

# **Entrepreneurial University Ecosystems: Does it matter the country's development in the Entrepreneurial Intention of a Public University?**

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## **Resumen**

Entrepreneurial ecosystems in universities are a trusted framework to analyse entrepreneurship as a viable career option, that can promote recovery from a crisis scenario. Particularly, after COVID-19 pandemic, the current situation demands intensifying all the agents involved to contribute to the recovery of the entrepreneurial ecosystem. However, public universities are vital institutions that provide education in all disciplines and receive young people interested in learning. Thus, one question comes to mind when the unit of analysis is the public university in a developed country. Does the country's level of development differently affect the student's entrepreneurial intention in public universities? This research frames a global sample of 436 students, 220 (Spain) and 216 (Mexico), students suitable for structural equation modelling. Our findings suggest a significant relationship between entrepreneurial university ecosystems and the entrepreneurial intention of students in public universities. Moreover, the entrepreneurial university ecosystem influences student's entrepreneurial intention through attitude and self-efficacy. On the contrary, the different level of development across studied countries does not affect the university students' entrepreneurial intention. It contributes to understanding the entrepreneurial contexts for public universities and brings new insights into the classification of entrepreneurial university ecosystems.

## **References**

- Ajzen, I. (1991) 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp.179–211 [online] [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T).
- Akwei, K., Mutize, M. and Alhassan, A.L. (2022) 'Education and economic growth in a developing country', *International Journal of Education Economics and Development*, Vol. 13, No. 2, pp.171–189 [online] <http://dx.doi.org/10.1504/IJEED.2022.10044287>.

- Alonso-Galicia, P.E., Fernández-Pérez, V., Rodríguez-Ariza, L. and Fuentes-Fuentes, M. (2015) 'Entrepreneurial cognitions in academia: exploring gender differences', *Journal of Managerial Psychology*, Vol. 30, No. 6, pp.630–644 [online] <http://dx.doi.org/10.1108/JMP-08-2013-0262>.
- Amabile, T. and Kramer, S. (2011) *The Progress Principle: Using Small Wins to Ignite Joy, Engagement, and Creativity at Work*, Harvard Business Review Press, Boston, MA.
- Ashraf, R. and Merunka, D. (2017) 'The use and misuse of student samples: an empirical investigation of European marketing research', *Journal of Consumer Behaviour*, Vol. 16, pp.295–308 [online] <https://doi.org/10.1002/cb.1590>.
- Audretsch, D., Cunningham, J., Kuratko, D., Lehmann, E. and Menter, M. (2019) 'Entrepreneurial ecosystems: economic, technological and societal impacts', *The Journal of Technology Transfer*, Vol. 44, pp.313–325 [online] <https://link.springer.com/article/10.1007/s10961-018-9690-4>.
- Baum, J.R. and Locke, E.A. (2004) 'The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth', *Journal of Applied Psychology*, Vol. 89, No. 4, pp.587–598 [online] <https://psycnet.apa.org/doi/10.1037/0021-9010.89.4.587>.
- Bazan, C., Shaikh, A., Frederick, S., Amjad, A., Yap, S., Finn, C. and Rayner, J. (2019) 'Effect of memorial university's environment & support system in shaping entrepreneurial intention of students', *Journal of Entrepreneurship Education*, Vol. 22, No. 1, pp.1–35.
- Boh, W.F., De-Haan, U. and Strom, R. (2016) 'University technology transfer through entrepreneurship: faculty and students in spinoffs', *The Journal of Technology Transfer*, Vol. 41, pp.661–669 [online] <https://doi.org/10.1007/s10961-015-9399-6>.
- Bosma, N., Ionescu-Somers, A., Kelley, D., Levie, J. and Tarnawa, A. (2020) *Global Entrepreneurship Monitor, 2019/2020 Global Report*, The Global Entrepreneurship Research Association, GERA, London, UK [online] <https://www.gemconsortium.org/report/gem-2019-2020-global-report>.
- Boyd, N.G. and Vozikis, G.S. (1994) 'The influence of self-efficacy on the development of entrepreneurial intentions and actions', *Entrepreneurship: Theory & Practice*, Vol. 18, No. 4, pp.63–77 [online] <https://doi.org/10.1177/027104225879401800404>.
- Brown, R. and Mason, C. (2017) 'Looking inside the spiky bits: a critical review and conceptualisation of entrepreneurial ecosystems', *Small Business Economics*, Vol. 49, pp.11–30 [online] <https://doi.org/10.1007/s11187-017-9865-7>.
- Byrne, B.M. (2010) *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd ed., Routledge, New York.
- Campos, M.L., Salati Marcondes de Moraes, G.H. and Spatti, A.C. (2021) 'Do university ecosystems impact student's entrepreneurial behavior?', *Brazilian Administration Review*, Vol. 18, No. 2, Art. 4, p.e200079 [online] <https://doi.org/10.1590/1807-7692bar2021200079>.
- Da Rocha, A.K.L., de Moraes, G.H.S.M. and Fischer, B. (2021) 'The role of university environment in promoting entrepreneurial behavior: evidence from heterogeneous regions in Brazil', *Innovation & Management Review* [online] <http://dx.doi.org/10.1108/INMR-08-2020-0112>.
- Di Gregorio, D. and Shane, S. (2003) 'Why do some universities generate more startups than others?', *Research Policy*, Vol. 32, No. 2, pp.209–227.
- Drnovsek, M., Wincent, J. and Cardon, M.S. (2010) 'Entrepreneurial self-efficacy and business startup: developing a multi-dimensional definition', *International Journal of Entrepreneurial Behaviour & Research*, Vol. 16, No. 4, pp.329–348 [online] <http://www.emeraldinsight.com/10.1108/13552551011054516>.
- Engle, R.L., Dimitriadi, N., Gavidia, J.V., Schlaegel C., Delanoe, S., Alvarado, I., He, X., Buame, S. and Wolff, B. (2010) 'Entrepreneurial intent: a twelve-country evaluation of Ajzen's model of planned behavior', *International Journal of Entrepreneurial Behaviour and Research*, Vol. 16, No. 1, pp.36–58 [online] <https://doi.org/10.1108/13552551011020063>.

- Etkowitz, H. and Klofsten, M. (2005) 'The innovating region: toward a theory of knowledge-based regional development', *R&D Management*, Vol. 35, No. 3, pp.243–255, DOI: <https://doi.org/10.1111/j.1467-9310.2005.00387.x>.
- Feld, B. (2012) *Startup Communities: Building an Entrepreneurial Ecosystem in Your City*, Wiley, Hoboken, NJ.
- Feld, B. and Hathaway, I. (2020) *The Startup Community Way: Evolving an Entrepreneurial Ecosystem*, Wiley, Hoboken, NJ.
- Fernández-Pérez, V., Alonso Galicia, P.E., Fuentes Fuentes, M.M. and Rodríguez Ariza, L. (2014) 'Business networks and academics' entrepreneurial intentions', *Industrial Management & Data System*, Vol. 114, No. 2, pp.292–320 [online] <https://www.emerald.com/insight/content/doi/10.1108/IMDS-02-2013-0076/full/html>.
- Fernández-Pérez, V., Montes-Merino, A., Rodríguez-Ariza, L. and Alonso Galicia, P.E. (2019) 'Emotional competencies and cognitive antecedents in shaping student's entrepreneurial intention: the moderating role of entrepreneurship education', *International Entrepreneurship and Management Journal*, Vol. 15, No. 1, pp.281–305.
- Feters, M.L., Greene, P., Rice, M.P. and Butler, J.S. (2010) *The Development of University-Based Entrepreneurship Ecosystems*, Edward Elgar, Cheltenham, UK, Northampton, MA, USA.
- Fini, R., Grimaldi, R., Marzocchi, G.L. and Sobrero, M. (2012) 'The determinants of corporate entrepreneurial intention within small and newly established firms', *Entrepreneurship Theory and Practice*, Vol. 36, No. 2, pp.387–414 [online] <https://doi.org/10.1111%2Fj.15406520.2010.00411.x>.
- Fischer B.B., de Moraes, G.H.S.M. and Rücker Schaeffer, P. (2019) 'Universities' institutional settings and academic entrepreneurship: notes from a developing country', *Technological Forecasting and Social Change*, Vol. 147, pp.243–252 [online] <https://doi.org/10.1016/j.techfore.2019.07.009>.
- Fornell, C. and Larcker, D.F. (1981) 'Evaluating structural equation models with unobservable variables and measurement error', *Journal of Marketing Research*, Vol. 18, No. 1, pp.382–388 [online] <https://doi.org/10.1177/002224378101800313>.
- García-Rodríguez, F.J., Gil-Soto, E., Ruiz-Rosa, I. and Gutiérrez-Taño, D. (2017) 'Entrepreneurial potential in less innovative regions: the impact of social and cultural environment', *European Journal of Management and Business Economics*, Vol. 26, No. 2, pp.163–179 [online] <https://doi.org/10.1108/ejmbe-07-2017-010>.
- Graham, R. (2014) *Creating University-Based Entrepreneurial Ecosystems: Evidence from Emerging World Leaders*, MIT Skoltech Initiative, Massachusetts Institute of Technology, Cambridge, MA [online] <https://www.rhgraham.org/resources/MIT:Skoltech-entrepreneurialecosystems-report-2014-.pdf>.
- Grillitsch, M. and Nilsson, M. (2016) 'Firm performance in the periphery: on the relation between firm-internal knowledge and local knowledge spillovers', *Regional Studies*, Vol. 51, No. 8, pp.1219–1231 [online] <https://doi.org/10.1080/00343404.2016.1175554>.
- Guerrero, M., Liñán, F. and Cáceres-Carrasco, F.R. (2020) 'The influence of ecosystems on the entrepreneurship process: a comparison across developed and developing economies', *Small Business Economics*, Vol. 57, pp.1733–1759 [online] <https://doi.org/10.1007/s11187-020-00392-2>.
- Guerrero, M., Urbano, D. and Fayolle, A. (2016) 'Entrepreneurial activity and regional competitiveness: evidence from European entrepreneurial universities', *The Journal of Technology Transfer*, Vol. 41, No. 1, pp.105–131, Springer [online] <https://doi.org/10.1007/s10961-014-9377-4>.
- Hair, J., Anderson, R., Tatham, R. and Black, W. (1999) *Análisis Multivariante*, 5th ed., Pearson Prentice Hall, Madrid, España.
- Harland, P., Staats, H. and Wilke, H.A.M. (1999) 'Explaining proenvironmental intention and behavior by personal norms and the theory of planned behaviour', *Journal of Applied Social Psychology*, Vol. 29, No. 12, pp.2505–2528 [online] <https://doi.org/10.1111/j.1559-1816.1999.tb00123.x>.

- Hsieh, R.M. and Kelley, D. (2020) 'A study of key indicators of development for university-based entrepreneurship ecosystems in Taiwan', *Entrepreneurship Research Journal*, Vol. 10, No. 2 [online] <https://doi.org/10.1515/erj-2018-0331>.
- Huezó, D.L. (2018) *Las Competencias Emocionales y la Intención Emprendedora de los Estudiantes Universitarios, El Efecto del Ecosistema Emprendedor del Tecnológico de Monterrey*, Unpublished PhD thesis, University of Cantabria, Spain [online] <http://hdl.handle.net/10902/14875>.
- Huezó-Ponce, L. and Saiz-Álvarez, J.M. (2020) 'Education, gender, and entrepreneurial intention: the case of Mexico', in Leitão, J., Nunes, A., Pereira, D. and Ramadani, V. (Eds.): *Intrapreneurship and Sustainable Human Capital*, pp.137–154, Springer, Cham [online] [https://doi.org/10.1007/978-3-030-49410-0\\_9](https://doi.org/10.1007/978-3-030-49410-0_9).
- Huezó-Ponce, L., Fernández-Pérez, V. and Rodríguez-Ariza, L. (2021) 'Emotional competencies and entrepreneurship: modeling universities', *International Entrepreneurship Management Journal*, Vol. 17, No. 1, pp.1497–1519 [online] <https://doi.org/10.1007/s11365-020-00683-w>.
- Isenberg, D.J. (2010) 'The big idea: how to start an entrepreneurial revolution', *Harvard Business Review*, Vol. 88, No. 6, pp.40–50.
- Jones, B. and Iredale, N. (2010) 'Enterprise education as pedagogy', *Education + Training*, Vol. 52, No. 1, pp.7–19 [online] <https://doi.org/10.1108/00400911011017654>.
- Karimi, S., Biemans, H.J.A., Lans, T., Chizari, M. and Mulder, M. (2014) 'Effects of role models and gender on students' entrepreneurial intentions', *European Journal of Training and Development*, Vol. 38, No. 8, pp.694–727 [online] <http://dx.doi.org/10.1108/EJTD-03-2013-0036>.
- Kautonen, T., Van Gelderen, M. and Tornikoski, E.T. (2013) 'Predicting entrepreneurial behaviour: a test of the theory of planned behavior', *Applied Economics*, Vol. 45, No. 6, pp.697–707 [online] <https://doi.org/10.1080/00036846.2011.610750>.
- Kelley, D., Singer, S. and Herrington, M. (2016) *Global Entrepreneurship Monitor 2015/2016, Global Report*, Global Entrepreneurship Research Association, London, UK [online] <https://www.gemconsortium.org/file/open?fileId=49812>.
- Kolvereid, L. and Isaksen, E. (2006) 'New business startup and subsequent entry into self-employment', *Journal of Business Venturing*, Vol. 21, No. 6, pp.866–885 [online] <https://doi.org/10.1016/j.jbusvent.2005.06.008>.
- Krichen, K. and Chaabouni, H. (2022) 'Entrepreneurial intention of academic students in the time of COVID-19 pandemic', *Journal of Small Business and Enterprise Development*, Vol. 29, No. 1, pp.106–126 [online] <https://doi.org/10.1108/JSBED-03-2021-0110>.
- Krueger, N., Reilly, M. and Carsrud, A. (2000) 'Competing models of entrepreneurial intentions', *Journal of Business Venturing*, Vol. 15, No. 5, pp.411–432 [online] [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0).
- Krueger, N.F. and Carsrud, A.L. (1993) 'Entrepreneurial intentions: applying the theory of planned behavior', *Entrepreneurship & Regional Development*, Vol. 5, No. 4, pp.315–330 [online] <https://doi.org/10.1080/08985629300000020>.
- Kuratko, D.F. (2005) 'The emergence of entrepreneurship education: development, trends, and challenges', *Entrepreneurship Theory and Practice*, Vol. 29, No. 5, pp.577–598 [online] <https://doi.org/10.1111%2Fj.1540-6520.2005.00099.x>.
- Lackéus, M. (2015) *Entrepreneurship in Education: What, Why, When, How*, Background Paper, OECD Publishing, Paris.
- Lee, S.H. and Wong, P.K. (2004) 'An exploratory study of technopreneurial intentions: a career anchor perspective', *Journal of Business Venturing*, Vol. 19, Nos. 1–2, pp.7–21 [online] [https://doi.org/10.1016/S0883-9026\(02\)00112-X](https://doi.org/10.1016/S0883-9026(02)00112-X).
- Liguori, E., Bendickson, J., Solomon, S. and McDowell, W. (2018) 'Development of a multi-dimensional measure for assessing entrepreneurial ecosystems', *Entrepreneurship and Regional Development*, Vol. 31 [online] <https://doi.org/10.1080/08985626.2018.1537144>.
- Liñán, F. and Santos, F.J. (2007) 'Does social capital affect entrepreneurial intentions?', *International Advances in Economic Research*, Vol. 13, No. 4, pp.443–453 [online] <https://doi.org/10.1007/s11294-007-9109-8>.

- Liñán, F., Urbano, D. and Guerrero, M. (2011) 'Regional variations in entrepreneurial cognitions: startup intentions of university students in Spain', *Entrepreneurship and Regional Development*, Vol. 23, Nos. 3–4, pp.187–215 [online] <https://doi.org/10.1080/08985620903233929>.
- Matthews, C.H. and Moser, S.B. (1995) 'Family background and gender: implications for interest in small firm ownership', *Entrepreneurship and Regional Development*, Vol. 7, No. 4, pp.365–377 [online] <https://doi.org/10.1080/08985629500000023>.
- Miller, D.J. and Acs, Z.J. (2017) 'The campus as entrepreneurial ecosystem: the University of Chicago', *Small Business Economics*, Vol. 49, No. 1, pp.75–95 [online] <https://doi.org/10.1007/s11187-017-9868-4>.
- Mitchell, R., Busenitz, L., Bird, B., Gaglio, C., McMullen, J., Morse, E. and Smith, J. (2007) 'The central question in entrepreneurial cognition research', *Entrepreneurship: Theory and Practice*, January, Vol. 31, No. 1, pp.1–27 [online] <https://doi.org/10.1111%2Fj.15406520.2007.00161.x>.
- Molina-Morales, F.X., García-Villaverde, P.M. and Parra-Requena, G. (2014) 'Geographical and cognitive proximity effects on innovation performance in SMEs: a way through knowledge acquisition', *International Entrepreneurship and Management Journal*, Vol. 10, pp.231–251, Springer [online] <https://doi.org/10.1007/s11365-011-0214-z>.
- Ministerio de Universidades, Gobierno de España (2022) Datos y cifras del Sistema Universitario Español, Publicación 2021–2022, Secretaría General Técnica del Ministerio de Universidades, eNIPO: 09720003-2 [online] <https://cpage.mpr.gob.es/>.
- Moriano, J.A., Gorgievski, M., Laguna, M., Stephan, U. and Zarafshani, K. (2012) 'A cross-cultural approach to understanding entrepreneurial intention', *Journal of Career Development*, Vol. 39, No. 2, pp.162–185 [online] <https://doi.org/10.1177%2F0894845310384481>.
- Morris, M.H., Shirokova, G and Tsukanova, T (2017) 'Student entrepreneurship and the university ecosystem: a multi-country empirical exploration', *European Journal of International Management*, Vol. 11, No. 1, pp.65–85 [online] <http://dx.doi.org/10.1504/EJIM.2017.081251>.
- Mueller, S. (2011) 'Increasing entrepreneurial intention: effective entrepreneurship course characteristics', *International Journal of Entrepreneurship and Small Business*, Vol. 13, No. 1, pp.55–74 [online] <https://dx.doi.org/10.1504/IJESB.2011.040416>.
- Muños Izquierdo, C. and Silva Laya, M. (2013) 'La educación superior particular y la distribución de oportunidades educativas en México', *Revista de la Educación Superior*, Vol. 42, No. 166, pp.81–101 [online] [http://www.scielo.org.mx/scielo.php?script=sci\\_arttext&pid=S0185-27602013000200004](http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-27602013000200004).
- Murnieks, C.Y., Mosakowski, E. and Cardon, M.S. (2014) 'Pathways of passion identity centrality, passion, and behavior among entrepreneurs', *Journal of Management*, Vol. 40, No. 6, pp.1583–1606 [online] <https://doi.org/10.1177/0149206311433855>.
- O'Connor, A. (2013) 'A conceptual framework for entrepreneurship education policy: meeting government and economic purposes', *Journal of Business Venturing*, Vol. 28, No. 4, pp.546–563 [online] <https://doi.org/10.1016/j.jbusvent.2012.07.003>.
- Orozco-Gómez, M.M. (2016) Impacto de la Atractividad de un Centro Comercial en la Satisfacción y Lealtad de sus Consumidores, PhD dissertation, Universidad Autónoma de Barcelona, España [online] <https://ddd.uab.cat/record/168478> (accessed 15 October 2021).
- Peterman, N.E. and Kennedy, J. (2003) 'Enterprise education: influencing students' perceptions of entrepreneurship', *Entrepreneurship: Theory & Practice*, Vol. 28, No. 2, pp.129–144 [online] <https://doi.org/10.1046%2Fj.1540-6520.2003.00035.x>.
- Pihie, Z.L. and Bagheri, A. (2013) 'Students' entrepreneurial regulation and intention to become an entrepreneur: a comparison between public and private universities', *South African Journal of Business Management*, Vol. 44, No. 4, pp.25–32 [online] <https://doi.org/10.4102/sajbm.v44i4.166>

- Rae, D. (2010) 'Universities and enterprise education: responding to the challenges of the new era', *Journal of Small Business and Enterprise Development*, Vol. 17, No. 4, pp.591–606 [online] <https://doi.org/10.1108/14626001011088741>.
- Roundy, P.T. (2017) "'Small town' entrepreneurial ecosystems implications for developed and emerging economies", *Journal of Entrepreneurship in Emerging Economies*, Vol. 9, No. 3, pp.238–262 [online] <https://doi.org/10.1108/JEEE-09-2016-0040>.
- Russo, J.E. and Schoemaker, P.J.H. (1992) 'Managing overconfidence', *Sloan Management Review*, Vol. 33, No. 2, pp.7–17.
- Schlaegel, C. and Koenig, M. (2014) 'Determinants of entrepreneurial intent: a meta-analytic test and integration of competing models', *Entrepreneurship Theory and Practice*, Vol. 38, No. 2, pp. 291-332 [online] <https://doi.org/10.1111%2Fetap.12087>
- Schumacker, R.E. and Lomax, R.G. (2004) *A Beginner's Guide to Structural Equation Modeling*, Lawrence Erlbaum Associates, New Jersey.
- Schwab, K., Zahidi, S. and World Economic Forum (2020) *The Global Competitiveness Report Special Edition 2020 How Countries are Performing on the Road to Recovery*, World Economic Forum, Cologny/Geneva Switzerland [online] <https://www.weforum.org/reports/the-global-competitiveness-report-2020/in-full>.
- Shirokova, G., Osiyevskyy, O. and Bogatyreva, K. (2016) 'Exploring the intention-behavior link in student entrepreneurship: moderating effects of individual and environmental characteristics', *European Management Journal*, Vol. 34, No. 4, pp.386–399 [online] <https://doi.org/10.1016/j.emj.2015.12.007>.
- Soomro, M.A., Memon, M.S. and Bukhari, N.S. (2019) 'Entrepreneurial education and its impact on entrepreneurial intentions: a comparative analysis of business radiates of public and private universities of Sindh', *Pacific Business Review International*, Vol. 11, No. 6, pp.35–46 [online] [http://www.pbr.co.in/2019/2019\\_month/December/4.pdf](http://www.pbr.co.in/2019/2019_month/December/4.pdf).
- Soria-Barreto, C., Honores-Marin, G., Gutiérrez-Zepeda, P. and Gutiérrez-Rodríguez, J. (2017) 'Prior exposure and educational environment towards entrepreneurial intention', *Journal of Technology Management Innovation*, Vol. 12, No. 2 [online] <https://doi.org/10.4067/S0718-27242017000200006>.
- Spigel, B. (2017) 'The relational organisation of entrepreneurial ecosystems', *Entrepreneurship Theory and Practice*, Vol. 41, No. 1, pp.49–72 [online] <https://doi.org/10.1111%2Fetap.12167>.
- Spigel, B., Kitagawa, F. and Mason, C. (2020) 'A manifesto for researching entrepreneurial ecosystems', *Local Economy*, Vol. 35, No. 5, pp.482–495 [online] <https://doi.org/10.1177%2F0269094220959052>.
- Stam, E. and Van de Ven, A. (2021) 'Entrepreneurial ecosystem elements', *Small Business Economics*, Vol. 56, pp.809–832 [online] <https://doi.org/10.1007/s11187-019-00270-6>.
- Stephens, S. (2020) 'Higher education and entrepreneurial activities: the experience of graduates', *International Journal of Education Economics and Development*, Vol. 11, No. 4, pp.407–419 [online] <https://dx.doi.org/10.1504/IJEED.2020.110598>.
- Sternberg, R. (2009) 'Regional dimensions of entrepreneurship', *Foundations and Trends in Entrepreneurship*, Vol. 5, No. 4, pp.211–340, Now Publishers Inc. [online] <http://dx.doi.org/10.1561/03000000024>.
- Thomas, E., Faccin, K. and Asheim, B.T. (2020) 'Universities as orchestrators of the development of regional innovation ecosystems in emerging economies', *Growth and Change*, Vol. 52, No. 2, pp.770–789 [online] <https://doi.org/10.1111/grow.12442>.
- Trivedi, R. (2016) 'Does university play significant role in shaping entrepreneurial intention? A cross-country comparative analysis', *Journal of Small Business and Enterprise Development*, Vol. 23, No. 3, pp.790–811 [online] <https://doi.org/10.1108/JSBED-10-2015-0149>.
- Turker, D. and Selcuk, S.S. (2009) 'Which factors affect entrepreneurial intention of university students?', *Journal of European Industrial Training*, Vol. 33, No. 2, pp.142–159 [online] <https://doi.org/10.1108/03090590910939049>.

- United Nations (2021) World Economic Situation Prospects 2021, United Nations publication, Sales No. E.21.II.C.1 [online] <https://www.un.org/development/desa/dpad/publication/world-economic-situation-and-prospects-2021/>.
- Usaci, D. (2015) 'Predictors of professional entrepreneurial intention and behaviour in the educational field', *Procedia-Social and Behavioral Sciences*, Vol. 187, pp.178–183 [online] <https://doi.org/10.1016/j.sbspro.2015.03.034>.
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E. and Van Gils, A. (2008) 'Explaining entrepreneurial intentions by means of the theory of planned behavior', *Career Development International*, Vol. 13, No. 6, pp.538–559 [online] <https://doi.org/10.1108/13620430810901688>.
- Wilson, K.E., Vyakarnam, S., Volkmann, C., Mariotti, S. and Rabuzzi, D. (2009) 'Educating the next wave of entrepreneurs: unlocking entrepreneurial capabilities to meet the global challenges of the 21st century', *World Economic Forum: A Report of the Global Education Initiative*, April [online] <http://dx.doi.org/10.2139/ssrn.1396704>.
- Zhang, Y., Duysters, G. and Cloudt, M. (2014) 'The role of entrepreneurship education as a predictor of university students' entrepreneurial intention', *International Entrepreneurship and Management Journal*, Vol. 10, No. 3, pp.623–641 [online] <https://doi.org/10.1007/s11365-012-0246-z>.
- Zollo, L., Laudano, M.C., Ciappei, C. and Zampi, V. (2017) 'Factors affecting universities' ability to foster students' entrepreneurial behavior', *Journal of Management Development*, Vol. 36, No. 2, pp.268–285 [online] <https://doi.org/10.1108/JMD-06-2016-0093>.