

ENTREPRENEURSHIP AND INEQUALITIES: EVIDENCE FROM INDIA

Kajal Gupta*, Poonam Sharma**

**Junior Research Fellow, Department of Evening Studies-Multi Disciplinary Research Centre
Panjab University, Chandigarh, India. Email: Kajalgupta024@gmail.com*

***Junior Research Fellow, University Business School, Panjab University, Chandigarh, India.
Email: Psharma.ubs@gmail.com*

Abstract: *The present study aims to explore the relationship between entrepreneurial activities and income inequalities in India. The manufacturing sector has been selected for the study. The previous studies in the related areas have shown contradictory results and there is a lack of consensus about the relationship between the two. Thus, an attempt has been made to study the same in Indian perspective. The Indian government has taken many initiatives from time to time to encourage entrepreneurial activities in the country. It is considered as a tool to conquer the problem of employability and economic growth. Thus, the study assumes the presence of a two-way relationship between entrepreneurial activities and income inequalities in India.*

Keywords: Entrepreneurship, Inequalities, Manufacturing Sector, Unbalanced Growth

INTRODUCTION

In today's global business environment almost every country is focussing on increasing the speed of economic development in their respective countries. The enlargement in the volume of world trade has further added a pace to this growth. Countries are always in search of different policies and strategies to make their goods and services more attractive and cost-effective than their competitors in the world market. Like, "financial assistance for entrepreneurs is high on the agenda in the European Union and OECD, where member states are urged to promote the availability of risk capital financing for entrepreneurs" (OECD 2004). This competition has resulted in the expansion of the private sector in India as well. In 1991, the Indian Government decided to adopt certain policy measures to increase the ease of doing business. These policies were aimed to serve multiple goals simultaneously like solving the problem of employability and rise in the standard of living of the people at large, by way of providing consumer goods at competitive prices in the market. Giving a boost to entrepreneurial activities is seen as a necessity for economic development. The policy of increasing entrepreneurship in a country has now become a traditional tool for augmenting the economic development on one hand and solving certain structural problems on the other. In India, the orientation of the Indian government towards the private sector changed drastically during the

decade starting in 1991. Several initiatives and policy measures like Digital India, Start up India, Make in India, National Skill Development Mission, Support to Training and Employment Programme for Women (STEP), etc has been undertaken by the government from time to time to help realise India its unique demographic potential so as to foster innovation and entrepreneurship. But at the same time, the income inequalities are thought to be greater than before. "According to the Central Board of Direct Taxes (CBDT) detailed income distribution data of roughly 50 million income tax payers revealed that the Gini coefficient for India in 2013 was 48, and it rose to 63 by 2016, a 15 percentage point jump in just three years" (Hindustan Times, 2018). "Many studies, including Schumpeter emphasized the role of entrepreneurship in economic growth and development of a country. Entrepreneurs, characterized by their attitudes to be imaginative, innovative, authoritative, and risk-taking, drive innovation and technological change in the economy, which are crucial in economic growth and development and lead to a higher income of the population. On the other hand, entrepreneurship has been considered to associate with higher inequality because of the risk embodied in it" (Yanya, 2012, p.436).

Thus, this study aims to find out the empirical shreds of the same with the focus on Indian manufacturing sector.

REVIEW OF LITERATURE

Theoretical Background

Karl Marx gave the model of economic growth which emphasized the class struggle between the Proletariat and the Bourgeoisie as the main reason for the doom of capitalism and the rise of socialism. Kuznets (1955) was a pioneer economist who gave an account of the relationship between economic growth and income inequality which describes the famous inverted U curve, commonly known as the Kuznets curve. He considered savings and process of structural change referred to as industrialization and urbanization as the main factors which would initially lead to rise in inequality in the course of economic development and eventually inequalities will decline as economic development proceeds further. Further, Lippmann *et al.*, (2005) gave a theoretical view regarding the relationship between entrepreneurship and inequality. The study believed that nations which are marked by excessive economic inequalities tend to flourish more in terms of rate of entrepreneurial activity, both, arising out of necessity and building on market opportunities. Given the fact that entrepreneurial activities are fundamental to the evolution of capitalism, the correlation between the Gini index and entrepreneurial activity was found to be positive with R^2 at 0.415.

Lewis (1954) gave importance to the process of structural change through which underdeveloped countries transform their existing economic structures from traditional subsistence sector to one characterized as a modern capitalistic sector. In the industrialization process, he gave importance to the process of capital accumulation sourced through rising profits which the capitalists earned by paying the workers less than their productivity levels. This shifts the functional distribution of income in favor of the capitalists' class thereby generating profits which form the basis for reinvestment and further growth. This process continues till labor gets exhausted in the traditional sector and hence to generate more demand higher wages had to be paid to the migrating labor. Along with it the average productivity and income of the remaining workers in the agriculture sector also rise. At this point, the functional distribution of income shifts in favor of the working class as dualism disappears and the process of structural change stands complete. The above studies suggest that the structural transformation of the economy characterising industrialisation is associated with rising income inequalities which ultimately creates the seeds of its own destruction in the form of class struggle (Karl Marx). Also, inequalities provide an inducement to invest money in new start-ups thus increasing the level of industrial diversity in the economy. The study (Lippmann *et al.*, 2005) also gave few factors that might strengthen the relation between entrepreneurship and inequality.

Thus, economic development, government support for new businesses, foreign direct investment, sectoral shifts, rapid service sector growth, and strength of the working class all tend to affect entrepreneurship and inequality in the same direction. Therefore, the study concluded that the nations which aim at egalitarian incomes might have to suffer from suppression of entrepreneurial activity while those favoring entrepreneurship might inadvertently lead to escalating levels of inequality.

Entrepreneurship and Inequalities

Entrepreneurship literature has mention of many definitions of an entrepreneur that too with different orientations. Schumpeter (1911) still has a dominant voice in this regard since he gave importance to innovations as the prime factor behind economic growth and development of a country. In his view, the role of innovators was assigned to the entrepreneurs who had the technical knowledge to innovate and managerial ability to undertake risks. Whereas Davids (1963) mentioned that an entrepreneur is an individual who starts a new business. Brockhaus (1980) believed that an entrepreneur is the major owner and manager of the business. Isenberg (2014) related entrepreneur with the top one or two percent who has the ability to cross over the hurdles and leave the competitors behind on the way to achieve gold medal in the Olympics of enterprise. Brockhaus and Horwitz's (1985) in their study concluded that the literature seems to support the fact that there is no general definition of entrepreneur. Most of the attempts to distinguish entrepreneur with small business owners or managers have found no significant differentiating factors. On the other hand, an entrepreneur is sometimes related to a capitalist class of the country.

Marinoni (2017) asserted that entrepreneurial activities captured by the quality of newly founded ventures are considered to be the vital in the process of economic development. This study found a significant and positive correlation between entrepreneurship and income inequalities. Kihmi (2010) contended that encouraging rural entrepreneurship may be favorable for both income growth and income distribution. Yanya (2012) applied VAR Granger Causality / Block Exogeneity Wald Tests and established a one-way causal relationship from entrepreneurship (firm establishment) to poverty and income inequality in Thailand. On the other hand Kerr and Nanda (2009) point out that financial constraint is one of the biggest concerns impacting potential entrepreneurs around the world. Black and Strahan (2002), Cetorelli and Strahan (2006) found a dramatic increase in start-ups or entrepreneurship activity subsequent to inter-state deregulation of branch banking. Singh (2017) conducted a book review of the "The Globalisation of Inequality" written by Francois Bourguignon. The author

held the belief that inequality prevailing globally had risen since the 1980s and the main reason accorded to it was the globalization of capital, unregulated capitalism and pro-market reforms. Yanya, Hakim, Razak (2013) examined the impact of entrepreneurship on income inequality and poverty reduction in Thailand using disaggregated data for 76 provinces for the year 2005 and 2006. Entrepreneurship measured as the number of the new business establishments had a significant negative impact on the growth of Gini-coefficient and the headcount index representing poverty but there was no significant impact on the income of the poor. On the contrary in case of panel data regression for the year 1995-2007, it revealed that the number of new firm establishments had no significant impact on income inequality and income of the poor but had a direct impact on reducing the poverty among Thai people. Similar results were examined by Bonito *et.al* (2017) which concluded that entrepreneurship as represented by a number of establishments comprising of Micro, Small and Medium Enterprises (MSMEs) had no impact on income inequality in the Philippines. Another explanation which focuses on the wealth held by the most privileged groups in society posits that higher levels of wealth inequality may a signal that some segments of the population have excess capital to invest in new ventures and, therefore increase opportunity entrepreneurial activity. They could either invest it in their own start-ups or act as angel investors for the start-up activities of others (Lippmann *et al.*, 2005). Thus, income inequalities increase the likelihood of individual-level engagement in social entrepreneurship (Pathak and Muralidharan, 2018).

The Indian government had also launched different policies and laws to facilitate the business sector in the economy. Various programmes like Entrepreneurship Development Programme, Startup India, Make in India and special emphasis on SSIs finds mention in the policy history of India. Along with this, the reforms of 1991 had opened up the Indian economy to the outside world leading to an increase in private capital investment. Entrepreneurship development programmes and related policies along with decreased governmental control have resulted in the growth of the business sector in India. On the other side regarding the situation of income inequalities, the IMF chief remarked that “The net worth of the billionaire community increased 12 fold in 15 years, enough to eliminate absolute poverty in India twice over” (Lagarde, 2014). “To the degree that inequality is consolidated and a lack of resource inhibits entrepreneurship, the founding of new businesses contributes to the reproduction of social and economic inequalities” (Lippmann *et al.*, 2005, p.6).

So, to gauge a better understanding of the relationship between entrepreneurship and income inequality in India, the present study has been carried out.

OBJECTIVES

The current study evaluates the link between Entrepreneurship and Income Inequalities in India for the period 1981-82 to 2012-13. For simplification purpose the year 1981-82 has been regarded as 1981 and 2012-13 as 2012, leading to a total time span of 32 years. The following are the objectives of the present study:

- To investigate if any association exists between entrepreneurship and income inequality in India.
- To examine the causal relationship between entrepreneurial activities and income inequality in India.
- To ascertain structural break in the trend of entrepreneurship and income inequality in the light of Economic Reforms of 1991.

RESEARCH METHODOLOGY

Variables and Data sources

The manufacturing sector of India has been selected for investigating the objective of the study. The variable for measuring the income inequalities is the Gini coefficient (before taxes) taken from The Standardized World Income Inequality Database, version 7.1 (2018). The proxy variable for entrepreneurship is the number of factories and profits. The data for measuring entrepreneurial activities have been collected from the Annual Survey of Industries 2015-16, Central Statistics Office (CSO), Government of India published in 2018.

Data Analysis

- For measuring the strength and direction of association between entrepreneurship and income inequality, Correlation Technique has been used.
- For examining the causality between entrepreneurship and income inequality Vector Autoregressive (VAR) Granger Causality/Block Exogeneity Wald test has been applied.
- For ascertaining the structural break in the data due to 1991 economic reforms, Dummy Variable Regression Analysis technique has been used.

Software packages SPSS (Statistical Package for Social Science) and Eviews 9 were used for analyzing the data.

Correlation

The Karl Pearson coefficient of correlation was used and accordingly the following null hypothesis (H_{01}) has been set for measuring the association between income inequalities and no. of factories as well as profits.

H_{01} There is no significant association between entrepreneurial activities and income inequalities.

Table 1: Correlation Matrix

(N=32)			
		No of factories	Profits
Gini coefficient	Pearson Correlation	.865**	.920**
	Sig. (2-tailed)	.000	.000

Source: Researcher's own compilation from SPSS output

The Pearson's correlation coefficient shows a positive association between number of factories and income inequalities as well as profits and income inequalities at 1% significance level. Thus H_{01} is rejected.

VAR Granger Causality/Block Exogeneity Wald Tests

The Granger Causality Test through VAR framework was applied to find out the causal link between entrepreneurship

and income inequality. Dickey (1976) and Fuller (1976) noted that "estimates of the VAR model in the Granger Causality analysis is biased in the presence of unit root and this bias can be expected to reduce the accuracy of forecasts" (Awe, 2012). So, first, the order of integration of the series (stationary) was tested for both the variables by using the Augmented Dickey-Fuller (ADF) Unit Root test.

Unit Root Test

Table 2 exhibits the results of Unit root test using ADF statistic. The null hypothesis of non-stationarity is performed at 1%, 5% or 10% level of significance. If the absolute value of the tau statistic on the ADF Test is smaller than the critical value of the ADF in the table with a certain level of significance, the time series is not stationary (Gujarati, 2012). The result of the ADF test illustrates that all the data series are non-stationary at level but no. of factories is stationary at first difference and all other variables are stationary at second difference.

Table 2: Unit Root Test Results

No.	Variable	ADF Test Statistic Level		ADF Test Statistic First Difference		ADF Test Statistic Second Difference	
		t-Stat	Prob.*	t-Stat	Prob.*	t-Stat	Prob.*
1.	Gini coefficient	-1.993289	0.5813	-2.560415	0.2994	-6.461437	0.0000
2.	Profits	2.273818	1.0000	-3.059697	0.1356	-2.429456	0.0172
3.	No. of Factories	-0.603692	0.9716	-5.704441	0.0003	-	-

Source Researcher's own compilation from Eviews output, *MacKinnon (1996) one-sided p-values

Selection of Optimal Lag Lengths for the VAR Granger Causality Test

Table 3 shows the results of VAR lag order selection criteria. According to the econometric literature the lag length corresponding to minimum AIC and SBC values is the optimum lag length. However if any clash emerges

between the two, then one can decide lag length on basis of decision provided by the majority of test statistics. On the basis of Likelihood Ratio (LR), Final Prediction Error (FPE), Akaike Information Criterion (AIC) and Hannan-Quinn Information Criterion (HQ), optimum lag length of 1-3 has been selected for further analysis of the data.

Table 3: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-718.4116	-	3.24e+19	53.43789	53.58188	53.48071
1	-701.1843	29.35015	1.77e+19	52.82847	53.40440*	52.99972
2	-690.9589	15.14875	1.67e+19	52.73770	53.74557	53.03739
3	-673.9450	21.42494*	9.92e+18*	52.14407*	53.58389	52.57221*

Source Eviews output, Note:* indicates optimum lag length

Results of VAR Granger Causality/Block Exogeneity Wald Tests

Granger and Newbold (1974) noted that “the regression results from the VAR models of the Granger causality tests using non-stationary variables will be spurious”. This is also supported by Rahmadana and Simatupang (2016) which applied the Granger Causality Test on second differenced

data to avoid false results. Thus, in the analysis to avoid the same problem, the cause and effect relationship among the variables in the short-run has been carried out on stationary data with the null hypothesis that entrepreneurship does not granger cause income inequalities and vice versa. This test detects whether the lags of the independent variable can granger cause the dependent variable in the VAR system using the Chi-square (Wald) statistics.

Table 4: VAR Granger Causality/Block Exogeneity Wald Tests Results

Dependent variable: DD(GINICOEFFICIENT)			
Independent Variable	Chi-sq	df	Prob.
D(NO_OF_FACTORIES)	12.14614***	3	0.0069
DD(PROFITS)	7.456218*	3	0.0587
All	16.62234	6	0.0108
Dependent variable: D(NO OF FACTORIES)			
Independent Variable	Chi-sq	df	Prob.
DD(GINICOEFFICIENT)	1.342626	3	0.7190
DD(PROFITS)	11.00137**	3	0.0117
All	15.58931	6	0.0161
Dependent variable: DD(PROFITS)			
Independent Variable	Chi-sq	df	Prob.
DD(GINICOEFFICIENT)	12.92990***	3	0.0048
D(NO_OF_FACTORIES)	14.39437***	3	0.0024
All	28.19534	6	0.0001

Note: Researcher's own compilation from Eviews output. *, ** and *** denotes significance at 10%, 5% and 1% levels.

From the aforesaid table 4, it can be well inferred that No. of factories Granger causes Gini coefficient whereas the Gini coefficient does not Granger cause no. of factories (Unidirectional Causality). Profits Granger cause Gini coefficient whereas the Gini coefficient also Granger causes profits (Bidirectional Causality). Profits Granger causes no. of factories whereas no. of factories also Granger cause profits (Bidirectional Causality).

Structural Stability of the Regression Model Using Dummy Variable Technique

To examine break in the trend of income inequalities and entrepreneurship, used intercept and slope dummy variable. The time period for the study is 1981-1982 to 2012-13. The break is estimated at 1991-92 which is regarded as the period of economic reforms when India did away with License Raj and adopted liberalization, privatization and globalization

(LPG). To examine the structural break due to the LPG policy the sample data is divided into two time periods i.e. the pre-reform period of 1981-82 to 1990-91 and post-reform period of 1991-92 to 2012-13.

H_{02} There is no structural break in the data with regard to the specific year (1991).

The regression equation is: $Y_t = \alpha_1 + \alpha_2 D + \beta_1 T + \beta_2 (DT) + u_t$
 Y_t Gini coefficient, profits and No. of factories of India.

T = no. of years taking values 1 to 32

D = dummy variable taking value 0 for each year in the pre-reform period (1981-82 to 1990-91) and value 1 for post-reform period (1991-92 to 2012-13).

DT = Slope dummy variable

α_2 = Differential intercept coefficient for post reform period.

β_1 = Slope coefficient for time variable.

β_2 = differential slope coefficient for post-reform period.

The sign and statistically significant coefficient of differential intercept and differential slope present change in the trend during the pre and post-reform period, thereby indicating the presence of a break-in trend.

Table 5: Dummy Variable Regression Where DV= Gini Coefficient

	Regression coefficients	t value	Sig.
Constant	42.667	245.810	.000
D	-2.980	-11.534	.000
T	.117	4.181	.000
DT	.204	6.966	.000
R ²	0.989		
Adjusted R ²	0.988		

Source: Researcher's own compilation from SPSS output

Dummy variable regression for the structural break at observation 1991 has been found to be statistically significant for the Gini coefficient at 1% significance value (Table 5). Thus the Null hypothesis (H_{02}) is rejected for income inequalities (Gini coefficient). There is a break in 1991 and the series needs two equations for pre and post-1991 data.

$$\hat{Y}_t = 42.67 - 2.98D + 0.12T + 0.20DT$$

Regression equation for 1981-82 to 1990-91 is

$$\hat{Y}_t = 42.67 + 0.12T$$

Regression equation for 1991-92 to 2012-13 is

$$\begin{aligned}\hat{Y}_t &= (42.67 - 2.98) + (0.12 + 0.20)T \\ &= 39.69 + 0.32T\end{aligned}$$

Table 6: Dummy Variable Regression Where DV= Profits

	Regression coefficients	t value	Sig.
Constant	136640.13	.039	.969
D	-29092032.80	-5.64	.000
T	67947.89	.122	.904
DT	1968334.67	3.37	.002
R ²	0.876		
Adjusted R ²	0.863		

Source: Researcher's own compilation from SPSS output

Dummy variable regression for profits (table 6) states that the slope coefficient of time variable is insignificant but

differential intercept and differential slope coefficient is statistically significant at 1% significance level. This states that there was no major change in profits during pre-reform period indicating stagnant growth. However, profits grew at a substantial rate in post reform period.

Table 7: Dummy Variable Regression Where DV= No. of Factories

	Regression coefficients	t value	Sig.
Constant	95550.07	8.53	.000
D	-33111.00	-1.99	.057
T	1155.52	.64	.528
DT	2690.94	1.43	.165
R ²	0.776		
Adjusted R ²	0.752		

Source: Researcher's own compilation from SPSS output

The dummy variable regression for the structural break in no. of factories at observation 1991 has been found to be statistically insignificant for slope coefficient of time variable and differential slope coefficient (Table 7). This indicates that there had only been an intercept shift with regard to no. of factories while slope became stagnant. If the value of the slope is zero, there was no trend and the indicator did not change with time.

RESULTS AND DISCUSSION

The correlation results indicate a high degree of correlation between income inequalities and measures of entrepreneurship. (Table 1). The correlation between the Gini coefficient and no. of factories is found to be 0.865 and between Gini coefficient and profits it is 0.920. This indicates that profits have a relatively high significant association with the income inequalities in India thereby establishing the link between entrepreneurship and income inequalities. Considering the fact that pairwise analysis among multiple variables could give misleading results (Seth, 2017) the model was extended to 'n' variable case using the autoregressive framework. Results of the Granger Causality Test through VAR model (Table 4) revealed that a bidirectional relationship exists between profits and no. of factories and between the Gini coefficient and profits in the manufacturing sector in India. Thus, a change in profits, in short-run is both the cause and effect of change in no. of factories. Similarly, a change in income inequalities in short-run is both the cause and effect of the change in profits in India. Further, a unidirectional short-run relationship exists from no. of factories to Gini coefficient i.e. income inequalities bear an insignificant short-run impact on no. of factories rather no. of factories cause movement in income

inequalities in short run. This result is in consensus with the previous study (Yanya, 2012). Therefore, it confirms the presence of a two-way causal relationship between entrepreneurial activities and income inequalities in India. Additionally, studies claim (Sharma and Sharma, 2019) and it is generally believed that 1991-92 has been the year of great change for the Indian economy. This change was due to the adoption of LPG policy. Dummy variable regression has been used to ascertain the structural change in the trend of study variables due to the 1991 reforms. The results have indicated that income inequalities and profits witnessed a structural break due to the policy changes of 1991 reforms. Both income inequalities and profit increased at a higher rate during post reform period as compared to pre-reform period. Thus, the results prove the point put forth by many studies that any government's attempt to facilitate pro-business policies (Piketty and Lucas, 2017) promoting private sector and entrepreneurship play a significant role in increasing the income inequalities by way of increasing the share of entrepreneurs in the total value added i.e. profits.

CONCLUSION AND POLICY IMPLICATIONS

Isenberg (2014) considered that “successful entrepreneurship always exacerbate inequality, at least in the short-run”. Entrepreneurs because of their capacity for inventive thought and quick understanding burst into new markets and create extraordinary value for the customers which in turn reward those who had helped build success into reality with greater financial returns. Entrepreneurship can push innovation and improve quality of life thus gratifying top 1% to keep getting richer and bottom 20% to lose hope. In this regard inequality is considered as a double edge sword, it kills on both sides (Isenberg, 2014). Although inequality can widen the gap between the rich and the poor, it can also provide an incentive for efficient and hard work, to innovate and to inspire onto a new path to accomplishment and upward mobility that get ignites due to the demonstration effect. In addition, the improved life chances and luxurious lifestyle associated with greater wealth serve as an incentive for potential entrepreneurs (Lippmann *et al.*, 2005, p.13). The same has been proved empirically in the present study. Though the numbers of factory establishments and profits have certainly caused income inequalities in the short run, those inequalities at the same time have caused entrepreneurship to significantly change. Thus, the policy makers should continue to observe the role of trade facilitator because the current scenario as per the analysis seems to be conducive for increase in private sector and entrepreneurs in India. If the planners want the growth of entrepreneurship, then they have to deal with its inequality as well. Measures which serve to reduce income inequalities may certainly cause entrepreneurial ambition to dampen down. However,

if at the same time the entrepreneurs in the economy share their positive growth impulses with the rest of the society, the growth synergy between the various economic sectors could help the economy realise its true growth potential. As suggested by Packard and Bylund (2018), “To the extent that inequality growth is the result of natural market processes, manipulating and disrupting these processes may have consequences far worse than the status quo. Disrupting these processes may inhibit the entrepreneurial market process, thereby reducing economic growth and delaying the redistribution process that enhances the lives of all, including the poor. If personal wealth is generated by increasing others' well-being through value-creative entrepreneurship, then it becomes much less obvious that inequality should be considered inherently bad and, therefore, mitigated through policy. Entrepreneurship theory can, therefore, by explaining the micro foundations of market processes, contribute to increased understanding and, thus, better policy with respect to economy and equality”.

In one of the recent survey conducted (Oxfam research, 2018) showed that the inequalities are at very high levels in India. In their survey respondents were asked to about the ratio of top pay to ordinary worker's pay. People responded it to be 64, which are quite high but the actual calculated ratio found to be 483, people think that it should be 14 and people are not even able to realize the quantum of inequality present in the country and it is constantly increasing too. Finding the answer to the question that whether income inequalities in India have crossed the highest limits and at the same time till what level they would be conducive for the growth of entrepreneurship, remains beyond the scope of this paper.

LIMITATIONS OF THE STUDY

All researches have certain limitations and this study is also not an exception to it. The major limitation is that due to unavailability of recent year's data about income inequalities in India, the analysis is limited to 2012 only which also constraints the need of testing for long-run equilibrium relationship through co-integration technique.

REFERENCES

- Annual Survey of Industries. (2015-16). Central Statistics Office (CSO) Industrial wing, Government of India published in 2018.
- Seth, A. (2007) Granger Causality. *Scholarpedia*, 2(7), 1667.
- Awe, O. O. (2012). On pairwise Granger causality modeling and econometric analysis of selected economic indicators. *Interstatt Journals*. net/YEAR/2012/articles/1208002. Pdf

- Black, S. E., & Strahan, P. E. (2002). Entrepreneurship and bank credit availability. *The Journal of Finance*, 57(6), 2807-2833.
- Bonito, J., Daantos, F. J. A., Mateo, J. C. A., & Rosete, M. (2017). Do entrepreneurship and economic growth affect poverty, income inequality and economic development. *Review of Integrative Business & Economics Research*, 6(1), 33-43.
- Brockhaus, R. H. (1980). Risk-taking propensity of entrepreneurs. *Academy of Management Journal*, 23(3), 509-520.
- Brockhaus, R. H., & Horwitz, P. S. (1985). The psychology of the entrepreneur. In D.L. Sexton & R.W. Simlar (Ed.) *The Art and Science of Entrepreneurship*. Cambridge, MA: Ballinger.
- Cetorelli, N., & Strahan, P. (2006). Finance as a barrier to entry: Bank competition and industry structure in local U.S. markets. *Journal of Finance*, 61(1), 437-61.
- Chancel, L., & Piketty, T. (2017). Indian income inequality, 1922-2014: From British Raj to Billionaire Raj. WID. World Working Paper Series N 2017/11, (July).
- Davids, L. E. (1963). *Characteristics of small business founders in Texas and Georgia*. Washington, D.C.; Small business Administration.
- Granger, C. W., & Newbold, P. (1974). Spurious regressions in econometrics. *Journal of Econometrics*, 2(2), 111-120.
- Gujarati, D. N. (2012). *Basic econometrics*. Tata McGraw-Hill Education.
- Hindustan Times (2018). The proof behind India's rising income inequality. Retrieved from <https://www.hindustantimes.com/india-news/the-proof-behind-india-s-rising-income-inequality/story-Khh2jqPaTHOFGCzuGoIc2L.html>
- Isenberg, D. (2014). Entrepreneurship always leads to inequality. *Harvard Business Review*.
- Jhingan, M. L. (2016). *The economics of development and planning*. Delhi: Vrinda Publications (P) Ltd.
- Kerr, W., & Nanda, R. (2009). Financing constraints and entrepreneurship. *National Bureau of Economic Research* (No.w15498).
- Kimhi, A. (2010). Entrepreneurship and income inequality in southern Ethiopia. *Small Business Economics*, 34(1), 81.
- Kuznets, S. (1955). Economic growth and income inequality. *The American Economic Review*, 45(1), 1-28.
- Lagarde, C. (2014). A New Multilateralism for the 21st Century, the Richard Dimbleby Lecture, London. *International Monetary Fund*.
- Lewis, W. A. (1954). Economic development with unlimited supplies of labor. *The Manchester School*, 22(2), 139-191.
- Lippmann, S., Davis, A., & Aldrich, H. E. (2005). Entrepreneurship and inequality. In *Entrepreneurship* (pp. 3-31). Emerald Group Publishing Limited.
- Marinoni, A. (2017). Entrepreneurship and Inequality. In *Academy of Management Proceedings* (Vol. 2017, No. 1, p. 11937). Briarcliff Manor, NY 10510: *Academy of Management*.
- OECD (2004). Financing innovative SMEs in a global economy. Second OECD Conference of Ministers Responsible for SMEs, Istanbul, Turkey.
- Oxfam (2018). Reward Work, Not Wealth. Retrieved from <https://www.oxfam.org.nz/reports>.
- Packard, M. D., & Bylund, P. L. (2018). On the relationship between inequality and entrepreneurship. *Strategic Entrepreneurship Journal*, 12(1), 3-22.
- Pathak, S., & Muralidharan, E. (2018). Economic inequality and social entrepreneurship. *Business & Society*, 57(6), 1150-1190.
- Rahmadana, M. F., & Simatupang, S. (2016). Using granger causality to examine the relationship between economic growth and absorption of labour in North sumatera province-Indonesia. *International Journal of Business and Management Invention*, 5(2), 38-43.
- Sharma, M. K. & Sharma, P. (2019). Paradigm shift in compensation to workers in Indian Manufacturing – Role of LPG Policies. *Indian Journal of Industrial Relations*, 54(3), 428-440.
- Singh, P (2017). Liberal approach to inequality. *Economic and Political Weekly*, 52(13).
- Solt, F. (2016). The Standardized World Income Inequality Database. *Social Science Quarterly* 97. SWIID Version 7.1, August 2018.
- Yanya, M. (2012). Causal relationship between entrepreneurship poverty and income inequality in Thailand. *International Journal of Trade, Economics, and Finance*, 3(6), 436.
- Yanya, M., Abdul-Hakim, R., & Abdul-Razak, N. A. (2013). Does entrepreneurship bring an equal society and alleviate poverty? Evidence from Thailand. *Procedia-Social and Behavioral Sciences*, 91, 331-340.