

Dynamic capabilities in the internationalisation process: A study on fintech startups

LALA HU^{*} MIRKO OLIVIERI[•] NUO WANG[▲] DANIELA CORSARO^{**}

Framing of the research. *This study focuses on the role of dynamic capabilities (DCs) in the internationalisation process of fintech startups, which operate in a rapidly expanding industry exhibiting substantial growth and development.*

Fintech companies have captured a third of global banking revenues since 2005 and are expected to continue growing at a significant rate (Statista, 2023). They have rapidly emerged in various countries (Block et al., 2018) and must expand beyond their home markets to scale up (McKinsey, 2022). However, startups face difficulties in financing (Giaretta and Chesini, 2021), capital-related decisions (Nofsinger and Wang, 2011), technology-intensive requirements (Haddad and Hornuf, 2019), and competition from traditional banking institutions and big fintech companies (Statista, 2023). Startups that are international entrepreneurship in nature, are riskier (Buccieri et al., 2020; Sharma et al., 2020) due to longer business distance from geographical, physical, and institutional points of view (Eriksson et al., 2014; Vahlne and Jonsson, 2017). Innovation is crucial for international entrepreneurship (Mitgwe, 2006), which requires time, capital (Ries, 2011), and the ability to respond and adapt to international market conditions (Buccieri et al., 2020).

Dynamic capabilities enable a firm to reconfigure, renew and create resources (Teece et al., 1997), perpetrating entrepreneurial strategic activities (Nayak et al., 2020) and building resilience in international backgrounds (Pitelis and Teece, 2018). Dynamic capabilities are important for the internationalization and sustained success of fintech companies that are entrepreneurial start-ups in nature (Luo, 2000), which are empowered by international orientations (Weerawardena et al., 2007). Knowledge capability upgrading positively enhances adaptive capabilities and helps financial companies achieve performance benefits while internationalizing (Sadeghi et al., 2022). There is a debate on whether knowledge can be categorized as a certain dynamic capability, but the study proposes to distinguish knowledge sources and implementations for classification (Meanwhile, Zámorský et al., 2022). The effects of time, speed, and degree of internationalization on dynamic capabilities are mediated by different variables, including innovation (Weerawardena et al., 2015), opportunity recognition (Wu et al., 2016) and capitalization capabilities, R&D intensity (Chakrabarty and Wang, 2012), and organizational reconfiguring capabilities. Successful firms develop dynamic capabilities that enable rapid internationalization and capability creation and upgrading (Sadeghi et al., 2022). The positioning exercise (Sapienza et al., 2006), environmental dynamism (Buccieri et al., 2020), and network capability development (Torkkeli et al., 2018) also moderate the effects of dynamic capabilities on firm survival and growth (Jantunen et al., 2005).

A global mindset with a clear marketing orientation for companies with international business is considered an essential ingredient (Cadogan et al., 1995; İpek, 2020) in developing dynamic capabilities (Barreto, 2010; Wang and Ahmed, 2007), which can provide firms with a special knowledge of foreign markets (Hoque, 2020; Wright et al., 2007). Relevant research in international business studies has shifted from static correlation on macro industrial variables to a cognitive approach (Nayak et al., 2020; Sadeghi, 2019) of opportunity exploration and exploitation (Hsieh, 2019; Zucchera, 2021). Cognitive capabilities can be collective, creating an interactive system in companies to ensure the formation and development of certain dynamic capabilities (Easterby-Smith and Prieto, 2008). Individual executives such as managers in international business have an important role in management and shaping the ecosystem through special strategic operations (Bouquet, 2005; Helfat and Peteraf, 2015). Managers need dynamic capabilities to identify, forecast, mitigate, and manage the disorders in their everyday operations (Sniazhko, 2019). Relevant studies categorize these dynamic capabilities into personal (Eriksson et al., 2014), inter-organizational (Blomqvist and Levy, 2006), and intra-organizational capabilities (Weerawardena and Mort, 2006). However, international business managers have

* Assistant Professor of *Marketing* - Università Cattolica del Sacro Cuore
e-mail: lala.hu@unicatt.it

• Adjunct Professor of *Marketing* - Università Cattolica del Sacro Cuore
e-mail: mirko.olivieri@unicatt.it

▲ PhD Candidate of *Marketing* - IULM University
e-mail: nuo.wang1@studenti.iulm.it

** Associate Professor of *Marketing* - IULM University
e-mail: daniela.corsaro@iulm.it

difficulties understanding the types of uncertainty in their businesses and developing appropriate strategies to deal with it effectively while internationalising (Sharma et al., 2020).

The research on fintech startups and their dynamic capabilities is in the exploration stage, with a focus on regional studies. The development of dynamic capabilities, such as innovation capabilities, are transforming the financial landscape globally (Muthukannan and Gozman, 2019), allowing fintech startups to reconfigure traditional banking scenarios (Gallego-Gomez and De-Pablos-Heredero, 2020) and spur innovations in the financial industry (Oshodin et al., 2019). Ambidextrous innovation (Buccieri et al., 2020), separating exploratory units from traditional exploitative ones (O'Reilly and Tushman, 2004), contributes to the internationalisation of fintech startups (Hsieh et al., 2019). Fintech companies leverage dynamic innovation capabilities in a business ecosystem with stakeholders, such as technology developers, government, financial customers, and traditional financial institutions (Lee and Shin, 2018), to access resources and exploit opportunities, thereby transforming the status quo of the ecosystem dynamics in financial markets (Alaassar, 2022). Incubators and competitors in the same cluster are two special actors to consider (Haddad and Hornuf, 2019), as larger geographical clusters with incubators attract more new fintech startups, reducing the risk of failure but increasing the likelihood of being acquired (Gazel and Schwienbacher, 2021).

Purpose of the paper. Fintech companies have evolved beyond the hype stage and are now significant players in the financial industry (Lee and Shin, 2018), with both startups and large technology companies like Google, Amazon, Facebook, Apple, and Alibaba offering their services (Statista, 2023a). While established companies have ample resources to leverage their technological capabilities, startups face difficulties in financing (Giaretta and Chesini, 2021), capital-related decisions (Nofsinger and Wang, 2011), technology requirements (Haddad and Hornuf, 2019), and competition from traditional banking institutions and big fintech companies. To address the intense competition in the international marketplace, especially under pandemic-induced uncertainty, dynamic capabilities (DCs) allow firms to reconfigure, renew, and create resources (Teece et al., 1997), promoting entrepreneurial strategic activities (Nayak et al., 2020). Although the validity of DCs as one of the most promising theoretical developments in resilience building, especially for relatively fragile startups, and in addressing the origins of a firm's competitive advantage in both national and international contexts (Pitelis and Teece, 2018) has been thoroughly investigated in academic management literature, no previous studies have analyzed DCs in relation to the internationalization processes of a strongly evolving sector, such as that of fintech startups. The objective of this explorative study is to investigate the DCs' deployment by startups in the fintech sector in their internationalization process. Specifically, we pose the following research question:

RQ. How are DCs deployed by fintech startups in their internationalisation process?

Methodology. To achieve our research objective, we adopted an exploratory approach based on a qualitative multiple-case study analysis (Yin, 2009; Eisenhardt and Graebner, 2007) on fintech startups. We carried out interviews with startups' founders and managers, and other actors involved in the internationalization processes of these firms. According to Eisenhardt and Graebner (2007), the multiple-case study approach is appropriate to build theoretical constructs and propositions, as case studies emphasize the richness of the context in which the phenomena occur. We used a theoretical sampling approach (Eisenhardt, 1989; Yin, 2009) to identify possible cases of fintech startups to analyze through databases, newspaper articles and LinkedIn platform. Among the requirements of the key informants to be involved in this research, they must be founders of fintech startups or have had managerial experiences in such industry. In total, 11 startups' key informants were available to participate in the study. Moreover, to broaden our investigation perspective, we have also involved in this study professionals operating in innovation hubs, startup accelerators and governmental agencies who have supported the internationalisation of fintech startups. In total, we conducted 19 semi-structured interviews with key informants to investigate how they deploy dynamic capabilities in the internationalization process of fintech startups.

The interviews focused on the following main topics: (1) the internationalization process and the level of international commitment of the startup; (2) startups' key capabilities to access and grow in international markets. These topics lay the foundations in the assumption that startups have to face a scarcity of resources. The semi-structured interviews were conducted in virtual mode, i.e. by video call via Microsoft Teams, Google Meet or Zoom, between January 2021 and January 2023 and lasted about an hour. The interviews were recorded and fully transcribed verbatim. The body of transcripts of the 18 semi-structured interviews conducted for this study represent the material which was analyzed by the researchers.

Preliminary findings. Our research focus is on the role of the dynamic capabilities of fintech startup' entrepreneurs in internationalization processes.

The preliminary results of this study show that in the internationalization process of fintech startups, DCs allow entrepreneurs to identify opportunities and reconfigure their business to adapt to the new market. For example, in order to effectively launch the startup's internationalization process, the entrepreneur needs some local actors, such as a country manager to be recruited, who has in-depth knowledge of the culture and the market to be accessed. These local partners play a key role also in the following phase of the internationalization process, which consists in the elaboration of a market access strategy and in the creation of new commercial and institutional agreements. Therefore, it is necessary for the entrepreneur to demonstrate the ability to access a local network to create effective partnerships for the fintech startup and to establish interpersonal relationships with key players for business development in the international market.

For these networking purposes, the key informants involved in this study revealed that the role of digital channels is crucial. In particular, the LinkedIn platform is used by all the interviewed professionals, especially in the early stages of the internationalization process of fintech startups, to identify key players and establish a connection via chat, which turns into a long-term relationship. LinkedIn, in fact, represents the first step in establishing interpersonal relationships which will be strengthened by the interlocutors on the occasion of physical events, such as trade fairs in which startups participate both for networking purposes and for market monitoring, to develop an updated perspective with respect to the fintech industry trends.

Furthermore, trade fairs are a useful marketing tool not only for the promotion of the product/service of the firm, but also for educating partners and other organizations regarding the potential of the startup's offer. In this vein, our study highlights that the fintech sector presents increasingly technologically advanced solutions which need to be communicated effectively to both insiders and end consumers. For this purpose, social media are the most useful digital marketing tools - for example, through platforms such as Instagram, fintech startups have the opportunity to illustrate the characteristics of their products/services by adopting a clear and simple language to inform consumers about the usage they can do with the fintech product/service.

In general terms, with this explorative research, we identify the barriers in the internationalization of fintech startups.

On one hand, as barriers to internationalization we identified:

- (1) the lack of communication of the fintech product/service to both intermediaries and consumers;
- (2) the legal barriers of the country being accessed;
- (3) the limited knowledge of the local market due to the psychic distance.

On the other hand, the objectives that the internationalization strategies of fintech startups aim to achieve are:

- (1) the formation of an international network with key actors, such as international organizations, partners, institutional actors, etc.;
- (2) an increase in the brand strength of the fintech startups internationally;
- (3) the growth of the fintech startup.

To achieve these objectives of the fintech startups' internationalization strategies, we investigated how DCs can help fintech companies' internationalization in the following areas:

- (1) DCs have their agility to be naturally innovative in the fintech industry, since it is a technology and knowledge intensive one. Fintech startups have their innate affinity to adapt themselves to digitalisation or they are born to be digitalised, which permits innovative DCs to perform as effective internationalization strategies;
- (2) followed by aforementioned points, fintech startups are found flexible in resource exploitation and exploration. This binary seeming exclusive relationship can be mobilized dynamically by fintech companies who can leverage their already existing time-saving resources exploitation at maximum level to save limited resources and invest it into potential complementarity exploration while internationalizing.
- (3) DCs in key actors selecting and networking, especially the local stakeholders, are exceptionally valid for fintech startups conducting crucial internationalization steps such as market access approaches and the operational compliance.

Research limitations. Dynamic capabilities are crucial in companies' internationalisation, as well as extensive and complicated. Our study has some limitations as we adopted a qualitative approach based on the case study to analyse a single industry, the fintech industry. Future research could also analyse the internationalisation of startups in other innovative industries to verify any differences in how they deployed dynamic capabilities during their internationalisation process.

Managerial implications. Illustrated by the findings of this study, it can be confirmed that DCs have significant managerial implications for fintech startups' internationalization strategies. Under the resource allocation view, companies need to allocate resources in a dynamic way by exploiting their inherent strengths and exploring potential complementarity of resources. The fintech industry has one certain entry threshold as a knowledge and technology intensive industry. Fintech companies offer intangible service much more than tangible cross border goods. It is beneficial especially when conducting their internationalisation process thanks to the effectiveness and borderless extensibility. Companies' exploiting and exploring capabilities are often considered mutually exclusive in traditional industries. Fintech companies can leverage their already existing time-saving resources exploitation at maximum level and make full use of this "curve crossing" time saved from resource exploitation by applying their dynamic capabilities to explore potential complementarity in order to enhance their international business performance. Relevant potential complementarity of internationalisation can sit in the formation of the "human sense" in business that technology can not reach so far. This requires a strategic approach to resource allocation that prioritizes investment in areas that can generate sustainable competitive advantage. Under the organizational structure view supported by DCs, companies can adopt an organizational structure that enables a systemic organizational structure to elaborate market access strategies, create new commercial and institutional agreements and gain in-depth societal and cultural market knowledge. This may involve offering competitive compensation packages, creating a culture of learning and development, and providing opportunities for career growth to enhance inter- and intra-organisational structures. Under the business relationship view, fintech companies who have successful internationalisation business performances are able to leverage partnerships and collaborations to access resources and capabilities that they may not have in-house. This involves partnering with other fintech companies, traditional financial institutions, technology

companies and even local non-economic stakeholders or actors to share knowledge and expertise. Once this talent pool is created, more resources can easily and efficiently be generalised by resource cycling, mobilizing and sharing with the hope to break the barriers in the internationalisation process. This process is also a process of adapting and learning, in which we witnessed how fintech companies strengthen their mindset to embrace experimentation, failure, and continuous improvement.

Originality of the paper. Despite the extensive research on dynamic capabilities in the international business literature, there is a paucity of studies that examine the role of dynamic capabilities in the internationalization processes of rapidly-evolving sectors, such as fintech startups. In order to fill this gap, in this exploratory study we presented preliminary findings on how entrepreneurial dynamic capabilities are deployed by fintech startups to approach foreign markets.

Keywords: dynamic capabilities; fintech; internationalization; startups

References

- ALAASSAR A., MENTION A.L., AAS T.H. (2022), "Ecosystem dynamics: Exploring the interplay within fintech entrepreneurial ecosystems", *Small Business Economics*, vol. 58, n. 4, pp. 2157-2182.
- BARRETO I. (2010), "Dynamic capabilities: A review of past research and an agenda for the future", *Journal of management*, vol. 36, n. 1, pp. 256-280.
- BLOCK J.H., COLOMBO M.G., CUMMING D.J., VISMARA S. (2018), "New players in entrepreneurial finance and why they are there", *Small Business Economics*, vol. 50, pp. 239-250.
- BLOMQUIST K., LEVY J. (2006), "Collaboration capability—a focal concept in knowledge creation and collaborative innovation in networks", *International Journal of Management Concepts and Philosophy*, vol. 2, n. 1, pp. 31-48.
- BOUQUET C., BIRKINSHAW J. (2008), "Weight versus voice: How foreign subsidiaries gain attention from corporate headquarters", *Academy of Management journal*, vol. 51, n. 3, pp. 577-601.
- BUCCIERI D., JAVALGI R. G., CAVUSGIL E. (2020), "International new venture performance: Role of international entrepreneurial culture, ambidextrous innovation, and dynamic marketing capabilities", *International Business Review*, vol. 29, n. 2, pp. 101639.
- CADOGAN J.W., DIAMANTOPOULOS A. (1995), "Narver and Slater, Kohli and Jaworski and the market orientation construct: integration and internationalization", *Journal of strategic marketing*, vol. 3, n. 1, pp. 41-60.
- CHAKRABARTY S., WANG, L. (2012), "The long-term sustenance of sustainability practices in MNCs: A dynamic capabilities perspective of the role of R&D and internationalization", *Journal of Business Ethics*, vol. 110, pp. 205-217.
- EASTERBY-SMITH M., PRIETO I. M. (2008), "Dynamic capabilities and knowledge management: an integrative role for learning?", *British journal of management*, vol. 19, n. 3, pp. 235-249.
- EISENHARDT K. M. GRAEBNER M. E. (2007), "Theory building from cases: Opportunities and challenges", *Academy of Management Journal*, vol. 50 n. 1, pp. 25-32.
- ERIKSSON T., NUMMELA N., SAARENKETO S. (2014), "Dynamic capability in a small global factory", *International Business Review*, vol. 23, n. 1, pp. 169-180.
- GALLEGO-GOMEZ C., DE-PABLOS-HEREDERO C. (2020), "Artificial intelligence as an enabling tool for the development of dynamic capabilities in the banking industry", *International Journal of Enterprise Information Systems*, vol. 16, n. 3, pp. 20-33.
- GAZEL M., SCHWIENBACHER A. (2021), "Entrepreneurial fintech clusters. *Small Business Economics*", vol. 57, pp. 883-903.
- GIARETTA E., CHESINI G. (2021), "The determinants of debt financing: The case of fintech start-ups", *Journal of Innovation & Knowledge*, vol. 6, n. 4, pp. 268-279.
- HADDAD C., HORNUF L. (2019), "The emergence of the global fintech market: Economic and technological determinants", *Small business economics*, vol. 53, n. 1, pp. 81-105.
- HELFAF C.E., PETERAF M.A. (2015). "Managerial cognitive capabilities and the microfoundations of dynamic capabilities", *Strategic management journal*, vol. 36, n. 6, pp. 831-850.
- HOQUE A., SHIKHA F.A., HASANAT M.W., ARIF I., HAMID A.B.A. (2020), "The effect of Coronavirus (COVID-19) in the tourism industry in China", *Asian Journal of Multidisciplinary Studies*, vol. 3, n. 1, pp. 52-58.
- HSIEH L., CHILD J., NAROOZ R., ELBANNA S., KARMOWSKA J., MARINOVA S., ZHANG Y. (2019), "A multidimensional perspective of SME internationalization speed: The influence of entrepreneurial characteristics", *International Business Review*, vol. 28, n. 2, pp. 268-283.
- İPEK, İ., BIÇAKCIOĞLU-PEYNIRCI N. (2020), "Export market orientation: An integrative review and directions for future research", *International Business Review*, vol. 29, n. 4, pp. 101659.
- JANTUNEN A., PUUMALAINEN K., SAARENKETO S., KYLÄHEIKO K. (2005), "Entrepreneurial orientation, dynamic capabilities and international performance", *Journal of International Entrepreneurship*, vol. 3, pp. 223-243.
- LEE I., SHIN Y.J. (2018), "Fintech: Ecosystem, business models, investment decisions, and challenges", *Business horizons*, vol. 61, n. 1, pp. 35-46.
- LUO Y. (2000), "Dynamic capabilities in international expansion", *Journal of world business*, vol. 35, n. 4, pp. 355-378.
- MCKINSEY (2022), *Europe's fintech opportunity, report*. Available at <https://www.mckinsey.com/industries/financial-services/our-insights/europes-fintech-opportunity> (Accessed 29 December 2022).
- MUTHUKANNAN P., GOZMAN D. (2019), *Meeting the challenge of Fintech startups: The development of dynamic capabilities at incumbent banks*.
- NAYAK A., CHIA R., CANALES J.I. (2020), "Noncognitive microfoundations: Understanding dynamic capabilities as idiosyncratically refined sensitivities and predispositions", *Academy of Management Review*, vol. 45, n. 2, pp. 280-303.

- NOFSINGER J.R., WANG W. (2011), "Determinants of start-up firm external financing worldwide", *Journal of Banking & Finance*, vol. 35, n. 9, pp. 2282-2294.
- O'REILLY C. A., TUSHMAN M.L. (2004), "The ambidextrous organization", *Harvard business review*, vol. 82, n. 4, pp. 74-83.
- OSHODIN O., MOLLA A., KARANASIOS S., ONG C.E. (2019), "How do FinTech Start-ups Develop Capabilities? Towards a FinTech Capability Model", *PACIS*, pp. 59.
- SADEGHI A., ALIASGHAR O., BOUGUERRA A. (2022), "Unpacking the relationship between post-entry speed of internationalization and export performance of SMEs: A capability-building perspective", *Journal of International Management*, 100982. <https://doi.org/10.1016/j.intman.2022.100982>
- SADEGHI M. (2019), "A shift from classroom to distance learning: Advantages and limitations", *International Journal of Research in English Education*, vol. 4, n. 1, pp. 80-88.
- SAPIENZA H.J., AUTIO E., GEORGE G., ZAHRA S.A. (2006), "A capabilities perspective on the effects of early internationalization on firm survival and growth", *Academy of management review*, vol. 31, n. 4, pp. 914-933.
- SHARMA P., LEUNG T.Y., KINGSHOTT R.P.J., DAVCIK N.S., CARDINALI S. (2020), "Managing uncertainty during a global pandemic: An international business perspective", *Journal of Business Research*, vol. 116, pp. 188-192.
- SNIAZHKO S. (2019), "Uncertainty in decision-making: A review of the international business literature", *Cogent Business & Management*, vol. 6, n. 1, 1650692.
- STATISTA (2023), *Fintech - statistics & facts*, Retrieved March 12, n. 2023, from <https://www.statista.com/outlook/dmo/fintech/worldwide>.
- WANG C.L., AHMED P.K. (2007), "Dynamic capabilities: A review and research agenda", *International journal of management reviews*, vol. 9, n. 1, pp. 31-51.
- WEERAWARDENA J., MORT G.S. (2006), "Investigating social entrepreneurship: A multidimensional model", *Journal of world business*, vol. 41, n. 1, pp. 21-35.
- WEERAWARDENA J., MORT G.S., LIESCH P.W., KNIGHT G. (2007), "Conceptualizing accelerated internationalization in the born global firm: A dynamic capabilities perspective", *Journal of World Business*, vol. 42, n. 3, pp. 294-306.
- WRIGHT M., HMIELESKI K.M., SIEGEL D.S., ENSLEY M.D. (2007), "The role of human capital in technological entrepreneurship", *Entrepreneurship theory and practice*, vol. 31, n. 6, pp. 791-806.
- WU H., CHEN J., JIAO H. (2016), "Dynamic capabilities as a mediator linking international diversification and innovation performance of firms in an emerging economy", *Journal of Business Research*, vol. 69, n. 8, pp. 2678-2686.
- YIN R.K. (2009), *Case study research: Design and methods*, Vol. 5, Sage Publications, London.
- ZÁMBORSKÝ P., SULLIVAN-TAYLOR B., TISCH D., BRANICKI L. (2022), "Antecedents of risk and uncertainty management capabilities: Insights from multinational enterprises in New Zealand", *Journal of Management & Organization*, vol. 28, n. 3, pp. 632-658.