

# IMPACT OF GROWTH IN STARTUP COMPANIES ON INDIAN GDP

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## Abstract

In this research paper, significant relationship between number of new start-ups and Indian GDP growth have been analyzed. India is now trending with huge growth in the new start-ups both tech and space in recent years. The new start-up schemes launched by the government has helped many entrepreneurs to have easy access to funds. The research has applied correlation and regression techniques to find relationship and significant impact of start-ups on GDP growth. The findings have shown negative weak correlation between two variables. On the other hand, no significant impact of new start-ups on Indian GDP growth has been found at 5% significant level. The research recommends the Indian government to focus on encouraging the new start-ups in agricultural sector, as primary sector majorly contributes in the GDP.

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## INTRODUCTION

A start-up is defined by the Indian government as a business which is less than seven years old, must have its headquarters there, and generates less than 2.5 billion rupees in annual revenue. A progressive and functional organic system is being built in the nation as a result of the Start-up India programme with the assistance of the Department of Trade and Industry and Incentives, transforming company ideas into reality for a prosperous start-up environment. In response to a government initiative, states and union territories across the country established start-up legislation. India's position in simplification maintained with work slowly increasing through 2019, despite the demonetization campaign in November 2016 causing many parts of the economy.

India is the third-largest startup ecosystem in the world, and through 2023, it is anticipated that it would continue to expand steadily at a rate of 12 to 15 percent annually. In 2018, there were over 50,000 new firms in India; 8,900–9,300 of these new businesses were innovation-driven. 1300 new technology businesses were launched into the globe in 2019, indicating that 2-3 new companies were formed on a regular basis (Start up India, 2022).

The pace of development in the footwear environment increased to 15% year-on-year in 2018, while development in the number of hatches and pedalboards grew to 11%. Crucially, the number of women with business vision has remained at 14%, up from 10% and 11% in the past two years. New industries in the country had the potential to create about 40,000 new jobs over the year, taking full employment in the original environmental fields somewhere between 1.6 and 1.7 lakh. Bangalore has been listed among the top 20 urban start-up cities in the world in the Start-up Genome Project rankings 2019. It has also been ranked as one of the five fastest growing urban start-up communities in the world (Start up India, 2022).

The new Indian industries have gone on to increase the size of the notes from various sources around the world and at home. The top 15 contracts accounted for about 40% of the total contract value, showing that most utilities value the quality of the contract more than the amount. The number of confidential business in India increased for the second year in a row, and bearing in mind that the normal size of a contract decreased slightly from the previous year, the total value of \$ 26.3 billion in 2018 was the second highest in the last 10 years. . The amount of large contracts increased by \$ 50 million from the previous year (Start up India, 2022).

The largest root of that e-commerce tree is in Bangalore, which is also a India's largest startup hub, followed by Delhi, Mumbai, and Hyderabad. Most of these firms have found success with the right funding and a keen eye for seeing the niche in their specific market gaps. A significant number of unicorn companies have been formed in India, duplicating the development of little seeds of ideas and becoming industry disruptors (Statista, 2022).

Startup finance in India has drawn large lenders from all around the world. Large Indian businesses have recently been interested in allocating funds to products and ventures, notably the Tata group and the Flipkart as

the part of innovative start-up. Many organizations that invented their own image names have benefited from grants and have seen significant recent development, becoming common names. Some of these include Oil Riding Group, the OYO pub network, Paytm computer portion management, and the Swiggy online food application (Statista, 2022).

The main problem in India's explosive start-up environment is the country's struggling economy. This was severely ruined by the COVID-19 outbreak and the effects of the lockdown between March and May 2020. Despite the covert public assistance of the cooperation, a number of new businesses have announced fortunes in terms of income and a very stable income or short-term decision. India's early biological system needs strong support points to rest in order to maintain the financial effects of the pandemic (Statista, 2022).

According to Statisticstimes (2022), the agricultural sector is the main contributor to GDP development. However, there are several SMEs that have maintained a high turnover in the procurement market and similarly employed millions of people. After all, the rationale behind this study is to determine whether a change in the development of new companies is negatively impacting India's GDP.

### Research Aim

To identify “the impact of growth in startup companies on Indian GDP”.

### Research Objectives

- To determine correlation between startup companies and Indian GDP.
- To identify whether startup companies have any significant impact on Indian GDP.
- To provide recommendation based on findings from statistical tests.

### LITERATURE REVIEW

Mishra (2018)'s existing empirical entrepreneurship literature primarily demonstrates a positive relationship between entrepreneurship (number and percentage of startups) and economic expansion. However, the components through which the business exerts its positive influence are not obvious. The net side effect of new activities on employment or GDP can be negative, in the short term, as new productive organizations may have to shut down less efficient ones. Due to the hypothesis that financial activity such as new firms produces unconscious side effects on firm level investments and positive share capital at the local area level (Bindal, Gupta & Dubey, 2018), this paper focuses on connections between start-ups, business and civil-level development in Sweden sometime between 2000 and 2008. Tests are conducted in all regions, as well as by region type and level of development.

The main objective of Chidambaram and Nagarajan (2019) was to study the effort to start up India, understand the problems faced by new businesses, focus on the impact of new companies on people separately, focus on awareness for new businesses. It depends on the help information. It was found that the public authority should help new companies to promote themselves, in India and worldwide, as well as adopt business-friendly strategies so that Indian companies can new a big increase and that they can work better too.

Kshetri and Kshetri (2016) provided the main focal points for setting the current state of new creative industries within the Indian environment and which is part of the related challenges facing India today by differentiating the strategies of different countries and states for find and find the best way. reflects the efforts of the Indian regulatory body towards the promotion and environment of new companies. The main focus of a research paper is defined as a relationship between GDP and newly registered companies, different in states and countries, estimating the feasibility of different plans. The Indian pilot program is considered an important step towards development as it monitors most of the major development conditions in a functional biological system. The configuration is established but the performance depends on its implementation. A new strategy transforms key areas of strength to reflect the adolescent's lack and emotion of enthusiasm and courtship.

### Hypothesis:

$H_0: \mu_1 = \mu_2 \rightarrow$  There is no significant impact of new startups on Indian GDP growth rate.

$H_1: \mu_1 \neq \mu_2 \rightarrow$  There is significant impact of new startups on Indian GDP growth rate.

## RESEARCH METHODOLOGY

### Research Design

Data has been collected from secondary sources. The nature of the data collected is quantitative. The collected data has been analyzed to find any significant relationship between them. Hence, the research design used in this research report is experimental. The positivist approach has been implemented to test the prior theory, that new start-ups have significant impact on GDP growth. The time duration used in this research is cross-sectional, where data has been collected once.

### Sample Collection

In this research, data has been collected for the period of 10 years from 2012 to 2021. Different secondary sources have been approach to collect the data for number of startups and GDP growth rate. For instance, data for number of startups have been collected from: (Crunchbase, 2022; Crunchbase, 2022a; Crunchbase, 2022b; Soni, 2021; Statista, 2022 and Statista, 2022a). On the other hand, data for Indian GDP growth has been collected from single source (Data World Bank, 2022).

### Data Analysis Technique

The data has been analyzed through applying both descriptive as well as inferential statistics technique. In descriptive technique; minimum, maximum, mean, median, standard deviation, skewness and kurtosis have been used as tool to describe the data. On the other hand, in inferential statistics, two different techniques: correlation and regression tools have been used. The correlation defines the directional relationship between two variables, while regression finds the significant relationship between two variables. The data has been analyzed through MS Excel, where data feature has been used to calculate regression, correlation and descriptive statistics of the collected data.

## RESULTS AND DISCUSSION

### Descriptive Statistics

**Table-1**

	<i>Start-ups</i>	<i>GDP Growth</i>
Mean	9,449.50	5.48
Median	5,085.00	6.62
Standard Deviation	13,110.49	4.50
Kurtosis	6.36	7.15
Skewness	2.39	(2.56)
Minimum	221.00	(6.60)
Maximum	44,000.00	8.95
Count	10	10

The above descriptive statistics table shows that on an average 9,450 start-ups recognized each year. On the other hand, average GDP over the last 10 years has been recorded at 5.48%. The median value of Start-ups is 5,085, which indicates that there are high discrepancies in the distribution of data. This can be evident from the high value of standard deviation. The Kurtosis is above 6.36, which implies a heavy tail and large number of outliers in the data. The Skewness implies positive value at 2.39. This implies that tail is towards the low start-ups. The 221 start-ups have been observed as the minimum, while total 44,000 has been recorded as the highest number of start-ups recognized in India.

The standard deviation of 4.5% in GDP signifies high diversion in data. The value of Kurtosis is also high at 7.15, which signifies heavy tails in the GDP growth data. The negative value of Skewness at -2.56 implies that India has maintained high GDP growth over the period of 10 years. The lowest GDP growth has been recorded at -6.6% while the highest growth has marked with 8.95%.

Correlation Table**Table-2**

	<i>Start-ups</i>	<i>GDP Growth</i>
Start-ups	1	
GDP Growth	-0.012361	1

The correlation table above signifies weak correlation between Start-ups and GDP growth rate. Further, a negative correlation between these two variables have been recorded. This signifies that GDP growth falls downwards, with the increase in the number of start-ups.

Regression Analysis**Table-3**

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	5.525	1.895	2.915	0.019
Start-ups	(0.000)	0.000	(0.035)	0.973

The regression table displayed above has been tested at 5% significant level. The findings indicate that null hypothesis has been accepted and it can be concluded that there is no significant relationship between starting of new startups and GDP growth in India.

Discussion

From the above findings, it can be commented that Indian Start-ups are not strong enough to impact GDP growth. As discussed earlier, agriculture sector is the major contributor in the Indian GDP growth rate. Hence, it is recommended that to make new start-ups effective, Indian government should encourage the entrepreneurs for injecting innovative ideas in agriculture sector. Most of the start-ups in India have been recorded in tech sector, as the big players in manufacturing sectors gives tough competitions to new start-ups. Therefore, Indian government also requires to provide both financial as well as moral support to new start-ups in order to survive for long-term.

**CONCLUSION**

Startups have the power to transform the world, and in the years to come, there will be an increase in the number of businesses that do so. The only way to accelerate a country's economic growth is through entrepreneurship. And a modest notion could turn into a significant, original answer that alters the course of your life. When startups are more numerous and contribute more to GDP, they are crucial for a country's economic progress. The statistics also support the conclusion that entrepreneurs do not significantly affect the GDP of India. To assist grow India's GDP, the government must encourage and support more entrepreneurs in India. The reason is that, India's GDP and foreign reserve are both now relatively low. The government is promoting entrepreneurship and the measures it is doing, which is beneficial for the startup industry in India and its promising future. And in the following ten years, this will unquestionably strengthen India's economy and GDP.

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