Original Research Article

The impact of COVID-19 pandemic-Entrepreneurial Uncertainty and Effect on Economic Development

Himani^{1,*}, Abhinav Anand¹, Amit Barwal¹, Shaina Kalsi¹, Surya Prakash Gautam¹, Saurabh Sharma², Raka Sharma

¹CT Institute of Pharmaceutical Sciences, Shahpur Campus, Jalandhar, Punjab, India

²Dept. of Pharmacy, CT University, Ludhiana, Punjab, India

ARTICLE INFO

Article history:

Received 30-09-2020

Accepted 11-09-2020

Available online 02-11-2020

Keywords:

Equity investments

Crisis

COVID19

Realtime data

Entrepreneurial finance

Necessity based entrepreneurship

ABSTRACT

This paper illustrates however chronic uncertainty caused by crisis events affects the provision of entrepreneurial sources of finance for starts –ups and tiny and medium sized enterprises (SMEs). To explore this line of argument, this paper examines crunch base period knowledge examining entrepreneurial finance investments in China throughout development COVID-19 crisis. The paper shows that these equity investments unrect dramatically within the immediate aftermath of COVID-19 virus, leading to a year on year decrease of 60% within the total volume of investment raised between quarter one in 2019 and quarter 1 in 2020. Importantly, the paper found early-stage seed investments falling the steepest, suggesting aborning starts-ups are those most heavily affected by the crisis. Overall, enterprise policy manufacturers have to be compelled to become higher attuned at watching period of time data sources to mitigate chronic entrepreneurial uncertainty via strategic policy responses.

© 2020 Published by Innovative Publication. This is an open access article under the CC BY-NC license (<https://creativecommons.org/licenses/by-nc/4.0/>)

1. Introduction

This paper illustrates however extreme uncertainty caused by crisis events affects the provision of entrepreneurial sources of finance for starts-ups and tiny, medium-sized enterprises (SMEs). For over a century, uncertainty has long been recognised as a central pillar influencing entrepreneurial higher cognitive process.¹ Uncertainty is defined because the perceived inability to predict outcomes within the general business setting accurately thanks to insufficient data or the shortcoming to discriminate between relevant and inapplicable data.² Throughout shocks and crisis events, levels of uncertainty escalate at such speed their impacts become extremely draining for entrepreneurs and entrepreneurial actors love banks and investors.^{3–6} Therefore, deciphering uncertainty is an integral a part of ascertaining however entrepreneurship is wedged by a crisis COVID-19 pandemic, especially

given the potential ramifications of “Financial Distancing” between entrepreneurial forms and investors.⁷

The literature on the categories of entrepreneurial effort remains rather divided, with students of entrepreneurship focusing additional on the determinants of OPP efforts and such sub-categories as high-growth and strategic entrepreneurship.⁸ Students of economic development, however, tend to target the causes and effects of inflammatory disease efforts.⁹ We have a tendency to address one in every of the empirical and method gaps within the literature on OPP and NEC efforts: most studies examine country-level rates if entrepreneurial efforts, failing to capture the interaction between country an individual drivers.^{10,11} As management variables, we have a tendency to include some demographic characteristics an entrepreneurial attitudes at the individual level, such as education, gender, age, social, capital, self-efficacy and concern of failure and a few formal institutional variables involving entrepreneurship dynamics at the country level, cherish labour freedom, trade freedom and states rates. The

* Corresponding author.

E-mail address: himani.sharma270197@gmail.com (Himani).

tendency to check the model on a novel sample of 956,925 people from 51 countries, combining primary knowledge from the Global Entrepreneurship Monitor (GEM) for the amount 2005–2013.

The contribution to the stream of comparative entrepreneurship literature is threefold. First, building on the work^{12,13} and development economists.¹⁴ Study the consequences of state fragility on entrepreneurial behaviours. Tend to contribute to the analysis on international comparative entrepreneurship¹⁰ by providing a fine grained discussion concerning but state fragility and thus the amount of economic development^{15–17} determine cross-country variations for ach OPP and inflammatory disease efforts, linking previous work that focuses on either OPP or inflammatory disease with the literature on state fragility and economic development.

The impact of the COVID-19 crisis has dramatically affected entrepreneurial finance in China to Associate in Nursing order of magnitude significantly surpassing different responded to markets adore the U.S.A.⁷ It shows that the firms hardest hit are start-ups who benefit the foremost from early-stage seed finance. The empirical setting for this study is China that was the first country to encounter a significant natural event of the COVID-19 virus, probably offering valuable empirical insights into however different countries across the world may be equally affected. In doing therefore it enhances different students who have examined however previous crisis episodes impact entrepreneurial finance.^{4,6}

Economic development associated differing kinds of entrepreneurial efforts:

Previous studies have tried to seek out an association between the categories of entrepreneurial efforts and economic development.^{18,19} A country's level of economic development will have an effect on each the rates of entrepreneurial efforts and their kind.^{20,21} Empirical proof shows that entrepreneurial venture creation rates are higher in poor countries and decline as economics become wealthier.²² As Shane points out, "If you would like to seek out countries where there are tons of entrepreneurs, head to continent or South America".²³ A large proportion of the many entrepreneurs in developing countries begin ventures often becoming self-employed in the informal sector so as to satisfy their basic wants.²⁴

In addition, economic development is related to higher rates of ritual. The opportunity cost of beginning a venture is higher in additional developed economics as a result of it more usually entails formal registration, fees and taxes and since average wages are higher in alternative words, higher group action prices and thus, higher entry barriers to entrepreneurship. What is more, economic development conjointly dictates the sophistication of the market: the

additional developed associate degree economy, the upper the common buying power of shoppers, the additional refined their demand for product and services and therefore the additional diversified the supply.²⁵ Thus, in more developed economies, it's more durable to interact in entrepreneurial efforts that don't produce price or introduce (and hence, don't qualify as OPP) and nevertheless offset their chance prices, exactly owing to the upper group action prices and higher sophistication of demand and provide. During a less-developed economy, it's easier to repeat product and services ascertained in wealthier contexts and therefore the demand for product and services which will be simply provided is a smaller amount saturated.²⁶

In terribly poor economies, incentives for OPP are scare as a result for the preconditions for the most productive reasonably entrepreneurship could also be absent or short. There will be a form of regeneration whereby the less developed the economy, the lower the incentives for OPP, which, in turn, hinder economic growth; but, the additional developed the economy, the upper the incentives for OPP, which offer the premise for any economic growth and development.^{9,27}

Fig. 1: Marginal effect of State Fragility in the individual level probability of engaging NEC based entrepreneurship. Moderated by country development level.

Fig. 2: Predicted probability of engaging NEC based entrepreneurship (%), as a function of State Fragility, moderated by country economic development level.

Entrepreneurial finance deals and uncertainty:

Due to the high levels of uncertainty related to finance for informationally opaque start-ups and SMEs, investors

overcome this by extensive observance and management procedures.²⁸ Indeed, an oversized body of labour indicates that equity investors need shut relative interactions and proximity (often face-to-face interactions) with the recipient firms.^{29,30} The investors usually use their personal networks to elicit deals so superintend their investee firms by staying “close to their money”.^{31–33}

What factors might justify this differential impact on different types and phases of entrepreneurial finance? Late-stage deals are generally undertaken by giant firms with well-established entrepreneurial firms which can create them additional recession proof. For instance, Airbnb magnificently obtained substantial working capital within the aftermath of the GFC. Plus, big VCs typically undertake staged capital infusions into corporations that have very long time tables, usually predicated on performance goals by recipient corporations.³⁴ Varied students have invoked the construct of real choices thinking to clarify the sequencing of investments.^{35,36} Every working capital funded project has project-specific uncertainty regarding the prices and benefits of the project. Consequently, a firm has the motive to speculate sooner rather than latter therefore on accumulate into to beat informational opacity and agency problems.³⁵

In conclusion, entrepreneurial finance is heavily procyclical in nature and this seems most pertinent for early-stage seed deals. Given the shortage of previous work on this subject some have noted the need for additional work to supply “potential explanations for very procyclical early-stage investments.”⁷

2. Results

Business continuity strategy throughout crisis:

The interviews reveal that entrepreneurs use multiple synchronous ways to verify continuous operation of their business throughout MCO, particularly:

1. Shorten the availability chain through centralised synchronous distributors.
2. Produce rising product to satisfy current customer's desires (customers are trying to find essential foods and clean-up and hygienically merchandise throughout MCO)
3. Use digitalised selling through mobile applications and social media, similar to Facebook and Whatsapp.
4. Employ ‘collect on delivery’ or ‘cash on demand’ dealing for the sale of products and
5. Receive payment via bank transfer or e-wallet. In line with the entrepreneurs interviewed, synchronous distribution approach permits entrepreneurs, particularly within the agri-based business to earn tight financial gain throughout a crisis. This strategy is parallel to Omni-marketing channel approach that suggest the employment of many channels in

distributing product to the client, for instance through distributors, mobile apps and physical store, is a lot of useful than single and freelance channel approach.

In addition, the results of the interviews purposes the institution of ‘centralised wholesale mart’ commercialism essential destructible produces like fish, vegetables and fruits, that they label as ‘frozen food hub’. This ‘frozen hub’ is seen by respondents as appropriate to be placed in many main high-traffic areas and may be placed in government administration offices, instruction establishments or primary housing areas. This approach is in line with³⁷ who planned the employment of ‘direct sales store’ plug destructible and agri-based merchandise. Figure 1 summarises the choice distribution approach undertaken by entrepreneurs throughout traditional time and MCO amount. Apparently, respondents viewed this approach as a lot of economical and not essentially applicable throughout this riotous time, however can also be enforced within the future.

Fig. 3:

2.1. Business recovery arrange once crisis

The movement management order amid COVID-19 outbreaks in Malaysia has reached 5 phases, diode to quite 2 months quarantine. Supported the interview, the result suggests the pandemic crisis has compact microenterprises in several level of disruption throughout the MCO phases. Some enterprises began to expertise business interruption for a month before MCO was obligatory in Malaysia. In fact, the extent of impact was additional intensive throughout the initial part of MCO that began to kick downstairs throughout the later phases. The business person perceived the slow demand for his or her product as reactions from changes in shopper shopping for behaviour, that their shopping for resolute staples and cleansing merchandise has been elevated throughout the crisis, so as to make sure continuous earnings, entrepreneurs ought to be additional versatile and build vital adjustment in their business. Entrepreneurs business recovery approach throughout the crisis evolves in a minimum of 4 stages, particularly responding, resuming, sick and resorting.³⁷ This study explains the business

recovery arrange undertaken by interviewed entrepreneurs throughout the 4 phases of MCO in Malaysia. Table 1 depicts, any various, methods for business recovery in time of crisis- before, throughout and once MCO.

Note: This knowledge is predicated on interviews with 2 small entrepreneurs concerned within the study.

Based on the interviews, it will be generalised that there no formal crisis management designing or contingency planning utilized by micro-entrepreneurs. However, a spread of approaches were went to manage the impact of the crisis, together with the operation of business from home, changing into own non-public runner, digital promoting, the multi-channel sales strategy and therefore the penetration of the new market phase throughput a crisis by commercialism rising essential merchandise. The impact-reduction ways undertaken by entrepreneurs during this study is parallel with crisis phases as steered³⁸ that involves responding, resuming ill and restoring.

2.2. Limitations and Implications for future research

Adopting a completely unique empirical approach employing a massive data set sanctioning progressive multi-level models.³⁹ Thus, a better look at the psychological feature variation at intervals the necrotizing enterocolitis and OPP classes would open up a method for novel contribution. May be, OPP-based entrepreneurs efforts may comprise efforts through which people ask for to extend either their independence or their income⁴⁰ and not solely to use a recognized chance. Thus, the psychological feature differences among opportunity-driven entrepreneurs and their institutional determinants across nations and over time warrant any investigation. Any work might address variations within the allocation of entrepreneurial effort⁴¹ between formal and informal OPP and necrotizing enterocolitis activities.^{42–44}

The approach excludes some relevant aspects generated by the heterogeneousness inside countries and the ways in which during which national establishments may regionally dorm differing types of entrepreneurship. Analysis that highlights less-developed countries or regions can give more insights into the advanced relationships among economic development, formal and new business creations motivations.^{44,45}

2.3. Implications for practice

The OPP is a lot of seemingly than inflammatory disease to advance a country's economy,⁴⁶ policy makers share an interest find ways that to support OPP-based entrepreneurial efforts. The quality of formal establishments could be a basic step toward guaranteeing that people undertake entrepreneurial efforts to pursue opportunities and not solely to produce wants. It cut back the state fragility has stronger effects on inflammatory disease in poor economics, in which

NEC is also the sole choice for escaping impoverishment.²⁴ Improved state fragility results in a lower chance of inflammatory disease, presumptively as a lot of folks enter into formal labour markets and meet their basic desires. Improved state fragility entails not solely higher regulatory frameworks, however additionally high state potency at desegregation the poor into the men and providing basic public merchandise, that reduces the requirement for self-sufficiency.¹²

Leibenstein suggest that public policy ought to specialise in 'the gaps, obstructions and impediments within the market network of the economy in question an on the gap filling and input completing capacities and responsiveness to totally different psychological feature states of the potential entrepreneurs in the population'.⁴⁷

3. Conclusion

Since the occurrence of the COVID-19 virus in China there has been a stark and dramatic decrease in mixture levels of equity investments (i.e. a 60% year on year decrease between quarter one in 2019 and quarter 1 in 2020) in China across all stages of the investment method. The severity of this decrease way exceeds the decreases witnessed in additional established markets for entrepreneurial finance akin to the North American nation.⁷ This decline is additionally thrice the dimensions of decrease by students following the finance crisis,⁴ suggesting that the uncertainty caused by the COVID-19 crisis is probably going to significantly surpass the GFC. This impact has been most pronounced for the foremost emerging entrepreneurial firms (i.e. the foremost opaque and most in want of shut investor-entrepreneur interaction), corroborating an oversized body of literature inferring that uncertainty has deeply damaging consequences for the foremost innovative and informationally opaque start-ups and SMEs.^{7,48}

Turning to the broader implications of the study, these data sources conjointly supply opportunities to tell their longer-term analysis and theoretical development. It also begs key queries regarding the kinds of entrepreneurial behaviour appear obvious candidates to more explore entrepreneurial responses to resource parsimony induced by crisis things,^{49,50} especially given the necessity for experimental approaches towards financing innovative start-ups.⁷

Added to the current, these kinds of live knowledge sources will alter policy manufacturers to trace however entrepreneurial development (such as entrepreneurial finance) responds throughout recovery periods following shock events. For example, in recognition of the potential negative impact of the COVID-19 crisis is having on British start-ups, the united kingdom government established a Future Fund with a budget \$250m to supply funding of between \$250,000 to \$5 m for GB start-ups.

Table 1: Different methods for Business Recovery in time of crisis.

Crisis Phases	Pre- Crisis			During Crisis			Post-Crisis
MCO Phases	1 month before crisis	MCO Phase 1	MCO Phase 2	MCO Phase 3	MCO Phase 4	MCO Phase 5 or more	12 months after crisis
Level of Impact on income reduction	80%	90%	80%	60%	50%	20%	Less than 3%
Business situation	full-day open, business as usual	<ul style="list-style-type: none"> • full closure, • no staff • channel disruption 	<ul style="list-style-type: none"> • half-day open • business from home 	<ul style="list-style-type: none"> • half-day open • business from home 	<ul style="list-style-type: none"> • half-day open • business from premise 	<ul style="list-style-type: none"> • Full-day open (follow MCO SOP) 	Business in the 'new normal' procedures
Impact reduction approach	None	Business from home	<ul style="list-style-type: none"> • Business from home • selfdeliver 	<ul style="list-style-type: none"> • Self-deliver • communitybased business • using mobile apps 	<ul style="list-style-type: none"> • using multichannel approach • mobile apps (e-hailing, e-bazaar, WhatsApp, Facebook) • hire private runner 	Plan for 'new normal' business:- <ul style="list-style-type: none"> • Cash on delivery • Private runner • Community based channel • Digital marketing 	<ul style="list-style-type: none"> • Restructuring of business model/ concept • Revising business plan (especially on cash flow and budgeting) • Investment on new business • Updating customer database
Crisis phases (Cook, 2015)	Warning	Responding		Resuming		Recovering	Restoring

4. Appendix1

4.1. Global Entrepreneurship Monitor National Consultants Survey (NES)

The National consultants Survey (NES) is one among the worldwide customary questionnaires of the methodology.^{51,52} Each year, a minimum of 36 consultants in collaborating countries complete the NES form. The factors are measured victimization multi-item scales that think about between 3 and 7 queries. These queries are answered on a 5 point Likert scale (where “completely true”=one and ‘completely false’=5). Calculates associate degree index for every issue victimization principal element analysis when correct analysis of every scale feasibility. Empirical studies have shown that government policies, education and coaching and also the internal market gift 2 sub-divisions for everyone.⁵¹ During this study, we tend to use the 2 sub-factors that represent the government policies category:

1. Government support and policies:
 - Government policies (e.g., public procurement) systemically favour new companies.
 - The support for brand new and growing companies could be a high priority for policy at the national

government level.

- The support for brand new and growing companies could be a high priority for policy at the authorities level.
2. Burden of taxes and paper work on entrepreneurship activities:
 - New companies will get most of the specified permits and licenses in a few week.
 - The number of taxes isn't a burden for brand new and growing companies.
 - Taxes and alternative government laws ate applied to new and growing companies in an exceedingly foreseeable and consistent method.
 - Addressing government paperwork, laws and licensing needs isn't unduly tough for new and growing companies.

5. Acknowledgment

The authors sincerely acknowledge and appreciate the tutorial steerage, support and also the continues intellectual patronage of all teaching staffs of CT Group of Institutes, Shahpur Campus, Jalandhar. While not their profound

capabilities and perception of subject, this work would now not had been attainable.

6. Conflicts of Interests

None.

7. Source of Funding

None.

References

1. Knight F. Risk, Uncertainty and Profit. Houghton Mifflin Co., Hart, Schaffner & Marx; 1921.
2. Milliken FJ. Three types of perceived uncertainty about the environment: state, effect, and response uncertainty. *Acad Manag Rev.* 1987;12(1):133–43.
3. McMullen JS, Shepherd DA. Entrepreneurial Action And The Role Of Uncertainty In The Theory Of The Entrepreneur. *Acad Manag Rev.* 2006;31(1):132–52.
4. Block J, Sandner P. What is the effect of the financial crisis on venture capital financing? Empirical evidence from US Internet start-ups. *Ventur Cap.* 2009;11(4):295–309.
5. Packard MD, Clark BB, Klein PG. Uncertainty Types and Transitions in the Entrepreneurial Process. *Organ Sci.* 2017;28(5):840–56.
6. Conti A, Dass N, Lorenzo FD, Graham SJH. Venture capital investment strategies under financing constraints: Evidence from the 2008 financial crisis. *Res Policy.* 2019;48(3):799–812.
7. Howell S, Lerner J, Nanda R, Townsend R. Financial Distancing: How Venture Capital Follows the Economy Down and Curtails Innovation. *Harvard Business School Working Paper.* 2020;p. 20–115.
8. Levie J, Autio E. Regulatory Burden, Rule of Law, and Entry of Strategic Entrepreneurs: An International Panel Study. *J Manag Stud.* 2011;48(6):1392–419.
9. Naudé W. Entrepreneurship is not a binding constraint on growth and development in the poorest countries. *World Dev.* 2011;39(1):33–44.
10. Bruton GD, Ahlstrom D, Han-Lin L. Institutional Theory and Entrepreneurship: Where Are We Now and Where Do We Need to Move in the Future? *Entrepreneurship Theory Pract.* 2010;34(3):421–40.
11. Hoskisson RE, Covin J, Volberda HW, Johnson RA. Revitalizing Entrepreneurship: The Search for New Research Opportunities. *J Manag Stud.* 2011;48(6):1141–68.
12. Ault JK, Spicer A. The institutional context of poverty: State fragility as a predictor of cross-national variation in commercial microfinance lending. *Strategic Manag J.* 2014;35(12):1818–38.
13. Ault JK. An institutional perspective on the social outcome of entrepreneurship: Commercial microfinance and inclusive markets. *J Int Business Stud.* 2016;47(8):951–67.
14. Acemoglu D, Robinson J. Why nations fail: The origins of power, prosperity, and poverty. New York: Crown Business; 2012.
15. Bowen HP, Clercq DD. Institutional context and the allocation of entrepreneurial effort. *J Int Business Stud.* 2008;39(4):747–67.
16. Estrin S, Korosteleva J, Mickiewicz T. Which institutions encourage entrepreneurial growth aspirations? *J Business Venturing.* 2013;28(4):564–80.
17. Stephan U, Hart M, Drews CC. Understanding motivations for entrepreneurship: a review of recent research evidence. Enterprise Research Centre and Aston Business School. Aston University, Birmingham; 2015. Available from: http://eprints.aston.ac.uk/25172/1/Understanding_motivations_for_entrepreneurship.pdf. Accessed 15.
18. Carree M, Stel AV, Thurik R, Wennekers S. The relationship between economic development and business ownership revisited. *Entrepreneurship Reg Dev.* 2007;19(3):281–91.
19. Sautet F. Local and systemic entrepreneurship: Solving the puzzle of entrepreneurship and economic development. *Entrepreneurship Theory Pract.* 2013;37(2):387–402.
20. Sternberg R, Wennekers S. Determinants and Effects of New Business Creation Using Global Entrepreneurship Monitor Data. *Small Business Econ.* 2005;24(3):193–203.
21. Carree M, Stel V, Thurik R, Wennekers S. The Effect of Entrepreneurial Activity on National Economic Growth. *Small Business Econ.* 2005;24(3):311–21.
22. Wennekers S, Stel AV, Carree M, Thurik R. The relationship between entrepreneurship and economic development. Is it U-shaped? *Foundations Trends Entrepreneurship.* 2010;6(3):167–237.
23. Shane S. Why encouraging more people to become entrepreneurs is bad public policy. *Small Business Econ.* 2009;33(2):141–67.
24. Banerjee AV, Duflo E. The economic lives of the poor. *J Econ Perspect.* 2007;21(1):141–67.
25. Porter ME. The competitive advantage of nations. London: MacMillan Press Ltd; 1990.
26. Webb JW, Tihanyi L, Ireland RD, Sirmon DG. You Say Illegal, I Say Legitimate: Entrepreneurship in the Informal Economy. *Academy Manag Rev.* 2009;34(3):492–510.
27. World Development Indicators. World Bank Publications; 2010.
28. Kaplan SN, Stromberg P. Venture Capitalists as Principals: Contracting, Screening, and Monitoring. *Am Econ Rev.* 2001;91(2):426–30.
29. Clercq DD, Sapienza HJ. Effects of relational capital and commitment on venture capitalists' perception of portfolio company performance. *J Business Venturing.* 2006;21(3):326–47.
30. Sapienza HJ, Gupta AK. Impact of agency risks and task uncertainty on venture capitalist - CEO interaction. *Acad Manag J.* 1994;37(6):1618–32.
31. Shane S, Cable D. Network Ties, Reputation, and the Financing of New Ventures. *Manag Sci.* 2002;48(3):364–81.
32. Cumming D, Werth JC, Zhang Y. Governance in entrepreneurial ecosystems: venture capitalists vs. technology parks. *Small Bus Econ.* 2019;52(2):455–84.
33. Conti A, Dass N, Lorenzo FD, Graham SJH. Venture capital investment strategies under financing constraints: Evidence from the 2008 financial crisis. *Res Policy.* 2019;48(3):799–812.
34. Gompers P, Lerner J. The Venture Capital Revolution. *J Econ Perspect.* 2001;15(2):145–68.
35. Li Y. Duration analysis of venture capital staging: a real options perspective. *J Bus Ventur.* 2008;23(5):497–512.
36. Hsu YW. Staging of venture capital investment: a real options analysis. *Small Bus Econ.* 2010;35(3):265–81.
37. Yu-Lian W. The Optimization Model of Distribution Channels Farm Produce in Heilongjiang Province. *Commercial Res.* 2008;4.
38. Cook J. A six-stage business continuity and disaster recovery planning cycle. *SAM Adv Manag J.* 2015;80(3):22–33.
39. Stephan U, Uhlaner LM, Stride C. Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *J Int Business Stud.* 2015;46(3):308–31.
40. Bosma N, Jones K, Autio E, Levie J. Global Entrepreneurship Monitor 2007 Executive Report. London: Global Entrepreneurship Research Association. London; 2007.
41. Baumol WJ. Entrepreneurship: Productive, Unproductive, and Destructive. *J Political Econ.* 1990;98(5):893–921.
42. Dau LA, Cuervo-Cazurra A. To formalize or not to formalize: Entrepreneurship and pro-market institutions. *J Business Venturing.* 2014;29(5):668–86.
43. Thai MTT, Turkina E. Macro-level determinants of formal entrepreneurship versus informal entrepreneurship. *J Business Venturing.* 2014;29(4):490–510.
44. Williams CC, Martinez-Perez A, Kedir AM. Informal Entrepreneurship in Developing Economies: The Impacts of Starting Up Unregistered on Firm Performance. *Entrepreneurship Theory Pract.* 2017;41(5):773–99.
45. Bruton GD, Ahlstrom D, Obloj K. Entrepreneurship in Emerging Economies: Where Are We Today and Where Should the Research Go in the Future. *Entrepreneurship Theory Pract.* 2007;32(1):1–14.

46. Valdez ME, Richardson J. Institutional Determinants of Macro-Level Entrepreneurship. *Entrepreneurship Theory Pract.* 2013;37(5):1149–75.
47. Leibenstein H. Entrepreneurship and development. *Am Economic Rev.* 1968;58(2):72–83.
48. Doshi H, Kumar P, Yerramilli V. Uncertainty, Capital Investment, and Risk Management. *Manag Sci.* 2018;64(12):5769–86.
49. Baker T, Nelson RE. Creating Something from Nothing: Resource Construction through Entrepreneurial Bricolage. *Administrative Sci Q.* 2005;50(3):329–66.
50. Kuckertz A, Brändle L, Gaudig A, Hinderer S, Reyes CAM, Prochotta A, et al. Startups in times of crisis – A rapid response to the COVID-19 pandemic. *J Business Venturing Insights.* 2020;13:e00169.
51. Levie J, Autio E. A theoretical grounding and test of the GEM model. *Small Business Econ.* 2008;31(3):235–63.
52. Reynolds P, Bosma N, Autio E, Hunt S, Bono ND, Servais I, et al. Global Entrepreneurship Monitor: Data collection design and implementation. *Small Business Econ.* 1998;24(3):205–31.

Abhinav Anand Professor

Amit Barwal Professor

Shaina Kalsi Professor

Surya Prakash Gautam HOI

Saurabh Sharma HOI

Raka Sharma Teacher

Cite this article: Himani, Anand A, Barwal A, Kalsi S, Gautam SP, Sharma S, Sharma R. **The impact of COVID-19 pandemic-Entrepreneurial Uncertainty and Effect on Economic Development.** *IP J Paediatr Nurs Sci* 2020;3(3):77-83.

Author biography

Himani Student