

## Effect of COVID-19 pandemic on the inflow of FDI into Indian economy

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Covid-19 has battered the global economy causing the worst recession since The Great Depression of the 1930s. By the end of 2020, the world's GDP maybe about 7.5% lower than it would have been without the pandemic. Globally more than 15% of the young people who were in work before the Covid-19 have lost their jobs. Widespread lockdowns have caused changes that were already affecting the world economy in technology, finance and trade. With great deal of uncertainty in the transactional space, investors are now more cautious before making any making any significant transactions. Global FDI flows fell by more than 49% in the first half of 2020 and even under the most optimistic scenario after the economic support policy measures by the governments, the numbers don't seem to be getting better. The developing countries are hit even worse because the sectors attracting the largest shares of FDI such as primary and manufacturing sectors are hit the worst. FDI being a critical driver of the economic growth could play an important role in supporting the economies during and after the crisis.

## Introduction

severely curtailing economic activity. According to the International Monetary Fund (2021), the global economy in 2020 contracted 3.2% and global trade by 8.3%. The pandemic caused a more dramatic fall in foreign direct investment (FDI) in 2020. According to United Nations Conference on Trade and Development (2021), global FDI flows dropped by 35% to \$1 trillion in 2020, from \$1.5 trillion in 2019.

investment capital. Investors may face increased business constraints at home, need to minimize the loss of home business and thus may not afford to invest abroad. This reduces the number of investors.

The second dimension is manufacturing versus services. To contain the spread of COVID-19, many countries imposed various restrictions on business operations. In general, the work-from-home model is more difficult in manufacturing than in services. Investors cannot initiate a new business abroad if work-from-home is an infeasible option for their business.

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operations, e.g., production operation in factories. A similar effect may exist in some service sectors (e.g., transportation and warehousing, construction, retail trade, and accommodation and food services).

### Review of Literature

The review of literature guides the researchers for getting a better understanding of the methodology used, limitations of various available estimation procedures and data bases, and lucid interpretation and reconciliation of the conflicting results. There are many type of research on the impact of remittances. Since the paper focuses on GDP, FDI, Unemployment, Digital banking service, this section will review the appropriate and related studies to get a better idea of the selected topic.

Comes *et al.* (2018) explained the connection between remittances, foreign direct investment, and economic growth, using panel data from seven countries from Central and Eastern Europe covering the period 2010–2016. The empirical result show the positive effect of remittances and foreign direct investments on economic growth for all selected states.

Meyer and Shera (2017) [7] studied the various impacts that remittances have on the economic growth of six high remittances receiving countries, Albania, Bosnia Herzegovina, Bulgaria, Romania, Macedonia and Moldova using panel data set over the period 1999–2013. Regression results show a positive and significant contribution of remittances in the economic growth of the selected six countries.

Azam (2015) [8] examined the role of remittances in fostering economic growth in Bangladesh, India, Pakistan and Sri Lanka and found the positive impact of remittances on economic growth in all countries. Besides these studies, Barajas *et al.* [2009] concluded that workers' remittances do not have any impact on economic growth in developing countries by employing the panel dataset of 84 countries over the period from 1970 to 2004.

Rao and Hassan (2011) [10] conducted a study on 40 high remittance recipient countries using a System GMM panel data analysis. The exact outcome communicates the direct growth effects of remittances and the growth effects of the channels through which remittances may affect growth by treating as conditioning variables. The study finds that remittances indirectly facilitate economic growth by increasing the ratio of Broad Money (M2) to GDP.

Conversely, Chami *et al.* (2005) [11] included 113 countries in their research and concluded that remittances have a negative impact on GDP growth using panel data of 29 years over the period 1970–1998. They found a negative correlation between the remittance's growth and economic growth. They identified the role of remittances as an altruistic which is not profit driven.

### Objectives of study

- To study the impact of COVID-19 on FDI inflow
- To understand the concept of COVID-19

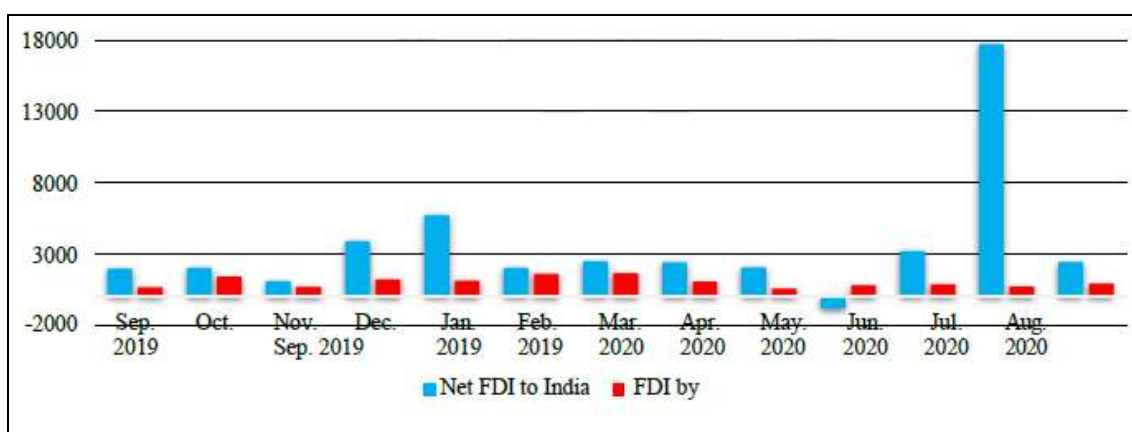
### Data Analysis

For the first quarter of the FY-20, FDI equity inflows dropped by 62% and as they form a major portion of the Net FDI, Net FDI fell by 59%. Equity inflows dropped in the first quarter and saw a steep rise of 16% in the second quarter bringing in \$20 Bn of equity FDI which was mostly fueled by tech investments by Google, Facebook, Amazon and such. Reinvested earnings saw little to no change from March to September, whereas other capital flows gradually declined from March to September with an exception for June.

**Table 1:** Impact of FDI Inflow

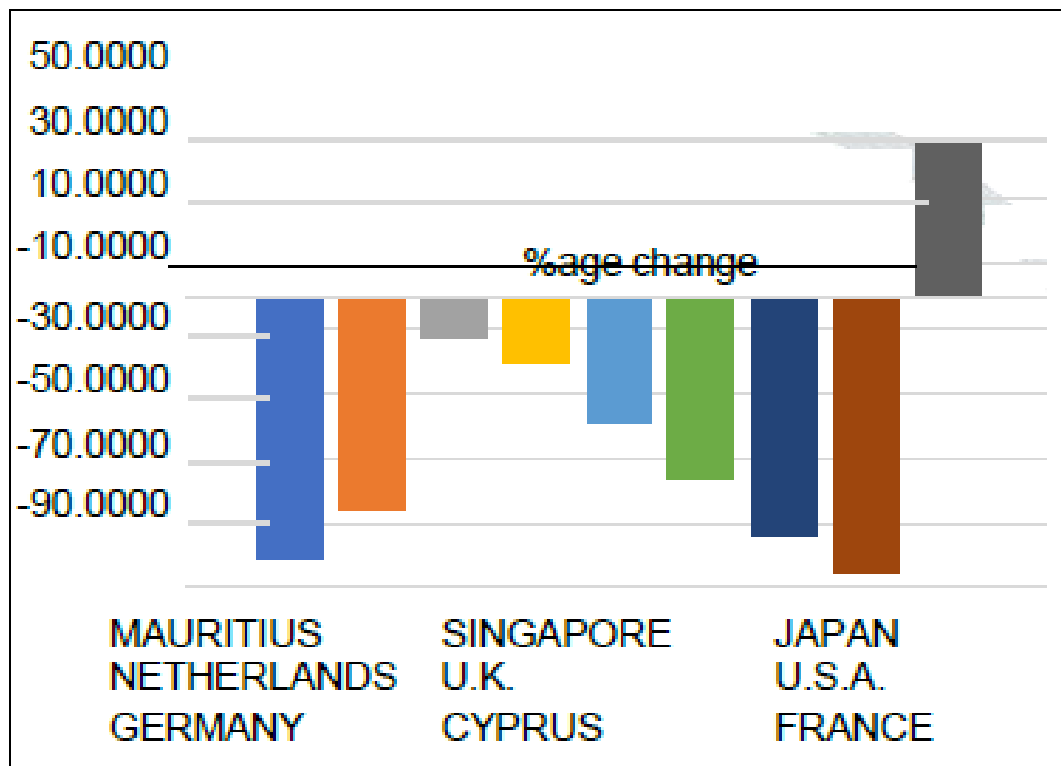
Year	2015	2016	2017	2018	2019	2020
FDI Inflow	55559	60220	60974	62001	74390	67542

Source: RBI 2020, WORLD BANK 2020



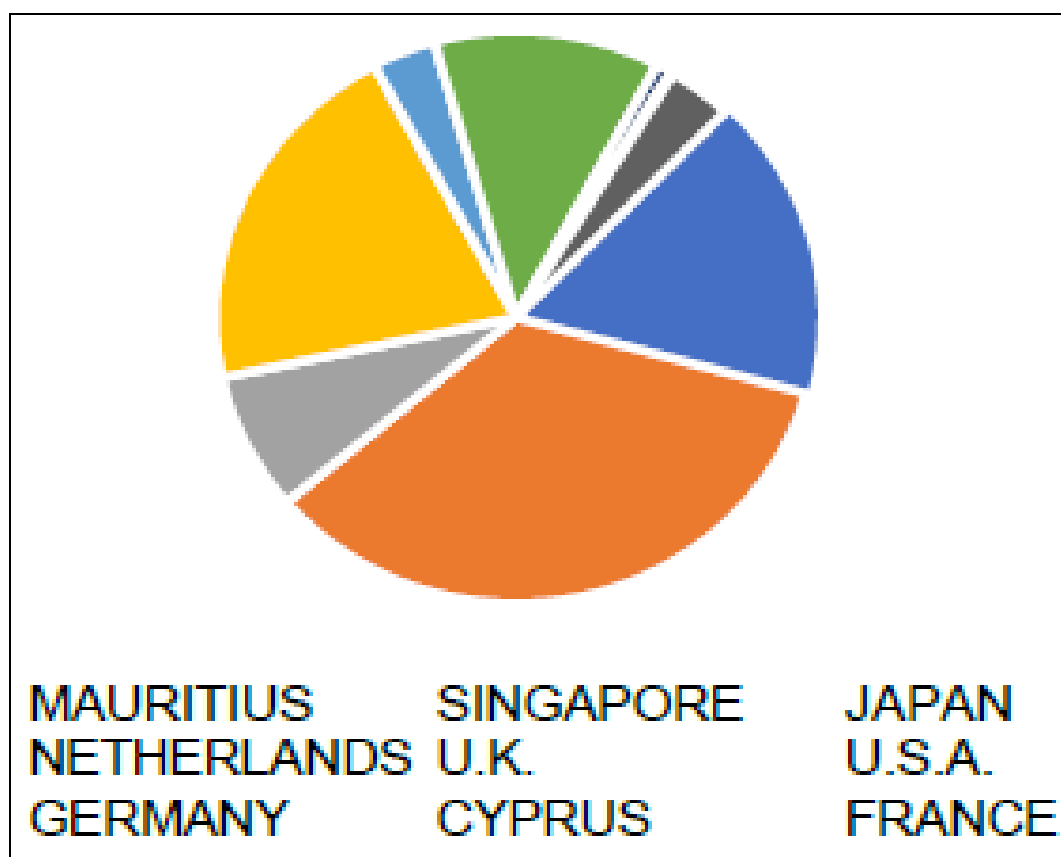
Source: RBI 2020, WORLD BANK 2020

**Fig 1:** FDI Inflows vs. Outflows (in US \$ million)



Source: RBI 2020, WORLD BANK 2020

**Fig 2:** % change of Inflows during Covid-19

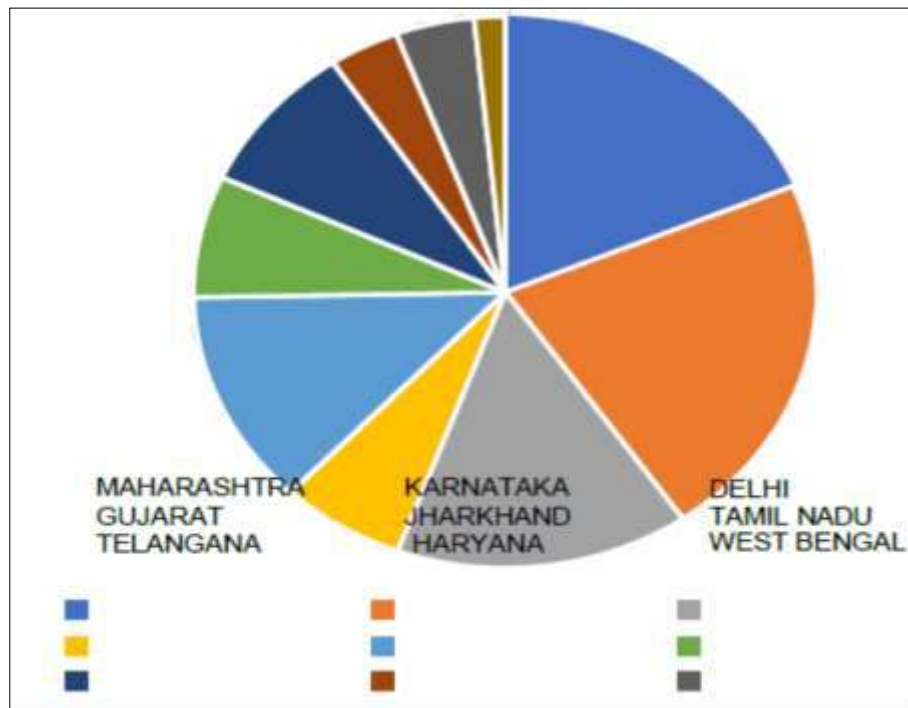


Source: RBI 2020, WORLD BANK 2020

**Fig 3:** Contribution by country

For the first quarter of FY-20 most countries saw a major decline in their contributions towards equity inflows with Mauritius and Singapore falling by 80.7% and 65.8%, with only one exception France, which saw a growth in its

contribution by 48.7%. Singapore emerged as the largest contributor of FDI bringing in \$1.82 Billion followed by the Netherlands, Mauritius, the US, and Japan.



Source: RBI 2020, WORLD BANK 2020

Fig 4: FDI Equity inflows by State 2020-21 (April – June)

During the first quarter of FY-20, the states which attracted the most FDI include Karnataka, followed by Maharashtra, Delhi, Jharkhand, and Gujarat. The states which saw the

largest decline in FDI inflows include Delhi, Karnataka, Tamil Nadu, Gujarat and Andhra Pradesh.

Table 2: Regression Analysis

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.9909476							
R Square	0.9819771							
Adjusted R Square	0.8668609							
Standard Error	575.94169							
Observations	12							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	3	162658208.5	54219403	163.4548	1.62355E-07			
Residual	9	2985379.461	331708.8					
Total	12	165643588						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Equity	1.8147622	0.241502822	7.514456	3.64E-05	1.268444898	2.3610796	1.268444898	2.36107957
Reinvested earnings	-1.8149319	0.565259573	-3.21079	0.010645	-3.09363794	-0.536226	-3.09363794	-0.53622596
Other capital	-1.0896933	0.564072058	-1.93183	0.085421	-2.36571293	0.1863264	-2.36571293	0.18632636

Regression is a statistical method used to determine the dependence of a dependent variable on a group of independent variables. For our analysis we'll choose the variables as follows:

Y = dependent variable = Net FDI

X = independent variable = Equity, Reinvested Earnings and Other Capital After running regression, we get the following results:

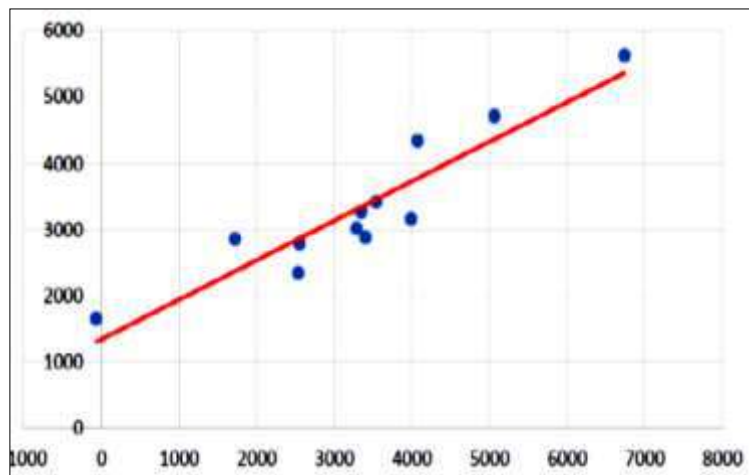


Fig 5: Line of Best Fit

### Findings

R-Squared value is 0.9819 or 98.19%, which is a very good fit. This means that 98.19% of the of the variation in Net FDI can be explained by the chosen independent variables which are Equity, Reinvested Earnings and Other Capital.

**F and P-values:** Significance F is very small which means our result is statistically significant because the value is less than 0.05. P-value for Equity is very small which means Equity is a good fit (almost 100%) for Net FDI. For Reinvested Earnings, the P-value is 0.010645, which means we can say with 99% confidence that Reinvested Earnings is a good fit. For Other Capital P-value is 0.08542 which means this isn't significant as it is greater than 0.05

**Coefficients:** Regression line is:  $Y = 1.8147*(\text{Earnings}) - 1.81*(\text{Reinvested Earnings})$ . From this equation we can say that for 1 unit increase in Equity, Net FDI increases by 1.814 units and for each unit increase in Reinvested Earnings Net FDI decreases by 1.8 units. From this equation we can also estimate any variable if we know the other two variables.

**Line of best fit:** This line of best fit expresses the relationship between the actual values and the estimated values. As the line obtained in our case is linear, we can say that the dependent variable varies linearly with the independent variable.

### Conclusion

The Covid-19 pandemic brought turmoil on the whole world and India was no exception. The first quarter of FY-20 saw a contraction in GDP by 22.6%. This decline had adverse effects on all economic areas including FDI which saw a contraction of 59% in the first quarter FY-20. But due to government's favorable business environment and revision of FDI policies, FDI inflows saw a 16% surge in the coming months driven mostly by technical and telecommunication investments. Also, India's self-reliance scheme (Atmanirbhar Bharat) has attracted investments from players such as Foxconn to setup manufacturing plants in the country. China's feud with the US has also proved to be beneficial for India as many big manufacturing companies have shifted their production and operations to India which will boost India's growth and image as a global player. In the coming years, India is going to be one of the most

attractive emerging markets for global investments. Annual FDI inflow in the country is expected to rise to \$75 Billion over the next five years according to a report by the UBS. Also India's goal of becoming a \$5 Trillion economy by 2025 will surely boost the investments in coming years. This is going to be a major sustainability reason for India by welcoming more FDIs.

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