



Taking Women Entrepreneurs to the Bank in Romania



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The report contributes to IFC's *Banking on Women* program's catalyzing role in helping partners and financial institutions profitably and sustainably serve women-owned businesses.

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Contents

Acknowledgments	
Foreward	4
List of Acronyms	7
Executive Summary	8
Introduction	11
Garanti Bank Romania and IFC	16
Summary of Methodology	18
Description of the Sample	19
Firm ownership and management	19
Region, sector and size	19
Age of Firms	20
Biggest obstacle faced by firms	20
Banking practices of Women-owned SMEs	21
Major banks serving Women owned-SMEs	21
Financial services received	23
Loan characteristics	23
Collateral	24
Stated Purpose and Use of Loan	26
Intent to obtain loan in FY16	26
Banking features used	26
Overview of Garanti Bank Clients — Growth in Key Variables	28
Sales	28
Permanent full-time workers	30
Labour productivity	31
Net profit	33
Impact of Access to Finance on Firm Performance in Romania	33
Perceived Benefits from Financial Services	34
Perceived impact on sales from financial products ..	34
Perceived impact on net profit from financial products	35
Perceived impact on permanent full-time workers from financial products	35
Perceived impact on working capital from financial products	36
Perceived impact on investment from financial products	36
Likelihood to recommend	36
Women-owned SME Case Study	38
Conclusion and Recommendations	40
Bibliography	42
Appendix	44
Detailed Methodology	44
Loan amount and firm performance	50
Access to finance and firm performance	51

Foreword



Ufuk Tandoğan

CEO Garanti Bank Romania

Although steps have been made in recent years to narrow the gender gap, access to capital continues to be one of the most significant challenges women face when starting and/or growing their businesses. Nonetheless, supporting this segment transcends its sociological importance. It is a proven fact that women have a significant contribution in all areas of the economy, and the latest numbers in this regard cannot be ignored. There are almost 500,000 women who own or lead companies in Romania, the figure having increased by 6.8% in 2018, compared to 2017.

Throughout the years, Garanti Bank Romania has been an active supporter of local businesses and entrepreneurs, including women, by facilitating their access to finance. Over the past seven years, we have granted more than EUR 145 million in loans to several women owned enterprises that aimed to further grow and create new jobs.

As part of our long-term commitment to support local entrepreneurship and offer the best finance options for investments, Garanti Group Romania, through Garanti Bank and Garanti Leasing, has successfully collaborated with The International Finance Corporation (IFC). As a result, 31% of the total loans volumes granted by Garanti Bank Romania to businesses with women in lead or with women as shareholders were provided through IFC facilities, while Garanti Leasing has also signed loan agreements with the IFC, totaling EUR 19,5 million, out of which EUR 9 million were granted with the purpose of financing women SMEs.

By extending finance to women-owned businesses, we have succeeded to attract, encourage, and support many companies that have proven to be responsible, reputable, profitable and active contributors to the economy. The study hereafter reveals that companies that received gender finance witnessed an annual average real sales growth of 5.52%, higher than the national annual average real sales growth of firms.

Although progress has been made in the recent years, there is still a lot of untapped potential for employment and economic growth that can be harnessed by strengthening women's participation in the Romanian private sector.

The 17 global goals set by the United Nations in 2015 (Sustainable Development Goals — SDGs) have shown that women's financial inclusion is linked to: Eliminating poverty, reducing hunger and food security, achieving good health and well-being, fostering quality education, promoting gender equality, promoting shared economic growth, innovation and sustainable industrialization, and equitable and peaceful societies.

Garanti Bank aims to be a solid and trustworthy partner for the Romanian business community that, with the right financing and support, can contribute significantly to the country's economic development. Our strategy is also aligned with IFC's vision of supporting continued advancement of gender equality and financial inclusion in Romania.



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As part of the World Bank Group and as a responsible investor in emerging markets, International Finance Corporation (IFC) has a development objective to increase women’s economic participation by enhancing their access to finance. Women-owned micro, small, and medium enterprises (MSMEs) are already becoming a force to be reckoned with when it comes to growth and development of economies in which they operate. They can further realize their economic potential and contribution if they have equal access to productive assets, including finance.

As a responsible investor, we also know that when our clients tap into the full potential of both women and men, they are stronger, more innovative, and better at serving the consumers of their products and services. We see how women customers present a substantial growth opportunity for pioneering financial institutions. Women own and lead roughly 6.6 million formal SMEs and 39 million micro-businesses in emerging markets, with a total estimated unmet credit demand of USD 1.7 trillion. IFC’s Banking on Women Program helps financial institutions tap into this growth segment by assisting banks in acquiring women-owned SME and retail customers—and profitably financing them. This increases access to finance for women and helps financial intuitions grow. IFC’s commitment to advancing gender equality is therefore anchored in a strong business case for profitable,

gender-smart banking solutions that reduce the finance gap between men and women as entrepreneurs.

Over the past decade, IFC has been working with Garanti Bank Romania to reduce the finance gap for women entrepreneurs in the country. Through our engagement with Garanti Bank Romania, the first bank in Romania committed to serving women entrepreneurs, we have built a sizeable body of knowledge that we aim to share. Our impact study found that Garanti Bank Romania has loaned over EUR 145 million to women-owned enterprises since 2017, and that the female borrowers who received loans experienced an annual average real sales growth of over 5 percent per year. Around two thirds of Garanti Bank clients reported that the financial services they received from Garanti Bank have contributed to an increase in their sales, net profit, and working capital. Over 84 percent of Garanti Bank’s female clients are very likely to recommend the products they have received from Garanti Bank, more so than clients of other banks.

It is with great pleasure that we introduce to the readers the *Taking Women Entrepreneurs to the Bank in Romania* report. This report is a joint initiative and the result of the long-standing partnership between the IFC and Garanti Bank Romania, aimed at increasing access to finance to female entrepreneurs in Romania and position Garanti Bank as the bank of choice for female customers. Three years in the making, this report has studied the impact of



Garanti Bank's Women SME Banking Program on the growth of women-led firms in Garanti Bank's portfolio. The report complements the *Garanti Bank Romania—Striving to Lead* publication, which was launched in 2016 and studied the impact of Garanti Bank's female SME customers on the bank's portfolio growth and quality. We are particularly excited about this study because it evidences—through robust data-based analysis—the business benefits to banks and the impact on women-led SMEs of increasing access to finance for female entrepreneurs.

The objective of this study is to share with development organizations, financial institutions, and donors evidence about the development impact of target financing solutions on women entrepreneurs. We invite you to enjoy the insights of this study and to think of ways in which your institution can create more economic opportunities for women.

LIST OF ACRONYMS

BOW	IFC Banking on Women Program
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COO	Chief Operating Officer
CPI	Consumer Price Index
CY	Calendar Year
EBAN	European Trade Association for Business Angels, Seed Funds, and Early Stage Market Players
EC	European Commission
EIF	European Investment Fund
EMENA	Europe, Middle East and North Africa
ES	Enterprise Survey
EU	European Union
FY	Financial Year
GDP	Gross Domestic Product
IFC	International Finance Corporation
IMAS	Institut für Markt- Sozialanalysen Ges.m.b.H.
LCU	Local Currency Unit
MSME	Micro, Small and Medium Enterprises
NPL	Non-Performing Loans
POS	Point of Sale
PWN	Professional Women's Network Romania Association
SAFE	Survey on the Access to Finance of Enterprises
SBA	Small Business Act
SME	Small and Medium Enterprises
WBG	World Bank Group
WE	Women Entrepreneur
W-SMEs	Women-owned Small and Medium Enterprises and Women entrepreneurs

Executive Summary

1. **After the financial crisis of 2008, Romania faced falling employment, low productivity, and a credit crunch.**

By 2015, employment decreased by 2.06 percent from 8.7 million persons in 2010 to 8.5 million persons. A large portion of the population is employed by Small and Medium Enterprises (SMEs)—they account for two out of three persons employed in Romania. At the same time, the majority of small firms, especially those owned and led by women, are marked by low levels of labor productivity and growth. This is often linked to SMEs' limited access to expansion-gearred finance. While access to finance has improved since the crisis, the SME finance gap¹ in Romania is

estimated to be USD 32.7 billion in 2017 (18 percent of GDP); and of this, women's SME finance gap is 8 percent, or USD 2.6 billion.

2. **Garanti Bank was the first bank to focus on the needs of women-owned SMEs and women entrepreneurs (W-SMEs) in Romania.**

IFC supported Garanti Bank Romania in expanding its portfolio and strengthening its offering to W-SMEs through a senior loan in 2011. Since then, Garanti Bank has loaned over EUR 145 million to women-owned enterprises as of end-December 2017. To understand the impact of the program, IFC commissioned a survey of W-SMEs in Romania, comprising clients of Garanti Bank Romania



Garanti Bank has loaned over EUR 145 million to women owned enterprises as of end-December 2017.



Garanti Bank Romania clients who received loans experienced an annual average real sales growth of 5.52 percent per year.

Key Highlights

Around two thirds of Garanti Bank clients reported that the financial services they received from Garanti Bank have contributed to an increase in their sales, net profit and working capital.



Further research is needed for rigorous analysis beyond self-reported information.



¹ International Finance Corporation. MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium Enterprises in Emerging Markets. Washington, DC, 2017. © International Finance Corporation. At <https://openknowledge.worldbank.org/handle/10986/28881> License: CC BY-NC-ND 3.0 IGO. This report analyzes the difference between current supply and potential unmet demand for SME finance which can potentially be addressed by financial institutions

as well as clients of other banks. This report analyzes the results of the survey including the financial services received by W-SMEs, and the relationship between the financial services provided and W-SME business performance.

- Garanti Bank Romania clients reported benefits from the access to loans. The sample of Garanti Bank Romania clients who were surveyed witnessed an annual average real sales growth of 5.52 percent per year.** This is higher than the national average annual real sales growth of 3.5 percent for all firms in Romania which was included in the Enterprise Survey 2013. Moreover, when we looked at the largest loan received by Garanti Bank clients, an increase in loan amount by 1 million Local Currency Unit (LCU) was associated with a 2.1 percentage point increase in annual sales growth on average, keeping firm age, sector, and region constant. Loan amount had a similar impact on labor productivity, but not on full-time employment.
- This corroborates well with Enterprise Survey 2013 data, where access to loans had a statistically significant relationship with sales and labor productivity, but not with employment for W-SMEs in Romania.** This was uncovered by comparing the business performance of W-SMEs in Romania who had received loans and W-SMEs in Romania who had not received any loans.² W-SMEs in Romania with access to loans had 13.3 percentage points higher sales growth and 9.1 percentage points higher labor productivity growth between 2010 and 2012 compared to W-SMEs in Romania without access to finance, after controlling for sector, region, and age of the firm.
- The perception of Garanti Bank clients regarding the impact of the financial products they have received from Garanti Bank on sales, net profit, working capital, and fixed assets of their**

² Based on World Bank's Enterprise Survey 2013 data

13.3%

Higher Sales Growth

**W-SMEs in Romania
with access to loans vs
those without access**

9.1%

Higher Labor Productivity Growth

businesses is also positive. Around two thirds of Garanti Bank clients reported that the financial services they received from Garanti Bank have contributed to an increase in their sales, net profit, and working capital. The reported impact of financial services by Garanti Bank clients on employment was mixed, with around 36 percent mentioning an increase, 60 percent mentioning no change, and 4 percent mentioning a decrease, partly driven by mechanization. The clients of other banks who were surveyed also reported a similar impact from the financial services they received on their business performance.

- The banking sector in Romania has evolved since the post crisis period and is more competitive today.** Other development finance institutions and the Romanian government have also started initiatives to encourage entrepreneurs and have supported banks in financing SMEs. Garanti Bank Romania's strategy is to support the local economy and companies having women as shareholders or in the top management structures. Eighty four percent of Garanti bank clients are very likely to recommend the products they have



received from Garanti Bank, more so than clients of other banks, particularly because of their relationship with the Garanti Bank staff, favourable interest rates, promptness and reliability of service, and flexibility to needs of the clients.

7. **Financial services from Garanti Bank have benefited the clients surveyed. However, additional research and more rigorous evidence are needed to attribute the performance of the W-SMEs to Garanti Bank or to IFC.** Further research can also help us to identify how to best serve women entrepreneurs and make growth more inclusive—from understanding the constraints faced by women entrepreneurs in different regions and sectors to documenting community benefits from the growth of women entrepreneurs. Identifying innovative methods to identify and screen new clients would help expand access to finance to more women entrepreneurs and other excluded groups.

84%

Garanti Bank clients

Very likely to recommend the products they have received from Garanti Bank, more so than clients of other banks.

Introduction

Romania experienced a severe economic contraction in 2009 following the global financial crisis.

GDP contracted by 7.1 percent from 364 billion lei in 2008 to 338 billion lei in 2009.³ The total number of employed persons fell by 2.06% from 8.7 million persons in 2010 to 8.5 million persons in 2015.⁴ Unemployment rates disaggregated by gender show that the crisis affected women more, with 67 percent of all out-of-work individuals in Romania in 2011 being female.⁵ In contrast, today, Romania is one of the fastest growing countries in the EU with GDP growth of 6.7 percent in 2017.⁶ This was driven by consumer confidence and domestic demand, supported by a multi-year fiscal expansion, minimum wage hikes, an accommodative monetary policy stance, and an improving

EU economy that drove consumer confidence and domestic demand.⁷ Growth in employed persons and productivity continue to be constrained and unequal between regions, sectors, and genders. Forty-four percent of working age women are working (female labor force participation rate) compared to 63 percent of men, as of 2017. This translates into a gender employment gap of 19 percent, one of the largest in the EU.⁸

Small and Medium Enterprises (SMEs), defined as enterprises employing less than 250 employees,⁹ play a significant role in employment, and account for two out of three persons employed in Romania.¹⁰ The 464,409 SMEs, including W-SMEs, comprise 99.7 percent of

Table 1: Number of enterprises, number of persons employed and value added by size of enterprises

Romania, 2016	Number of enterprises	Number of persons employed	Value added (€ Billion)
SMEs	4,64,409	26,34,263	34.6
Large firms	1,571	13,33,113	30.9
Total	4,65,980	39,67,376	65.5
SME share	99.7%	66.4%	52.8%

Source: Eurostat, European Commission 2018

³ World Bank national accounts data and OECD National Accounts data files.

⁴ Labor force in Romania: employment and unemployment in 2015. National Institute of Statistics, Romania.

⁵ Ramya Sundaram, Ulrich Hoerning, Natasha De Andrade Falcao, Natalia Millan, Carla Tokman, and Michele Zini. *Portraits of Labour Market Exclusion*. World Bank and European Commission, 2013. At <http://www.worldbank.org/en/region/eca/publication/portraits-of-labor-market-exclusion-in-europe-and-central-asia>.

⁶ European Commission Winter Forecast 2018. At https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/romania/economic-forecast-romania_en.

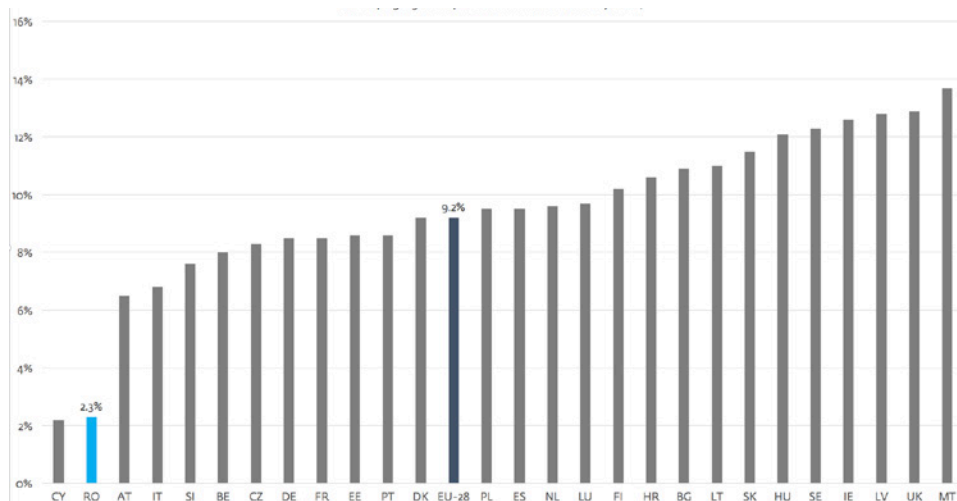
⁷ "Romania: Staff Concluding Statement of the 2018 Article IV Mission." IMF, March 2018. At <http://www.imf.org/en/News/Articles/2018/03/16/mcso3162018-romania-staff-concluding-statement-of-the-2018-article-iv-mission>.

⁸ European Commission 2018. At <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-romania-en.pdf>.

⁹ This includes micro firms with less than 10 employees. Detailed definition in methodology section.

¹⁰ Eurostat and European Commission 2018.

Chart 1: Share of high-growth firms in the business economy—2014



Source: Eurostat

Romania’s total enterprises and account for half of the Romanian GDP (as of 2016).¹¹ While SMEs are Romania’s economic engine, Romania still has the lowest ratio of SME per 1000 inhabitants in the EU. As such, there is considerable potential for entrepreneurship and the growth of that segment.

At the same time, the majority of small firms, especially those owned and led by women, are marked by low levels of labor productivity and growth. Labor productivity, defined as value-added divided by the number of persons employed, is EUR 13,150 on average for SMEs; lower than that of larger firms (EUR

23,207) and lower than the EU average.¹² As per Enterprise Survey 2013, the average annual labor productivity growth of firms in Romania is only 0.4 percent; this is worse for firms led by women. High-growth enterprises¹³ account for only 2.3 percent of all enterprises in Romania (in 2014).¹⁴ As seen in Chart 1, Romania ranks second lowest in the EU with regard to share of high-growth firms in the economy, which averages at 9.2 percent across the EU-28.¹⁵ Moreover, during 2009-2014, five-year survival rate of new SMEs in Romania was between 40 and 60 percent.¹⁶

Low productivity and low growth of SMEs are often linked to SMEs’ limited access to expansion-gear

¹¹ European Commission 2018. The data cover the “non-financial business economy,” which includes industry, construction, trade, and services (NACE Rev. 2 sections B to J, L, M and N), but not enterprises in agriculture, forestry, and fisheries, and the largely non-market service sectors such as education and health. The following size-class definitions are applied: micro firms (0-9 persons employed), small firms (10-49 persons employed), medium-sized firms (50-249 persons employed), and large firms (250+ persons employed). At https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en.

¹² Source: Small Business Act for Europe (SBA) Dataset for Romania, 2017.

¹³ High-growth enterprises are defined as enterprises with at least 10 employees at the beginning of their growth spurt and showing average annualised growth in number of employees greater than 10 percent per annum over a three-year period.

¹⁴ Patrice Muller, Jenna Julius, Daniel Herr, Laura Koch, Viktoriya Peycheva, Sean McKiernan, Karen Hope. *Annual Report on European SMEs 2016-2017*. European Commission, November 2017.

¹⁵ *Annual Report on European SMEs 2016-2017*. European Commission, November 2017.

¹⁶ (Based on SMEs with one or more employees.) Radauer, A., Roman, L. - Technopolis Group. *The Romanian Entrepreneurial Ecosystem - Background Report*. Horizon 2020 Policy Support Facility, Directorate-General for Research and Innovation, Brussels, 2016. (Estimated using Eurostat 2009-2014 data.)

Chart 2: Percentage of enterprises that mentioned “Access to Finance” as the most important problem for their enterprise



Source: European Central Bank Survey on the Access to Finance of Enterprises (SAFE 2017)

finance, which prevents them from growing and fully exploiting profitable business opportunities.

The financial crisis of 2008 not only led to a drop in GDP and employment, but the Romanian banking sector was also faced with low liquidity ratios and deteriorating asset quality, with non-performing loan (NPL) levels of 22.2 percent. The average interest rate for loans up to and including EUR 1 million is the second highest in the EU (Roman and Rusu 2015)¹⁷ and, the cost of credit for small businesses was about 17 percent higher than for larger firms (European Central Bank 2014).¹⁸ Increasing the capacity of financial institutions was essential to supporting the flow of credit to individuals and SMEs, especially to W-SMEs. Access to finance was cited as the

most important concern for 25 percent of SMEs in 2009, according to the Survey on the Access to Finance of Enterprises (SAFE) run by the European Central Bank and European Commission. Since then, it has come down to 9 percent in 2017, marginally higher than the EU average of 7 percent.

While there have been improvements in access to finance, there remains a substantial funding gap of external financing for SMEs in Romania.

Based on European statistics in 2016, Romania is placed in last place of 31 European countries on amounts of angel investments between 2014-2016.¹⁹ According to research conducted by IFC,²⁰ the SME finance gap in Romania, defined as the difference between current supply and potential demand

¹⁷ Angela Roman & Valentina Diana Rusu. “Access to Finance of SMEs in CEE Countries and Supportive Measures,” *The Journal of Accounting and Management*. Danubius University of Galati, Issue 3, 2015. 37-48.

¹⁸ European Central Bank. “Survey on the access to finance of enterprises (SAFE).” *Analytical Report*. 2014.

¹⁹ (Gathered by EBAN83.) Andrez, Tataj, Dalle, and Romanainen. *Specific Support to Romania – Starts-ups, Scale-ups and Entrepreneurship in Romania*. European Commission, 2017.

²⁰ International Finance Corporation. 2017. *MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium Enterprises in Emerging Markets*. Washington, DC. © International Finance Corporation. <https://openknowledge.worldbank.org/handle/10986/28881> License: CC BY-NC-ND 3.0 IGO.



for SME finance which can be addressed by financial institutions,²¹ is estimated to be USD 32.7 billion, or 18 percent of GDP. Of this, women's SME finance gap is 8 percent, or USD 2.6 billion. Access to finance for SMEs, particularly W-SMEs, continues to be important to ensure inclusive growth in Romania.

Women entrepreneurs are further subject to specific challenges. This is because on average, the Romanian woman entrepreneur is married with children, and as such, is more likely than men to have family-related obligations. These create time and mobility constraints that impact her ability to start and grow her business. Women are also less likely than men to feel that they have the skills, knowledge, and experience to start a business. According to a study by the Global Entrepreneurship Monitor, among adults aged 18-65 years old in the EU who were asked whether they

“have the skills, knowledge, and experience to start a business” over the period 2010-2014, only one third of women indicated that they had sufficient skills, knowledge, and experience to start a business over the 2010-14 period compared to half of men.²² Moreover, women entrepreneurs are unable to benefit from business referrals and connections and to avail themselves of valuable market information in the same way their male counterparts do because of their limited access to business networks. They also seem to be more reliant on (but also less able to access) peer support in order to address some of their challenges. As such, business networks that integrate women entrepreneurs or provide exclusive access to women entrepreneurs would be a powerful means to overcoming some of these gender-specific challenges.

²¹ The MSME finance gap assumes that the firms in a developing country have the same willingness and ability to borrow as their counterparts in well- developed credit markets and operate in comparable institutional environments—and that financial institutions lend at similar intensities as their benchmarked counterparts.

²² Policy Brief on Women's Entrepreneurship. European Commission, 2017.

Established in 2010, IFC’s “Banking on Women” Program (BOW) helps financial institutions around the world with SME lending track records to profitably expand their portfolios and provide women entrepreneurs with access to finance. This business line was launched in response to the large, unmet demand for financial services by women, particularly W-SMEs. The business line’s strategy centers on partnering with financial intermediaries to widen the delivery of financial services (credit, savings, insurance, and other financial services) and non-financial services (mentorship, coaching, training, business networks) to support the growth and success of W-SMEs. Combining investment and advisory services, the BOW business line provides targeted investments to financial institutions through gender bonds, senior and subordinated debt, risk-sharing facilities, and supply-chain financing with a variety of financial services providers, geared at spurring lending to women customers and women-owned enterprises. IFC’s advisory work focuses on capacity-building for strategy and analytics, product development, risk analysis, marketing, training, and communications/branding for the respective lending institutions. The business line to-date has committed USD 1.8 billion in 70 projects as of June

2018. Based on the IFC Reach Data Survey for 2017, which included 35 BOW client financial institutions, as of end-CY2017, IFC BOW clients had an aggregate outstanding loan portfolio to W-SMEs of 173,972 loans for a total of USD 7.1 billion outstanding. Since launching the BOW Program in EMENA in 2011, IFC has been active in the region, including supporting Garanti Bank Romania with finance for on-lending to women entrepreneurs. A positive outcome of this partnership: as of December 2017, Garanti Bank Romania has lent in excess of EUR 145 million to W-SMEs since 2011.

This report examines the impact of the “Women Entrepreneurs” (WE) support program implemented by Garanti Bank in Romania in partnership with IFC.

The first phase of the study published in 2016 examined how the women customer segment affected the bank’s business.²³ This phase focuses on understanding the impact of the program on the end beneficiaries, W-SMEs—particularly on their sales, profits, employment, working capital, and assets. We briefly examine the intervention by IFC and Garanti Bank, and move on to assess the impact of the intervention based on a survey of a sample of 82 W-SMEs.

²³ *Garanti Bank Romania: Striving to Lead - A Study on Women in Banking*. International Finance Corporation. At https://www.ifc.org/wps/wcm/connect/region__ext_content/ifc_external_corporate_site/europe+and+central+asia/resources/garantibankromania.

Garanti Bank Romania and IFC

GLOBAL IFC BANKING ON WOMEN PROGRAM

IFC focuses on working with the private sector in developing countries around the globe to create markets that open up opportunities for all. Globally, women-owned businesses comprise an estimated 28 percent of MSME business establishments (45.7 million), but unfavorable business, social, and regulatory environments and other factors impede women entrepreneurs from accessing finance, resulting in a global MSME finance gap of USD 1.6 trillion (32 percent of total MSME finance gap).²⁴ Through Banking on Women (BOW), IFC has committed USD 1.8 billion across 70 projects,²⁵ and provides advisory services to its extensive network of client financial institutions to increase access to financial solutions for women entrepreneurs.

GARANTI BANK ROMANIA

Active in Romania since 1998 and fully licensed since 2009, Garanti Bank Romania is one of the top ten banks in Romania, with total assets of EUR 2,143 million, equity of EUR 265 million, and net income of EUR 22.5 million at the end of 2017. Garanti Bank Romania has been developing its SME banking capacity since 2007 and started to develop a product package specifically for women entrepreneurs within its SME segment in 2010. Garanti Bank Romania addresses the specific needs of women entrepreneurs in Romania by offering a combination of financial services, customized marketing, education, and non-financial services. It also supports the Professional Women's

Network Romania Association (PWN), which offers women entrepreneurs the information and instruments needed to develop their own businesses.

GARANTI BANK ROMANIA'S WOMEN ENTREPRENEUR (WE) BANKING PROGRAM

Garanti Bank was a pioneer in recognizing the business opportunities associated with providing banking products and services to the underbanked women entrepreneur segment. Since 2011 until year-end 2017, IFC has

GARANTI BANK ROMANIA'S WOMEN SME PORTFOLIO TODAY



Garanti Bank was the first bank in Romania to focus on the needs of women SMEs. As of the end of 2017, Garanti Bank Romania's SME loan portfolio was approximately EUR 324 million, of which 46 percent is women owned or managed. The portfolio of loans to W-SMEs has increased from EUR 32 million in 2013 to EUR 145 million at the end of 2017. Garanti Bank Romania has seen higher growth rates of the W-SME portfolio when compared to the rest of the SME portfolio. The number of women entrepreneurs financed also has increased from 206 in 2013 to 759 in 2016, and to 1000 as of the end of 2017. The average loan amount at the time of disbursement was 852,701 Romanian lei.

²⁴ MSME Finance Gap (IFC), 2017.

²⁵ As of June 2018.



committed a total of EUR 95 million to Garanti Group Romania, which includes banking and leasing services, to help finance SMEs.²⁶ The financing is targeted at helping finance small businesses, and 55 percent of this funding has been earmarked specifically for financing women entrepreneurs through Garanti Leasing and Garanti Bank Romania's Women Entrepreneur (WE) Banking Program. Financial leasing also has an impact on inclusiveness as an attractive financing alternative for underserved SMEs, particularly young and small firms, which have difficulty obtaining bank loans due to lack of sufficient collateral and creditworthiness track records. As of the end of December

2017, Garanti Bank has invested over EUR 145 million in W-SMEs, which represent 46 percent of its SME portfolio. This investment was largely financed by IFC's loans. Additionally, the bank subsequently extensively incorporated IFC's Banking on Women Program (BOW) into its existing business strategies, along with differentiating its marketing approach to the female SME borrowers and collecting gender-disaggregated data. In short, IFC's loan provided the funding and played a catalyzing role for Garanti Bank Romania to profitably and sustainably serve women-owned businesses.

²⁶ IFC has partnered with Garanti Bank in 2012 (EUR 22.5 million), 2014 (EUR 35 million), 2018 (EUR 25 million) and with Garanti Leasing in 2014 (EUR 7 million), 2017 (EUR 5.5 million).

Summary of Methodology

This section summarizes the methodology, the full details of which are provided in the appendix along with detailed caveats. In 2016, IFC commissioned IMAS to conduct a survey to assess the impact of the Women Entrepreneur (WE) Banking Program that was implemented in Romania from 2011 through Garanti Bank Romania. This report is based on the results of the survey of a total of 82 firms: a target group sample of 50 Romanian women-owned SMEs and women entrepreneurs (W-SMEs) who received financial services from Garanti Bank Romania, and a comparison group sample of 32 Romanian W-SMEs who had received financial services from a bank other than Garanti Bank Romania during the evaluation period of fiscal years 2011–2015. The survey was conducted in-person from July 2016 through November 2017, and asked questions about firm financials in 2011 and 2015, the financial services used by SMEs, the loans they have received, characteristics of loans, and the perceived impact of the financial services on firm performance.

The World Bank Group (WBG) team developed the interview questionnaire (based on the Enterprise Survey questionnaire format), which was translated into Romanian for ease of use by the interviewers and the SMEs. Before the data collection stage started, the WBG team led a training session with all IMAS enumerators involved in the SME survey. The field interviews were conducted with SME senior managers, accountants, and/or human resource managers. Each SME was asked about the business and the change in key variables (sales, profits, number of workers, etc.) between 2011 and 2015, along with details about financial services they have obtained and their experience with banks.

As described above, the report is based on the survey of a sample of 82 W-SMEs and therefore some inherent limitations must be kept in mind while interpreting the results, including: a) low response rate and selection bias, b) omitted variable bias, c) measurement error and attribution, and d) external validity.

Description of the Sample

As mentioned in the previous section on Methodology, **the study is based on a survey of a sample of 82 small and medium enterprises owned or managed by women.**

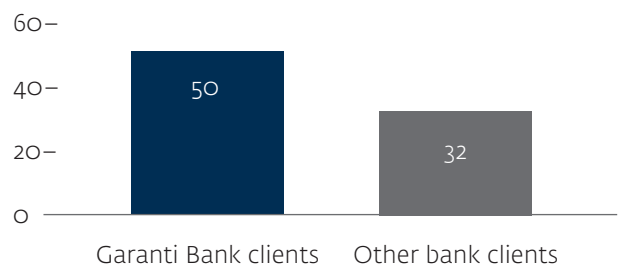
Within this, 50 constitute the target group sample of W-SMEs in Romania that took part in Garanti Bank Romania's Women SME Banking Program and 32 constitute the comparison group sample of W-SMEs in Romania who received financial services from another bank.

FIRM OWNERSHIP AND MANAGEMENT

By design, all firms surveyed are owned or managed by women. The percentage of firms owned by women range from 10 percent to 100 percent, and is on an average 85 percent (median of 100 percent). Half of all the firms in the sample are sole proprietorship (52 percent among Garanti Bank clients and 54 percent among "other bank" clients). Around 33 percent are shareholding companies (30 percent among Garanti Bank clients and 38 percent among other bank clients), and 11 percent are limited partnerships (14 percent among Garanti Bank clients and 6 percent among other bank clients).

Eighty-three percent of all firms in the sample have women in the top management. Moreover, 22 percent of the sample SMEs have a women CEO, 77 percent have a woman COO, and 30 percent have a woman CFO. Managers of the firms in our study have about the same years of experience (18.2 years) compared to the Romanian economy. This was marginally higher for Garanti Bank clients (18.5 years) compared to other bank clients (17.7 years). According to the Enterprise Survey, the average years of experience of managers of firms in Romania is 19 years; firms with a female top manager have marginally lower years of experience (18.2 years) compared to firms

Chart 3: Survey sample



with a male top manager (19.3 years). Managers of sample W-SMEs are well educated in general: 90 percent of managers at Garanti Bank clients have post high-school/college or upper education compared to around 80 percent of managers at other bank clients.

REGION, SECTOR AND SIZE

The distribution by region, sector, and size is relatively similar between the sample of Garanti Bank clients and the sample of other bank clients, though there are some differences as mentioned in the appendix (under detailed methodology). Half of all the firms in the sample are from Transylvania region—42 percent of Garanti clients and 59 percent of clients of other banks. Agriculture, mining, manufacturing, and retail account for nearly half of the sample of Garanti Bank clients. The share is higher among the sample of other bank clients. Small and medium W-SMEs, with less than 100 employees each, account for 90 percent of the survey sample. The share of small W-SMEs is higher in the sample of Garanti Bank clients (74 percent) compared to the sample of other bank clients (56 percent).

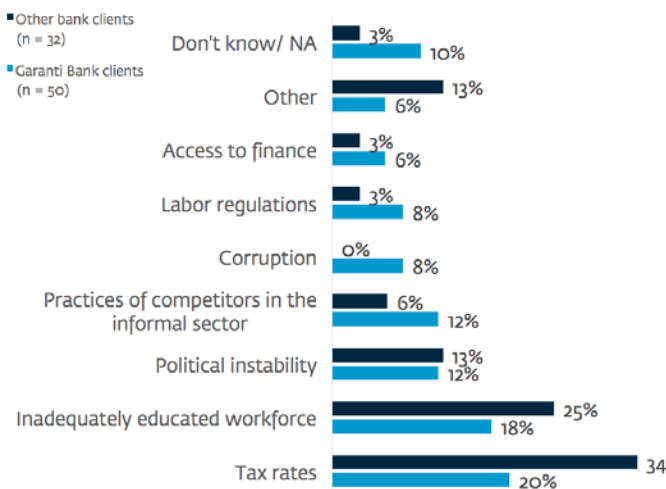
AGE OF FIRMS

The sample groups of Garanti Bank clients and other bank clients are fairly similarly distributed based on firm age. Approximately one third of firms are in each age bucket—less than 10 years, 10-20 years, and more than 20 years since registration.

BIGGEST OBSTACLE FACED BY FIRMS

Compared to the economy, Garanti Bank clients do not rate access to finance as a top obstacle, indicating that they have obtained sufficient access to finance and seem to be satisfied with the access to financing they are receiving from Garanti Bank. According to the Enterprise Survey 2013 conducted by World Bank, 10 percent of 540 firms surveyed reported access to finance as the biggest obstacle faced by them, making it the third most common obstacle. Similar to the Enterprise Survey, the firms in the sample groups were presented with a list of 15 business environment obstacles, and asked to choose the biggest obstacle to their business. Among the sample of Garanti Bank clients, only 3 of 50 W-SMEs report “access to finance” as their biggest obstacle, making it the seventh most common obstacle; among the sample of other bank clients, only 1 among 32 W-SMEs report “access to finance” as their biggest obstacle.

Chart 4: Biggest obstacle faced by W-SMEs



FIRM AGE A DETERMINANT OF EMPLOYMENT GROWTH, SALES GROWTH, AND PROFITABILITY



Banerjee (2014) examines the impact of financial constraints on profitability across the age distribution of SMEs and shows not only that financing constraints reduce start-up profitability, but also that firm age is a critical determinant of employment growth, sales growth, and profitability. Employment growth in young firms less than five years old is estimated to be around 18 percent higher than that of older firms in advanced economies. Similarly, sales growth of young firms is estimated to be around 20 percent higher than for older firms. We have therefore controlled for firm age when estimating the impact of financial services on business performance.

Source: Banerjee, Ryan. "SMEs, Financial Constraints and Growth." BIS Working Paper No. 475, December 2014. At SSRN: <https://ssrn.com/abstract=2542219>.



Banking Practices of Women-owned SMEs

The survey also tried to understand the banking practices of W-SMEs, namely their primary bank, the financial services received, loans taken, characteristics of loans, and intent to take a loan in the future.

MAJOR BANKS SERVING WOMEN-OWNED SMES

Garanti is a middle-tier bank with well-developed capacity to offer gender-specific loan products, although it operates in a highly-concentrated banking sector where the top five banks have more than half of the total market share. While Garanti Bank was the first bank to focus on the needs of W-SMEs in Romania, many more banks have started seeing the value of catering to the needs of women and of SMEs, and now serve SMEs, including W-SMEs.

The primary banks mentioned by W-SMEs in the survey sample, other than Garanti Bank, include Banca Transilvania, Banca Comercială Română (BCR), BRD Groupe Societe Generale, and OTP Bank Romania. Some of these firms, particularly BCR and Banca Transilvania, have services targeted at small and medium enterprises. Banca Comercială Română (BCR) is Romania's largest bank in terms of asset value and client base. Women are a significant part of BCR's consumer banking portfolio, with women accounting for 49.4 percent of the total BCR clients.²⁷ The profile of bank clients shows that the monthly income (salary or pension type) of women are rising compared to the minimum net monthly salary per

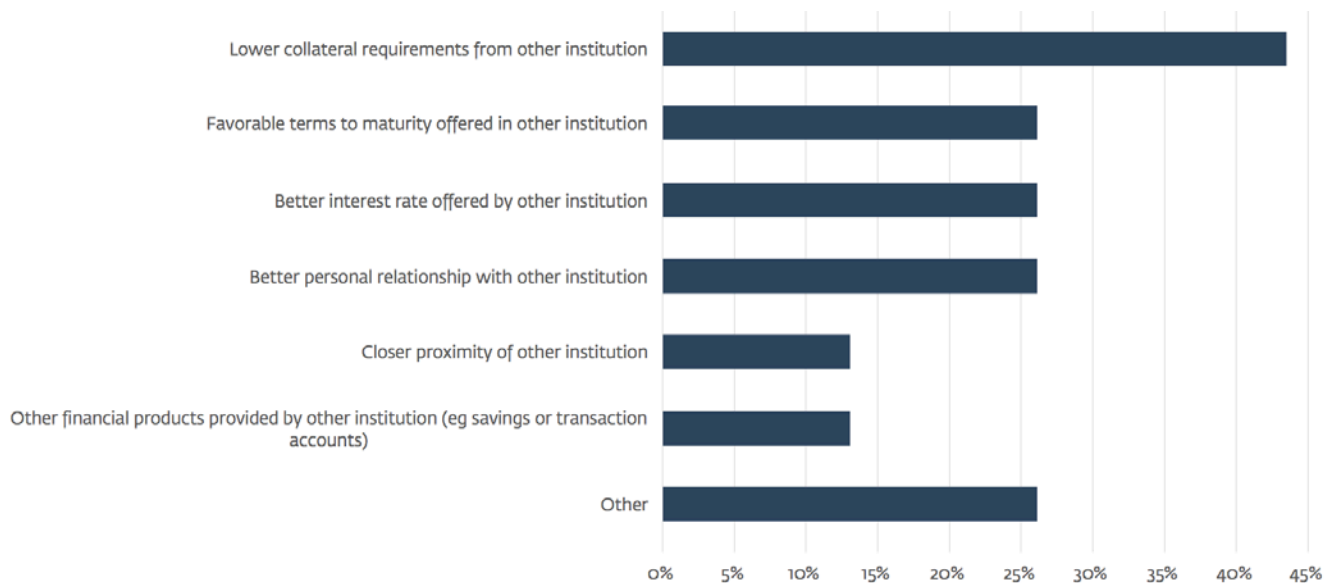
economy. In addition, women collect income in their account more regularly than men do and save more than men, outrunning them in term deposits. In May 2017, BCR partnered with The European Investment Fund (EIF), part of the European Investment Bank Group, on the SME Initiative, committing to offer financing at lower interest rates to SMEs. BCR also entered a collaboration with Romania's Business Environment, Commerce and Entrepreneurship Minister to implement the Start-Up Nation program, to provide financial aid from the State for new firms at 3.5 percent interest per year, credit fees of no more than 2 percent of the amount of the credit, and establishment of a collateral deposit at a related interest rate during the lending period. Banca Transilvania is the

“Limited access to assets is a major reason why women are rejected for loans, as banks can be reluctant to lend to customers who lack traditional collateral.”

Source: Women Business and the Law 2018, p.31

²⁷ BCR Press Release, March 2016. At <https://www.bcr.ro/en/press/press-release/2016/03/08/how-to-do-banking-at-feminine>.

Chart 5: The main reason for the establishment to receive financial services from other financial institutions in FY11 to FY15



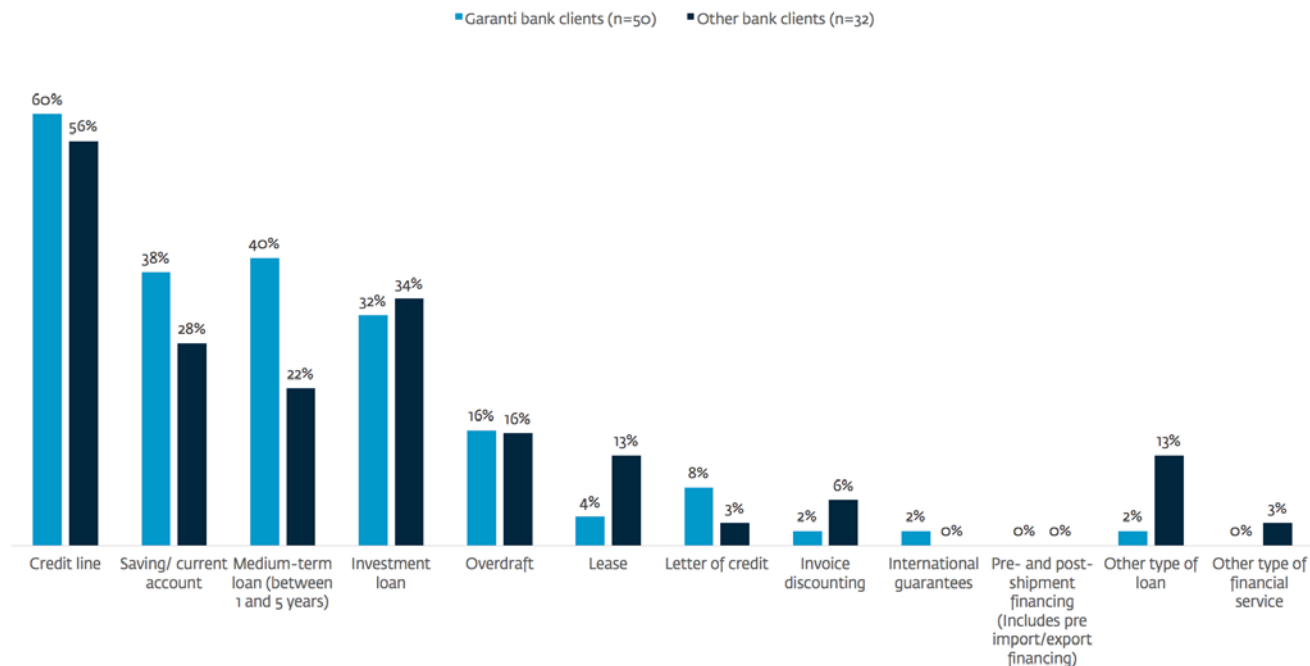
second largest bank in Romania. In March 2012, it entered a EUR 7.5 million loan agreement with The European Investment Fund aimed at supporting micro-enterprises and self-employed entrepreneurs in Romania. Under the agreement, Banca Transilvania was to provide a total amount of up to EUR 15 million to around 1,500 micro-entrepreneurs across Romania. It is positioned as the Bank for Entrepreneurial People, with a SME loan portfolio of 3,221 million lei at the end of 2016, having grown at 4.7 percent from 2015. The deposits raised from SME clients increased by 3.3 percent in 2016, reaching 5,407 million lei.²⁸

Nearly half of the sample of Garanti Bank clients (46 percent) received financial services from a competitor between 2011 and 2015. This was higher than the sample of other bank clients, among whom 16 percent on average received financial services from a different bank during the same time period. The terms offered by Garanti were better than the ones offered by

competitors, based on the values reported in the survey, as we see below under “loan characteristics.” While the value of collateral as a percentage of loan on average seems higher for the loans from Garanti Bank in the sample, the annualized interest rate and the loan term to maturity on average seem to have been more favorable for loans from Garanti Bank Romania compared to loans from other banks between 2011 and 2015 for W-SMEs in our sample. However, it would be helpful to explore the difference between client perception versus actual terms offered to clients, and also to study the current environment further to remain competitive and serve clients better.

²⁸ Report of the Board of Directors of Banca Transilvania – 2016.

Chart 6: Please indicate the type of financial services this establishment received from the Bank X in FY11 to FY15, % of firms



FINANCIAL SERVICES RECEIVED

Credit line is the most common financial service received by W-SMEs in the sample group, between 2011 and 2015. This is followed by savings/current account, medium-term loans, and investment loans. A higher proportion of Garanti Bank clients received medium-term loans compared to other W-SMEs—on average, two out of five Garanti clients (40 percent) versus slightly more than one out of five clients of other banks (22 percent). This is commendable as banks are traditionally more conservative about providing medium-term and long-term finance to fund operations, and many SMEs have to resort to financing medium-term and potentially longer-term assets with short-term credit lines or overdraft.

LOAN CHARACTERISTICS

As mentioned earlier, one of the key objectives of the study was to understand the characteristics of loans received by W-SMEs. Ninety-four percent of the W-SME firms in the sample group that had received financial services from banks had taken a loan between 2011 and 2015. **The terms of the loan are better for the sample of Garanti Bank clients compared to the sample of other bank clients.** Loan amounts are larger, interest rates are lower, and tenors are longer for loans to Garanti Bank clients compared to what other banks offer. Garanti Bank clients, however, on average faced higher collateral requirements. The larger loan amounts at time of disbursement for Garanti Bank clients was particularly stark when we examine the first loans received by W-SMEs, where the loan amount at the time of disbursement was on average double for Garanti Bank clients compared to other bank clients in the sample (0.8 million lei versus 0.4 million lei). The annualized interest rates were also better for the sample of Garanti Bank clients on average compared to other bank clients. The

Table 2: Terms of the loan for the sample on average

	All Loans		First Loans*		Largest Loans*	
	Garanti Bank Clients	Other Bank Clients	Garanti Bank Clients	Other Bank Clients	Garanti Bank Clients	Other Bank Clients
Total number of loans	54	36	31	25	46	31
Loan amount at the time of disbursement	852,701	703,012	834,393	387,922	901,903	759,924
Annualized interest rate of the loan	6.21	6.78	6.22	7.45	6.09	6.81

*Includes the "only loans" taken by W-SMEs—cases where they have taken only one loan

difference was more pronounced in the case of the first loans received by the W-SMEs; annualized interest rate of the first loans were 6.22 on average for the sample of Garanti Bank clients compared to 7.45 for the sample of other bank clients. Loan term to maturity was longer for the sample of Garanti Bank clients at 49 months on average compared to 43.1 months for sample of other bank clients.

COLLATERAL

In line with the market, 80.0 percent of all loans received by, both Garanti Bank clients and other bank clients in the sample groups required collateral. This was in line with the market; according to the 2013 Enterprise Survey in Romania, the proportion of loans requiring collateral was 80.7 percent and, the value of collateral needed for a loan (percent of the loan amount) is 186.8 percent of the loan amount. Firms whose top manager was a woman required more than double the value of the loan, with average value of collateral being 222.9 percent of the loan amount. Excluding six firms whose value of collateral was more than ten times of loan amount,²⁹ the average value of collateral for the survey

sample was similar at 224 percent of the loan amount. However, the value of collateral for loans of the sample of Garanti Bank clients was higher at 279 percent of the loan amount on average. The higher value collateral for Garanti might be driven by the use of longer-term loans, which traditionally require more collateral. Garanti Bank Romania is constantly improving its offering for women entrepreneurs. Based on customer feedback, the bank is improving its financial solutions that both meet customers' needs and remain in accord with its Credit Policy for loan volumes and related collateral requirements.

Land and buildings under ownership of the establishment was the most common type of collateral, with three out of four W-SMEs using this as collateral. This was followed by personal assets of the owner (house, etc.). The proportion of clients using these assets as collateral was higher among Garanti Bank clients compared to other bank clients, and may partly be the reason for the higher value of collateral as a percentage of loan amount for Garanti Bank clients.

²⁹ Three of these firms were clients of Garanti bank and the other three were clients of other banks. The type of collateral in these cases were "Land, buildings under ownership of the establishment" in five of the cases and "Personal assets of owner (house, etc.)" in one case.

Chart 7: Type of collateral used for the loan this establishment has taken out, percent of firms

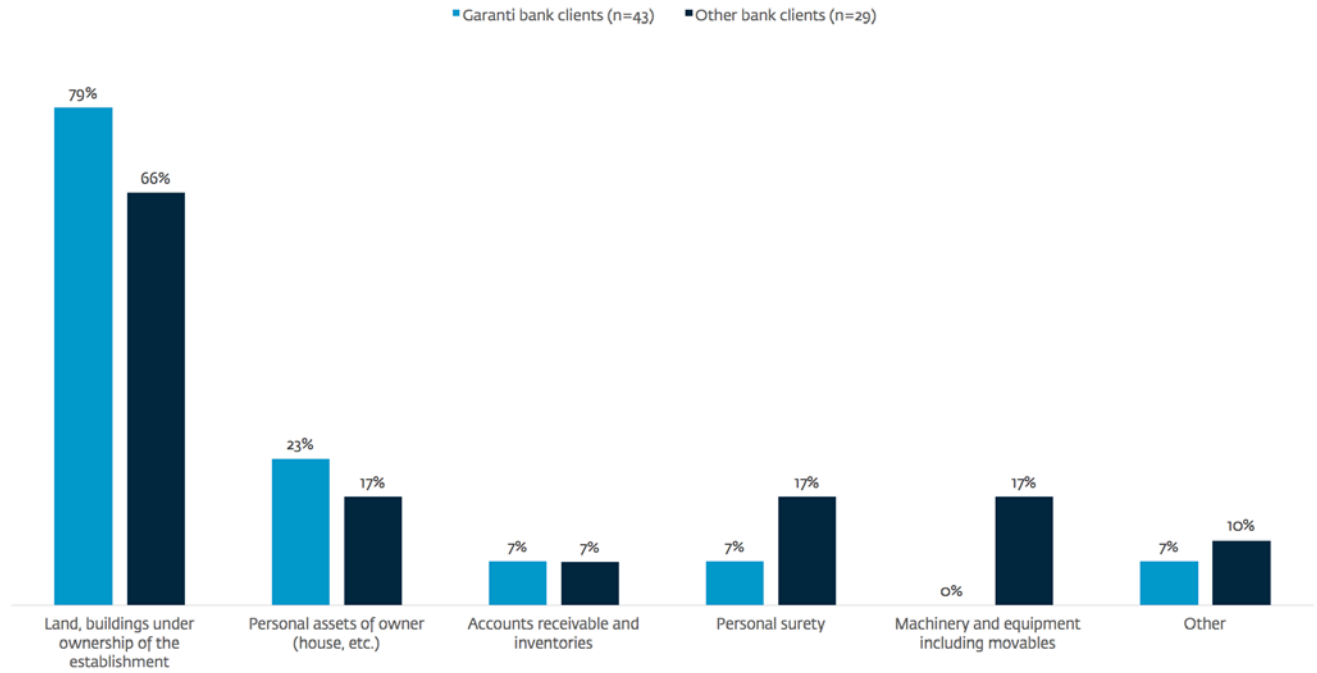
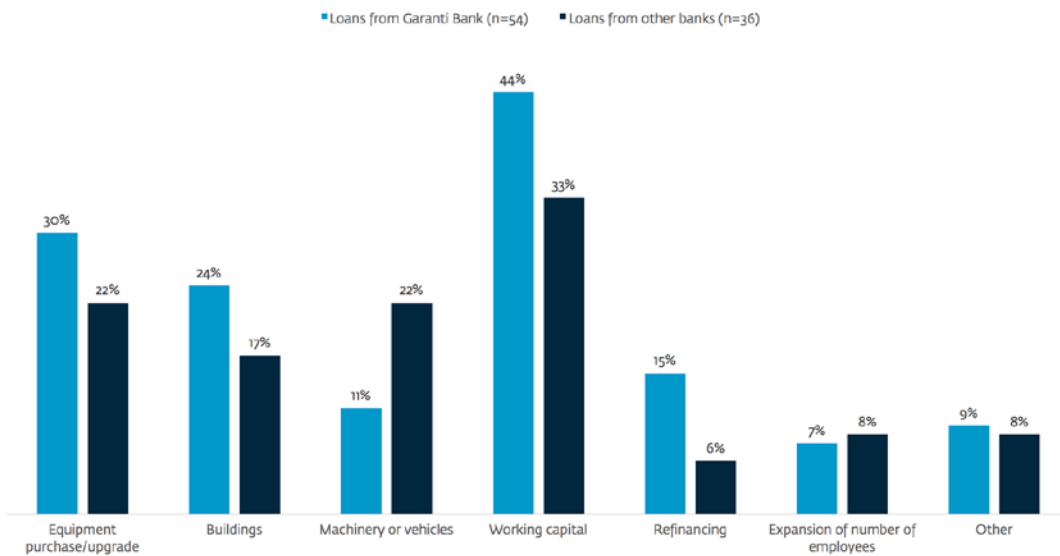


Chart 8: Stated purpose of the loan this establishment has taken out in FY11 to FY15, percent of loans



STATED PURPOSE AND USE OF LOAN

Capital investment and working capital, which are typically required for growth-g geared firm expansion by SMEs, were most frequently stated as the purpose of loan on average. This was similar between Garanti Bank clients and other bank clients. Around half of all loans were taken for capital investment, which included equipment purchase/upgrade, buildings and machinery or vehicles. Loans for equipment purchase and buildings were more common among clients of Garanti Bank Romania compared to clients of other banks. The stated purpose of 44 percent of loans taken by Garanti Bank clients was working capital. This was also higher than the proportion of loans taken for working capital purpose by other bank clients.

The actual use of the loan reported by the sample group was in line with the stated purpose of the loan.

Based on the sample survey, 49 percent of the loans was used for capital investment, namely equipment purchase/upgrade, buildings, and machinery or vehicles; 41 percent was used for working capital. Only 8 percent of all the loans in the sample (Garanti Bank and "other bank") were used for expansion of number of employees.

INTENT TO OBTAIN LOAN IN FY16

On average, only 21 percent of the 82 women SME firms surveyed intended to obtain a loan in FY 2016.

The reported intent was higher for clients of Garanti Bank, with 13 W-SMEs (a quarter of the sample) reporting that they intend to obtain a loan in FY 2016 versus 4 W-SMEs among clients of other banks (13 percent of the sample). Capital investment was most commonly reported as the purpose of the loan among the 17 W-SMEs in the sample who mentioned they intend to obtain a loan. Among Garanti Bank clients planning to take a loan, 38 percent mentioned buildings and 31 percent mentioned equipment upgrade as the purpose of a future loan. Working capital was also mentioned by 31 percent of the clients who intend to take a future loan.

BANKING FEATURES USED

Internet banking is the most commonly used banking feature, with almost three out of four W-SMEs in the sample group using internet banking. The use of these services is higher for clientele of Garanti Bank Romania on average, based on the sample survey. More than 80

Chart 9: Stated purpose of future loan reported by sample W-SMEs

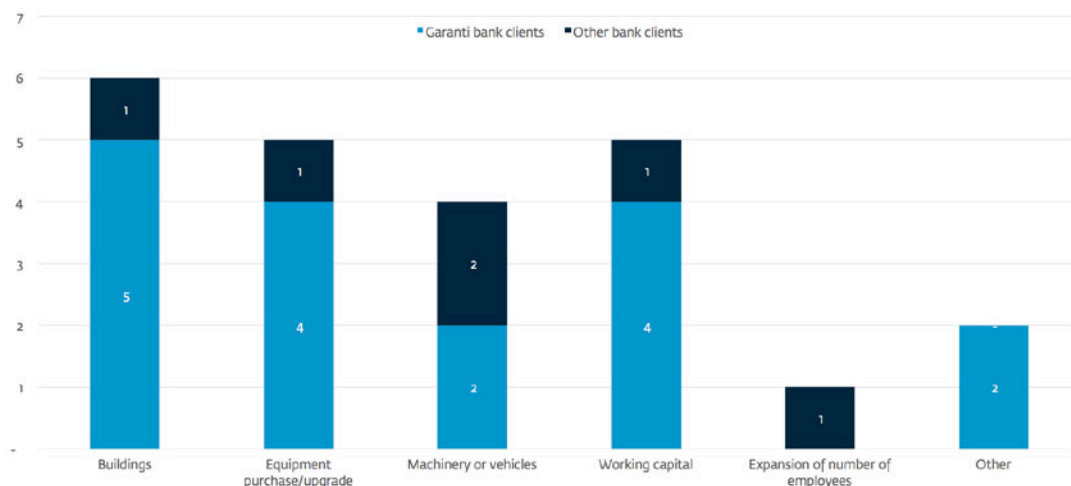
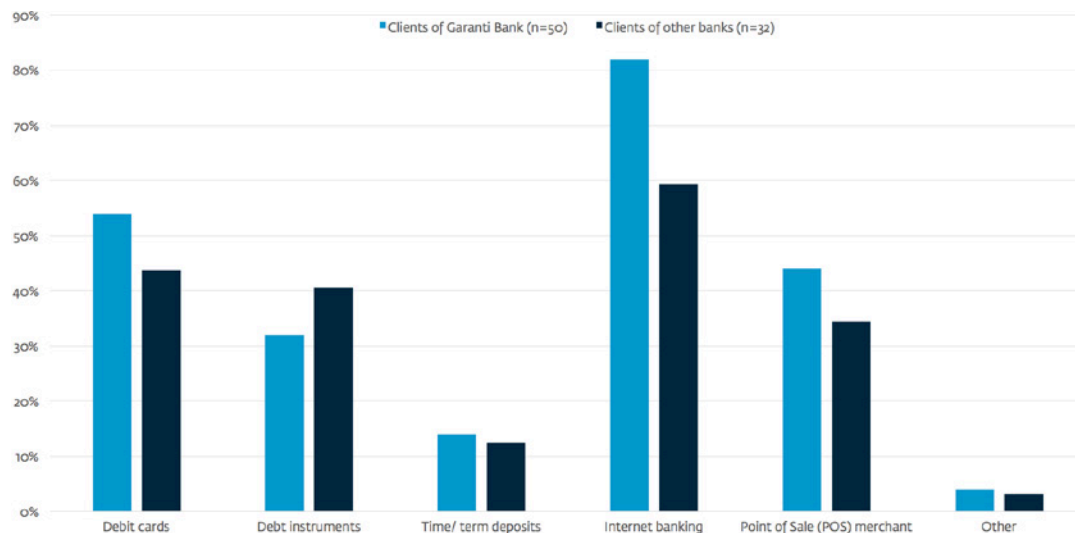


Chart 10: Share of survey sample who have used various banking services



percent of Garanti clients surveyed use internet banking compared to 60 percent of other bank clients. Almost half of the Garanti clients use debit cards and POS terminals. Use of debit cards and POS terminals is also marginally higher for the sample of Garanti clients compared to the sample of other bank clients. A literature search shows that competitors have observed increasing propensity to use these services among women. According to Banca Comercial Română (BCR), their female clients have a high propensity to internet banking, with one in three BCR clients using such services being a woman, and women are transacting more often and more by card on POS than men. They also observed that women using the internet banking services of BCR access their account twice a month on average and perform operations at least once a month, and 8 percent of them use this service only on a mobile phone.

Overview of Garanti Bank Clients—Growth in Key Variables

Among the sample group of 50 Garanti clients, 92 percent of clients (n = 46) received some loan from Garanti Bank between 2011 and 2015. Out of these, half of the firms received more than one loan. As seen in the previous section, the average size of the loan received by clients of Garanti Bank Romania at the time of disbursement was 8,52,700 lei, approximately 150,000 lei higher than the average for the whole sample. The following sections appraises the growth rate of key variables of business for the sample of Garanti Bank clients during the same period, 2011 to 2015. It also examines the correlation between the growth in key variables and the loan amount received.³⁰ All growth rates discussed in this report are based on Average Annual Growth Rate.³¹ Medians of average annual growth rate was also calculated, and results have been aligned with the means. All time-series financial data were converted from nominal values to real 2015 values based on the consumer price index (CPI).³²

The sample of Garanti Bank Romania clients witnessed an annual average real growth in sales and labor productivity between 2011 and 2015 that was higher than the national average annual real sales growth of firms in Romania as per Enterprise Survey 2013. Moreover, when we looked at the largest loan received by Garanti Bank clients, the increase in loan amount was associated with a statistically

significant increase in annual sales growth and in annual labor productivity on average, keeping firm age, sector, and region constant. At the same time, full-time employment remained fairly constant between 2011 and 2015, and loan amount did not have a statistically significant impact on full-time employment for the sample of Garanti Bank clients.

SALES

In real terms, overall sales for the sample of Garanti Bank Romania clients grew at an annual average rate of 5.52 percent per year between 2011 and 2015, with a standard deviation of 13.5 percent (and median of 2.9 percent).³³ **When we looked at the largest loan received by Garanti Bank clients, an increase in loan amount by 1 million LCU was associated with a 2.1 percentage point increase in annual sales growth on average, keeping firm age, sector, and region constant.** Moreover, the average annual sales growth of 5.52 percent is higher than the national average real annual sales growth of firms in Romania, which was 3.5 percent according to Enterprise Survey 2013. The Enterprise Survey sample of Romanian firms with a female top manager had sales growth of 0.7 percent, compared to Romanian firms

³⁰ Growth rate of key business variables are calculated from 2010 to 2015, though in some cases, the client may have received the loan towards the end of the period.

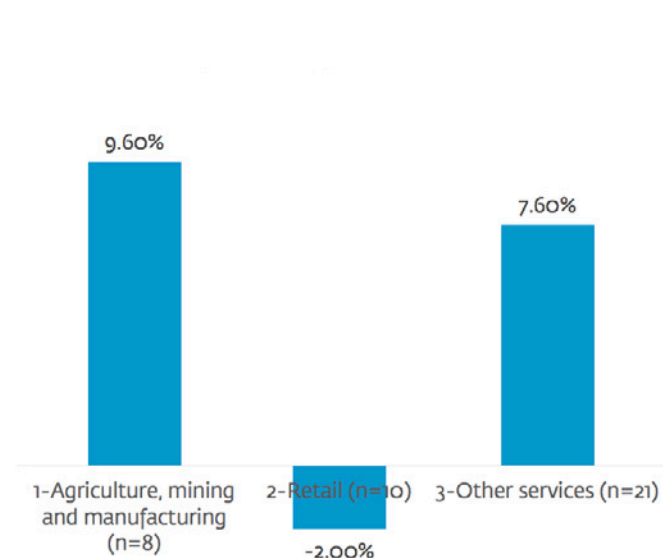
³¹ *Average Annual Growth Rate = (End-Beginning)/5 years / Average (End, Beginning) %.*

³² The CPI for 2015 was 114.20 with base year 2010. (Source: World Development Indicators, The World Bank; International Monetary Fund; International Financial Statistics and data files.) The real values have been calculated based on the following formula:

$$RealValueYearY = (NominalValueYearY) \times (CPIBaseYear/CPIYearY)$$

³³ A one sample t-test was conducted to determine whether the growth was statistically significantly different from zero at 95% confidence level. Average annual growth rate is statistically significant (95% CI, 0.83 to 10.22), t (33) = - 2.3929, p = 0.0226.

Chart 11: Average annual growth rate of sales for Garanti Bank W-SME clients by sector (FY11 to FY15)

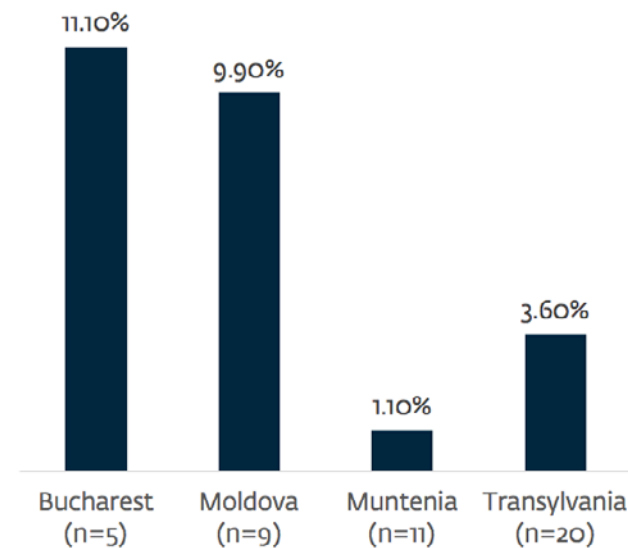


with a male top manager that had higher sales growth of 4.3 percent.

The average sales growth rate for Garanti clients in agriculture, mining, and manufacturing is highest at 9.6 percent. Garanti SME clients in retail have declined on average by 2.0 percent, and clients in other services have growth by 7.6 percent on average. While the growth in services sector is in line with expectations, the fall in sales growth of retail sector firms in the sample is contrary to expectations as the economy has seen value-added growth less in agriculture and industry compared to retail and other services sector.

The sample of W-SMEs in Bucharest³⁴ has seen the highest average annual sales growth at 11 percent on average, higher than the average annual growth overall. This is in line with expectations, as studies on regions of Romania

Chart 12: Average annual growth rate of sales for Garanti Bank W-SME clients by region (FY11 to FY15)



(Stefan and Strat 2017) show a strong polarization of the Romanian economy at county level, with Bucharest being the “superstar.”³⁵ The high average growth rate of W-SMEs in Moldova in the sample is at the same time surprising and encouraging, as the North-East region is the least developed and among the poorest regions in the EU.³⁶ The firms driving this growth were in agriculture, mining (non-metallic mineral products), or other services.

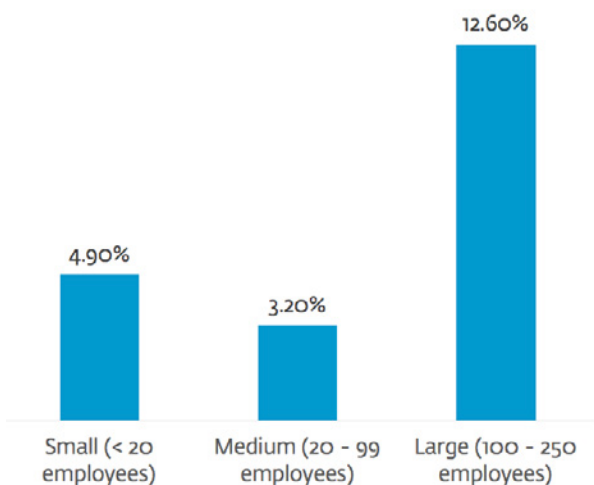
The firms with between 100 and 250 employees also grew at a higher rate than small- and medium-sized firms. Average annual growth rate of W-SMEs with more than 100 employees in the sample of Garanti Bank clients was 12.6 percent compared to average annual growth rates of 4.9 percent and 3.2 percent for small- and medium-sized W-SMEs respectively.

³⁴ In the subsequent sections, we present a breakdown of key outcomes by sector, region, and size. For some of these breakdowns, the sample sizes are small (e.g., five observations for Bucharest in the regional breakdowns). It must be noted that the findings are illustrative based on the sample available and may not be representative of W-SMEs or Garanti Bank clients for the respective breakdown.

³⁵ Strat, V. & Stefan, C. “The growth poles and the lagging regions of Romania – a county level approach for 2015.” *Management & Marketing*, 12(3), 2017. 456-473. Retrieved 11 Apr. 2018, At doi:10.1515/mmcks-2017-0028.

³⁶ Laura Diaconu (Maxim), “Regional Economic Disparities In Romania. Comparative Analysis Of The North-East And West Development Regions.” *The USV Annals of Economics and Public Administration*. Stefan cel Mare University of Suceava, Romania, Faculty of Economics and Public Administration, vol. 14(2(20)), December 2014. 75-82.

Chart 13: Average annual growth rate of sales for Garanti Bank clients by firm size (FY11 to FY15)



PERMANENT FULL-TIME WORKERS

The average annual growth rate³⁷ of permanent full-time workers and permanent full-time women workers between 2011 and 2015 for clients of Garanti Bank Romania in the sample was positive on average, but not statistically significant.

The average annual growth rate of permanent full-time workers between 2011 and 2015 for Garanti Bank Romania clients in the sample was 3.02 percent (median of 1.49 percent and standard deviation of 11.12 percent).³⁸ Moreover, there was no significant growth in employment from a change in loan amount after accounting for sector, region, and firm age.³⁹ The growth in permanent full-time women workers between 2011 and 2015 for clients of Garanti Bank Romania in the sample was similar to that of all permanent full-time workers, with a mean average annual growth rate of 2.46

percent (median of 0 percent and standard deviation of 11.71 percent), not statistically significant.⁴⁰ As we saw in the earlier section on banking practices of W-SMEs, only 7 percent of all loans in the sample of Garanti Bank clients were acquired with the stated purpose of expanding employee base.⁴¹

The growth rate in employment by sector show that agriculture and retail firms in the sample have seen an average decrease at -3.5 percent and -0.1 percent respectively, compared to firms in other services that grew at 4.2 percent on average. This parallels the employment trends in the Romanian economy. The share of agriculture sector in total employment decreased by 3.7 percentage points between 2011 and 2015, from 30.1 percent to 26.4 percent.⁴² The decrease was larger in total female employment during the same period.⁴³ One respondent reported a fall in employment in agriculture, mining, and manufacturing, and mentioned that the reason for the decrease in workers was mechanization and employees leaving for competitors. The fall in retail sector employment seems to be driven by the low output growth of firms in the sample.

The growth rate by region shows that the average annual growth rate in permanent full-time workers of Garanti clients in the sample has been fairly similar across the regions, being 2.8 percent in Bucharest, 3.2 percent in Moldova, 2.0 percent in Muntenia, and 1.9 percent in Transylvania on average. The average annual growth rate in permanent full-time workers of small W-SMEs with less than 20 employees was 3.6 percent on average—higher than larger W-SMEs on average. The growth in permanent full-time women workers was also highest among small firms with less than 20 employees, at 2.3 percent on

³⁷ Estimated as the annual change in the number of employees divided by the average value over the two periods (2011 and 2015).

³⁸ The growth of permanent full-time workers was not statistically significant based on a one sample t-test, $t(38) = 1.6952$, $p = 0.0982$.

³⁹ Detailed equation in Appendix.

⁴⁰ The growth of permanent full-time women workers between 2010 and 2015 was not statistically significant based on a one sample t-test, $t(35) = 1.2589$, $p = 0.2164$.

⁴¹ For this sample, the job creation was statistically insignificant.

⁴² International Labour Organization, ILOSTAT database. Data retrieved in November 2017.

⁴³ International Labour Organization, ILOSTAT database. Data retrieved in November 2017.

Chart 14: Average annual growth rate of permanent full-time workers (total and women) for Garanti Bank clients, by sector (FY11 to FY15)



average. In contrast, larger firms with more than 20 employees saw a decline in permanent full-time workers, with medium-sized firms having an average annual growth rate of -2.7 percent and large-sized firms having an average annual growth rate of -0.3 percent.

LABOR PRODUCTIVITY

Growth in Labor productivity, defined as sales divided by number of permanent full-time workers, was statistically significant, with a mean average annual growth rate of 4.73 percent (a median of 1.79 percent and a standard deviation of 12.74 percent) for Garanti clients between 2011 and 2015.⁴⁴ An increase in loan amount by 1 million LCU was associated with a statistically significant increase in labor productivity by 2.1 percent on average from 2011 to 2015, after controlling for sector, region, and firm age (detailed equation in Appendix). Furthermore, the average annual labor productivity growth for Garanti Bank clients in the sample is much higher than the national average for annual labor productivity growth for firms in Romania, which was 0.4 percent, according to Enterprise Survey 2013. The growth witnessed by Garanti clients is commendable, as labor productivity has been a

challenge for Romanian SMEs, particularly for W-SMEs. Firms with a female top manager saw a decline in labor productivity at -3.7 percent, whereas firms with a male top manager saw growth in labor productivity at 1.5 percent between 2010 and 2012 in Romania, according to Enterprise Survey 2013.⁴⁵

The average growth rate in labor productivity for Garanti clients in agriculture, mining, and manufacturing is highest at 12.3 percent. Clients have attributed part of the improvement in productivity to mechanization and more efficient use of labor using financial products received. The sample of firms in the retail sector saw the least growth in labor productivity at 0.6 percent, and firms in other services saw growth in labor productivity at 3.4 percent.

The growth rate by region shows that the average annual growth rate in labor productivity has been highest in Bucharest and Moldova at 9.5 percent and 10.2 percent respectively. This seems to be partly driven by capital investment in the agriculture sector. Labor productivity marginally fell by 1.1 percent on average in Muntenia, where the growth in employment was higher than the growth in output.

⁴⁴ The growth was statistically significant based on a one sample t-test, $t(33) = 2.1696$, $p = 0.0373$.

⁴⁵ Enterprise Survey 2013, World Bank.



The larger W-SMEs in the sample of Garanti Bank clients saw the highest growth in labor productivity, with average annual growth of 12.7 percent on average. This is in line with expectations based on trends in the economy, where the larger firms have seen more growth in value addition relative to employment, compared to the smaller firms.⁴⁶

Chart 15: Average annual growth rate of labor productivity for Garanti Bank clients, by sector (FY11 to FY15)

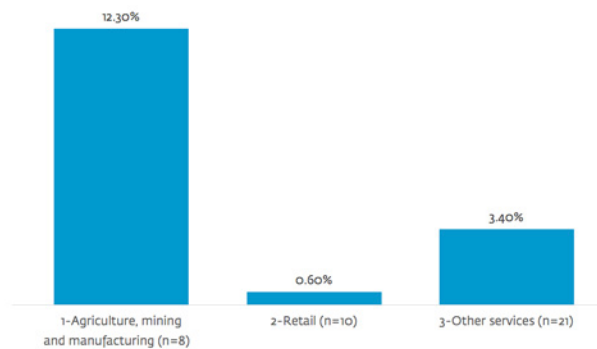
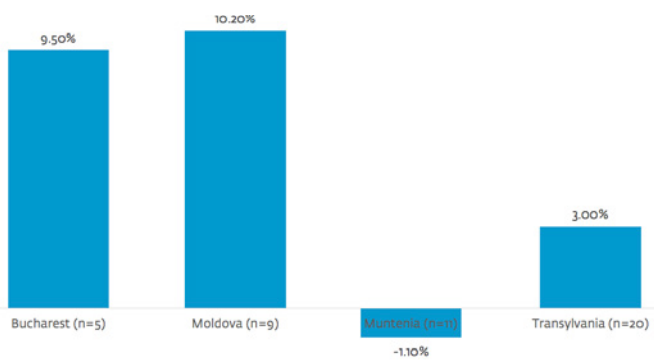


Chart 16: Average annual growth rate of labor productivity for Garanti Bank clients, by region (FY11 to FY15)



Labor productivity growth for Garanti bank's female SME clients is higher than the national average in Romania.

⁴⁶ Small Business Act for Europe (SBA) Fact Sheet for Romania, 2017



IMPACT OF ACCESS TO FINANCE ON FIRM PERFORMANCE IN ROMANIA

Statistically significant results on sales and labour productivity, but not on employment

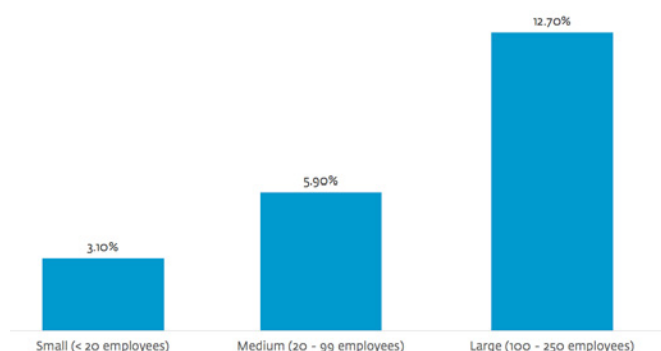
We examined World Bank's Enterprise Survey 2013 data on W-SMEs in Romania—both those who had received loans and those who had not—to understand the relationship between access to finance and business performance. After controlling for sector, region, and firm age, access to a loan was associated with a statistically significant positive impact on sales and labor productivity, but not on employment. W-SMEs in Romania with access to a loan had 13.3 percentage point higher sales growth between 2010 and 2012 compared to W-SMEs in Romania without access to finance, after controlling for sector, region, and age of the firm. The test was statistically significant at a 5 percent level of significance, $p = 0.047$. On similar lines, access to a loan was associated with a 9.1 percentage point increase in labor productivity growth between 2010 and 2012 for W-SMEs in Romania, after controlling for sector, region, and firm age. The test was statistically significant at 5 percent level of significance, $p = 0.028$. Access to finance did not have any statistically significant correlation with employment growth, after controlling for firm characteristics. This is similar to the trend that we see above for Garanti clients, who experienced a statistically significant increase in sales and labor productivity but not in employment. This may partly be driven by the reason for which loans are taken by enterprises in Romania. We see in earlier sections that capital investment is reported by majority of firms in the sample as the primary purpose of the loan.

Source: Enterprise Survey 2013, World Bank. (Details of analysis in Appendix.)

NET PROFIT

The average annual growth rate in net profit between 2011 and 2015 for clients of Garanti Bank Romania in the sample was positive on average, but not statistically significant. The average annual growth rate of net profit between 2011 and 2015 for Garanti Bank Romania clients in the sample was 9.51 percent (median of 10.35 percent and standard deviation of 35.91 percent).⁴⁷ The smaller clients of Garanti Bank in the sample, with less than 20 employees, saw a higher growth in net profit at 13.64 percent compared to medium-sized and larger W-SMEs.

Chart 17: Average annual growth rate of labor productivity for Garanti Bank clients, by firm size (FY11 to FY15)



⁴⁷ The average annual net profit growth was not statistically significant based on a one sample t-test, $t(27) = 1.4012$, $p = 0.1725$.

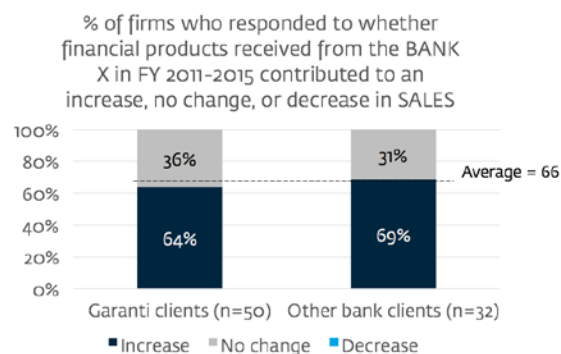
Perceived Benefits from Financial Services

This section captures the perception by Romanian W-SMEs regarding impact of financial services on business performance. On average, the survey sample group—both Garanti Bank clients and other bank clients—perceived a positive impact on sales, net profit, and working capital from the financial services they received. This is mostly in line with the direction of growth of the firms in the sample of Garanti Bank Romania clients between 2011 and 2015, shown in the prior section. However, there are various factors that may impact business performance of Garanti Bank clients, and it is challenging to isolate the impact of access to a loan without more information. We therefore examined Enterprise Survey 2013 data to test how access to finance is associated with business performance. The results are shown in the box above. The survey of Garanti Bank clients also sought to understand from the interviewees how they perceived the impact of financial services on their business—particularly, whether the financial products received from their primary bank between fiscal years 2011 and 2015 contributed to an increase, no change, or decrease in key business variables, such as sales, net profit, employment (total and women), working capital, and investment. The results are given in the following pages.

PERCEIVED IMPACT ON SALES FROM FINANCIAL PRODUCTS

There is no difference between Garanti Bank and other banks on the perceived impact of financial services on sales. On average, two thirds of firms that received financial services from a bank self-reported that they experienced an increase in sales from financial products they received between FY 2011 and FY 2015. There were instances in which clients perceived an increase in sales from financial products they received but reported a fall in sales. The drop in sales in such cases may be driven by other factors—internal or external to the firm.⁴⁸

Chart 18: Perceived Change in Sales (FY11 to FY15)



⁴⁸ Please note that the reported data is what happened to sales overall. The perception question is the impact of financial services on sales.

PERCEIVED IMPACT ON NET PROFIT FROM FINANCIAL PRODUCTS

A higher proportion of Garanti Bank clients perceived an increase in net profit from financial services compared to the sample of other bank clients. On average, 60 percent of firms that received financial services from a bank self-reported that they experienced an increase in net profit from financial products they received between FY 2011 and FY 2015. This share was marginally higher for clients of Garanti Bank Romania, with two thirds of the sample of Garanti Bank clients reporting an increase in net profit compared to only half of the sample of other bank clients. Similar to sales, there were instances where clients perceived an increase in net profit from financial products they received but reported an actual fall in net profit. It may be helpful to research further the factors that led to the reported drop in net profit, as it may help us isolate the impact of the loan on the business.

PERCEIVED IMPACT ON PERMANENT FULL-TIME WORKERS FROM FINANCIAL PRODUCTS

The perception by the overall sample of W-SMEs regarding the impact of financial products on employment was mixed. Thirty-five percent of firms who received financial services from a bank self-reported that they experienced an increase in permanent full-time workers from financial products they received between FY 2011 and FY 2015, 2 percent reported that they experienced a decrease, and the remaining 62 percent reported that they experienced no change. This was similar between Garanti Bank clients and other bank clients. The key reason stated by firms who availed of financial services was that mechanization and upgrades resulted in decrease of workers, who left for competition.

The perception by W-SMEs in the survey sample regarding the impact of financial products on permanent full-time women workers was relatively similar to permanent full-time workers, as seen in figure below. Among firms that received financial services

Chart 19: Perceived Change in Net Profit (FY11 to FY15)

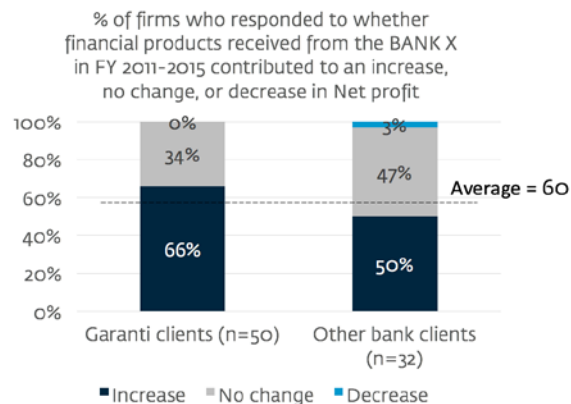


Chart 20: Perceived Change in permanent full time workers (FY11 to FY15)

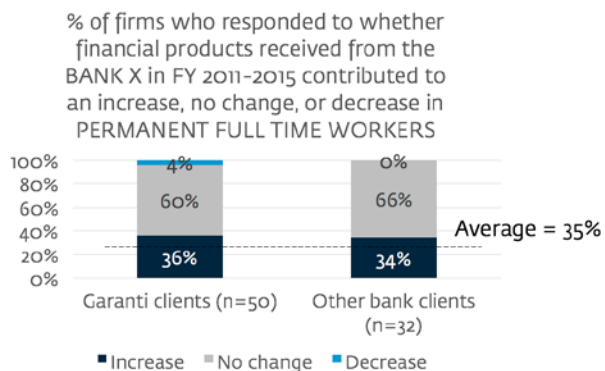
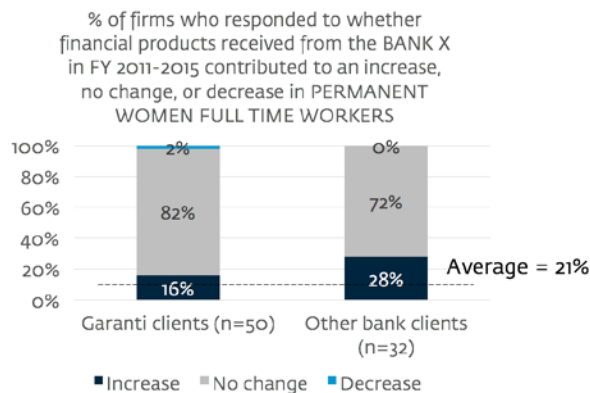


Chart 21: Perceived Change in permanent women full time workers (FY11 to FY15)



from a bank, 21 percent self-reported that they experienced an increase in permanent full-time women workers from financial products they received between FY 2011 and FY 2015, 1 percent reported that they experienced a decrease, and the remaining 78 percent reported that they experienced no change.

PERCEIVED IMPACT ON WORKING CAPITAL FROM FINANCIAL PRODUCTS

Based on self-reporting, the impact of financial products on working capital was overwhelmingly positive for all W-SMEs in the sample, on average.

While only around 40 percent of firms in the sample mentioned that they used loans for working capital, 70 percent of firms who received financial services from a bank reported that they experienced an increase in working capital from financial products they received between FY 2011 and FY 2015, and 30 percent reported that they experienced no change.

PERCEIVED IMPACT ON INVESTMENT FROM FINANCIAL PRODUCTS

On average, approximately half of the firms who received financial services from a bank perceived that financial products they received between FY 2011 and FY 2015 contributed to an increase in purchase of fixed assets. Thirty-eight percent of Garanti Bank clients perceived this increase compared to two thirds of clients from other banks. Among Garanti clients whose stated purpose of their largest loan was "Equipment purchase/upgrade, buildings or machinery," 60 percent reported that financial products led to an increase in investment or purchase of assets.

LIKELIHOOD TO RECOMMEND

Garanti Bank clients are unanimously likely to recommend the financial products they have received from Garanti Bank. Eighty-four percent of clients of Garanti Bank Romania report that they are "very likely" to recommend



Chart 22: Perceived change in working capital from financial products (FY11 to FY15)

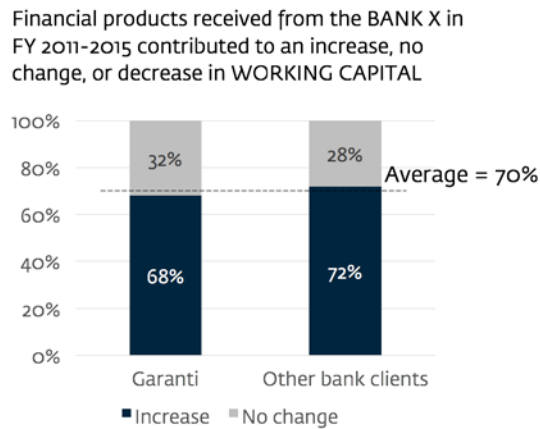
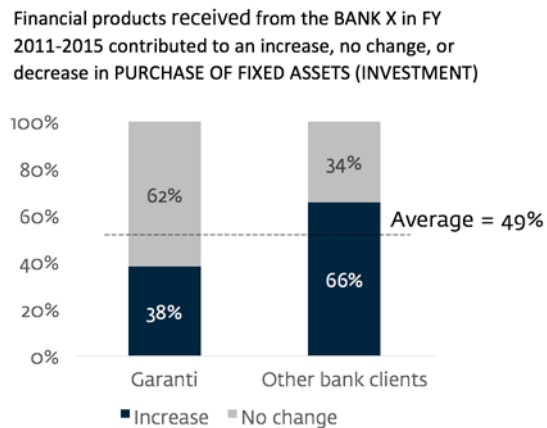


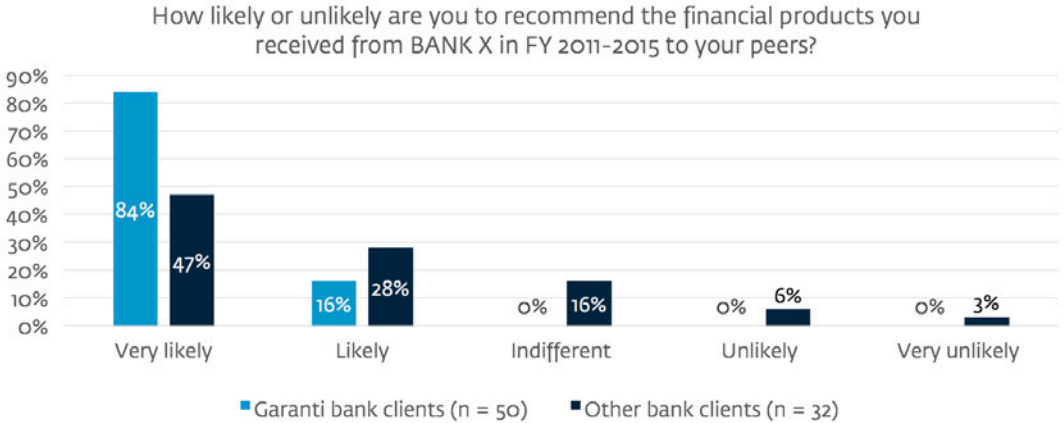
Chart 23: Perceived change in investment from financial products (FY11 to FY15)



to their peers the financial products received from Garanti Bank in FY 2011- 2015 versus 47 percent of clients of other banks. The remaining 16 percent of Garanti Bank clients in the sample also report that they are “likely” to recommend the financial products they have received from Garanti Bank. The key reasons clients state for recommending

Garanti Bank Romania are their relationship with the Garanti Bank staff, favorable interest rates, promptness and reliability of service, and flexibility to needs of the clients.

Chart 24: Percentage of clients who responded to whether they are likely to recommend the financial products they received from Garanti Bank Romania and other banks



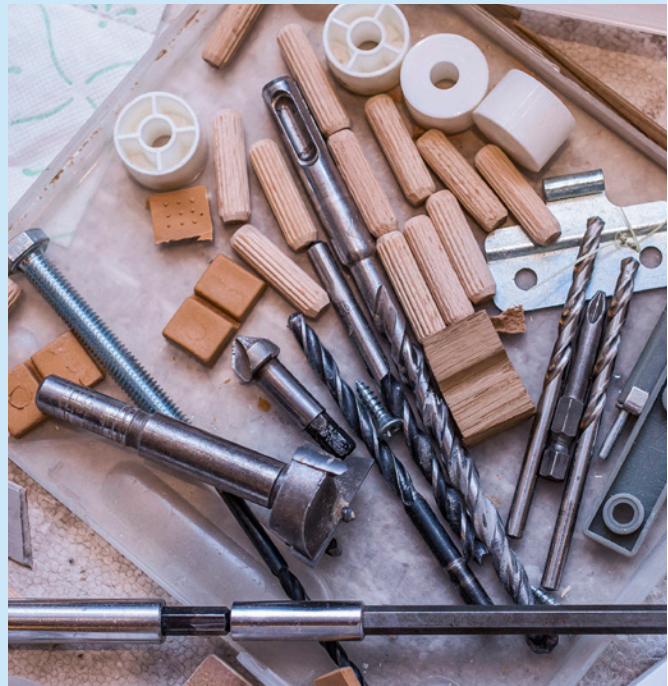
WOMEN-OWNED SME CASE STUDY

Nicolae Felicia, Carpati Modern Furnitura SRL—(Part of OVO Design Group)

OVO Design Furniture Group SRL is a Romanian manufacturer of classic and modern luxury furniture.

The company's range of products includes kitchen, living room, dining room, and bedroom furniture. They also produce furniture for restaurants, offices, and conference rooms. Established in 1994, the company has been in the market for over 20 years and has grown from a smaller-size enterprise to one with an annual turnover of close to EUR 6 million in 2014. OVO Design Furniture Group SRL has been categorized as a women-led SME primarily because the company is part of Ovo DesignH Group, which has minority women ownership, while Carpati Modern Furnitura SRL itself has a woman CFO, a top manager with decision-making authority. Not only is the CFO of Carpati Modern Furnitura SRL a woman; some 80 percent of managerial positions in the company are held by women. Nicolae Felicia, the company's key decision-maker, has a long-standing relationship with Garanti Bank.

The company is a recent SME banking client of Garanti Bank. It obtained its first loan from the bank as recently as in 2013, in the form of two short-term loans, one cash and one working capital, with a letter of guarantee in the value of EUR 2.5 million. The loan was collateralized through property owned by the company. The currently outstanding loan amount is EUR 1.3 million. The loan was not associated with any preferential interest rates, and was used by the company for working capital.



The company further holds a checking account and corporate credit cards and processes its payroll through the bank. The company's CFO, Nicolae Felicia, offers some interesting insights into why women entrepreneurs may choose a specific bank to do business with. In the case of Ovo Design the main reasons for the CFO's choice of Garanti Bank was the bank's reputation, its flexibility, and the personal relationship Ms. Felicia already had with the bank. This is very much in line with research conducted on women's banking preferences, which revolve around trust and relationship-building with the bank, as opposed to opportunistic transaction orientation (a consumer pattern prevailing among male banking customers). Ms. Felicia confirms that

CASE STUDY; CONTINUED FROM PAGE 38

without the financing obtained from Garanti Bank, the company would have been cash-constrained, and it would have been very difficult to manage the business. The company did consider alternative sources of finance at the time it obtained financing from Garanti Bank. These included other commercial banks in the market as well as funds.

Indeed, the company has tapped into other sources of financing since Garanti Bank launched its BoW Program, and did obtain a EUR 1.5 million loan from the Bank of Cyprus. This funding was, however, unrelated to the financing the company received from Garanti Bank, and the loans it has from Garanti Bank did not in any way help obtain financing from other banks.

Despite beginning as a start-up, the company has never used personal loans for its business. Ovo Design is growing fast, and with that has come further financing needs. The company plans to apply for further financing in the coming two years, mostly to upgrade and purchase new equipment.

Given Ovo Design's growth and expansion, the company would direct any additional financial resources into upgrading its equipment and training its employees. It would also consider purchasing new equipment and hiring more qualified staff. Ms. Felicia further offers some insight into the challenges that small businesses in Romania, including women-led firms, face and the specific finance and non-finance needs they typically have. The biggest challenge to the company is tax and labor regulation, in addition to access to reliable electricity/power. This includes costs associated with power, as well as compliance with labor regulations. The company considers the two most pressing needs that can be addressed by the bank are lower interest rates for women-led firms and customized business consulting services for women clients. Because of the costs associated with accessing power, the company is further interested in energy efficiency financing and energy efficiency audits.

Conclusion and Recommendations

The context of the banking sector in Romania is different today than it was in 2010. NPL levels have improved and more banks see the value of financing women and W-SMEs. In recent years, public support for SMEs has mainly taken the form of state guarantees to help businesses obtain credit from banks. Other government measures included the de minimis scheme for SMEs, a support programme for young entrepreneurs and a programme to encourage female entrepreneurship.⁴⁹ However, there remains a substantial gap in SME financing and it continues to be important to provide access to finance for SMEs, particularly W-SMEs, to ensure inclusive growth. Our research shows that financial services have benefited W-SMEs. Enterprise Survey 2013 data show that access to a loan has a statistically significant positive impact on sales growth and labor productivity of W-SMEs. Garanti Bank clients also perceive that the financial services they received from Garanti Bank Romania have helped their business. However, we would need additional research and more rigorous evidence to attribute the performance of the W-SMEs to Garanti Bank or to IFC. It is also important to build impact evaluations into the design of future projects.

This was the first beneficiary study of this kind within the BOW Program. It was particularly difficult to conduct the data collection for the study as the response rate was low. But in the future, IFC wants to conduct more of these studies in other markets to understand and articulate development impact.


Further research can also help us to identify how to best serve women entrepreneurs and how to make access to finance more inclusive. Additional research to understand credit constraints faced by women entrepreneurs in different regions of Romania and in different sectors could help to ensure inclusive growth. Understanding the externalities and benefits on the community from providing financing to W-SMEs also merits further study.

Research has found that young firms and small firms are more credit constrained and use less external finance than large firms, especially in terms of banks and equity finance because of lack of collateral (Beck, Demirgüç-Kunt, and Maksimovic 2008).⁵⁰ Collateral continues to be one of the challenges mentioned by W-SMEs in the sample of Garanti Bank clients. However, the risk of serving young firms without collateral is also higher as the five-year survival rate of new firms in Romania is less than 60 percent. IFC could work with the banking sector and could test new ways to identify and screen new clients. Some financial institutions are adopting psychometric tests as a method for screening clients and differentiating potential loan defaulters from non-defaulters. For example, Klinger et al (2013) used such a test to help a leading Peruvian financial institution reduce credit risk in lending to micro-, small- and medium-sized enterprises that would otherwise not receive lending due to lack of a credit history and high perceived risk profile.⁵¹ Additionally, Kuhnen and Melzer (2017) have shown that individuals with high self-efficacy are more likely to take precautions that mitigate adverse

⁴⁹ Roman, Angela and Valentina Diana Rusu. "Access to Finance of SMEs in CEE Countries and Supportive Measures," *The Journal of Accounting and Management*. Danubius University of Galati, issue 3, 2015. 37-48.

⁵⁰ Beck, T.H.L. & Demirgüç-Kunt, A. & Maksimovic, V. "Financing patterns around the world: Are small firms different?" Other publications TiSEM 7078f1cc-51a6-4556-b193-d. Tilburg University, School of Economics and Management, 2008.

⁵¹ Klinger, Bailey, Asim Khwaja, and Joseph LaMonte. *Improving credit risk analysis with psychometrics in Peru*. 2013.



financial shocks, and they are subsequently less likely to default on their debt and bill payments, especially after experiencing negative shocks such as illness.⁵² Identifying innovative methods to identify and screen new clients would help expand access to finance to more W-SMEs and other excluded groups.

Considering Romania is one of the lowest in the EU with regard to labor productivity of firms, the improvement in productivity seen by the sample of Garanti Bank clients is commendable. At the same time, it would be good to research and identify which sectors promote employment along with productivity growth.

Garanti Group Romania and IFC signed a new agreement of EUR 32 million in March 2018 to work together to provide financing to Romanian small and medium enterprises, dedicating half the amount for on-lending to W-SMEs.⁵³ Continuing to innovate to address the needs of women entrepreneurs will help Garanti Bank maintain its first-mover advantage and be a leader in serving W-SMEs. Similarly, additional research on factors impacting women entrepreneurs, on their needs, and on ways to make access to finance more inclusive would not only benefit the sector in Romania but also enable IFC to provide lessons to other middle-income countries in the world that are in a similar phase of growth.

⁵² Kuhnen, C., and Melzer, B. "Non-Cognitive Abilities and Financial Delinquency: The Role of Self-Efficacy in Avoiding Financial Distress." doi:10.3386/w23028, 2017.

⁵³ Following the evaluation of a senior IFC loan of EUR 22.5 million to Garanti Bank Romania, IEG assigned a *Mostly Successful* rating as the project had a preponderance of positive results, with some minor shortcomings. Garanti's loan growth has been stronger than peers', especially when compared to women-owned SMEs, the focus of the project. Given weak economic growth in Romania, Garanti loan growth, profitability, asset quality, and profitability were weaker than expected. There was a relatively positive demonstration effect regarding loans to women entrepreneurs as those increased their share to total loans to 2.6 percent as of 2015 compared to 0.4 percent in 2010. Moreover, IEG also assigned a *Satisfactory* rating, as additionality was in line with IFC's operating principles.

Bibliography

- Andrez, Tataj, Dalle and Romanainen. *Specific Support to Romania – Starts-ups, Scale-ups and Entrepreneurship in Romania*. European Commission, 2017.
- Ayyagari, Meghana; Juarros, Pedro Francisco; Martinez Peria, Maria Soledad; Singh, Sandeep. "Access to finance and job growth: firm-level evidence across developing countries (English)." Policy Research working paper; no. WPS 7604. World Bank Group Washington, D.C., 2016. At <http://documents.worldbank.org/curated/en/804781467990954208/Access-to-finance-and-job-growth-firm-level-evidence-across-developing-countries>
- Beck, T.H.L., Demirgüç-Kunt, A., and Maksimovic, V., "Financing patterns around the world: Are small firms different?," Other publications TiSEM 7078f1cc-51a6-4556-b193-d. Tilburg University, School of Economics and Management, 2008.
- Brown, J. D., Earle, J. S., and Lup, D. (2004). "What Makes Small Firms Grow? Finance, Human Capital, Technical Assistance, and the Business Environment in Romania." *Economic Development and Cultural Change* 54, no. 1, October 2005. 33-70. doi:10.17848/wpo3-94.
- Diaconu (Maxim), Laura. "Regional Economic Disparities In Romania. Comparative Analysis Of The North-East And West Development Regions." *The USV Annals of Economics and Public Administration*, Ștefan cel Mare University of Suceava, Romania. Faculty of Economics and Public Administration, vol. 14(2(20)), December 2014. 75-82.
- Enterprise Survey. *Enterprise Survey 2013*. The World Bank. At <http://www.enterprisesurveys.org/>.
- European Central Bank. *Survey on the access to finance of enterprises (SAFE)*. 2017. At https://www.ecb.europa.eu/stats/ecb_surveys/safe/html/index.en.html
- European Commission. *Annual Report on SMEs 2016-2017*. November 2018. At <https://www.smeacademy.eu/reports--results/annual-report-on-european-smes-2016-2017>.
- . *Policy Brief on Women's Entrepreneurship*. 2017.
- . Romania Country Report. 2018. At <https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-romania-en.pdf>.
- . "What is an SME?" (n.d.) At http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm.
- . Winter Forecast. 2018. At https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-performance-country/romania/economic-forecast-romania_en.
- Eurostat. "How to do banking at feminine: Female clients are ever more financially emancipated, with a wealth in rise and organized with personal finances." BCR Press Release, March 08, 2016. At <https://www.bcr.ro/en/press/press-release/2016/03/08/how-to-do-banking-at-feminine>.
- International Finance Corporation. "Definitions of Targeted Sectors." (n.d.) At https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial_institutions/priorities/ifcs_definitions_of_targeted_sectors
- . "Garanti Bank Romania: Striving to Lead." 2016. At https://www.ifc.org/wps/wcm/connect/region__ext_content/ifc_external_corporate_site/europe+and+central+asia/resources/garantibankromania.

- — —. "MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium Enterprises in Emerging Markets." 2017. At <https://openknowledge.worldbank.org/handle/10986/28881> License: CC BY-NC-ND 3.0 IGO.
- — —. "MSME Finance Gap." 2017. At <https://www.smefinanceforum.org/data-sites/msme-finance-gap>
- International Labour Organization. *ILOSTAT database*. Data retrieved in November 2017.
- International Monetary Fund. *International Financial Statistics*. Data retrieved in March 2018.
- — —. "Romania: Staff Concluding Statement of the 2018 Article IV Mission." March 2018. At <http://www.imf.org/en/News/Articles/2018/03/16/mcso3162018-romania-staff-concluding-statement-of-the-2018-article-iv-mission>.
- Klinger, Bailey, Asim Khwaja, and Joseph LaMonte. *Improving credit risk analysis with psychometrics in Peru*. 2013.
- Kuhnen, C., and Melzer, B. "Non-Cognitive Abilities and Financial Delinquency: The Role of Self-Efficacy in Avoiding Financial Distress." 2017. doi:10.3386/w23028.
- Leitch, C., Welter, F., and Henry, C. (2018). "Women entrepreneurs' financing revisited: Taking stock and looking forward." *Venture Capital*, 20(2), 103-114. 2018. doi:10.1080/13691066.2018.1418624
- Levine, R. "Finance and growth: Theory and evidence." In Philippe Aghion and Steven Durlauf (eds.) *Handbook of Economic Growth*. Elsevier Science, The Netherlands,, 2005.
- National Institute of Statistics. "Labour force in Romania: employment and unemployment in 2015." 2015. At <http://www.insse.ro/cms/en/content/romanian-labour-force-employment-and-unemployment-2015>.
- Poggesi, Sara, Mari, Michela, and De Vita, Luisa. "What's New in Female Entrepreneurship Research? Answers from the Literature." *International Entrepreneurship and Management Journal* 12 (3): 735–764.10.1007/s11365-015-0364-5, 2016.
- Radauer, A. and Roman, L. "Technopolis Group, The Romanian Entrepreneurial Ecosystem— Background Report." *Eurostat 2009-2014*. Horizon 2020 Policy Support Facility, Directorate-General for Research and Innovation, Brussels, 2016..
- Report of the Board of Directors of Banca Transilvania— 2016.
- Roman, A. and Rusu, V. "Access to Finance of SMEs in CEE Countries and Supportive Measures." *The Journal of Accounting and Management*, Issue 3, December. Danubius University of Galati, 2015. 37-48.
- Small Business Act for Europe (SBA). *Fact Sheet for Romania*, 2017
- Stefani, M. L., and Vacca, V. P. (2013). Credit Access for Female Firms: Evidence from a Survey on European SMEs. SSRN Electronic Journal. doi:10.2139/ssrn.2297789
- Strat, V. and Stefan, C. "The growth poles and the lagging regions of Romania—a county level approach for 2015." *Management & Marketing*, 12(3), 456-473, 2017. Retrieved 11 Apr. 2018. At doi:10.1515/mmcks-2017-0028.
- Sundaram, Ramya; Hoerning, Ulrich; Falcao, Natasha De Andrade; Millan, Natalia; Tokman, Carla; Zini, Michele. "Portraits of labour market exclusion" (English). World Bank Group, Washington, DC, 2014. At <http://documents.worldbank.org/curated/en/837771468246370480/Portraits-of-labor-market-exclusion>.
- World Bank national accounts data and OECD National Accounts data files.

Appendix

DETAILED METHODOLOGY

In 2016, IFC commissioned IMAS to conduct a survey to assess the impact of the Women Entrepreneur (WE) Banking Program that was implemented in Romania from 2011 through Garanti Bank Romania. This report is based on the results of the survey of a total of 82 firms: a target group sample of 50 Romanian women-owned SMEs and women entrepreneurs (W-SMEs) who received financial services from Garanti Bank Romania, and a comparison group sample of 32 Romanian W-SMEs who had received financial services from a bank other than Garanti Bank Romania during the evaluation period of fiscal years 2011-2015 (2010 is pre-program).

A key aspect for this survey was the criterion of women-owned SMEs and women entrepreneurs (W-SMEs). Garanti Bank Romania defined women-owned SMEs and women entrepreneurs (W-SMEs) as firms with at least one female shareholder and/or decision maker with an SME loan product (working capital or investment loan). This is the definition that has been used in the report. Firms with 250 or fewer employees are generally referred to as Small and Medium Enterprises (SMEs). However, there are differences regarding the definition of SMEs. The European Commission defines SMEs as businesses which employ less than 250 staff and have an annual turnover of less than EUR 50 million (USD 37.5 million), and/ or their balance sheet total is less than EUR 43 million (USD 32.3 million).⁵⁴

IFC defines SMEs if it meets two out of three criteria regarding employees, assets and sales, or if the loan to it falls within the relevant MSME loan size proxy.⁵⁵ Out of the sample of 50 Garanti clients, 47 firms have loan size at origination between USD 10,000 and USD 2 million and are therefore considered a small or medium enterprise, and 3 firms have total loan size at origination of less than USD 10,000, and are therefore considered a micro-enterprise. According to the IFC, an enterprise qualifies as a woman-owned enterprise if it meets the following criteria: it is greater than or equal to 51 percent owned by woman/women; or it is greater than or equal to 20 percent owned by woman/women and it has one or more women as CEO or COO or President of Vice-President and it has greater than or equal to 30 percent of the board of directors comprised of women (where a board exists).⁵⁶ All the firms in the sample of Garanti Bank clients surveyed fell into this category except one firm which had female ownership of only 10 percent.

The survey was conducted in-person from July 2016 through November 2017, and asked questions about firm financials in 2011 and 2015, the financial services used by SMEs, the loans they have received, characteristics of loans, and perceived impact of the financial services on firm performance.

⁵⁴ This definition of SME includes micro firms. SBA Fact Sheet 2017. http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/index_en.htm.

⁵⁵ IFC's Definitions of Targeted Sectors. (n.d.). At https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/financial_institutions/priorities/ifcs_definitions_of_targeted_sectors

⁵⁶ In the case of target group firms, the term used was "women borrowers" and it could also include scenarios where women (individuals, households, micro enterprises) are co-signers, and individual women borrowers and deposit accounts held by women. The definition may extend to other forms of registered businesses (i.e., sole-ownership).

TARGET UNIVERSE

Garanti Bank's Women Entrepreneur (WE) portfolio was comprised of 759 W-SMEs in 2016.⁵⁷ The profile of the women SME portfolio was critical for determining the survey sample. The table below shows the distribution of portfolio in 2016 by region, sector, and firm size. Forty percent of firms were from Muntenia, 26 percent from Transylvania and the remaining from Bucharest and Moldova. Agriculture, mining and manufacturing, and retail accounted for approximately 40 percent of the firms, and other services sector accounted for the remaining 60 percent of the firms. For the purposes of the report, Small SMEs are defined as firms with less than 20 employees; Medium SMEs are defined as firms with 20 or more employees, but less than 100; and large SMEs are defined as firms with 100 or more employees, but not more than 250. The vast majority (97 percent) of the Garanti Bank

women SME portfolio was comprised of small and medium SMEs: 81 percent small SMEs with less than 20 employees each, 16 percent medium SMEs, and remaining 3 percent large SMEs.

SAMPLING PROCEDURE

The survey of the target group was conducted between July 2016 and September 2017. The universe of the target sample was comprised of all firms involved in Garanti Bank's Women SME Banking Program. However, IMAS Marketing & Polls was allowed to contact the firms only after explicit confirmation stating that Garanti Bank had obtained their permission to be contacted by IMAS Marketing & Polls and after screening them for all the eligibility conditions. This created several challenges in achieving the desired number of responses.

Table 3: Distribution of Garanti Bank's portfolio of 759 W-SMEs by region, sector, and firm size

Region	Size	1-Agriculture, mining and manufacturing	2-Retail	3-Other services	Total
1 Transylvania	1-Small	2%	5%	14%	26%
	2-Medium	2%	0%	2%	
	3-Large	0%	0%	1%	
2 Muntenia	1-Small	4%	9%	18%	40%
	2-Medium	1%	2%	4%	
	3-Large	0%	0%	0%	
3 Moldova	1-Small	2%	4%	7%	18%
	2-Medium	1%	1%	2%	
	3-Large	0%	0%	0%	
4 Bucharest	1-Small	1%	3%	11%	16%
	2-Medium	0%	0%	1%	
	3-Large	0%	0%	0%	
Total by sector		15%	24%	61%	100%

⁵⁷ Note that Garanti Bank tracks three levels of women ownership: over 50 percent women ownership, between 25 and 49 percent women ownership, and less than 25 percent women ownership. This figure includes all three categories.

The resulting target group sample was comprised of 50 firms screened and interviewed, and represented only approximately 21 percent of the expected sample. IMAS Marketing & Polls received 74 approved contacts from Garanti Bank Romania, representing only 31 percent of the expected target group sample of 240 cases. Out of 74 companies that gave their approval to take part in the survey, 57 firms were marked, based on the screener, as eligible to participate; 14 contacts expressed their refusal to take part in the project; and 3 firms were out of target. The final target group sample was comprised of 50 firms, as 7 contacts had agreed to take part in the survey but subsequently refused to answer the main questionnaire. Thus, 50 firms of the 74 approvals received were interviewed.

Given the lower than expected sample, it was decided to expand the scope of the survey using quota-based sampling, to include W-SMEs that were not Garanti Bank clients to serve as a comparison group. Between October and November 2017, IMAS interviewed 105 W-SMEs that

had a similar profile as the target sample group but were not clients of Garanti Bank. This included 32 enterprises that had received financial services from a bank other than Garanti Bank Romania during the evaluated period of fiscal years 2011-2015 and 73 enterprises that did not receive financial services from any bank between 2011 and 2015. The sample of 73 enterprises was not a suitable counterfactual for the sample of Garanti Bank clients, and therefore they have not been included in the survey results. The rest of the report examines the results of the survey of 82 W-SMEs that received financial services from Garanti Bank or another bank during the period between 2011 and 2015.

SAMPLE DISTRIBUTION

As mentioned above, IMAS reached out to all 759 Garanti Bank women SME clients in the portfolio for whom permission was obtained and who met eligibility criteria. The 50 firms that completed the interview comprised 7 percent of the total portfolio of 759 clients. The regional, sectoral and size distribution of the sample of 50 W-SMEs

Table 4: Target sample distribution

Region	Size	1-Agriculture, mining and manufacturing	2-Retail	3-Other services	Total
1 Transylvania	1-Small	0%	12%	20%	42%
	2-Medium	6%	2%	0%	
	3-Large	2%	0%	0%	
2 Muntenia	1-Small	4%	8%	8%	26%
	2-Medium	0%	0%	4%	
	3-Large	0%	0%	2%	
3 Moldova	1-Small	4%	6%	4%	22%
	2-Medium	2%	0%	2%	
	3-Large	2%	0%	2%	
4 Bucharest	1-Small	0%	0%	8%	10%
	2-Medium	0%	0%	0%	
	3-Large	0%	0%	2%	
Total by sector		20%	28%	52%	100%

interviewed in 2016 and 2017 roughly approximated the proportion represented in Garanti Bank Romania's loan portfolio (as shown in Table 1 above). The chart below examines in detail the regional, sectoral, and size distribution of W-SMEs in the sample group of Garanti Bank clients and the differences compared to the distribution of W-SMEs in Garanti Bank Romania's portfolio.

There is a higher proportion of firms from Transylvania in the sample of Garanti Bank clients (42 percent of all W-SMEs in sample) compared to the overall portfolio (26 percent of all W-SMEs in portfolio). At the same time, Muntenia and Bucharest are less represented in the sample of Garanti Bank clients (36 percent in total) compared to the overall portfolio (56 percent in total).

Firms in agriculture, mining and manufacturing, and in retail are more represented in the sample of Garanti Bank clients (20 percent and 28 percent respectively) compared to Garanti Bank's women SME client portfolio (15 percent and 24 percent respectively). Firms in other services sector are less represented in the sample (52 percent) compared to the overall portfolio (61 percent).

The distribution of the survey sample by firm size is fairly similar to the distribution of Garanti Bank's portfolio of women SME clients. However, the share of small firms with less than 20 employees is smaller (74 percent) and the share of large firms is higher (10 percent) in the sample group compared to the overall portfolio (which comprises 81 percent small SMEs and 3 percent large SMEs).

The comparison sample group was selected using a quota-based sampling methodology, following the proportion of firms similar to the target survey sample—by region, size, and sector. There are however some differences in the distribution. The proportion of Other Bank clients from Transylvania region (59 percent) is higher than the sample of Garanti Bank clients (42 percent). Agriculture, mining and manufacturing are also represented more in the sample of Other Bank clients (38 percent) compared to the sample of Garanti Bank clients (20 percent). Additionally, there is a fewer share of small

Table 5: Regional distribution of survey sample versus Garanti women SME client portfolio

	Sample of Garanti Bank clients (50)	Garanti Portfolio (759)
Transylvania	42%	26%
Muntenia	26%	40%
Moldova	22%	18%
Bucharest	10%	16%

Table 6: Sector distribution of the survey sample versus Garanti women SME client portfolio

	Sample of Garanti Bank clients (50)	Garanti Portfolio (759)
Agriculture, mining and manufacturing	20%	15%
Retail	28%	24%
Other services	52%	61%

Table 7: Firm size distribution of the survey sample versus Garanti women SME client portfolio

	Sample of Garanti Bank clients (50)	Garanti Portfolio (759)
Small (1-19 employees)	74%	81%
Medium (20- 99)	16%	16%
Large (100 – 250 employees)	10%	3%

Table 8: Comparison sample distribution

Region	Size	1-Agriculture, mining and manufacturing	2-Retail	3-Other services	Total
1 Transylvania	1-Small	9%	13%	16%	59%
	2-Medium	16%	3%	0%	
	3-Large	3%	0%	0%	
2 Muntenia	1-Small	0%	0%	6%	22%
	2-Medium	3%	0%	6%	
	3-Large	3%	0%	3%	
3 Moldova	1-Small	3%	3%	3%	16%
	2-Medium	0%	0%	3%	
	3-Large	0%	0%	3%	
4 Bucharest	1-Small	0%	0%	3%	3%
	2-Medium	0%	0%	0%	
	3-Large	0%	0%	0%	
Total by sector		37%	19%	44%	100%

SMEs in the sample of Other Bank clients (56 percent in total) compared to the sample of Garanti Bank clients (74 percent in total). The table below summarizes the regional, sectoral, and size distribution of the of 32 W-SMEs that received financial services from a bank other than Garanti Bank.

INTERVIEWS

The World Bank Group (WBG) team developed the interview questionnaire (based on the Enterprise Survey questionnaire format), which was translated into Romanian for ease of use by the interviewers and the SMEs. Before the data collection stage started, the WBG team led a training session with all IMAS enumerators involved in the SME survey. The field interviews were

conducted with SME senior managers, accountants, and/or human resource managers. Each SME was asked about the business and the change in key variables (sales, profits, number of workers, etc.) between 2011 and 2015, along with details about financial services they have obtained and their experience with banks.

SURVEY RESULTS

This report delves into the results of the survey including the financial services received by W-SMEs and the relationship between the financial services received and their business performance.⁵⁸ In most cases, the average of the responses reported and perceived by respondents have been shown for the sample of 50 Garanti Bank clients and the sample of 32 other Bank clients. At the same time, the

⁵⁸ The results have been shown after removing top and bottom one percentile of outliers.

sample of other Bank clients is not a perfect counterfactual to Garanti Bank clients as seen above, and the sample size is too small to control for factors that affect business performance such as region, size, and age of the firm. Therefore, business performance of Other Bank clients has not been compared to the business performance of Garanti Bank clients. The amounts were reported by clients and have been shown in the local currency unit, Romanian lei. Where necessary, we have converted currency using 2010 average exchange rate, 1 US dollar = 3.1779 Romanian lei and 1 US dollar = 0.75188 euros.⁵⁹

CAVEATS

As described above, the report is based on the survey of a sample of 82 W-SMEs and therefore some inherent limitations must be kept in mind while interpreting the results.

LOW RESPONSE RATE AND SELECTION BIAS: The universe of the target sample was comprised of all 759 firms involved in Garanti Bank's Women Entrepreneur Banking Program. However, only 50 Garanti clients completed the survey after screening them for eligibility conditions, obtaining permission, and taking out those who refused to participate in the survey. The regional, size and sector distribution of the final sample group of 50 Garanti Bank clients approximated the distribution of the Garanti Bank client population. However, to the extent that the responses are driven by un-observables (e.g., it is likely that NPL clients may not be included in the group as they may not have a good relationship with the bank anymore, and therefore Garanti would not have gotten the approval to interview them), **the sample may not be representative, of the population.** Moreover, it must be noted that the survey was conducted in 2016 and 2017, and tries to capture the performance of W-SMEs between 2011 and 2015. As the survey design is not a panel over two time periods, it is likely that there may be **survivorship bias** (as it ignores businesses that no longer exist, but may have existed during the baseline period of 2010).

OMITTED VARIABLE BIAS: The study captures change in key variables (sales, employment, etc.) between 2011 and 2015 to make inferences about the sample's business performance. There could be variables, both internal and external to the firm (macroeconomic conditions, regulations, change in management, etc.), that could have changed during this time period and could have had an impact on the business performance of the sample. However, not all the variables and their changes are captured in our survey, and may cause **omitted variable bias** while estimating the impact of loan amount on the sample's performance.

MEASUREMENT ERROR AND ATTRIBUTION: Data used in this report were provided by senior managers, accountants, and/or human resource managers of the WSME firms to the interviewers. To avoid firms from inflating their performance to appear creditworthy for future lending, the interview was conducted not by loan officers but by a third party. Moreover, enumerators asked for data sources to reduce recall bias and sensitivity. There may still be some **measurement error** when using reported results such as their income, cost of sales, employment, or impact of financial services on firm performance. Furthermore, in some cases, Garanti clients perceive that the financial products they have received from Garanti Bank have led to an increase in sales, net profit, or employment, but they report an actual fall in these variables (sales, net profit, employment). A better understanding of the circumstances and other factors that led to the fall of these business variables also merits further investigation. In addition to this, the survey was conducted over a period of sixteen months, which may create unevenness between the recall data for firms surveyed at different points in time. Besides, the growth rates are estimated between 2011 and 2015 because data were collected only for these two years, notwithstanding the fact that the loan may have been taken towards the end of the five-year period. In some cases this may lead to understatement of the impact of the loan; in other cases the change in key variables may be attributable to factors

⁵⁹ International Monetary Fund, International Financial Statistics.

other than the financial service received.

EXTERNAL VALIDITY: The results of this study are specific to the sample reviewed and can only be used to extrapolate to a population with similar characteristics (women owned/managed SME clients with loans originating between 2011 and 2015 in similar contexts and markets). The multipliers should not be used to extrapolate for non-representative populations or predict effects in the future, as these would not be statistically significant.

LOAN AMOUNT AND FIRM PERFORMANCE

AVERAGE GROWTH IN SALES

Based on the average annual growth rate of sales between 2011 and 2015 for a sample of 34 clients of Garanti Bank Romania, an increase in loan amount by 1 million Romanian lei is associated with sales growth of 2.1 percent points on average, after controlling for sector, firm age, and region, with year fixed effects. The average growth

rate over five years of a firm in existence for 10 years in retail sector in an urban area with a loan size of 855,000 lei is estimated to be around 9 percent on average. The growth rate of firms in food and agriculture, manufacturing, and services was on average higher than that of firms in retail. Age of business also had a statistically significant relationship with sales growth: sales growth on average decreased by 13.2 percent with every year of a firm's existence. Sales growth rate of firms in rural areas was lower than that of firms in urban areas, by 2.3 percent on average.

AVERAGE GROWTH IN PERMANENT FULL-TIME WORKERS

Based on a sample of 31 Garanti clients, the amount of the loan received from Garanti Bank is associated with a marginally positive change in permanent full-time workers, but the change is not statistically significant. Clients in agriculture and services sectors had a higher employment growth rate than the retail sector, while manufacturing had a lower growth rate. Age of business had a statistically

Table 9: Correlates of growth in sales, permanent full-time workers, and labor productivity of Garanti Bank WSME clients

Variables	(1) Growth in sales	(2) Growth in permanent full-time workers	(3) Growth in labor productivity
Loan amount (largest, million LCU)	0.021*** [0.004]	0.006 [0.009]	0.021** [0.006]
Firm age (log)	-0.132*** [0.008]	-0.040*** [0.008]	-0.121** [0.038]
Sector – Food and Agric (dummy)	0.302*** [0.016]	0.009 [0.034]	0.298*** [0.023]
Sector – Manufacturing (dummy)	0.016 [0.014]	-0.082*** [0.015]	0.071*** [0.012]
Sector – Services (dummy)	0.078*** [0.014]	0.011 [0.014]	0.042 [0.029]
Rural (dummy)	-0.023 [0.036]	0.009 [0.023]	-0.033 [0.032]
Constant	0.375*** [0.031]	0.147** [0.048]	0.334** [0.104]
Observations	31	34	31
R-squared	0.623	0.251	0.422
Regression	2011–2015 annual growth with year fixed effects	2011–2015 annual growth with year fixed effects	2011–2015 annual growth with year fixed effects
SE Cluster	Sector	Sector	Sector

Note: Robust standard errors in brackets; *** P ≤ 0.01, ** P ≤ 0.05, * P ≤ 0.1; Only includes W-SMEs; Removed 1% of outliers

significant impact on employment growth; with every year of a firm's existence, growth in permanent full-time workers decreased by 4 percent. Rural areas seemed to have a marginally higher growth rate in permanent full-time workers than urban areas.

AVERAGE GROWTH IN LABOR PRODUCTIVITY

Based on a sample of 31 Garanti clients, an increase in loan amount by 1 million lei is associated with a statistically significant increase in labor productivity growth by 2.1 percent on average. Age of business also had a statistically

significant impact on labor productivity; with every year of a firm's existence, growth in labor productivity decreased by 12.1 percent. Clients in agriculture, manufacturing, and services sectors had a higher growth in labor productivity rate than retail sector. Rural areas seemed to have a lower growth rate in labor productivity than urban areas.

ACCESS TO FINANCE AND FIRM PERFORMANCE

Table 10: Correlates of employment, sales, and labor productivity growth in sales, employment and labor productivity of Romanian W-SMEs, based on Enterprise Survey 2013

Variables	(1) Sales Growth	(2) Employment Growth	(3) Labor productivity Growth
Access to loan	0.133* [0.047]	-0.017 [0.009]	0.091** [0.028]
Firm age	-0.008* [0.003]	-0.005 [0.004]	-0.003 [0.001]
Sector – Manufacturing	0.085 [0.042]	0.021 [0.024]	-0.004 [0.013]
Sector – Services	-0.063 [0.027]	0.003 [0.021]	-0.062** [0.013]
Rural	0.107** [0.029]	0.007 [0.034]	0.013 [0.017]
Sales (2010)		-0.009 [0.008]	
Employment (2010)	-0.002 [0.001]		0 [0.000]
Constant	0.006 [0.072]	0.177** [0.051]	0.07 [0.032]
Observations	311	315	311
R-squared	0.073	0.06	0.045
Regression	Weighted	Weighted	Weighted
SE Cluster	Sector	Sector	Sector

Note: Robust standard errors in brackets; *** P ≤ 0.01, ** P ≤ 0.05, * P ≤ 0.1; Only includes W-SMEs; Removed 1% of outliers



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Creating Markets, Creating Opportunities

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