



**Determinants of Formal Financial Services in the Development of
Entrepreneurship in Rural Ecuador**

**TESIS PARA OBTENER EL GRADO DE DOCTOR EN
ADMINISTRACIÓN ESTRATÉGICA DE EMPRESAS**

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Dedication

For all those entrepreneurs, working men and women in rural and remote areas. Their work and effort is as important as what is done in big cities and their inclusion should be a right, not a gift.



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I want to thank God in the first place for allowing me to achieve this goal that I proposed a few years ago, without Him nothing is possible.

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Abstract

Purpose: To analyze the determinants of access to and use of formal financial services through the banking correspondent channel on the development of enterprises in rural areas of Ecuador.

Method: Qualitative case study methodological strategy. Eighteen rural communities of the Coast and Highlands of Ecuador were studied. A thematic analysis was carried out to identify and analyze recurring patterns within the data. themes and sub-themes were categorized, allowing for the exploration of underlying meanings of interviews. Through an inductive analysis in Atlas.ti 9. The concepts identified in the interviews and the researcher's files were reviewed and the results were compared with the theoretical assumptions specified in the literature.

Results: The main new contribution of this research to the business management knowledge of this research was the following: This study showed that there is a gap on the effect of banking correspondents without access to credit on the economic development of communities. In the case of Ecuador, correspondents differ in that they do not grant credit, which reaffirms that financial inclusion generates business development, not access to credit. The presence of the correspondent in communities has eliminated non-financial transaction costs by reducing the physical distance between the user and the distributor of financial services. The non-payment of non-financial transaction costs positively affected the generation of savings; in addition, the presence of the correspondent allowed the inhabitants to open savings accounts, which are used for personal and business transactions. Many businesses started their activities after the incorporation of the correspondent due to the concentration of potential customers of local businesses. In addition, the growth of business after correspondent banking is generated from the savings of time and money.

Limitations and recommendations for future research: It is recommended to empirically address the effect of access to financial services, without considering credit, on economic development and poverty reduction.

Keywords: Financial access, correspondent banking, transaction costs, entrepreneurship, rural finance.



Resumen Ejecutivo

Propósito: Analizar los determinantes del acceso y uso de servicios financieros formales a través del canal de corresponsalía bancaria en el desarrollo de empresas en zonas rurales del Ecuador.

Método: Estrategia metodológica de estudio de caso cualitativo. Se estudiaron dieciocho comunidades rurales de la Costa y Sierra del Ecuador. Se llevó a cabo un análisis temático para identificar y analizar patrones recurrentes dentro de los datos. Se categorizaron los temas y subtemas, lo que permitió la exploración de los significados subyacentes de las entrevistas. A través de un análisis inductivo en Atlas.ti 9. Se revisaron los conceptos identificados en las entrevistas y los archivos del investigador y los resultados se compararon con los supuestos teóricos especificados en la literatura.

Resultados: La principal nueva contribución de esta investigación al conocimiento de la gestión empresarial de esta investigación fue la siguiente: Este estudio mostró que existe una brecha sobre el efecto de los corresponsales bancarios sin acceso al crédito en el desarrollo económico de las comunidades. En el caso de Ecuador, los corresponsales difieren en que no otorgan crédito, lo que reafirma que la inclusión financiera genera desarrollo empresarial, no acceso al crédito. La presencia del corresponsal en las comunidades ha eliminado los costos de transacción no financiera al reducir la distancia física entre el usuario y el distribuidor de servicios financieros. El no pago de los costos de transacción no financieros afectó positivamente la generación de ahorro; además, la presencia del corresponsal permitió a los habitantes abrir cuentas de ahorro, las cuales se utilizan para transacciones personales y comerciales. Muchos negocios iniciaron sus actividades luego de la incorporación de la corresponsal debido a la concentración de clientes potenciales de los comercios locales. Además, el crecimiento del negocio después de la banca corresponsal se genera a partir del ahorro de tiempo y dinero.

Limitaciones y recomendaciones para futuras investigaciones: Se recomienda abordar el empíricamente efecto del acceso de los servicios financieros, sin considerar el crédito, en el desarrollo económico y la reducción de pobreza.

Palabras Clave: Acceso financiero, corresponsal bancario, costos de transacción, emprendimiento, finanzas rurales.



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Introduction

This thesis is structured in two Chapters. The first Chapter presents the research paper accepted for publication, which is required to complete the degree of Doctor en Administración Estratégica de Empresas granted by the Pontificia Universidad Católica del Perú through its graduate school in business management, CENTRUM PUCP. The second Chapter includes the main conclusions and recommendations of the thesis. Therefore, Chapter 1 of this thesis includes the research paper entitled Impact of access and use of formal financial services in the development of entrepreneurship in rural Ecuador, which was accepted for publication by Polish Journal of Management Studies on 29 April 2023 (see Appendix A, letter of acceptance or message accepting the paper). This journal is part of the Web of Science and Scopus database, in quartile Q3.

This paper dealt with purpose to determine the impact of access and use of formal financial services through correspondent banking on the development of entrepreneurship in the rural sector of Ecuador through a qualitative case study methodological strategy. Eighteen rural communities on the Coast and Highlands of Ecuador were studied. A thematic analysis was carried out to identify and analyze recurring patterns within the data. themes and sub-themes were categorized, allowing for the exploration of underlying meanings of interviews. Through an inductive analysis in Atlas.ti 9, the relationships between the concepts identified in the interviews and the researcher's files were structured and the results were compared with the theoretical assumptions specified in the literature. In order to determine the impact of correspondent banking in the communities studied, the theoretical assumptions of transaction costs were used as a frame of reference.

As results, the presence of the correspondent in the communities has eliminated non-financial transaction costs by reducing the physical distance between the user and the distributor of financial services. The non-payment of non-financial transaction costs positively

affected the generation of savings; moreover, the presence of the correspondent allowed the inhabitants to open savings accounts, which are used for personal and business transactions. Many businesses started their activities after the incorporation of the correspondent due to the concentration of potential clients of local businesses. Also, business growth after the correspondent is generated from time and money savings. This study concludes that business growth and entrepreneurship generation come through savings generated by not paying transaction costs and not through credit.

Problem Statement.

Financial inclusion is a key factor for the economic development of communities, especially in developing countries such as Ecuador. However, not all financial services have the same impact on the welfare of individuals and businesses. In particular, banking correspondents, which are agents authorized to carry out financial operations on behalf of a bank, can have adverse effects if they do not offer access to credit. This may limit investment, savings and consumption opportunities for users, as well as the generation of employment and income. Therefore, there is a need for a study to analyze the effect of banking correspondents on the economic development of communities in Ecuador, and to analyze possible aspects to be solved in order to improve the quality and coverage of this service.

The purpose of this qualitative research is to analyze the impact of access to and use of formal financial services through the banking correspondent channel on the development of enterprises in rural areas of Ecuador. For this purpose, an inductive analysis was conducted in Atlas.ti 9, Dataviv and Dedoose and the results were compared with the theoretical assumptions specified in the literature. To determine the impact of correspondent banking in the communities studied.

In this qualitative research, the use of a theoretical framework was employed to guide and support the scientific investigation. The theoretical framework makes it possible to

identify, define and relate the concepts, theories and models that apply to the research problem, as well as to help delimit the scope and depth of the research. The use of the theoretical framework may vary according to the type of research being conducted, whether qualitative or quantitative.

Qualitative research, as in the case of this research work, is based on the study of the meanings, experiences and perceptions of the subjects involved in a social phenomenon (Loayza, 2020). While quantitative research focuses on the analysis of numerical and statistical data that allow measuring and contrasting variables. Therefore, the theoretical framework in qualitative research is usually more flexible, dynamic and inductive, since it is built from the data collected during the research process and adapts to the particularities of the context.

With respect to the scientific method Induction and deduction, the following is detailed. Induction and deduction are two methods of reasoning used to arrive at knowledge. Deductive reasoning starts with a general statement or hypothesis and examines the possibilities to reach a specific, logical conclusion (Siswono et al, 2020). In contrast, inductive reasoning starts with specific observations and tries to develop a theory or generalization based on those observations.

Deductive reasoning is often used to test hypotheses and theories, which predict certain outcomes if they are correct. It is a top-down approach where the researcher starts with a theory and then tests it with observations or experiments (Zalaghi & Khazaei, 2016). Deductive reasoning is often used in mathematics, where theorems are proved by starting with axioms and then using logical deductions to arrive at a conclusion (Siswono et al, 2020).

Inductive reasoning, on the other hand, is a bottom-up approach where the researcher starts with specific observations and then tries to develop a theory or generalization based on those observations (Haque, 2022). Inductive reasoning is often used in the natural and social

sciences, where researchers make observations and then try to develop theories to explain those observations (Haque, 2022).

Both inductive and deductive reasoning have their strengths and weaknesses. Deductive reasoning is useful for testing hypotheses and theories, but it can be limited by the quality of the initial assumptions or premises (Malhotra, 2017). Inductive reasoning is useful for developing new theories or generalizations, but it can be limited by the quality and quantity of the observations.

In summary, induction and deduction are two different methods of reasoning used to arrive at knowledge. Deductive reasoning starts with a general statement or hypothesis and examines the possibilities to reach a specific, logical conclusion, while inductive reasoning starts with specific observations and tries to develop a theory or generalization based on those observations. Both methods have their strengths and weaknesses and are used in different fields of study (Haque, 2022; Siswono et al, 2020; Zalaghi & Khazaei, 2016).

With respect to the study population and sample. No records or statistics were found. Therefore, it was not possible to determine the number of the study population. To select the case studies, several qualitative criteria were applied based on Gray (2014). Cases in rural communities were purposively chosen and snowball sampling was used to identify more cases from interviewees' references (Gray, 2014). Rural locations were visited where the existence of at least one banking correspondent was confirmed. Researchers informed participants about the purpose of the study, the topics consulted, and informed consent. Eighteen interviews were conducted in the coastal and Andean regions of Ecuador, following the established parameters.

Method Used.

The general objective is to determine the impact of access to and use of formal financial services on the development of entrepreneurship in Ecuador. For this purpose, a

descriptive-correlational study is proposed, which seeks to describe the characteristics of the population under study and establish possible relationships between the variables of interest.

The descriptive correlational scope is a type of research that seeks to describe the characteristics of a population or phenomenon, and to establish the relationships between the variables that compose it (Pandey & Pandey, 2021). This scope makes it possible to identify the factors that influence the behavior of a dependent variable, based on the analysis of the covariation with one or more independent variables (Bujang et al, 2017). The descriptive correlational scope does not involve manipulating or controlling the variables, but rather observing them as they are in reality. This type of research requires a clear definition of the problem, hypotheses, variables and indicators, as well as the selection of a representative sample and the application of appropriate statistical techniques to measure the correlation between variables (Avcı & Ayaz-Alkaya, 2022).

The study is based on a qualitative methodology for data collection and analysis, through interviews with eighteen banking correspondents (González et al, 2020). The sample consists of eighteen banking correspondents in these rural areas who access and use formal financial services. The instruments used are a semi-structured interview and subsequent analysis with data analysis tools such as Atlas.ti 9. The expected results are to identify the impact of access to and use of formal financial services by rural entrepreneurs, as well as to evaluate the impact of this access and use on the development of their entrepreneurial capacity.

For data collection. Official information on rural enterprises was consulted and sought, as well as information on the existence of banking correspondents in remote and remote areas at the national level. However, there are no official records or statistics on this information. Therefore, it was impossible to identify a population number as a study universe of companies in remote rural areas of Ecuador.

The selection of the sample of cases was made considering several qualitative criteria. A data collection plan was carried out in the different provinces of Ecuador, both on the coast and in rural areas of the highlands. Eighteen people were interviewed according to the inclusion criteria. The interview began with a description of the participant, including their full names, type of enterprise, name of the enterprise, years of activity and the rural community where they have their enterprise. For confidentiality reasons, the last name was omitted in the description of the data. The informants of the selected cases were informed about the study and their informed consent was obtained. The Findex Questionnaire (questionnaire measuring financial inclusion) developed by the World Bank is also the basis for developing the questions for this research (Demirguc-Kunt & Klapper, 2012).

The study was based on interviews with participants. To ensure the quality and validity of the data, a database was created for each case and the information was analyzed with Dedoose, Dataviv and Atlas.ti 9 (Paulus & Lester, 2016).

The first stage consisted of reviewing the literature to define the theoretical framework of the study according to the publications on the subject. The second stage consisted of comparing the cases to identify similarities and differences with the current state of the topic between each case.

Finally, the interviews were coded and categorized to establish relationships based on the inductive analysis of the data.

Detailed process of reliability testing and validity.

To ensure construct validity, strategies have been applied to ensure appropriate measures of the concepts investigated, such as: triangulation of information, obtained from various sources, including observations, interviews and documents; key consultants have verified drafts of the case study reports; a chain of evidence has been retained in the analysis;

researcher bias has been explicitly indicated; quasi-statistics have been used to support certain researcher inferences; two pilot cases have been conducted.

The triangulation of information in this study was based on the comparison of businessmen's statements with the researchers' direct observations, the verification of written documentation and the consistency of the answers obtained from different sources.

The qualitative approach requires reliability, so different data collection techniques were used within the same methodology (Hayashi et al, 2019). In addition, triangulation was made with different data sources. Among the techniques used, the following stand out: documentary review, which made it possible to analyze the relationship between financial access and entrepreneurship based on previous studies; interviews, which facilitated the participants' opinions; and the researchers' records, which consisted of photographs and observation notes (Guba & Lincoln, 1989; Shenton, 2004).

Chapter I: The Research Article

The research paper, Impact of access and use of formal financial services in the development of entrepreneurship in rural Ecuador, was accepted for publication on 29 April 2023 on Polish Journal of Management Studies (ISSN 2081-7452) and is indexed on Web of Science and Scopus database in quartile Q3. The paper will be appearing in the Volume 27 2023.

Abstract

This study aimed to determine the impact of access and use of formal financial services through correspondent banking on the development of entrepreneurship in the rural sector of Ecuador. The qualitative case study methodological strategy was used in this research. Eighteen rural communities on the Coast and Highlands of Ecuador were studied. Through an inductive analysis in Atlas.ti 9, the relationships between the concepts identified in the interviews and the researchers' files were structured, and the results were compared with the theoretical assumptions specified in the literature. In order to determine the impact of correspondent banking in the communities studied, the theoretical assumptions of transaction costs were used as a frame of reference. The presence of the correspondent in the communities has eliminated non-financial transaction costs by reducing the physical distance between the user and the distributor of financial services. The non-payment of non-financial transaction costs positively affected the generation of savings; moreover, the presence of the correspondent allowed the inhabitants to open savings accounts, which are used for personal and business transactions. Many businesses started their activities after incorporating the correspondent due to the concentration of potential clients of local businesses. Also, business growth after the correspondent is generated from time and money savings. The novelty of the study focuses on empirically showing that in rural contexts, the mere fact of providing formal

financial services in the community -through the correspondent banking channel- (without having credit) allows the growth of the enterprise through savings transaction costs.

Keywords: Financial access, correspondent banking, transaction costs, entrepreneurship, rural finance.

Introduction

Access to formal financial services is crucial for individuals and communities to improve their economic and social well-being (Lee-Yin, Hen-Toong, & Gek-Siang, 2022). However, in many rural areas, access to these services is limited or non-existent, which poses a significant challenge to economic development and poverty reduction (Villarreal, 2017). The latest Findex data reveals that a staggering number of adults, approximately one-third or 1.7 billion, still do not have access to a bank account. This is a major cause for concern as almost half of the unbanked population comprises women, poor households in rural areas, and individuals not in the workforce. The figures indicate a significant gap in financial inclusion that needs to be addressed urgently (World Bank, 2022).

Due to the enormous gap between the supply and demand of financial services to meet the needs of the poor, it is important to analyze the role of the traditional financial system in expanding adequate financial services and their accessibility to rural areas (International Labour Organization, 2022). Recent research has explored various alternative methods to improve financial access in rural areas, including mobile banking, electronic money, and banking correspondents (Simatele & Maciko, 2022; Tok & Heng, 2022; World Bank, 2022).

The literature has identified the importance of efficient financial systems for long-term economic growth, reduced social and economic inequality, and increased economic dynamism. However, while these studies have provided valuable insights into the impacts of access to formal financial services, there is still a significant gap in the literature regarding the effect of financial access on banking correspondents in areas where credit is not offered

(Amadasun & Mutezo, 2022). An important theoretical and empirical literature shows the importance of efficient financial systems for long-term economic development (Nguyen T., 2022; Nguyen P., 2022; Manzoor & Amjad, 2022).

An inclusive financial system could be associated with lower social and economic inequality and a more dynamic economy as a whole (Simatele & Maciko, 2022). Poverty researchers receive more profound insights into the behavior of microenterprises in rural and remote areas that allow them to identify better the business and economic implications for poverty reduction as an effect of access to financial services (Lin – Yin et al., 2022; Nguyen P., 2022). Financial institutions and markets arise to alleviate market frictions arising from information asymmetries and transaction costs (Kpodar & Amir, 2022).

The identified gap that gives relevance to this research is that all studies on banking correspondents include access to credit (Assunção, 2013, Pereira et al., 2015; Diniz et al., 2012), while this work analyzes the effect of financial access on banking correspondents in Ecuador, whose characteristic is that they do not grant credit. The literature postulates that financial inclusion affects business development, entrepreneurship, economic development and poverty reduction. This research seeks to contribute to the academic literature with a study that shows the positive relationship between access to and use of formal financial services (excluding microcredit) in entrepreneurship development. Furthermore, the rural sector in which the research was conducted is relevant since few studies have been developed in this context, and Ecuadorian regulation limits banking correspondents to provide formal financial services without including micro-credit (a reality different from other Latin American countries that have adopted this channel of distribution of banking services).

Literature Review

Financial inclusion has become a significant topic of interest in the academic field, with many studies examining its effects on different aspects of society. One area of focus is

the relationship between mobile money (MoMo) and entrepreneurship, particularly in East Africa. Koomson et al. (2022) found that digital savings and access to digital credit play crucial roles in the MoMo–entrepreneurship nexus, with significant heterogeneity based on location, gender, and age. Another study by Wang et al. (2020) looked at the impact of digital inclusive finance on coastal rural residents' entrepreneurship in China and found that it significantly promotes entrepreneurship.

Digital finance has been identified as an essential tool to increase the propensity and quality of entrepreneurship, especially for disadvantaged groups. Liu et al. (2022) found that local digital financial development positively influences entrepreneurial probability and quality in China, especially for migrants living in rural regions with lower educational levels and experienced cross-provincial mobility. Furthermore, Lian et al. (2023) examined the income effects of digital inclusive finance on rural residents in China's main grain-producing regions. They found that digital inclusive finance positively affects rural residents' income regarding entrepreneurship, financial investment, non-agricultural employment, and mechanized production.

Ajide (2020) investigated the impact of financial inclusion on entrepreneurship in selected African countries and found a significant and positive effect. Lastly, Goel et al. (2022) presented a conceptual framework of the Business Correspondent (BC) model's success, which consists of six dimensions: economic, strategic, technological, customer satisfaction, employee satisfaction, and social, with empirical validation across four BC model implementations. All these studies examine the impact of financial inclusion on entrepreneurship, with each study focusing on different means of inclusion.

Financial inclusion can be achieved through physical (Ajide, 2020; Ambarkhane et al., 2022; Gitonga & Kiraka, 2019; Goel et al., 2022; Shafi & Reddy, 2022) or digital means (Koomson et al., 2022; Liu et al., 2022; Lian et al., 2023; Wang et al., 2020). Physical means

of financial inclusion involve using traditional banking services such as bank branches, ATMs, and banking correspondents (Ajide, 2020; Ambarkhane et al., 2022). In contrast, digital means of financial inclusion utilize technology-based services such as digital banking (Lian et al., 2023), electronic money (Koomson et al., 2023) and fintech (Lagna & Ravishankar, 2022) that can have an impact on entrepreneurship.

The identified gap that gives relevance to this research is that all studies on banking correspondents include access to credit (Ajide, 2020; Ambarkhane et al., 2022; Assunção, 2013; Diniz et al., 2012; Gitonga & Kiraka, 2019; Goel et al., 2022; Shafi & Reddy, 2022, Pereira et al., 2015), while this work analyzes the effect of financial access on banking correspondents in Ecuador, whose characteristic is that they do not grant credit. The literature postulates that financial inclusion affects business development, entrepreneurship, economic development and poverty reduction. This research seeks to contribute to the academic literature with a study that shows the positive relationship between access to and use of formal financial services (excluding microcredit) in entrepreneurship development.

On the other hand, financial literacy plays a crucial role in successfully adopting and using financial services, whether through physical or digital means of financial inclusion. However, digital financial inclusion presents a unique challenge for those with low levels of financial literacy (Ambarkhane et al., 2022). Digital financial services require users to have basic technology skills and an understanding of financial concepts such as interest rates, fees, and risk (Lian et al., 2023). In contrast, physical financial inclusion, such as traditional banks and credit unions, may offer more accessible and familiar services to those with low levels of financial literacy (Ajide, 2020). Thus, while digital financial inclusion can increase access to financial services, it is important to consider the potential challenges that low levels of financial literacy may pose for successful adoption and usage.

Research has shown that digital financial services have the potential to enhance financial literacy among users. For example, mobile money platforms often include educational resources, such as SMS-based financial tips, to help users understand and navigate the financial landscape (Lagna & Ravishankar, 2022). In addition, the transparency and convenience of digital financial services can help users track their transactions and understand their financial behavior, leading to improved financial decision-making (Lian et al., 2023). On the other hand, physical means of financial inclusion, such as traditional brick-and-mortar banks, may not always offer the same level of educational resources or transparency (Gitonga & Kiraka, 2019). However, physical means of financial inclusion may be more accessible to those with limited digital literacy or access to technology, highlighting the need for various financial inclusion strategies to meet the diverse needs of users (Ambarkhane et al., 2022). Overall, while digital financial services can enhance financial literacy, it is important to consider the barriers to digital access and literacy that may exist for certain populations and to develop comprehensive strategies for financial inclusion that meet the diverse needs of users.

Considering that verification of rurality is of utmost importance for the relevance of the literature in this research, the studies selected in the analysis process have been conducted in rurality contexts, including Cambodia (Vong et al., 2012; Fang, 2014); Brazil (Assunção, 2013; Diniz et al., 2012; Pereira et al., 2015); Malaysia (Chan & Abdul Ghani, 2011); India (Ambarkhane et al., 2022; Burgess & Pande, 2005; Rajesh Raj et al., 2014); Bangladesh (Afrin et al., 2010; Gitonga & Kiraka, 2019); Indonesia (Nugroho & Chowdhury, 2015); South Africa (Ajide, 2020; Kostov et al., 2015); Mexico (Bruhn & Love, 2009). Furthermore, the rural sector in which the research was conducted is relevant since few studies have been developed in this context, and Ecuadorian regulation limits banking correspondents to provide

formal financial services without including micro-credit (a reality different from other Latin American countries that have adopted this channel of distribution of banking services).

Methodological framework

The study's central research question was: What are the impacts of access to and use of financial services generated by the correspondent banking channel in developing entrepreneurship in rural Ecuador? The research question was formulated after a thorough review of studies that have addressed the relationship between financial access and economic development. The methodological framework proposed by Fang et al. (2014) is the basis for investigating the reality of access and use of formal financial services, through a different channel of distribution of such services, in this case, correspondent banking, which has certain similarities with mobile banking, but in turn, has differences about the business model, the services offered. Additionally, the context in which the study is conducted is in another geographical latitude, in which the culture and context are different.

Methodological method

The qualitative method used in this research was the case study (Yin, 2013). Rural localities in Ecuador were selected for the primary research development. One of the characteristics of the case study design is the inductive logic, which allows focusing on the particularities of the diversity of the cases, as well as establishing comparisons between them to achieve an emerging general proposal - conceptual model - that allows a certain degree, predicting behaviors without the criterion of quantitative representativeness and generalization (Yin, 2022; Nguyen, 2022).

The case study method was used, in which the units of analysis were rural inhabitants who had experienced a financial inclusion process through the correspondent banking channel and were engaged in some entrepreneurial activity. The case study method was selected because it allows: (a) predicting similar results (literal replication); or (b) predicting

contrasting results, but for predictable reasons (theoretical replication) (Avolio, 2012; Machado Chumpitaz & Vela Bravo, 2015; Yin, 2013).

Data collection method

In Ecuador, the National Institute of Statistics and Census is responsible for collecting information on the population and various economic areas of the territory. Likewise, the governmental entities that collect information on companies, income, sales, and banking information are the Superintendency of Companies, Superintendency of Banks, Superintendency of Popular and Solidarity Economy, and the Internal Revenue Service. The following were consulted, and official information on rural enterprises (in remote areas, with characteristics of self-employment) was sought, as well as information on points at the national level, on the existence of banking correspondents in remote and distant areas (of any banking entity to which they belong). However, there are no official records or statistics on this information. Thus, it was impossible to identify a population number as a study universe of enterprises in remote rural areas of Ecuador.

For the development of this study, a semi-structured interview was used to collect primary information. In the qualitative studies selected as a basis for this research (Fang, 2014; Vong et al., 2012), open-ended questions were used, which were relevant to the object of study. Thus, the semi-structured interview of the author Fang (2014) was taken as a basis for structuring the instrument applied in this research. Likewise, through its research groups, the World Bank has developed questionnaires that collect information on financial inclusion, especially on the use of financial products provided by formal entities. For this reason, the Findex Questionnaire (questionnaire that measures financial inclusion) developed by the World Bank is also the basis for elaborating the questions in this research (Demirguc-Kunt & Klapper, 2012). With the respective authorizations to use these instruments as a basis, a questionnaire of questions was developed for the present research, taking into account the

diverse realities of the contexts where the instruments have been applied, as well as the different distribution channels of financial services used in the interview of the study by Fang (2014). The interviews were developed as a conversation focused on capturing the essence, meaning, or significance of the experiences of people using banking correspondent services within their community.

Sampling

Once the localities were selected, entrepreneurs located in those localities were chosen. The selection of the sample of cases was made considering several qualitative criteria, according to Gray (2014). Initially, the cases were approached according to the criterion of rurality, according to the purpose of the study; therefore, the cases were intentionally selected in rural communities. Once arrived at the study communities, opportunistic sampling was applied, that is, in an emergent manner, in the sense that once fieldwork has begun, new samples may become evident or be offered during the study. Finally, the researchers validated the observed reality and consulted the interviewees about the characteristics to select the next case studies, which is called snowball sampling (Gray, 2014).

After applying the pilot cases, an information collection plan was carried out in the various provinces of Ecuador, both in the Coastal and Highlands regions in rural sectors. As indicated in previous paragraphs, field trips were made to rural localities since there was no official information on the cases for selection. Once each locality was visited, at least one banking correspondent was identified. Based on this confirmation, the researchers validated the observed reality and consulted with various entrepreneurs about the characteristics to select the study cases. Before starting each information gathering through the interview of the selected case, each participant received information about the purpose of the study, the main aspects that were consulted and the informed consent.

A total of 18 interviews were conducted with selected cases in Ecuador's coastal and highland regions in strict compliance with the selected parameters. The collection was carried out between the second semester of 2021 and the first quarter of 2022. However, the collection was halted at various times due to mobilization restrictions due to the COVID-19 global pandemic and the strong winter that Ecuador experienced in the first months of 2022.

Inclusion criteria

For the selection of the case studies, the people chosen had to meet several criteria to guarantee the suitability of their participation in the study. The criteria were as follows: (a) the rural sector or parish to be selected must have at least one correspondent bank; (b) the person must live in the rural population of Ecuador; (c) the person must also have a business; (d) the person must confirm that he or she has undergone a process of financial inclusion through the correspondent banking channel, and (e) the person must confirm that he or she plays a leading role in the commercial activity being developed (e.g., business owner).

Reliability and validity of the research

According to Avolio (2015), in order to develop a high-quality case study, four conditions related to the study design must be maximized: construct validity, internal validity, external validity, and reliability. To ensure these conditions, the strategies suggested by Yin (2003), Creswell (2003) and Maxwell (1996) have been used. To ensure the validity of the construct, strategies have been used that allow the establishment of adequate measures of the concepts studied (Yin, 2003), such as a) triangulation of information, which has been collected from multiple sources, including observations, interviews and documents; b) key consultants have reviewed draft case study reports; c) a chain of evidence has been maintained in the analysis; d) the investigator's bias has been clearly specified (Creswell, 2003); e) quasi-statistics have been used to support certain inferences by the researchers (Maxwell, 1996); f) two pilot cases have been carried out (Feng, 2005)

The triangulation of the information allows for comparing various types and sources of information to achieve the validity of the results. As Avolio (2015) indicates, the triangulation was carried out by comparing information from the literature after the observations with information from the interviews with the people with different points of view to finally establish coincidences of the empirical referents with the results of the inductive analysis in Atlas TI.

In this study, the triangulation of the information has been achieved mainly through a) the comparison of what was expressed by the entrepreneurs during the interviews with what was directly observed by the researchers during the visits made; b) the verification of the information with written documentation obtained during the interview, such as advertising information, among other documents, when applicable; c) the comparison of the information contained in the field notes format with that of the interviewer's notes and the researchers' report, to ensure the consistency of the answers obtained.

To ensure the reliability of the qualitative approach, methodological triangulation was considered, specifically triangulation within the method, i.e., several data collection techniques were used within the same methodological strategy, and data source triangulation was also applied (Gray, 2014). Specifically, the documentary review was applied to identify the relationship between financial access and the generation of entrepreneurship from published works; the interviews allowed the collection of the participant's point of view and the researchers' records, which included photographs and observer's records. The data collected from the sites were also triangulated, taking samples from several rural areas distributed between the coastal and highlands regions of Ecuador.

Data analysis

A schematization of the data collected from each interview was carried out, complemented by the researchers' notes, photographs and videos, with information that can

be presented descriptively in the case studies. After each case study, the information was collected, recorded and archived (physical and digital media). In addition, all the case study interviews were recorded and later transcribed for use in the research. In order to ensure greater rigor and reliability in the study, a database was developed for each case, and the information collected was processed using the Atlas.ti 9, qualitative analysis tool.

With the information entered into the program, inductive data analysis was carried out in two phases. The first phase contemplated exploring the literature to establish the referential framework of the study based on the publications on the subject. The second phase focused on the analysis of the cases to establish relationships and differences with the state of the art of the subject between each case. Finally, relationships and differences were established with the referent literature. The interviews were coded and then categorized to establish relationships from the inductive process of information analysis.

Results

In order to effectively address the central research question, a selection of 18 cases was made, enabling the acquisition of individual information to facilitate subsequent comparisons. The number of cases was determined by the theoretical saturation criterion espoused by Creswell and Creswell (2018) and Gray (2014). This criterion dictates that the foundation of a theory must be interpreted based on the heterogeneity of the data, and the search for additional data must continue until a point of impossibility of discovering new information is reached. Consequently, data collection continued until there was no longer a complete novelty to the meanings of the study.

Descriptive analysis of the case studies

Eighteen people were interviewed according to the inclusion criteria. The interview began with a description of the participant, including their full names, type of business, name of the business, years of activity and the rural community where they have their

entrepreneurship. For confidentiality reasons, the last name was omitted from the data description. The informants of the selected cases were informed about the study, and informed consent was obtained. Once each informant agreed to participate in the study, the respective interview was conducted, using digital media to the recording media. Likewise, a logbook was used to record the participants' data, in which the researchers also recorded notes on additional observations.

The profile of the informants represents a variety of industries, including pharmacies, trade accessories, grocery stores, dining rooms, tailoring, hardware, and bazaars. The length of time the businesses have been operating ranges from 1 year to 15 years. The businesses were located in different rural sectors, including San Carlos, Puerto Inca, Chobo, Sabanilla, Las Cañas, Las Avispas, La Estacada, La Puntilla, Virgin Valley, Recinto Sargental, Barraganetal, Puerto Pechiche, San Miguel de Perucho, La Matilde, St. Paul of Athens, San Jacinto, and San Simon. Some businesses have unique names, such as Dios Proveerá and Creaciones Yahveh Jired, while others have generic names, like Supertodo and La Salud. Some businesses are similar in type and/or location, such as the two grocery stores in Puerto Inca and the two restaurants.

Impact of access to and use of formal financial services through the correspondent banking channel on the development of rural sector entrepreneurship

Five of the 18 cases reported facing physical distance issues, which took them between one hour and 30 minutes and five hours to travel from their place of residence to a better infrastructure location for financial transactions. Six out of 18 interviewees mentioned traveling between 25 and 50 minutes to reach the nearest bank branch or a correspondent bank. The researchers verified the distance and the claims made by the interviewees.

High transaction costs emerged as another issue during the inductive data analysis. Four out of 18 interviewees mentioned incurring expenses between 15 and 20 dollars for

various transactions, including payments and withdrawals, while eight out of 18 interviewees spent between three and eight dollars, with a frequency of one to three times a month. The most commonly cited costs were transportation and food. Before the implementation of the correspondent, the interviewees reported high non-financial transaction costs for travel and food: “I spent between 20 and 25 dollars every time I had to go out to make transactions in Playas, and I went out twice a month” (Gina G., rural parish of Isla Puná, Guayaquil canton, Guayas Province). “The approximate value that I spent was one dollar and fifty cents, and what was also spent in the city to eat” (María O. recinto Las Avispas, Milagro canton, Guayas Province). “Each trip, I spent at least \$7.50, and I was gone for at least 5 hours, which prevented me from attending to my business” (Gabriel E., San Miguel de Perucho rural parish, Quito canton, Pichincha Province).

Implementing the banking correspondence in the communities saved time and money. The respondents listed various types of payments and transactions, including payment of electricity bills, the government-issued human development bonus, the recharge of phone minutes and data bundles, payment to suppliers engaged in multilevel businesses, and payment for internet services, all of which were facilitated by the correspondent located in the community at the time of the interview. The reduction in transaction costs enabled ten out of the 18 respondents to save funds in their bank accounts to start, operate, or expand their entrepreneurial ventures. At the same time, more than half of the business owners interviewed reported reinvesting their savings to expand their businesses: “I save time and also some money by not leaving the premises to make the payments that we previously had to make outside in Daule” (Joselyn, Sangertal parish, Pedro Carbo, Guayas).

One of the benefits highlighted by the interviewees that are linked to business expansion is acquiring new customers. The respondents explained that individuals who visit the Correspondent Bank's location often make additional purchases while conducting their

banking transactions, increasing overall sales. Additionally, interviewees observed a surge in foot traffic in the community due to the presence of the banking correspondent, with residents from neighboring communities also coming to conduct their transactions at the correspondent: “Before having the banking correspondent, my clients were very few, I was only known by the community, currently more clients come from other communities to do any type of transaction and they start buying from me” (Andrés, San Jacinto parish, Guaranda canton, Bolívar Province).

Finally, two out of 18 respondents affirmed that the implementation of the correspondent has contributed to their personal development as it has provided an opportunity to learn about personal finance and accounting: “It saves time and money because we do not have to leave the precinct to make payments that we used to have to make outside in Daule. Thanks to the correspondent, I have also had to learn more about accounting to manage accounting of my home and business; since I have the bank near here, I don’t have to save it under my mattress” (Joselyn D., Sartajenal precinct, Pedro Carbo and Lomas de Sargentillo cantons, Guayas Province).

The results of this research make a noteworthy contribution to the literature on the impact of financial accessibility. Specifically, the findings reveal that the growth of businesses and the creation of entrepreneurial opportunities, attributable to the presence of banking correspondents, need not be contingent upon credit availability. Rather, the effects on business development and entrepreneurship are associated with access to formal financial services such as deposits, withdrawals, third-party payments, and the collection of government-issued human development bonuses, among others. Furthermore, the savings generated by reduced transaction costs associated with conducting financial transactions within their communities also contribute to these positive outcomes.

Discussion of results

It can be inferred from the results that the presence of the correspondent has brought financial inclusion to the communities under study, encouraging business startups and promoting business improvement. The results are consistent with other studies that have reached the same conclusion (Ajide, 2020; Ambarkhane et al., 2022; Gitonga & Kiraka, 2019; Goel et al., 2022; Shafi & Reddy, 2022). It has made it possible to eliminate non-financial transaction costs by reducing the physical distance between the user and the distributor of financial services. In this sense, the results confirm the findings that point out that distance can be an important impediment to the poor's use of formal savings services (Ambarkhane et al., 2022; Lian et al., 2023; Shafi & Reddy, 2022; Hasan et al., 2022). Furthermore, these findings are consistent with research that indicates that transaction costs impede the direct investment of society's savings (Ajide, 2020; Ambarkhane et al., 2022; Assunção, 2013; Beck et al., 2009; Fan et al., 2017; Goel et al., 2022; Pereira et al., 2015).

The non-payment of non-financial transaction costs positively affected the generation of savings; moreover, the presence of the correspondent allowed residents to open savings accounts, which are used for personal and business transactions. Ambarkhane et al. (2022) studied Pradhan Mantri Jan-Dhan Yojana (PMJDY), which is National Mission for Financial Inclusion to ensure access to financial services, namely, a basic savings & deposit accounts, remittance, credit, insurance, pension in an affordable manner through banking correspondent. As a result, in 2021, over 43.6 crore bank accounts were opened under the PMJDY scheme, with a total balance in these accounts standing at over Rs 1.4 lakh crore (approximately USD 18.7 billion) as of March 31, 2021.

These results are also consistent with the study developed by Diniz et al. (2012) in the county of Autazes in the Amazon region of Brazil, with positive effects on the rural population after the incorporation of the banking correspondent in that locality, which are detailed as follows: (a) the substantial reduction in the high costs of transportation to other

localities; (b) savings of several days per month (time); (c) socioeconomic development of the population, the money is reinvested in the rural areas: (a) substantial reduction of high transportation costs to other localities; (b) savings of several days per month (time); (c) socioeconomic development of the population, money is reinvested in the locality; (d) reduction in the number of assaults.

Regarding the effect of the correspondent on the enterprise, many businesses started their activities after the incorporation of the correspondent. This is because correspondents increase the concentration of the public, who become potential customers of local businesses. In terms of business growth, previously, business growth was relatively difficult (Ajide, 2020; Ambarkhane et al., 2022; Assunção, 2013; Goel et al., 2022; Pereira et al., 2015; Shafi & Reddy, 2022).

However, the results differ from the literature because the banking correspondent models studied by the referent authors grant credit in their communities, which does not occur in the context of this research. Therefore, the inference made from the results is that banking correspondents have a positive impact on the generation of entrepreneurship and business growth, not necessarily because they grant credit, but because of the access to formal financial services they provide and the savings that their presence represents in the rural communities where they are located.

In terms of financial inclusion, the literature also cites other means of inclusion, such as digital banking (Lian et al., 2023), electronic money (Koomson et al., 2023), fintech (Lagna & Ravishankar, 2022) that can have an impact on entrepreneurship. However, digital finance differs slightly from the topic of this work because, in the case of non-bank correspondents, there is a physical place to carry out transactions, while digital banking requires ICT. In addition, using ICT requires certain knowledge that is not easy in populations

with low levels of education, such as those in rural areas. However, it can be argued that despite the differences, digital banking remains part of financial inclusion (Xie, 2020).

In conclusion, financial inclusion promotes entrepreneurship; despite the differences in the inclusion system, the effect remains the same, where correspondents are part of financial inclusion (Nabila, 2020). This is achieved through banking penetration, availability and accessibility of service/product, and usage of banking systems/technology (Inegbedion, 2022). Nevertheless, it is important to clarify the difference of a correspondent as it is a physical non-bank office where transactions are made, just like a bank. In the case of Ecuador, these correspondents differ by not providing credit, which reaffirms that financial inclusion generates business development, not access to credit, contrary to (Zogning, 2023; Fan, 2017; Assunção, 2013).

An emerging hypothesis from this study is that simple access to formal financial services affects entrepreneurship and business growth. Similarly, it can be hypothesized that access to credit does not necessarily affect entrepreneurship and business growth. Another emerging hypothesis focuses on the fact that banking correspondents or banking agents are more successful in providing financial inclusion than other digital means where populations have low literacy levels and also where the populations are elderly.

Conclusions

The results allowed us to state that many businesses started after the presence of banking correspondence. According to the analysis, this effect is due to two main reasons: the first is that banking correspondents provide the services that used to take time and money to obtain, and the second is due to the influx of potential clients that these correspondents attract.

From the findings of this study, it was possible to conclude that: (a) banking correspondents allow rural communities to access formal financial services, which had a positive effect on the generation of entrepreneurship and business growth; (b)

entrepreneurship and business growth are associated with savings due to transaction costs, and no credit as in all the cases studied as a reference; (c) banking correspondents allow businesses to increase their sales due to the influx of the public; (d) it was not possible to prove the effect of financial access on economic development and poverty reduction.

Limitations and recommendations for future research

It was possible to conclude that banking correspondents generate transaction cost savings; however, it was impossible to determine the value added to the savings generated. Therefore, it is recommended that research be conducted to quantify the added value generated by transaction savings derived from transaction cost savings.

Considering that this study's generation of entrepreneurship and business growth associated with financial access does not include access to credit, it is recommended that this theoretical relationship be empirically verified. For future research, it is proposed to continue with a study that quantifies the benefit of financial access in entrepreneurship and business development without considering credit.

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Chapter II. Conclusions and Recommendations

Conclusions

This research aimed to answer the question of what impact has the access and use of formal financial services through the banking correspondent channel on the development of entrepreneurship in rural areas of Ecuador.

The applied method allowed to compare and contrast the theoretical assumptions with the reality of the cases analyzed. From the findings of this study, it was possible to conclude that: (a) banking correspondents allowed rural communities to access formal financial services, which had a positive effect on the generation of entrepreneurship and business growth; (b) entrepreneurship and business growth are associated with savings due to transaction costs, and not credit as in all the cases studied as a reference; (c) banking correspondents allow businesses to increase their sales due to the influx of the public; (d) it was not possible to prove the effect of financial access on economic development and poverty reduction

The findings show that the presence of the correspondent in the communities has eliminated non-financial transaction costs by reducing the physical distance between the user and the distributor of financial services. According to the literature, transaction costs impede the direct investment of society's savings (Assunção, 2013; Beck & Demirgüç-Kunt, 2008; Beck et al., 2009; Fang et al., 2014; Pereira et al., 2015; Vong et al., 2012,). The non-payment of non-financial transaction costs positively affected the generation of savings; moreover, the presence of the correspondent allowed the inhabitants to open savings accounts, which are used for personal and business transactions.

Many businesses started their activities after the incorporation of the correspondent (Pereira et al., 2015), and many others have grown due to the concentration of potential clients of local businesses (Bruhn & Love, 2009).

The inference made from the results is that banking correspondents have a positive impact on the generation of entrepreneurship and business growth, not necessarily because they grant credit, but because of the access to formal financial services they provide and the savings that their presence represents in the rural communities where they are located.

Similarly, Beck et al. (2009) point out that lack of access to finance is often the fundamental mechanism for generating persistent income inequality and slower economic growth. However, economic development and poverty reduction are related to access to credit services, which is not part of the financial services provided by non-bank correspondents in Ecuador, so that no conclusive statements can be made about this inference.

Efficient financial services enable the implementation of innovative production technologies that produce higher expected revenues. By using a correspondent, a collaborative and mutually beneficial relationship is created between: customers, who can bank quickly and securely; banks, which can reduce their operating costs and reach more people; and correspondents, who can increase their revenues and build customer loyalty.

Recommendations

First of all, because of its nature, this research cannot be not conclusive. An effect of correspondents on the development of ventures cannot be inferred, until this relationship is empirically corroborated. Therefore, it is recommended that research be conducted to quantify the added value generated by transaction costs saving and how much of this savings is invested in entrepreneurship.

Considering that this study's generation of entrepreneurship and business growth associated with financial access does not include access to credit, it is recommended that this theoretical relationship be empirically verified. For future research, it is proposed to continue with a study that quantifies the benefit of financial access in entrepreneurship and business development without considering credit.

According to Burgess and Pande (2005) access to and using formal financial services help individuals improve their living conditions and gradually overcome poverty. However, the results did not allow to arrive at conclusive statements regarding the presence of correspondents in economic growth and poverty reduction. This is because several factors specified in the literature could not be considered in this study, such as access to credit, cultural factors, type of entrepreneurship, and characteristics of the entrepreneur, which are variables that merit further study. Therefore, it is recommended to empirically address the effect of access to financial services, without considering credit, on economic development and poverty reduction.

Another recommendation derived from the conclusions of this study is linked to the particularity of correspondent banking models without access to credit, as is the case of correspondent banking in Ecuador. The literature points out that these models can negatively affect communities, such as the over-indebtedness of the low-income population, the reproduction of social exclusion practices and the reinforcement of power asymmetries. Therefore, it is recommended that a study be conducted to determine the existence of these adverse effects in correspondents without access to credit.

In terms of methodology for future research. It is recommended to perform data validation in a systematic and documented manner, recording the actions taken and changes made to the data, and to periodically review the results of the validation and evaluate its impact on the analysis and interpretation of the data.

Implications

The main theoretical implication of this research arises from the versions of the participants who confirmed that the presence of correspondents has allowed to grow their businesses, and others that argued have started their businesses thanks to the influx of public that correspondents generate. Thus, there are two implications that arise from economical and

managerial perspectives. From economical perspective, it can be implied that financial access generates enterprise development, independently of credit access. From the managerial perspective, it can be implied that correspondents are good collateral businesses that can be used to promote other entrepreneurs due to the need of clients for bank services.

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Appendix A – Acceptance Letter for publication



Letter of Acceptance

I am pleased to inform that after peer review process, the paper:

*"IMPACT OF ACCESS AND USE OF FORMAL FINANCIAL
SERVICES IN THE DEVELOPMENT OF
ENTREPRENEURSHIP IN RURAL ECUADOR"*

written by

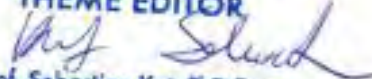
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