# Rise of the Global South: an Analysis of South-South Development Cooperation in India

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**Abstract:** The recent emergence of South-South Cooperation (S-SC) among the 'Global South' has resulted in mutually favourable partnerships that foster economic growth, poverty reduction, and holistic development among member nations. S-SC has played a pivotal role not only in the economic spheres, but also the political, sociocultural, environmental and technical domains. In India, S-SC is a manifestation of cohesion that promotes national well-being, collective self-reliance, as well as the realization of multiple internationally endorsed development schemes, including the Millennium Development Goals. Therefore, this paper seeks to explain South-South Cooperation (S-SC) as a multi-faceted concept that enunciates the inherent development trajectory of India, while distinctly categorizing the varied gains absorbed as a result of this cooperation. The paper uses an empirical model to establish the large role assumed by S-SC in constructing and advancing prolonged, growth-conducive, and sustainable economic and social development in India in the long run.

Keywords: South-South Cooperation, India, FDI, Sustainable development

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# I. INTRODUCTION AND OVERVIEW OF RESEARCH

I.A) Interpretation of S-SC in the Indian Framework

According to H. Ross (2011), the prosperous miscellany of the Southern nations provides an excellent opportunity for the forging of communally advantageous partnerships to ensure the attainment of economic growth, development of industrial capacity and productivity, and the reduction of poverty. Ever since the Buenos Aires Plan (1978) for Action relating to the implementation and promotion of technically advantageous cooperation, S-SC has been steadily gaining the necessary momentum and has shown increasingly encouraging trends. The UN Conference held in 2009 in Nairobi went on to acknowledge and dignify the large role that emerging countries such as India play in the provision of support and implementation of S-SC along with associated nations.

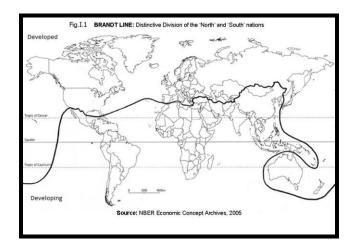
This paper seeks to explain South-South Cooperation as a multi-faceted concept that enunciates the development trajectory of India, while distinctly categorizing the varied gains absorbed as a result of cooperation rather than conventional foreign aid received as a result of North-South cooperation. The advent of South-South development cooperation has not only facilitated a rampantly expanding productive capacity in India, but has also transformed emerging nations of the global South into strong allies of the nation. In this regard, this paper seeks to establish the large role assumed by South-South cooperation in advancing prolonged, growth-conducive, and sustainable economic and social development in India.

UNDP (2012) states that S-SC is an approach to development which attempts to conduct the exchange of valuable experience, necessary information, technical knowledge, advanced technology, conducive investment, and productive capacity between and amongst nations of the Global South. This progression is by and large carried out through the functioning of national authorities in the form of networks, domestic governments, as well as academic institutions, to allow for the acceleration of holistic development across the economic, social, political, legal, and technological spheres. This framework of S-SC is now extensively acknowledged as the principal apparatus for the countries of the South to fulfill their development objectives. The scheme is guided by the principles of collective assistance between allied nations, respect for the prevalent sovereignty of each country, as well as the premise of non-conditionality within the context of this cooperation.

The principle notion that underlies the extensive role played by S-SC in the Indian framework is supported by an expansive degree of technical collaboration in conjunction with financial aid that operates and transcends beyond national boundaries on the basis of a reciprocal partnership and reverence, as opposed to a vested interest characteristic to conventional aid. In this regard, the development in the South through S-SC leads to the creation of multiple instrumental channels through which emerging nations can add to and prop up the establishment of sustainable industrial development in allied nations including India (ibid).

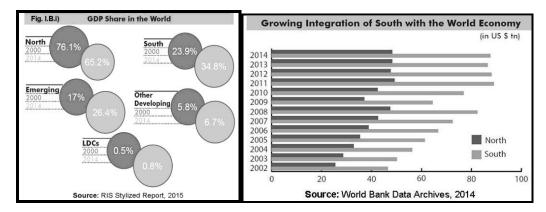
R. Paulsen (2012) states that S-SC refers to a wide-ranging scaffold of collaboration that takes place among nations sharing scientific knowledge, superior technology, and favorable investment such that they can simultaneously engage in matching developmental goals through the means of concerted efforts. The most important forms of S-SC that have played a role in advancement of the global South have been South-South flows of monetary resources (FDI), advancements in regional integration, unrestrained volume of South-South trade flows, and mutually advantageous technology transfers. In accordance, it can be inferred that S-SC has a magnanimous role to play in not only advancement of economic growth in India, but also in the social, technical, political, cultural, and environmental domains. In India, S-SC has assumed the form of a manifestation of the collective solidarity of the indigenous masses in a manner that ensures the attainment of national welfare, self reliance, and perhaps most importantly the fulfilment of internationally mandated developmental objectives, such as the Millennium Development Goals. As a consequence of the premise that the S-SC initiatives and agenda is completely determined by the Southern nations on their own, India has attained a large influence in abiding by its inherent values of national ownership and self reliance, while simultaneously fulfilling the internationally accepted objectives of mutual benefit, non-conditionality, and equality (UNESCO, 2015).

#### I.A.1) Brandt Line



As per NBER Archives (2005), the Brandt Line represents an ocular illustration of the separation between the 'Northern' and 'Southern' nations. The line encloses the world and occupies the position of latitude of 30 degrees north. The figure (Fig I.1) displays the Brandt line across the world map, which divides the nations of the globe into one of two categories – Developed (North) and Developing (South). The categorization is undertaken on the basis of GDP per capita (with underlying growth patterns) as opposed to geographical location of the nation.

*I.B.*) *S-SC and the Rise of the Global South I.B.i.*) *S-SC and the Uprising of GDP Growth* 



The nations of the South experienced and witnessed a largely hassle-free economic revolution following a turbulent period of slowdown during the global recession of 2008. It has continually been noticed that the nations of the North continue to struggle with their frail recovery for over half a decade, the Southern countries exemplified an illustration of a strengthened growth dynamic within the prevailing economic climate. The responsibility and credit for the transformation in these growth trajectories can be attributed to S-SC. S-SC equipped the nations of the Global South to demonstrate exemplary resilience and occupy a position of influence in relation to the rebalancing of global demand to account for the shifts in developmental paradigms (RIS, 2015). In line with the above statement, the figure (Fig I.B.i) illustrates a comparative analysis between the global GDP proportion between the years 2000 and 2014. As shown, the proportion in percentage grew as a consequence of nations engaging in S-SC from 23.9 to 34.8 percent. On the other hand, the Northern nations experienced a decline from above three-fourths of the global proportion to 65.2 percent within the same time period. This exemplification categorically backs the argument that S-SC proves to be conducive to the promotion of holistic growth within the nations of the South including India.

## I.2.B.iii) S-SC as an Instrument to Foster Southern Trade

It has been widely acknowledged that international trade has experienced multiple tectonic transformations in the past decade, a large degree and magnitude of which can be attributed to the cause of the dynamism of trade exhibited by Southern nations as a consequence of engagement in S-SC. It is imperative to note that the share of the North in international trade has fallen steeply, while the corresponding proportion held by the South has assumed a rampant augmentation. In conjunction with expanding volumes of trade, the nations of the Global South including India are much more integrated with the global economy. In this regard, the nations of the South have experienced a rise in trade volumes that amount to a greater magnitude than the globally attained growth of output (S. Dale, 2014).

The figure-set exemplifies how during the buoyant period of 2003 to 2007 that preceded the global financial crisis; output of the Southern nations grew by almost seven percent. Additionally, the volume of trade as a consequence of S-SC registered a growth that corresponded to 16.9 percent. A matter of global interest was the tendency of the rising trend line of trade in the South to maintain its augmenting position even as the world progressed into the first phase of recession. An important conclusion drawn from this premise is that through more penetrative liberalization of trade, the Southern nations emerged as the engine of global trade and commerce (ibid).

# II. SUSTAINABILITY AND TENABILITY OF S-SC IN INDIA

"South-South Cooperation has managed to materialize within the context of the pervasive struggle of formerly fashioned colonies to accomplish indisputable independence and holistic development across economic, social, and legal spheres that shall persist into the years to come." - R. Benjamin (2009), UNCTAD

While the diverse benefits that can be accrued by presently emerging nations by engaging in the cooperation have been classified beforehand in the discourse of this paper, it is imperative to evaluate the effectual tenability of S-SC within the Indian framework. This chapter strives to appraise the objective fulfilled by South-South Cooperation in the development course of India, while attempting to clarify how S-SC can prove to be a means to equip the nation while it progresses along its pathway to fulfill the globally relevant and essential Sustainable Development Goals (SDGs) in the imminent future.

According to Goldman Sachs (2016), international programs of cooperation concerned with development are habitually perceived within the framework of relationships that prevail between nations of the North and South,

corresponding to North-South Cooperation (N-SC). As per the presently customary discourse of development across the world, the developed North possesses the technical skills and essential capital resources which the poor nations of the South lack to a vast degree. This underlying gap between the nations of the North and South is used extensively across development literature to discuss the underdevelopment prevalent in the global South. As a direct consequence, alterations in this traditional discourse has led to nations of the South indulging in the process of endorsing international development by themselves, through the provision of economic (predominantly in the form of financial resources), as well as productive and technical capacity building assistance to the allied countries within the span of the South. P. Khmer (2016) suggests that impending international predicaments such as the energy and food accessibility crises, global warming, in conjunction with the appearance of pandemics such as Ebola and influenza, have played a large role in stimulating and encouraging the nations of the South to engage in enhanced forms of partnerships. In the Indian context, this partnership mechanism exudes a maximum affinity for success through cooperation at the interregional, regional, and sub-regional levels within the nation.

The rampant need for addressing issues relating to explosive global financial markets, as well as the requirement of locating alternative sources of emergency funding apart from the IMF (International Monetary Fund) have motivated Indian policymakers to actively seek support among allied nations of the South, especially in the midst of a state of economic pandemic in the developed nations where aid poured in from conventionally. This heightened awareness within the framework of the Indian society has had a large hand in the generation of dynamism in cooperation activities in accordance with the development trajectory of the nation (ibid). Moreover, as per the International Policy Centre for Inclusive Growth (2014), the Indian interpretation of South-South Cooperation relates to an intensive consideration being given to sustainable development cooperation as the nation gains an escalating foothold in the global economic climate. In conjunction with the other BRIC economies of Brazil, Russia, and China, India manages to represent a fourth of the worldwide GDP (gross domestic product), while also accounting for just over 40% of the population of the world. It is estimated that through the premise of South-South Cooperation, these four emerging economies have the collective capacity to surpass the combined output generated by the 'Group of Seven Wealthy Nations' by the year 2035, with India optimistically becoming the world's most influential economy before 2050. Since the initiation of the formation of alliances between nations of the South, S-SC among India and its allies has been conducted in multiple ways that range from integration of economic activities, to the creation of blocs for negotiation within institutions of multilateral importance. Furthermore, S-SC in the Indian context may also extend to alliances in the defence and military sector, and exchanges within the cultural domain, which exemplify the expanse of the role played by development cooperation in the advancement of the nation's economic facility.

The Agenda for Combined Action (2008) signed in Accra states that developing nations led by India have continually critiqued the manner in which foreign aid from Northern nations is employed as a neo-colonial instrument by advanced countries. The conformist schemes of these advanced countries relating to the imposition of policy conditionality on emerging nations of the South is carried out through the process of linking donations and aid to military, political, and most importantly commercial interests of the aid benefactors.

In a manner of direct contrast, S-SC is highly sustainable in India due to its innate objectives and the founding principles on which the cooperation operates. South-South Development Cooperation among India and its allies is organized on the basis of the postulates of mutual camaraderie and solidarity as opposed to relations arising from profitable clientelism. In this manner, S-SC is deemed superior when the developmental interests of India are considered with a holistic outlook (ibid).

### **III: EVALUATION OF VARIABLES AND COMPONENTS OF RESEARCH**

Within the tenure of research, a time period of the year 2000 to 2010 has been taken into account to facilitate the study. As per the scope of the paper, the year 2000-2001 is an appropriate preliminary point of measurement. This is because the effects of the New Economic Policy of 1991 that globalized the Indian economy (and therefore allowed for the establishment of South-South Cooperation) can appropriately be measured a decade after its introduction. Further, the study is limited to the year 2009-2010, as changes in domestic policies following this period have not fully shown their effects and thus cannot be quantified completely at the moment to show their role in changing the dynamic of S-SC in India.

### III.1) Dependent Variable (Y): Total Foreign Direct Investment (FDI) flows into India

As established earlier in the paper, the advent of South-South development cooperation has not only facilitated a rampantly building inflow of FDI into India, but has also transformed emerging nations of the global South into strong donors of aid and productive resources. In this regard, in order to measure the extent of this

cooperation in the development trajectory of India, South-South cooperation has been provided a quantifiable basis through the indicator of Total Foreign Direct Investment (FDI) flows into India over the specified time period. As per the RIS Bulletin on Triangular Cooperation (2011), total FDI flows into India prove to be an excellent estimator of the efficacy of South-South development cooperation in the nation. As per the conclusions drawn in the previous chapter on the transformed composition of cooperation from North-South FDI to South-South FDI, advancements in this indicator appositely depict a higher engagement in South-South development cooperation. 'Total FDI inflow in India' as the dependent variable has been represented as 'Y' for the purpose of the regression analysis.

# III.2) Independent Variables

# III.2.i) Export Orientation of the Indian Market $(X_1)$

The International Development Association (2012) states that the tendency of a donor nation to invest in productive capacity through FDI has a high correlation with a favourable orientation of markets in the host nation. It is further observed that a higher propensity of India to export goods at a competitive rate through controlled markets is beneficial for its trade partners, and thus an evaluation of the export orientation shall give us an apt outlook into the nature of South-South cooperation. This parameter of export orientation of India can be quantified through the indicator of value of net exports within the given time period. 'Net exports' from India as the independent parameter have been represented as the variable ' $X_1$ '. It can therefore be understood that the degree of South-South cooperation fostered directly depends on the value of net exports of India. In other words, the total FDI inflow in India (Y) depends directly on the net exports of India ( $X_1$ ) (ibid).

# III.2.ii) Gross Value Added at Factor Cost $(X_2)$

FDI inflow is inclined to direct the building of productive capacity in nations and firms that already have a minimum operational viability, as donor entities wish to capitalize on their gains through industries relatively presenting increasing returns to scale. Further, the potential for consequent spillover effects directly depend on the degree of activity in a sector (Tinbergen Institute, Erasmus University Rotterdam, 2006). 'GVA<sub>FC</sub>' as the independent variable has been represented as 'X<sub>2</sub>' for the regression analysis undertaken in the following chapter. In this regard, in order to effectively examine the extent of South-South Cooperation's role in the development of India, it is imperative to also evaluate the sectoral economic activity that eventually directs this cooperation. This economic activity can be quantified using the indicator of Gross Value Added at Factor Cost (GVA<sub>FC</sub>), and it can be summed up the measure of the advancement of South-South cooperation directly depends on the value of economic activities in India. In other words, the total FDI inflow in India (Y) depends directly on the GVA<sub>FC</sub> (X<sub>2</sub>). In order to attain an appropriate measure of the GVA<sub>FC</sub>, multiple sectors that broadly encompass the entirety of the Indian economy were examined. The sectors of agriculture, mining and quarrying, manufacturing, electricity production and distribution, construction, trade, transport, financial services, real estate, public administration, and other (miscellaneous) services were studied in the course of measurement of GVA<sub>FC</sub>.

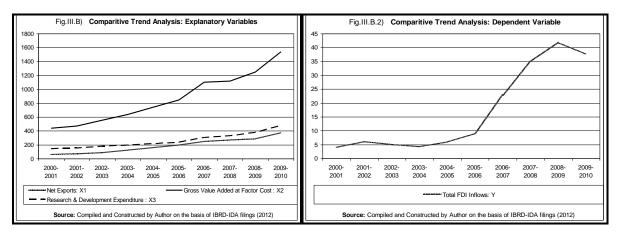
### III.2.iii) Research & Development $Expenditure(X_3)$

As per the International Policy Centre for Inclusive Growth (2010), Research and Development Expenditure can be understood as expenditure that arises from both private and public sources, which is undertaken to systematically build a fortress of knowledge. This expenditure while primarily affecting the nature of human expertise within a nation in relation to primary or applied research in conjunction with experimental advancement; has a large role to play in enhancing human knowledge of polity, history, society, international law, and culture. It has been well established that South-South Cooperation encompasses a transfer of skills, technical expertise, resources, and knowledge between nations of the Global South; while simultaneously recognizing that a higher intensity of resource flow shall take place inwards to nations with higher capacities to generate returns. In this regard, the joint collaboration paper of the IPC and UNDP (Rathin Roy, 2008) recognizes that the expenditure incurred on research and development that magnify the productive capacity of India's domestic industries directly impact the degree to which allied nations of the South shall consider the nation a worthwhile site of investment. It can therefore be understood that the degree of South-South cooperation fostered directly depends on the magnitude of expenditure incurred on Research and Development in a particular nation. In other words, the total FDI inflow in India (Y) depends directly on the  $E_{R&D}(X_3)$  (ibid).

YEAR	Total FDI Inflows: Y	Net Exports: X <sub>1</sub>	Gross Value Added at Factor Cost : X <sub>2</sub>	Research & Development Expenditure : X <sub>3</sub>
2000-2001	4.029	60.782	440.615	142.4508
2001-2002	6.132	73.234	467.778	150.2503
2002-2003	5.035	90.568	552.071	174.8961
2003-2004	4.322	126.271	638.888	193.2636
2004-2005	6.051	160.361	739.822	215.5841
2005-2006	8.961	199.379	844.017	234.889
2006-2007	22.826	252.325	1099.701	305.057
2007-2008	34.843	272.938	1114.024	329.639
2008-2009	41.873	288.043	1244.563	373.127
2009-2010	37.745	374.237	1537.725	477.156

*III.3)* Consolidation of Data Set and Trend Evaluations

Table III.A displays the consolidated data set of dependent and explanatory variables undertaken in research for given time period expressed in Billions of US Dollars. The figure (Fig.III.B) exhibits the comparative trend analysis of explanatory variables undertaken in research for the specified period. As observed, the three independent parameters (Net Exports, Gross Value Added at Factor Cost, and Research & Development Expenditure) each demonstrate an increasing trend over time. In this regard, the premise of research dictates that the magnitude of S-SC quantified through the Total FDI inflows into India shall consequently show a rampantly augmenting trend over the time period due to the nature of the relationship between the variables undertaken in research. The figure (Fig.III.B.2) exhibits the comparative trend analysis of the independent variable Y (Total FDI inflows in India) undertaken for research during the specified time period. As observed, the nature of dependence of Y on the aforementioned explanatory variables causes the exhibited increasing trend in the magnitude of Y as well, barring a diminutive descent in 2003-04.



# **IV: DATA ANALYSIS: MULTIPLE REGRESSION MODEL**

# IV.A) Establishment of Research Relationship and Regression Equations

As explained on the basis of the ADB Working Paper Series on South-South FDI (R. Lipsey, 2011), South-South Cooperation manifests in the form of Foreign Direct Investment not only to demonstrate increased inward flows to India, but to also ensure that the domestic nature of market orientation makes India an attractive site for future inflow of S-SC resources as well. In this regard, the quantification of South-South Cooperation in India directly depends on the volume of trade through a stream-lined and effective export orientation of Indian markets.Furthermore, technology transfers in line with S-SC are reliant on the intensity of economic activity within a nation that exemplifies the productivity of utilization and absorption of inward aid; while at the same time the expenditure incurred on research and development that magnify the productive capacity of India's domestic

industries directly impact the degree to which allied nations of the South shall consider the nation a worthwhile site of investment. Therefore, to summarize the quantification of S-SC in a rational and measurable manner that plays a role in shaping India's foreign policy in the upcoming future; the export orientation of domestic markets, coupled with the intensity of economic activity differentiated across sectors, as well as the expenditure incurred on research and development prove their mettle as influential determinants of South-South cooperation, quantified through the inward flow of FDI (ibid). On the basis of the above realization, through the establishment of dependence of the Total FDI inflow in India as quantifier of South-South Cooperation in the previous chapter on the three explanatory variables being considered, the functional form of the regression equation relationship can be expressed with ease. The equation operates on the premise substantiated in the previous chapter, which explores the relation of how total FDI inflow in India depends directly on the net exports of India, the Gross Value Added at Factor Cost (GVA<sub>FC</sub>), as well as the Research and Development Expenditure ( $E_{R&D}$ ).

For the facilitation of the regression analysis, the classification of Null and Alternative Hypotheses can be facilitated.  $H_0$  represents Null Hypothesis, such that: $H_0$ : there exists no relationship of dependence between the dependent variable Y and explanatory variables  $X_1$ ,  $X_2$ , and  $X_3$ .Furthermore,  $H_1$  represents Alternative Hypothesis, such that: $H_1$ : there exists a relationship of dependence between the dependent variable Y and explanatory variables  $X_1$ ,  $X_2$ , and  $X_3$ .Furthermore,  $H_1$  represents Alternative Hypothesis, such that: $H_1$ : there exists a relationship of dependence between the dependent variable Y and explanatory variables  $X_1$ ,  $X_2$ , and  $X_3$ .

#### Equation IV.A.i): Total FDI Inflows = $\beta_0 + \beta_1$ Net Exports + $\beta_2$ GVA<sub>FC</sub> + $\beta_3$ E<sub>R&D</sub> + $u_i$

Equation IV.A.i) represents the general regression equation formed on the basis of the aforementioned analysis of variables. The terms  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  represent the parameters of regression taken along with the explanatory variables Net exports, GVA<sub>FC</sub>, and E<sub>R&D</sub>. Furthermore, the term 'u<sub>i</sub>' represents the error term that accounts for minor variations in Y that cannot be explained by the explanatory variables, along with the miniscule measurement fallacies in the variables that are impossible to avoid.

### Equation IV.A.ii): $\mathbf{Y} = \mathbf{\beta}_0 + \mathbf{\beta}_1 \mathbf{X}_1 + \mathbf{\beta}_2 \mathbf{X}_2 + \mathbf{\beta}_3 \mathbf{X}_3 + \mathbf{u}_i$

Equation IV.A.ii) represents the functional form of the resultant regression equation in its representational form for each variable. As per D.N. Gujarati (2005), it is imperative to remove Heteroscedasticity and Autocorrelation between the variables in order to ensure that the regression model undertaken is accurate and valid to an elevated degree. In order to achieve this, we apply natural logarithm with base 10 (represented as  $\log_{10}$ ) on the dependent and explanatory variables and simplify the general regression equation formed above. In this regard, the functional form of the regression equation shown above is correspondingly modified. Additionally, the data set taken into consideration for data analysis is also amended to rationalize the changes made after applying natural logarithm to the variables.

### $\textit{Equation IV.A.iii}): log_{10} \ Y = \beta_0 + \beta_1 \ log_{10} \ X_1 + \beta_2 \ log_{10} \ X_2 + \beta_3 \ log_{10} \ X_3 + u_i$

Equation IV.A.iii) represents the revised functional form of the resultant regression equation in its representational form after applying the natural logarithm to each variable. Additionally, on applying natural logarithm to the equation and post the removal of Autocorrelation and Heteroscedasticity in order to improve accuracy, the data set itself observes changed values for each variable. This new data set shall be used for the consequent regression as opposed to the raw data set assimilated in the previous chapter.

Table IV.B)		Outp	ut of Re	gressior	1			
SUMMARY OUTPUT								
Rearession Statistics								
Multiple R	0.939047691							
R Square	0.8990534275							
Adjusted R Square	0.8629616953							
Standard Error	5.149915088							
Observations	10							
ANOVA								
	df	55	MS	F	Significance F			
Regression	3	1990642540	663547513.3	21.50106377	0.001304478317			
Residual	6	185166888.6	30861148.1					
Total	9	2175809429						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	78.46160748	24.84219098	-3.158401268	0.02514028385	-142.3204924	-14.6027226	-142.3204924	-14.602722
Net Exports (X1)	0.628041526	0.001694453078	1.407740137	0.02182353458	-0.001970380690	0.00674107991	-0.00197038069	0.006741079
Gross Value Added at Factor Cost (X2)	0.8651061527	0.09876029862	0.8759655092	0.04211312361	-0.1673608145	0.340382045	-0.1673608145	0.34038204
R&D Expenditure (X3)	1.598016008	0.000758539784	2.593748343	0.04861576354	0.000017572717	0.00391734989	0.00001757271	0.003917349

IV.B) Regression Analysis and Output Interpretation

# IV.B.1) Construal of Regression Output

As per the definitions of a multiple linear regression model (D.N. Gujarati, 2005), Multiple R can be appropriately described as the correlation between response values and the fitted values. In the table (Table IV.B) above, the Multiple R is equivalent to ~0.93905, which implies that there exists a very high degree of correlation between the dependent variable and the independent parameters. Moreover, R square ( $R^2$ ) represents the coefficient of multiple determination for multiple linear regression, which can be understood as the actual percentage of the variation in the dependent variable that can be explained by the linear parameters. In the table above (Table IV.B), the R square value is equivalent to ~0.89905 which implies that 89.905% of the variation in the dependent variable can be appropriately explained by the variation in the independent parameters. This result proves that there exists a high goodness of fit, indicating that the test at hand fits the observations appositely. In this regard, the result obtained is conducive to proving that the test at hand that relates to the expansive role of S-SC in the Indian economy is valid and significant (ibid).

Following the calculation of the values of the parameters  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , these values can be substituted to obtain the final regression equation upon which the research undertaken operates. The equations represent the final resultants from regression after all computed values are inputted. These equations shall dictate the relation upon which the research undertaken that relates to the expansive role of South-South Cooperation in the development trajectory of India.It can be clearly observed that the P-value of each variable corresponds to a value that is less than 0.05, which implies that each P-value observed fulfils the criterion at 5 percent level of significance. As a consequence, the Null Hypothesis is rejected, and it is inferred that consequently there exists a relationship of dependence between the dependent variable Y and explanatory variables X<sub>1</sub>, X<sub>2</sub>, and X<sub>3</sub>.

Table IV.B.t	o) Regression Statis	stics			
Multiple R		0.939047691			
R Square		0.8990534275			
Adjusted R Square		0.8629616953			
Standard Error		5.149915088			
Observations		10			
Source: Exce	I Regression Output,	2018			
Table IV.B.c) Results from Regression Analysis					
	Coefficients	P-value			
Intercept	78.46160748	0.025140284			
Net Exports (X <sub>1</sub> )	0.628041526	0.021823535			
Gross Value Added at Factor Cost (X <sub>2</sub> )	0.865106153	0.042113124			
R&D Expenditure (X <sub>3</sub> )	1.598016008	0.048615764			
Source: Exce	I Regression Output,	2018			

# IV.B.2) Rationalization of Coefficients of Regression

As observed the positive magnitude of the coefficients associated with each explanatory variable exemplifies the direct relationship that exists between Total FDI inflow in India and the independent factors (Net Exports, Gross Value Added at Factor Cost, and Research & Development Expenditure) employed in the research. This relationship diametrically measures the mean increase in the dependent variable corresponding to one unit of increase demonstrated by the independent parameter, while all other predictors in the regression analysis are held constant. In this regard, we can understand that there exists a positive relationship between Total FDI inflow in India and Net Exports, denoting that with an increased magnitude of Net exports that exemplifies an increased volume of trade through streamlined export orientation, the Total FDI inflow in India and consequently S-SC shall also be augmented. The absolute value of the coefficient X1 indicates that with every percentage unit increase in Net Exports, the Total FDI inflow in India can be expected to increase by 62.8041526 percent (≈62.80%) within the stipulated time period (ibid).Furthermore, there subsists a positive relationship between Total FDI inflow in India and Gross Value Added at Factor Cost ( $GVA_{FC}$ ), denoting that with a sustained rise in  $GVA_{FC}$  that elucidates a productive intensity of economic activity, the Total FDI inflow in India and accordingly South-South Development Cooperation shall be improved. The absolute value of the coefficient  $X_2$  signifies the premise that with every percentage unit increase in GVA<sub>FC</sub>, the Total FDI inflow in India can be expected to increase by 86.51061527 percent ( $\approx$ 86.51%) within the predetermined time period (ibid).

Thirdly, a positive relationship between Total FDI inflow in India and Research & Development Expenditure ( $E_{R\&D}$ ) can clearly be observed, symbolizing that with a sustained rise in  $E_{R\&D}$ , which displays the expenditure incurred on research and development that magnify the productive capacity within India, the Total FDI inflow in India and eventually S-SC shall be enhanced. The absolute value of the coefficient  $X_3$  provides a foundation for the assertion that with every percentage unit increase in  $E_{R\&D}$ , the Total FDI inflow in India can be expected to increase by 159.8016008 percent ( $\approx$ 159.80%) within the time period undertaken for the regression analysis (ibid).

In summation, the objective of establishing that an increased inflow of aid in the form of total FDI (that can be used to quantify South-South Cooperation) as a function of the magnitude of trade through a rationalized export orientation of Indian markets, as well as the productivity of utilization of inward aid through an enhanced strength of economic activity, and the expenditure incurred on research and development that magnify the productive capacity of India's domestic industries is fulfilled through the pronouncements obtained from the regression analysis facilitated in this chapter of the research paper. Furthermore, the results from regression equip the reader to unwaveringly recognize that there exists a relationship of dependence between the dependent variable Y (Total FDI inflows in India) and explanatory variables  $X_1$ ,  $X_2$ , and  $X_3$ , corresponding to Net Exports,  $GVA_{FC}$ , and  $E_{R\&D}$ .

# **V: POLICY RECOMMENDATIONS IN THE INDIAN FRAMEWORK**

This chapter seeks to exemplify the probable and recommended course of action to be adopted within the Indian framework in order to ensure the sustainable absorption and longevity of S-SC within the nation. The recommendations that arise stem from research and provide two avenues for fostering of S-SC, one through channelling of indigenous resources towards strengthening of involved sectors, and the other by means of fulfilment of the SDGs in line with sustainable growth of S-SC.

# V.A) Policy Recommendations in-line with Research

The premise of research explored in the previous chapter provides Indian policymakers a concrete path to follow with respect to the channelling of resources and developmental efforts towards a specific direction. As seen through the rationalization of coefficients in the aforementioned section (IV.B.2), the Total FDI inflow in India that quantifies S-SC depends heavily on Net Exports,  $\text{GVA}_{FC}$ , and  $\text{E}_{R\&D}$ , with the most intensive dependence on Expenditure in R&D. This in turn implies that through the focussing of productive resources in the establishment of advanced technology through R&D expenditure being boosted, FDI inflow and consequently S-SC shall be augmented in India. Following R&D, the focus should move to attaining a highly productive economic capacity measured through GVA, and finally devoting efforts to rapidly build the export capacity in order to directly increase the advent of sustainable and accessible S-SC in India.

# V.B) Attainment of SDGs through S-SC

UNDP (2017) states that S-SC in India can be used as an instrument to target four essential SDGs, namely: 'Decent Work and Economic Growth', 'Industry, Innovation, and Infrastructure', 'Responsible Consumption and Production', and 'Partnerships amongst Nations for Fulfilment of Goals'. S-SC in India is an instrument owing to which the magnitude and intensity of global development cooperation can expand through the course of combination of capacities to augment efficacy of productive resources on a global scale.

SOUTHERN COUNTRY	April 1996 – March 2002	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
China	19.48	13.40	29.17	21.94	27.88	42.17	60.22
Malaysia	5.27	4.31	2.80	7.42	9.56	14.78	22.12
Singapore	3.50	9.81	1.87	18.40	12.03	8.12	36.69
Thailand	1.21	2.97	4.42	1.01	8.37	12.83	19.11
	ble V.B.2) F		-			and endertailed the parts	
	April 1996 – March	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
COUNTRY	- March 2002						
	- March	<b>2002-03</b> 11.64	<b>2003-04</b> 28.52	<b>2004-05</b> 34.55	<b>2005-06</b> 19.37	<b>2006-07</b> 8.65	<b>2007-08</b> 6.36
COUNTRY	- March 2002						

As per the World Bank (2009), the supply position in conjunction with growing flows of international monetary resources has allowed the Global South including India to register a very high growth rate. With the fostering of S-SC and consequent surge in S-S investment flows, India and multiple nations of the Global South are now the hub for internationally mandated FDI endeavours. The flow of S-S FDI consistently rose despite the global recession and eventually is showing signs of convergence with the FDI outflows exhibited by the Northern nations, as depicted in the figure set (Table V.B.1 and V.B.2). This calls for the understanding that engaging holistically in S-SC will allow India to realize its developmental trajectory and fulfil multiple internationally relevant SDGs to ensure growth-conducive and sustainable development in India (ibid).

# **VI: CONCLUSION**

This section attempts to conclude the paper and highlight the essential learning outcomes obtained from the study. The paper clearly elucidates S-SC as a multi-faceted concept that enunciates the development trajectory of India, while distinctly categorizing the varied gains absorbed as a result of cooperation rather than conventional

foreign aid received as a result of N-SC. The advent of South-South development cooperation has not only facilitated a rampantly building inflow of FDI into India, but has also transformed emerging nations of the global South into strong donors of aid and productive resources.

The paper concludes that S-SC is highly sustainable in India due to its innate objectives and the founding principles on which the cooperation operates. S-SC among India and its allies is organized on the basis of the postulates of mutual camaraderie and solidarity as opposed to relations arising from profitable clientelism. It can also in this regard be understood that engaging holistically in S-SC will allow India to realize its developmental trajectory and fulfil multiple internationally relevant SDGs to ensure growth-conducive and sustainable development in India. The research undertaken establishes without a doubt the unwavering relationship of dependence that exists between the premise of S-SC and internal progress of the Indian economy in itself, characterized by the explanatory variables utilized in formulation of the paper.

The paper postulates how in India, S-SC is a manifestation of cohesion that promotes national well-being, collective self-reliance, as well as the realization of multiple internationally endorsed development schemes, including MDGs and SDGs. Through the empirical model analysis utilized, the large role assumed by S-SC in constructing and advancing prolonged, growth-conducive, and sustainable economic and social development in India in the long run has been established in a steadfast manner. As a result, the paper succeeds in its objectives of analysing the rise of the Global South with reference to India, while understanding the transformation of developmental trajectories that shall spearhead the sustainable and protracted institution of the nation as a worldwide superpower in the imminent future.

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