

Guatemala:

POLICIES FOR BUSINESS RECOVERY, JOBS AND ECONOMIC TRANSFORMATION

September 2021



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Table of Contents

<i>List of figures</i>	<i>iii</i>
<i>List of tables</i>	<i>vii</i>
<i>List of boxes</i>	<i>vii</i>
<i>Abbreviations and acronyms</i>	<i>viii</i>
<i>Acknowledgements</i>	<i>xi</i>
<i>Executive Summary</i>	<i>1</i>
1. Introduction	11
1.1. COVID-19 impacts on firms and policy responses	20
1.2. Overview of priority areas.....	26
2. Business Regulatory Environment	31
2.1. Institutional quality, property rights and contractual environment.....	38
2.2. Regulatory governance and predictability in implementing laws and regulations.....	42
2.3. Cost of doing business in the formal sector	48
2.4. Trade facilitation.....	53
2.5. Digital readiness	57
2.6. Business regulatory environment suggested action plan	61
3. Access to Productive Finance	69
3.1. Current trends in MSME finance.....	69
3.2. Impact of COVID-19 on access to finance for MSMEs and Government response	74
3.3. Providers and products: innovation and diversification	76
3.4. Enabling environment and market Infrastructures	83
3.5. National policies and access to finance for the MSME segment	85
3.6. Access to productive finance suggested action plan	88
4. Promotion and retention of foreign investment in Guatemala	90
4.1. Guatemala’s FDI performance	90
4.2. Summary of constraints affecting investment	96
4.3. Foreign direct investment suggested action plan	101
5. Global value chain participation and development in Guatemala	104
5.1. GVCs for jobs and economic transformation	105
5.2. COVID-19 implications for GVCs	108

5.3.	Current GVC participation and performance in Guatemala	110
5.4.	Main challenges and reform areas	121
5.5.	Global value chains suggested action plan	125
6.	<i>Entrepreneurship and innovation</i>	129
6.1.	Framework	130
6.2.	Entrepreneurship and innovation in Guatemala	131
6.3.	Local entrepreneurship and innovations ecosystems in Guatemala	158
6.4.	Policies for entrepreneurship and innovation in Guatemala	163
6.5.	Entrepreneurship and innovation suggested action plan	175
	<i>Annex 1. Full list of growth and jobs subjects and report coverage</i>	184
	<i>Annex 2. Selection of aspirational and structural peers</i>	185
	<i>Annex 3. Key laws and regulations governing investment in Guatemala</i>	186
	<i>Annex 4. Guatemala Investor-State Dispute Settlement Cases.....</i>	192
	<i>Annex 5. Key Provisions in Guatemala’s International Investment Agreements</i>	194
	<i>Annex 6. Investment Competitiveness Benchmarking Methodology</i>	196
	<i>Annex 7. Investment Competitiveness Benchmarking Sub-Pillar Indicators and Sources.....</i>	197
	<i>Annex 8. Analysis of the Shrimp and Sustainable Fashion Value Chains in Guatemala</i>	202
	<i>Bibliography.....</i>	207

List of figures

Figure 1.	GDP per capita growth of Guatemala, 1961 - 2019.....	11
Figure 2.	Guatemala’s per capita GDP relative to the U.S.	12
Figure 3.	Growth Decomposition, 1951–2017, average (%) per year. Real GDP growth and contributions, percentage points	13
Figure 4.	Labor Productivity over Time, 1991–2017; 1991=100	14
Figure 5.	WBG Jobs and Economic Transformation framework.....	19
Figure 6.	Status of the business at the time of interview	22
Figure 7.	Shock to sales, relative to same period of 2019	22
Figure 8.	Average change in sales relative to same period of 2019, by firm size.....	22
Figure 9.	Average change in sales relative to same period of 2019, by sectors.....	22
Figure 10.	Share of firms experiencing a decrease of weekly hours worked relative to one year ago, by size and sector (%). Wave 1.....	23
Figure 11.	Adjustments to firms’ labor force.....	23
Figure 12.	Value of orders cancelled because of lack of inputs as a fraction of sales, by sectors. Wave 2	23

Figure 13. Value of orders cancelled because of lack of inputs as a fraction of sales, by firm size. Wave 2	23
Figure 14. Availability of cash: average and median number of weeks firms can cover costs. Wave 2	24
Figure 15. Ratio of outstanding liabilities to total sales in 2019 and adjusted to 2020. Wave 2 .	24
Figure 16. Fraction of businesses that started or increased the use of digital technology. Differences across sizes.	25
Figure 17. Most needed policy in each size category and fraction of businesses that demand that policy. Wave 2.	25
Figure 18. Thirty years of stagnant productivity in Guatemala, 1991-2019.....	31
Figure 19. Guatemala’s performance on business environment and corruption	32
Figure 20. Positive business regulation reforms implemented in Guatemala, 2005-2019	33
Figure 21. Guatemala’s overall performance on GCI 2019 (by pillar)	34
Figure 22. Guatemala’s performance in Doing Business 2020 (by indicator)	34
Figure 23. New businesses entry rate in Guatemala and Central America	35
Figure 24. Guatemala has one of the highest informality rates in LAC	36
Figure 25. Guatemala is positioned below Latin American average when it comes to e-government.....	38
Figure 26. Institutional quality, rule of law, and property rights benchmarks.....	39
Figure 27. Guatemala underperforms all its regional peers on resolving a commercial dispute	41
Figure 28. Quality of Land Administration.....	41
Figure 29. WGI’s Government effectiveness and control of corruption, 2018	44
Figure 30. Guatemala has one of the highest percentages of administrative procedures that require three or more interactions to be resolved, as well as the lowest citizen satisfaction in Latin America	45
Figure 31. Number of procedures for sole proprietorships and companies to close a business by institution in Guatemala, 2020	50
Figure 32. Number of procedures, time and cost to obtain a construction permit, 2019	51
Figure 33. Number of payments and time to pay taxes, as well as how easy is to obtain a VAT refund or to correct a mistake after filing the corporate income tax, 2019	53
Figure 34. Countries most targeted by phishing attacks in Central America, 2018	59
Figure 35. Domestic credit to the private sector is below regional peers and has been stagnant	71
Figure 36. Most lending is directed to corporate and consumer segments	72
Figure 37. Use of Financing by Firms and Individuals.....	73
Figure 38. Firms do not rely on financial institutions for investments or working capital	74
Figure 39. Guatemalan firms are cash-constrained and delaying payments	75
Figure 40. Loan Portfolio of MICOOPE, by type.....	78
Figure 41. MICOOPE past due loan portfolio 2019 and 2020.....	78
Figure 42. MICOOPE type of collaterals.....	78
Figure 43. Guatemala’s FDI & GDP Growth Path (2009-2018)	91
Figure 44. Guatemala’s Sources of External Financing (USD bn) (2009-2018).....	91
Figure 45. Guatemala vs. Comparators: FDI Inflows (% of GDP) (2009-2018)	91

Figure 46. Guatemala vs. Comparators: FDI Inward Stock (% of GDP) (2009-2018)	91
Figure 47. Guatemala's Composition of Inward FDI Flows (USD bln) (2009-2018).....	92
Figure 48. Dependency of FDI on Source Countries: Guatemala vs. Comparators (2017)	92
Figure 49. Greenfield FDI (# of Projects) by Industry for Guatemala (2003-2018)	93
Figure 50. Greenfield FDI (# of Projects) by Sector for Guatemala (2003-2018)	93
Figure 51. Investment motivation typology (Dunning and Lundan).....	94
Figure 52. FDI Typology: Share of Guatemala's Greenfield FDI by Type (top) and Type and Sector (bottom). 2012-2016.....	95
Figure 53. Guatemala vs. Comparators: Outward FDI Flows (% of GDP) (2009-2018)	96
Figure 54. Guatemala vs. Comparators: Outward FDI Stocks (% of GDP) (2009-2018)	96
Figure 55. Good practices for the design of investment incentives	98
Figure 56. What is a GVC ?	106
Figure 57. GVCs and growth, productivity and jobs	106
Figure 58. National policies can enhance the benefits of participation in GVCs.....	108
Figure 59. Export Basket Composition 2000 (above) and 2018 (below)	111
Figure 60. Exports by partner	112
Figure 61. Exports and labor value-added.....	112
Figure 62. Guatemala's wood industry export composition, 2018	121
Figure 63. Entrepreneurial ecosystem framework.....	131
Figure 64. Registration of new businesses and GDP per capita, 2018	132
Figure 65. Share of young formal firms (0-3 years in operation), 2017	132
Figure 66. Employment growth in formal firms (%), 2017	133
Figure 67. Average size of formal firms with more than 20 years in operation (# of workers), 2017	133
Figure 68. Global Innovation Index Ranking, 2020	133
Figure 69. Global Innovation Index and GDP per capita, 2020.....	134
Figure 70. GII ranking of LAC countries, 2015-2020	134
Figure 71. Innovation input to output performance, 2020	135
Figure 72. Percentage of firms investing in R&D	136
Figure 73. Percentage of firms that introduced innovations	136
Figure 74. GDP share of R&D investment.....	137
Figure 75. Technological content of exports, 2017. Lall Classification.....	139
Figure 76. Percentage of high-tech manufactured exports and per capita income levels	139
Figure 77. Percentage of firms experiencing deficiencies in infrastructure and service delivery.	140
Figure 78. Percentage of firms in Guatemala experiencing deficiencies in infrastructure and service delivery, by size.....	141
Figure 79. Percentage of population using Internet.....	142
Figure 80. Secure Internet servers per 1 million pp, 2019	142
Figure 81. Fraction of businesses that started or increased the use of digital technology. Differences across sizes	143
Figure 82. Fraction of businesses that started or increased the use of digital technology. Differences across sectors	143

Figure 83. Distribution of the fraction of digital sales	144
Figure 84. Reasons for Technology Adoption for Micro and Small Firms by Firm Size	145
Figure 85. Reasons Percent of Surveyed Firms Citing Barriers to Digital Services in Their Country, by Firm Size	146
Figure 86. Share of adults with tertiary education completed and share of sciences and engineering graduates among total graduates	147
Figure 87. Number of researchers per million people.....	147
Figure 88. Percentage of firms exporting directly or indirectly at least 10 percent of sales	151
Figure 89. Percent of manufacturing firms using material inputs and/or supplies of foreign origin	151
Figure 90. Percentage of firms with international certifications.....	152
Figure 91. Percentage of firms with official websites.....	153
Figure 92. Percentage of adults who believe they have the required skills and knowledge to start a business	155
Figure 93. Percentage of adults who believe that entrepreneurship is a good career choice ..	155
Figure 94. Percentage of adults who fear of failure would prevent them from starting a business	155
Figure 95. Opportunity vs necessity driven entrepreneurship*	155
Figure 96. Percentage of adults who personally know entrepreneurs	156
Figure 97. Ratio of female to male entrepreneurship in 2019	156
Figure 98. Percentage of firms with a female top manager	157
Figure 99. Traditional sectors entrepreneurship ecosystems in Guatemala.....	161
Figure 100. Tradable services ecosystems in Guatemala	161
Figure 101. High-tech entrepreneurship ecosystems in Guatemala	162
Figure 102. Share of government programs supporting businesses, by stages of business development.....	165
Figure 103. Main types of beneficiaries targeted by government programs.....	165
Figure 104. Main sectors targeted by government programs.....	165
Figure 105. Proportion of budget spent in the capital and rest of the country	165
Figure 106. Main mechanisms used by government programs to promote entrepreneurship and innovation (share of programs)	166
Figure 107. Main types of financial support provided by government programs (share of programs).....	166
Figure 108. Main expected outcomes of government support programs (share of programs)	167
Figure 109. KPIs of assessed programs	168
Figure 110. Programs that collect feedback on a regular basis (left) and use it to inform their strategy (right)	168
Figure 111. Main types of beneficiaries targeted by supporting organizations.....	171
Figure 112. Businesses supported by non-governmental organization (by stages of business development).....	171
Figure 113. Main sectors targeted by supporting organizations.....	172
Figure 114. Total beneficiaries by target beneficiaries in 2019, supporting organizations	172
Figure 115. Index of Investment Freedom	186

Figure 116. Currency Inconvertibility and Transfer Restriction Risk	188
Figure 117. Guatemala’s International Investment Agreements	190
Figure 118. Unit value average exports, shrimps (USD/Ton)	202
Figure 119. Exports of frozen (above) and preserved shrimp (below). USD million, current prices	203
Figure 120. Number of destination markets for shrimp (Honduras and others)	203
Figure 121. Quality ladder unit price for shrimp (Honduras and others).....	203
Figure 122. Strategic segments, shrimp and shrimp products.....	204
Figure 123. EU/US buyers are ratcheting up compliance requirements.....	205
Figure 124. Strategic segments, apparel value chain	206

List of tables

Table 1. Priority sectors, areas and territories. National Competitiveness Policy 2018-2032.....	15
Table 2. COVID-19 economic shocks.....	21
Table 3. COVID-19 impacts on firms and policy responses	26
Table 4. Guatemala’s evolution on Starting a Business between 2006 and 2019	49
Table 5. Doing Business Trading Across Borders 2020: Guatemala	54
Table 6. Guatemala’s performance on international benchmarks related to ICT adoption and digital practices.....	58
Table 7. The financial system in Guatemala is bank-centric.....	71
Table 8. Allowed activities to banks and MFIs in Guatemala	81
Table 9. Possible Measures to Cope with the COVID-19 pandemic in the tourism sector	110
Table 10. Selected value chains	113
Table 11. Characteristics of businesses in the data	159
Table 12. Summary of maturing and high potential ecosystems across industries	162
Table 13. Main entrepreneurship and innovation services provided by government support programs.....	173
Table 14. Main entrepreneurship and innovation services provided by supporting organizations, 2019	174
Table 15. Description of Heatmap Scores.....	196
Table 16. Specific characteristics of the Sustainable Apparel segment within the Quick Response Apparel value chain.....	205

List of boxes

Box 1. International good practice examples: high impact regulatory reform	47
Box 2: MSME financing in the National Financial Inclusion Strategy	86
Box 3. Key principles for effective FDI institutional arrangements	97
Box 4. International good practices on incentives’ governance and design	99

Box 5. What has changed with Covid-19 and what has stayed the same in the tourism sector?	109
Box 6. International good practice example: Serbia Innovation Fund	137
Box 7. Progress and challenges in the adoption of digital technologies in Guatemala	144

Abbreviations and acronyms

AGEXPORT	Asociación Guatemalteca de Exportadores (Guatemala Exporters Association)
ANAM	National Association of Municipalities
ASAZGUA	Asociación de Azucareros de Guatemala (Guatemala Sugar Association)
B2B	Business-to-Business
B2C	Business-to-Consumers
BANGUAT	Central Bank of Guatemala (Banco de Guatemala)
BANRURAL	Rural Development Bank
CAMAGRO	Cámara de Agro (Chamber of Agriculture)
CAUCA	Código Aduanero Unico Centroamericano (Central American Customs Code)
CCG	Cámara de Comercio de Guatemala (Guatemala Chamber of Commerce)
CENAC	Centre for Arbitrage and Conciliation from the Chamber of Commerce of Guatemala
CENCIT	Comité Empresarial para las Negociaciones Comerciales Internacionales (Business Sector Committee for Trade Negotiations and Trade Administration)
CIEN	National Economic Research Centre
CIG	Cámara de Industria de Guatemala (Chamber of Industry of Guatemala)
CIV	Ministry of Communications, Infrastructure, and Housing
COFEMER	Federal Regulatory Improvement Commission (Mexico)
COMBEX-IM	Comité de Operación y Mantenimiento de la Bodega de Exportación e Importación de la Aduana Express Aereo
CONAMER	National Commission for Regulatory Improvement (Mexico)
CONRED	National Coordinator on Mitigation for Disasters
CPI	Corruption Perception Index
CRECIG	Conflict Resolution Commission of the Chamber of Industry of Guatemala
DB	Doing Business report
DICABI	Directorate of Cadastre and Real Estate Appraisal
DIPAFRONT	Dirección de Puertos, Aeropuertos y Fronteras, Ministerio de Gobernación. (Directorate of Police for Ports, Airports and Borders)
DMASC	Directorate for Alternative Conflict Solution Methods
eCommerce	Electronic Commerce
eGovernment	Electronic Government
EMPAGUA	Guatemala City's Water Company
eSignature	Electronic Signature

FEL	Electronic Online Invoice (<i>Factura Electrónica en Línea</i>)
FUNDESA	Foundation for Development of Guatemala
G2B	Government-to-Business
G2C	Government-to-Citizen
GB	Gigabyte
GBRU	Global Business Regulation Unit
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GNI	Gross National Income
ICT	Information and Communication Technologies
ICT	Information and Communication Technologies
IDB	Interamerican Development Bank
IGSS	Guatemalan Social Security Institute
IMF	International Monetary Fund
IPRI	International Property Rights Index
ITU	International Telecommunications Union
JOM	Commercial Oral Proceedings Program (Mexico)
LAC	Latin America and the Caribbean
LLCs	Limited Liability Companies
MAGA	Ministerio de Agricultura, Ganadería y Alimentación. (Ministry of Agriculture, Livestock and Food Security.)
MIAD	Modernización Integral Aduanera (Integrated Customs Modernization)
MINECO	Ministry of Economy
MARN	Ministry of Environment and Natural Resources
MSMEs	Micro, small, and medium-sized enterprises
MSPAS	Ministerio de Salud Pública y Asistencia Social. (Ministry of Health and Public Assistance)
NCS	National Cybersecurity Strategy
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
ONSEC	National Office for Civil Service
POT	Land Management Plan
PRA	Property Rights Alliance
PRONACOM	National Competitiveness Program
PROREFORMA	Priority Sectors Reform Program (Mexico)
PROSARE	SARE's quality certificate (Mexico)
RAC	Unit for Alternative Conflict Resolution
RECAUCA	Reglamento al Código Aduanero Único Centroamericano (Regulations for the Central American Customs Code)
RENAP	National Registry of Individuals
RGM	Municipal Management Ranking
RIA	Regulatory Impact Assessments
RGP	General Registry of Property

RIC	Registry of Cadastral Information
RTCA	Reglamento Técnico Centroamericano (Regional Technical Central American Regulation)
SARE	System for Quick Business Start-Up (Mexico)
SAT	Tax Administration Superintendence
SEGAPLAN	Planning and Programming Secretariat of the Presidency
SIECA	Secretaría de Integración Económica Centroamericana (Central American Secretariat for Economic Integration)
SIMPLIFICA	Administrative Simplification Program (Mexico)
SIT	Superintendence of Telecommunications
SMEs	Small and Medium Enterprises
SNFJ	Unit for Judicial Facilitators' National Service
TEA	Total early-stage Entrepreneurial Activity
TFA	Trade Facilitation Agreement (Acuerdo de Facilitación del Comercio)
UNCITRAL	United Nations Commission on International Trade Law
UNCTAD	United Nations Conference on Trade and Development
VAC	Ventanilla Ágil de la Construcción (Agile Window for Construction)
VAI	Ventanilla Ágil para las Importaciones (Agile Window for Imports)
VAT	Value added tax
VECS	Simplified Window for Construction Permits (Mexico)
VIPE	Ventanilla Única para las Exportaciones (Single Window for Exports)
WBG	World Bank Group
WDI	World Development Indicators
WEF	World Economic Forum
WIPO	World Intellectual Property Rights Organization
WJP	World Justice Project
WTO	World Trade Organization

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Abstract

The objective of this report is to inform public policies in Guatemala related to business recovery, jobs, and economic transformation. Analysis and actionable policy recommendations are provided in five complementary areas: 1) business regulatory environment; 2) access to productive finance; 3) foreign direct investment; 4) participation in global value chains; and 5) innovation and entrepreneurship. Reforms in these areas can help address Guatemala's historic growth and productivity challenges, as well as boost recovery from the COVID-19 pandemic, ultimately leading to more and better formal, private sector jobs. Positive government reform initiatives are underway in most of these areas, yet much remains to be done. Complementary reform efforts—e.g., related to worker skills, infrastructure, and security—are also needed but are beyond the scope of the report.

Executive Summary

Low productivity growth has hindered Guatemala from achieving higher levels of income per capita.

Total Factor Productivity has been a drag on real GDP growth in Guatemala since the 1980s. During the same period, the growth rate of labor productivity (measured as value added per worker) has lagged regional and aspirational peers. Although macroeconomic stability and large remittance inflows since the end of the Civil War have allowed Guatemala to grow steadily, growth has been insufficient to offset the mounting divergence between Guatemala's per capita output and that of more developed economies.

Guatemala's dependence on a limited number of low value-added exports restricts its growth potential.

Guatemala's economy is at an intermediate level of diversification, producing relatively simple goods and services that many countries are capable of exporting competitively. Guatemala seems to be less integrated into the world economy than other countries with similar levels of income per capita. Economic transformation based on a more diversified, sophisticated, and dynamic export sector would enable Guatemala to capitalize on greater gains from trade, while also generating better-quality jobs linked to higher productivity growth.

The COVID-19 pandemic hit a Guatemalan economy with stagnant productivity and declining labor earnings, compounding the country's historical growth challenges.

In the short-term, the pandemic generated significant impacts on firms and employment. Liquidity constraints, layoffs, businesses closures, disruptions in supply chains, bankruptcies, and lower investment impacted the operation of thousands of businesses of every size. By the third quarter of 2020, nearly one out of every five formal businesses in Guatemala was temporarily or permanently closed. But impacts are not limited to the short-term. Despite Guatemala's remarkable resilience to the economic impacts of COVID-19, the process of reabsorbing formal workers who have become unemployed, underemployed or inactive during the past year could be lengthy, extending income losses for firms and households in Guatemala. Transitioning from crisis to recovery remains a significant challenge for Guatemala. Ensuring sustainable business growth and job creation, while strengthening policies, institutions and investments will be essential to rebuild a stronger, resilient, and more equitable economy.

Executive Summary

Guatemala needs to create more formal private sector jobs to accelerate the recovery from the COVID-19 shock and to improve living standards in the long term. Although unemployment in Guatemala is relatively low, high rates of inactivity and underemployment pose a significant challenge. For workers to be enticed out of inactivity and into the formal sector, more attractive jobs are needed. Creating more and better private sector jobs in Guatemala will require increasing productivity through economic transformation.

Creating more and better private sector jobs will reduce the incentives for migration and help the country capitalize on its demographic dividend. Migration in Guatemala is strongly associated with economic factors, specifically with unemployment and underemployment. The analysis and recommendations in this report aim to accelerate and deepen economic transformation in Guatemala; consequently, creating better jobs for more people and decreasing incentives for economic migration. Moreover, Guatemala is amid a demographic transition that offers the nation a once-only opportunity to accelerate economic growth and generate shared prosperity. Implementing policy reforms to boost productivity growth and enable economic transformation will be critical to maximize Guatemala's demographic dividend.

Boosting the digital transformation of Guatemalan firms is a cross-cutting theme of this report. Digital transformation could help firms recover faster from the COVID-19 crisis and build resilience to future shocks. Moreover, the adoption of digital technologies will enable Guatemalan firms to better position themselves and compete in both domestic and foreign markets. Despite the high potential of digitization for business development, Guatemala's digital agenda is still nascent, while several constraints prevent firms from using digital technologies intensively. The suggested policy reforms throughout the report include recommendations to consolidate a robust digital agenda and boost the digital transformation of Guatemalan firms.

Increasing women's entrepreneurship and labor force participation is essential to accelerate Guatemala's recovery from the COVID-19 shock and to enable long-term sustainable growth. Gender biases in entrepreneurship impact the dynamism of the entrepreneurial ecosystem in Guatemala.¹ Moreover, the social and economic dynamics generated by the COVID-19 pandemic are exacerbating gender gaps in entrepreneurship and labor force participation. Recent World Bank projections suggest that promoting greater female labor force participation would have strong positive effects on growth, investment and household consumption in Guatemala (World Bank, 2021a). This report proposes short term and structural measures to address key constraints to women's entrepreneurship and labor force participation in Guatemala.

Aside from creating more and better jobs, economic transformation can strengthen the resilience of Guatemalan firms to climate shocks. Many of the subject areas analyzed in the report are either directly impacted by climate change or can contribute to Guatemala's mitigation and adaptation efforts.

This report contributes to the World Bank Group's global focus on Jobs and Economic Transformation (JET). Economic transformation is key to creating more and better jobs. This means shifting from lower to higher-productivity activities, within and across sectors and firms. Economic transformation requires facilitating job-creating investment by the private sector. It also requires a policy and regulatory

¹ Chapter 6 discusses some of these biases in more detail.

Executive Summary

environment that enables workers and entrepreneurs to take advantage of opportunities to access jobs and raise earnings

The report provides in-depth analysis and recommendations in five areas critical to boost productivity and enable economic transformation in Guatemala. The document draws from—and builds on—recent World Bank jobs, growth and digital entrepreneurship diagnostics to identify key constraints for productivity growth, the creation of more and better jobs, and economic transformation in Guatemala. Likewise, the report builds upon the analysis and prioritization of the National Competitiveness Policy 2018-2032 and is aligned with the strategy of the *Guatemala No se Detiene* project. Consultations with the Government and the private sector helped define specific themes to be analyzed and refine policy recommendations. The report focuses on five priority areas:

- i. Business regulatory environment (Chapter 2)
- ii. Access to productive finance (Chapter 3)
- iii. FDI promotion and retention (Chapter 4)
- iv. Participation in global value chains (Chapter 5)
- v. Entrepreneurship and innovation (Chapter 6)

These areas were chosen based on the following factors: importance for recovery and growth; Guatemala's performance vis-à-vis comparator countries; consultations with local stakeholders; complementarity with recent and forthcoming World Bank analytical work; and World Bank global knowledge and potential to add value.

A brief rationale and suggested priority reforms for each area are outlined below. Reforms are categorized as: a) short-term priorities, including COVID recovery reforms and low-hanging fruit; and b) structural reforms that are critical for Guatemala's development in the medium- and long-term. A full list of possible reforms is provided in each chapter's suggested action plan. The reforms listed below have been highlighted as potential priorities based on likely impact and feasibility of implementation.

Business regulatory environment (chapter 2)

Description and rationale	<p>A weak contractual and institutional environment hinders the entry, growth and competitiveness of formal businesses in Guatemala. An inadequate regulatory environment for businesses can limit private sector demand for labor, thus impacting job creation. Likewise, high regulatory and administrative costs undermine a level playing field for the private sector.</p> <p>Legal and regulatory reforms that improve the business environment can facilitate new firm entry, formalization, and development. A healthy business environment can help firms better cope with the challenges posed by the COVID-19 pandemic and facilitate the reallocation of capital and labor from firms that are no longer viable to firms that are able to adapt to new opportunities. Likewise, Guatemala can improve trade openness and reduce the cost and time of trading goods across borders by reviewing its legal framework, streamlining administrative procedures, and enhancing inter-agency coordination for trade facilitation.</p> <p>Chapter 2 identifies possible reforms in five areas to improve Guatemala’s business environment: (i) institutional quality, property rights, and contractual environment; (ii) regulatory governance and predictability in implementing laws and regulations; (iii) cost of doing business in the formal sector; (iv) cost and time of trading across borders through trade facilitation; and (v) digital readiness.</p>	
Short-term priorities	<i>Costs of doing business in the formal sector</i>	<p>Streamline key regulatory processes for business entry, operation, and exit. For instance, by approving the Law on Simplification of Requirements and Administrative Red Tape; fully implementing “Minegocio.gt”; and improving the “Agile Window” for construction permits.</p>
	<i>Trade facilitation</i>	<p>Accelerate the implementation of the Customs Integrated Modernization Plan to enhance post-clearance audits, controls, and allow faster clearance and release of goods.</p> <p>Improve and digitalize cross border procedures of MAG, MSPAS, DIPAFRONT and other border control organisms, including sanitary and phytosanitary license management systems. Initiate implementation of the “Universal Window for Foreign Trade”, integrating the procedures of all the border control agencies: SAT-Customs, MSPAS, MAGA, DIPAFRONT, MARN and others.</p>
	<i>Digital readiness</i>	<p>Implement the Law on the Recognition of Communications and Electronic Signatures in G2B and G2C public services, and speed-up the G2B and G2C digitalization process, focusing on high volume, high frequency, and high impact procedures. At the same time, based on Article 23 of the Law for the Simplification of Procedures and Administrative Requirements, promote systems that allow the completion of procedures and issuance of resolutions by electronic means.</p>
Structural reforms	<i>Institutional quality, property rights, and</i>	<p>Improve the contractual environment by strengthening contract enforcement and promoting alternative dispute resolution mechanisms. Likewise, increase the protection of minority</p>

	<i>contractual environment</i>	investors by modifying the Commercial Code to increase the rights of shareholders.
	<i>Regulatory governance and predictability in implementing laws and regulations</i>	Design and implement a regulatory governance framework, e.g., by designing a law on regulatory improvement with establishing formal participation of the social and productive sectors in the design of regulations.
	<i>Costs of doing business in the formal sector</i>	Enact and implement a competition law to regulate anti-competitive practices (e.g., monopolies and cartels), supervise mergers and acquisitions, and eliminate entry barriers in the Guatemalan market. In this sense, it is suggested that the draft Competition bill be amended in Congress (initiative 5074), so that it is consistent with the development and competitiveness of the Guatemalan economy, especially in international markets.
	<i>Digital readiness</i>	Amend current laws on issues related to e-Commerce and enact laws on data protection and cybercrime. ²
Responsible entities	Executive Organ, Congress, MINECO, MINGOB, MARN, CIV, Ministry of Labor, Ministry of Health, Ministry of Education, PRONACOM, SAT, SENACYT, GAE, SIT, IGSS, Judicial system, Registry of Commerce, RGP, RIC, EMPAGUA, CONRED, ANAM, ONSEC, and relevant line institutions.	

² Including: design and approve a Personal Data Protection Law; design and approve a specific law on electronic commerce to protect online transactions; review and adjust the Consumer and User Protection Law, the Law for the Recognition of Communications and Electronic Signatures; the Law on Copyright and Related Rights; the Law for the Comprehensive Protection of Children and Adolescents, and the General Telecommunications Law of 1996, among others; implementation in all electronic public services of the Law for the Recognition of Communications and Electronic Signatures.

Access to productive finance (chapter 3)

Description and rationale	<p>Access to finance for micro, small, and medium enterprises (MSMEs) is critical to generate employment, productivity gains, and inclusive economic growth. Yet, even in non-crisis periods, most MSMEs in Guatemala struggle to access affordable financing within the formal financial sector and operate on thin margins. The MSME finance gap in Guatemala was recently estimated to reach 22 percent of GDP.³ In this context, tightened credit markets as a result of the COVID-19 pandemic pose a systemic risk for the viability of the MSME sector and its role as a driver of employment and economic growth.</p> <p>Proactive government policies and financial sector reforms can help to mitigate the effects of the COVID-19 crisis on MSMEs and improve MSME finance in the long term. Chapter 3 identifies a range of financial sector policies and reforms that can contribute to improve access to finance for MSMEs in Guatemala. Reform areas covered include: (i) improving the enabling environment for MSME finance; (ii) facilitating availability of diverse and innovative financial products for MSMEs; (iii) strengthening the role of financial cooperatives in MSME finance; and (iv) improving the institutional sustainability, capitalization, and market outreach of the partial credit guarantee fund.</p>	
Short-term priorities	<i>Availability of diverse and innovative financial products for MSMEs</i>	Review the legal framework for microfinance institutions and identify barriers to licensing for existing MFIs. Strengthen the ecosystem for electronic factoring.
Structural reforms	<i>Improve the enabling environment for MSME Finance</i>	Enact a Credit Bureau Law and an Insolvency Law with necessary implementing regulations. Build capacity to improve the insolvency system. The current bill for the Insolvency Law (initiative 5446) could be amended or replaced to align with international good practices.
	<i>Facilitate availability of diverse and innovative financial products for MSMEs</i>	Implement the Leasing Law and build capacity of the industry to develop and scale leasing products.
	<i>Partial credit guarantee fund</i>	Enact a legal framework to enable market entry and growth of fintech firms, including e-money operators and crowdfunding platforms.
	<i>Strengthen the role of financial cooperatives in MSME finance</i>	Improve the institutional sustainability, capitalization, and market outreach of the partial credit guarantee fund
Responsible entities	MINECO, Congress, SIB	

³ Figure for 2018, equivalent to USD 14 billion. SME Finance Forum 2018.

Foreign direct investment (chapter 4)

Description and rationale	<p>FDI enables recipient countries to import ideas, technologies, and know-how from the rest of the world, which in turn spurs productivity and innovation, and contributes to the creation of more and better jobs. FDI can also facilitate the upgrading of local suppliers and their entry into global value chains.</p> <p>FDI inflows have dropped steadily in Guatemala since 2014, and by 2018 the country's inward FDI stock was lower than that of its structural and aspirational peers. Moreover, most of the FDI received has been concentrated in a narrow number of sectors with limited effects on the generation of sustainable growth and quality employment.</p> <p>Chapter 4 identifies a range of reforms to position Guatemala more advantageously among its regional competitors and globally, attract new investments in high-potential sectors, and retain existing investment. Proposed reforms relate to: (i) strategic framework for FDI attraction; (ii) institutional framework for investment promotion; (iii) regulatory and judicial framework for investment; (iv) investment incentives; (v) investment entry and establishment; (vi) investor protection and retention; and (vii) investment linkages.</p>	
Short-term priorities	<i>FDI strategic framework</i>	<p>Revise pre COVID-19 approaches and develop a targeted FDI attraction strategy, aligned with “Proyecto Guatemala no se Detiene”, aimed at encouraging investments in specific sectors and niches with a high potential for growth and jobs in the new post-COVID context, taking into account potential opportunities for nearshoring.</p>
	<i>Regulatory and judicial framework</i>	<p>Conduct a detailed assessment of the regulatory environment for investments to identify investment constraints in key economic sectors.</p>
Structural reforms	<i>Institutional framework</i>	<p>Continue strengthening PRONACOM as a functioning Investment Promotion Agency (in addition to its other functions) or design and establish a new (or redesigned) government agency for the proactive promotion of investment in accordance with international best practices with a single mandate of investment promotion.</p>
	<i>Judicial framework</i>	<p>Review the Foreign Investment Law of 1998 and other regulations to align them with modern investment laws per international best practices and international commitments.</p>
	<i>Investment incentives</i>	<p>Conduct a cost-benefit analysis of the existing incentives regime to identify its efficiency and suitability in a post COVID-19 environment with reduced fiscal space. Compile firm-level data on recipients of investment incentives and conduct economic analysis to evaluate whether incentives are reaching the marginal investors or used in a redundant manner. Use findings from the economic analysis to design an incentive targeting regime that reaches the marginal investor.</p>

Responsible entities	MINECO, PRONACOM, Ministry of Finance
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Participation in global value chains (chapter 5)

Description and rationale	<p>Guatemala’s current participation in global value chains (GVCs) is marked by specialization in agricultural and agribusiness goods and low value-added manufacturing products, such as textiles and apparel, directed primarily to the US market. Recent trends in international markets offer unique opportunities for repositioning Guatemala toward more sophisticated segments of agricultural, manufacturing and services GVCs. Moreover, the COVID-19 pandemic has opened novel opportunities to upgrade Guatemala’s participation in GVCs (e.g., into the adventure tourism segment). Strategic repositioning into dynamic segments of GVCs would strengthen backward linkages between large (local and foreign) firms and Guatemalan SMEs, boosting job creation in Guatemala, particularly for low-skilled workers, and through it, generate opportunities for poverty reduction. National policies play a fundamental role in ensuring that the economic and social benefits of strategic repositioning within GVC materialize, for both SMEs and larger firms.</p> <p>Chapter 5 analyzes selected value chains in Guatemala and presents policy recommendations for their strategic repositioning.⁴ Recommendations focus on: (i) institutional coordination; (ii) improving infrastructure; (iii) fostering human capital; (iv) enhancing the provision of sector-specific public goods; (v) improving market access and FDI attraction; and (vi) digitalization.</p>	
	Short-term priorities	<i>Institutional coordination</i>
<i>Foster human capital</i>		Provide trainings and certifications for specific processes required to upgrade key value chains. For instance, trainings in cold chain management and sustainable packaging (tropical fruits), or bootcamps and short courses on STEM and ICT-related skills targeted to younger people (BPO services).
<i>Digitalization</i>		Promote digitalization of critical processes in strategic value chains. For instance, promote the adoption of improved ICT systems for traceability, or provide digital trainings for use of social media and digital marketing and e-commerce in retail.

⁴ The value chains addressed in the chapter are: Agriculture and Seafood (tropical fruits, cocoa, coffee, seafood), Manufacturing (forest products, textiles and apparel), and Services (tourism and BPO services). Annex 8 provides further information on the Prepared Shrimp and Sustainable Fashion segments of the seafood and apparel value chains, respectively. It should be noted that these chains have been selected for analytical purposes only and are not necessarily representative of the strategic priorities of the current government.

Structural reforms	<i>Institutional coordination</i>	Identify / validate key interventions for medium-term strategic repositioning of selected GVCs, and coordinate with public and private stakeholders to implement selected interventions.
	<i>Enhance the provision of sector-specific public goods</i>	Invest or incentivize investment in R&D to develop products and processes necessary to upgrade Guatemala's participation in strategic value chains. For instance, invest in R&D for identification of fine cocoa aromas best adapted to terroir (cocoa), invest in R&D to develop new local fibers such as hemp or cactus (sustainable fashion), and offer technical assistance to local companies in the provision of more sophisticated BPO services.
	<i>Improve market access and FDI attraction</i>	Improve access to destination markets and attraction of FDI in the targeted segments.
Responsible entities	MINECO, PRONACOM, MAGA, MARN, ASTI, AGEXPORT, Guatemala BPO Commission	

Entrepreneurship and innovation (chapter 6)

Description and rationale	<p>Business innovation—the introduction of new products, technologies, business processes, and ideas in the market—plays a central role in improving firm-level productivity, which in turns influences overall productivity and economic growth. Entrepreneurship is critical for job creation and the generation and adoption of new ideas, and consequently for the productivity and economic growth of nations.</p> <p>Guatemala has relatively high potential for entrepreneurship within the LAC region. However, several supply- and demand-side factors keep the entrepreneurship ecosystem from realizing its full potential. Insufficient access to finance, high regulatory burdens, inadequate human and knowledge capital, among other factors, impact the ability of individuals to start a business, as well as the potential of local businesses in Guatemala to mature and grow over time. Governments can play a critical role in creating an innovation and entrepreneurship-friendly business environment, including supportive financing and advisory programs.</p> <p>Chapter 6 identifies possible constraints limiting the dynamism of Guatemala's entrepreneurship ecosystem and proposes policy actions related to the six themes: (i) innovation and entrepreneurship ecosystem governance; (ii) innovation; (iii) capabilities for entrepreneurship and business development; (iv) business adaptation and technology adoption; (v) entrepreneurship; (vi) local ecosystems; and (vii) linkages with knowledge providers.</p>	
	Short-term priorities	<i>Ecosystem governance</i>
<i>Innovation</i>		Develop and implement a national innovation policy.

	<i>Entrepreneurship and business development capabilities</i>	Implement large-scale online business training to micro and small firms for crisis recovery, adaptation, and digitization, with a focus on female entrepreneurs. Training via an online platform could cover resilience, personal initiative, costs and prices, marketing/ e-commerce, and business model transformation.
	<i>Business adaptation and tech adoption</i>	Implement technology adoption grant program to help firms digitize and transform production to meet new post-COVID-19 demands. Grant programs could be combined with business advisory services to maximize impact.
Structural reforms	<i>Ecosystem governance</i>	Reinforce coordination between entrepreneurship and innovation ecosystem actors (including coordination within the government (e.g., MINECO, SENACYT, MINEDUC), as well as the private sector (innovation and entrepreneurship supporting industries, financial sector), and academia. If needed, an Innovation and Entrepreneurship Coordination Council could be established. The Council (or equivalent body) could be designed as a mechanism to guide innovation, research and development towards the productive needs of the country (in accordance with the guidelines of the National Policy on Innovation).
	<i>Innovation</i>	Identify and finance instruments that support innovation and R&D, based on international good practices and with multiannual financing sources.
	<i>Entrepreneurship</i>	Develop a high potential start-up grant program, with special attention to female entrepreneurship.
Responsible entities	MINECO, SENACYT, MINEDUC, INTECAP, innovation support industry, financial sector	

There are other challenges to Guatemala’s economic recovery and development not covered by this report. Examples included crime and violence, political stability, physical infrastructure and telecommunications, skills and labor market participation, and regional integration. Many of these challenges are covered in complementary World Bank analyses, such as *Unleashing Central America’s Growth Potential (2021)*, *Guatemala Jobs Diagnostic (2021)*, and a forthcoming study on micro-economic competitiveness issues in Central America. A full list of subjects affecting both labor demand and supply and whether they are covered in the report is included in Annex 1.

1. Introduction

1. Sustained but low economic growth in Guatemala since the late 1990s, combined with the COVID-19 shock, present a dual challenge for economic development. Guatemala's macroeconomic conditions have been stable over the last three decades, partly driven by low budget deficits and public debt (World Bank, 2021a). This macroeconomic stability and large remittance inflows since the end of the Civil War have allowed the country to grow steadily but at modest rates; between 1996 and 2019, GDP per capita grew at an average rate of 1.5 percent per annum (Figure 1). However, modest economic growth has been insufficient to offset the continuous decline in relative per capita output since the 1960s. In six decades (1960-2019), Guatemala's GDP per capita relative to the United States decreased from 8.3 percent to 6.1 percent (Figure 2). The COVID-19 pandemic hit a Guatemalan economy with stagnant productivity, high levels of informality, and declining labor earnings, compounding its historical growth challenges. Recent estimates suggest that Guatemala GDP's fell over 3.5 percent in 2020 (World Bank, 2021b).

Figure 1. GDP per capita growth of Guatemala, 1961 - 2019

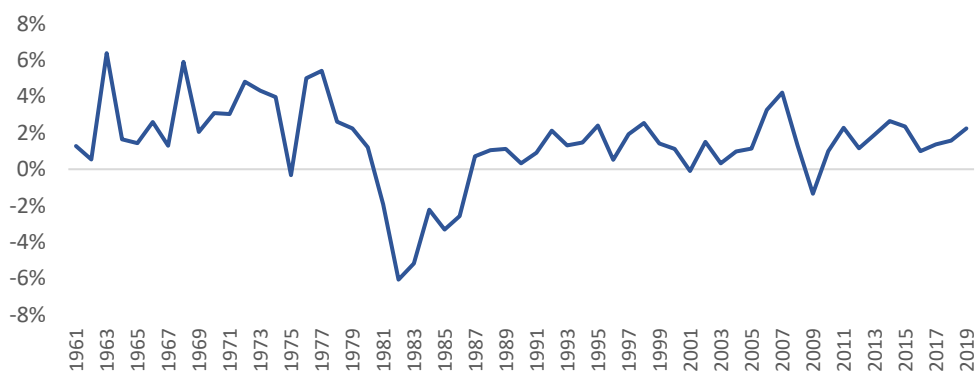
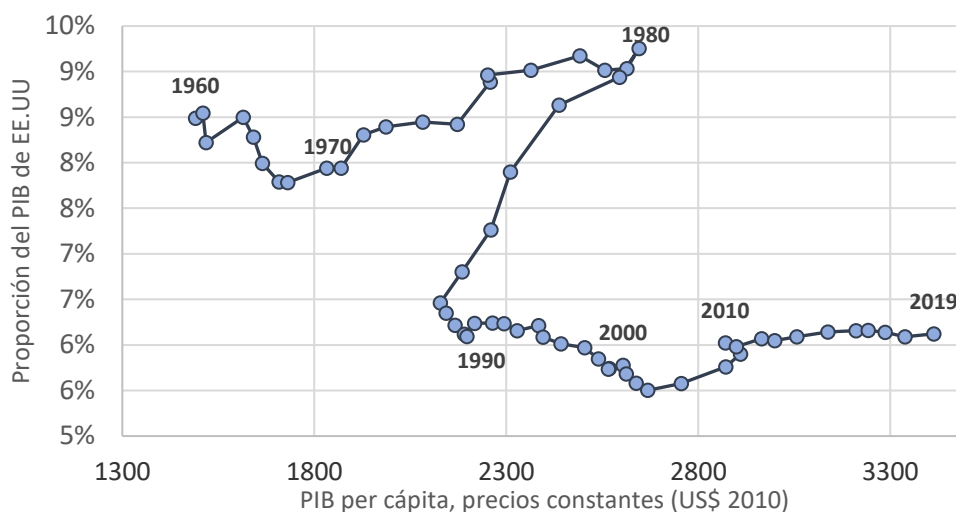


Figure 2. Guatemala's per capita GDP relative to the U.S.

Source: Adapted from (World Bank, 2021a), with data from the World Development Indicators (WDI).

2. It is essential that Guatemala creates more productive, formal private sector jobs to recover from the COVID-19 shock and to improve living standards in the long run. Although Guatemala's labor force is growing rapidly and getting more educated, good well-paying jobs are increasingly scarce, workers have been facing continued declines in average labor earnings and education premia over time. Unemployment in Guatemala is low (2.5 percent in 2018), but underemployment poses a significant challenge: a large share of workers work fewer hours, earn lower incomes, and use their skills less than they would like to. Moreover, the low unemployment rate conceals high informality and gender biases in labor force participation. The recent Guatemala Jobs Diagnostic Report shows that in 2018 only 25 percent of Guatemalan workers were employed in the formal sector, about two thirds of waged jobs lacked formal contracts, and 36 percent of the working age population was inactive (World Bank, 2021c).⁵ For workers to be enticed out of inactivity and the informal sector, more attractive jobs are needed. Creating more and better paying formal private sector jobs in Guatemala will require increasing productivity through economic transformation.

3. The creation of more and better private sector jobs will reduce the incentives for migration in Guatemala. Migration in Guatemala is more related to economic factors than in El Salvador or Honduras. According to a recent IADB survey, nine out of every ten Guatemalan migrants list “economic reasons” as one of the main motivations behind their decision; a larger proportion than family reunification (44 percent) or violence (27 percent). Moreover, among those that reported having migrated for economic reasons, 43 percent pointed to unemployment as the main cause and 45 percent pointed to underemployment (e.g., not enough work or not enough income from work) as the specific reason behind their decision (IADB, 2019). The analysis and recommendations in this report aim to accelerate and deepen economic transformation in Guatemala; consequently, creating better jobs for more people. The

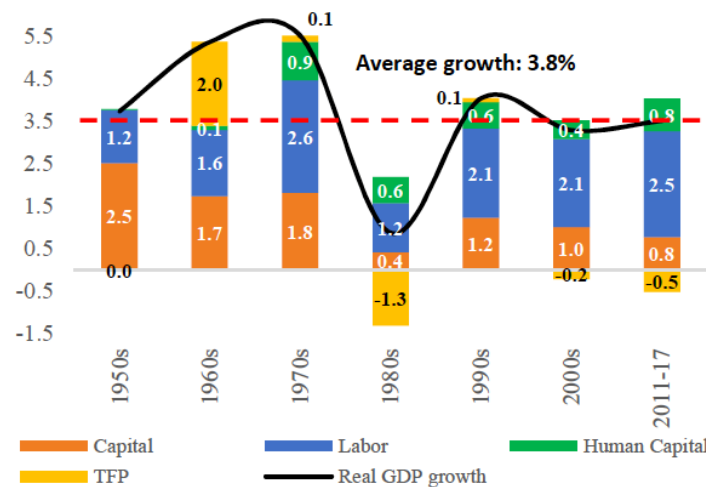
⁵ Female participation in Guatemala is lower than what would be expected given its level of GDP per capita (52 percent) (World Bank, 2021c).

Introduction

report proposes multiple policies and regulatory reforms to improve employment opportunities in the country, thus reducing the incentives for economic migration.⁶

4. Low productivity growth has hindered Guatemala from achieving higher levels of income per capita. For the period 1950–2017, Total Factor Productivity (TFP) in Guatemala grew at an average 0.04 percent and showed significant fluctuations over time (World Bank, 2021a). Even in the period following the end of the Civil War, TFP has been a drag for real GDP growth, averaging -0.2 percent in the 2000s and -0.5 percent between 2010 and 2017 (Figure 3).⁷ Likewise, the growth rate of labor productivity (measured as value added per worker) in Guatemala has lagged behind regional and aspirational peers in the last 30 years (Figure 4).⁸ Low productivity growth could also limit the potential gains from demographic changes over the coming decades. Guatemala is undergoing a demographic transition that offers the nation a once-only opportunity to accelerate economic growth and transform its economy.⁹ However, absent robust productivity growth that leads to more and better jobs, the prospects for taking advantage of this demographic dividend are limited.

Figure 3. Growth Decomposition, 1951–2017, average (%) per year. Real GDP growth and contributions, percentage points



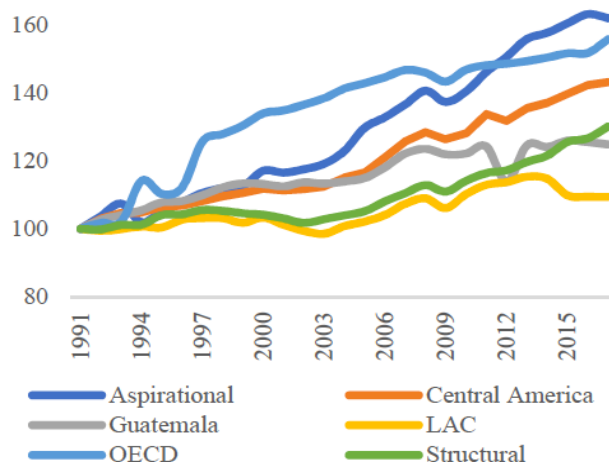
Source: (World Bank, 2021a)

⁶ It can also be argued that economic transformation could indirectly reduce violence-related migration. By improving economic conditions for all Guatemalans, economic transformation would create new and better alternatives for individuals currently engaged in criminal activities, and by reducing crime it could decrease incentives for migration (Jaitman, et al., 2017) (Seelke, 2014).

⁷ Closing the gap in five key determinants of TFP—innovation, education, market efficiency, infrastructure, and institutions—between Guatemala and its aspirational peers by 2035 would lead to an annual GDP per capita growth rate 1.6 percentage points higher than the baseline scenario (in which the gap remains the same). This catch-up in TFP would also result in a poverty rate 17 percentage points below that in the baseline scenario by 2035 (World Bank, 2021a).

⁸ Guatemala’s structural peers are Bolivia, El Salvador, Honduras, Nicaragua, Paraguay and Senegal. Its aspirational peers are Albania, Chile, Jordan, Latvia, Lithuania, Panama and Peru (World Bank, 2021a).

⁹ The demographic dividend is the economic growth potential that results from a large young population entering the labor market, producing lower dependency rates even in the context of significant migration outflows. The 2016 Guatemala Systematic Country Diagnostic pointed out that the country was in the early stages of a demographic transition (World Bank, 2016). Recent data from the 2018 Census confirms that a demographic dividend in the country is already underway.

Figure 4. Labor Productivity over Time, 1991–2017; 1991=100


Source: (World Bank, 2021a)

5. Guatemala's dependence on a limited number of low value-added exports limits its growth potential. Guatemala is at an intermediate level of diversification, producing relatively simple goods and services that many countries are capable of exporting competitively. Although Guatemala's total exports have doubled between 1995-2018, the composition of exports has been largely similar over the same period, with a predominance of agricultural products, apparel, clothing, and low value-added services.¹⁰ The composition of a country's export can significantly impact its prospects of economic growth. Empirical evidence indicates that export composition, when biased toward activities that are more reliant on human capital and technology, can predict higher growth rates in the future.¹¹ Likewise, Guatemala seems to be less integrated to the world economy than other countries with similar levels of income per capita, suggesting that it may not be capitalizing on all potential gains from trade. Economic transformation based on a more diversified, sophisticated and dynamic export sector would help Guatemala generate better-quality jobs linked to higher productivity growth, while also creating buffers against climate shocks and commodity cycles (World Bank, 2021a).

6. The Government of Guatemala has identified 11 priority agendas to increase competitiveness, boost productivity and enable economic transformation. The "Política Nacional de Competitividad 2018-2032" (National Competitiveness Policy - NCP) seeks to align social needs with productivity, increase the qualification of human capital and generate greater opportunities for economic and social development for Guatemalans through well-paying formal jobs (PRONACOM, 2018). The NCP focuses on 11 priority agendas (including the regulatory environment, FDI and the entrepreneurship ecosystem), 11 strategic clusters and 9 secondary cities (Table 1). In 2021 the Government of Guatemala launched the Project "Guatemala No se Detiene" (Guatemala Does Not Stop), which encompasses multisectoral strategies and specific actions to facilitate Guatemala's recovery from the COVID-19 shock and promote long term growth. Specifically, the Plan aims to: (i) strengthen the sectors in which Guatemala already exports competitively, improving their linkages to global value chains; and (ii) leverage the proximity of Guatemala

¹⁰ Based on data from Harvard University Growth Lab's Atlas of Economic Complexity, constant prices. Available online at: <https://atlas.cid.harvard.edu/>

¹¹ See Hausmann & Hidalgo (2010) and Lall (2000).

Introduction

to the U.S. and other large markets to attract efficiency-seeking Foreign Direct Investment (i.e., nearshoring) in sophisticated sectors with potential to transform the economy.¹²

Table 1. Priority sectors, areas and territories. National Competitiveness Policy 2018-2032

Priority Sectors	Priority Agendas	Priority Territories
Forestry, furniture, paper and rubber	Horizontal	Ciudad de Los Altos
	Corruption	
Fruits and vegetables	Security	Ciudad de Las Verapaces
Textile, apparel and footwear	Legal certainty	Ciudad de Guatemala
Processed foods	Chronic malnutrition	Ciudad de Oriente
Beverages	Educational quality	Ciudad de Nor-Occidente
Light Manufacturing	Vertical	Ciudad Portuaria de Puerto Barrios
	Bureaucracy costs	
Metalworking	Infrastructure and Logistics	Ciudad Valle de Panchoy
Tourism and Health Services	Sustainability of the energy sector	Ciudad de Petén
Transport and logistics	Research, development and innovation	Ciudad Portuaria de San José
ICT, software & Contact Centers	Entrepreneurship ecosystem	
Construction	Attraction of Foreign Direct Investment	

Source: Adapted from (PRONACOM, 2018)

7. This report provides in-depth analysis and recommendations in five areas strongly aligned with the Government of Guatemala’s priority agendas. The report draws from and builds on recent World Bank jobs, growth and digital entrepreneurship diagnostics (World Bank, 2021a, 2021c; Montenegro et al, 2021) to identify key constraints for productivity growth, the creation of more and better jobs, and economic transformation in Guatemala. Likewise, the report builds upon the analysis and prioritization of the NCP 2018-2032 and is aligned with the *Guatemala No se Detiene* project. Consultations with the Government and the private sector helped define specific themes to be analyzed and refine policy recommendations. The report focuses on five priority areas:

- i. Business regulatory environment (Chapter 2)
- ii. Access to productive finance (Chapter 3)

¹² Current sectors considered in the Plan include: apparel, textiles, agriculture, foods and beverages, and chemicals; high-potential sectors include: pharmaceuticals, medical devices, high-tech manufactures, and BPOs. Based on information from PRONACOM: “Sector público y privado se unen para fomentar la inversión a través del convenio ‘Guatemala No se Detiene’”. Available online at <https://www.pronacom.org/2021/02/17/sector-publico-y-privado-se-unen-para-fomentar-la-inversion-a-traves-del-convenio-guatemala-no-se-detiene/>

Introduction

- iii. FDI promotion and retention (Chapter 4)
- iv. Participation in global value chains (Chapter 5)
- v. Entrepreneurship and innovation (Chapter 6)

8. These areas were chosen based on the following factors: importance for recovery and growth; Guatemala's performance vis-à-vis comparator countries; consultations with local stakeholders; complementarity with recent and forthcoming World Bank analytical work; and World Bank global knowledge and potential to add value.

9. The areas all play a vital role in boosting productivity and facilitating economic transformation. There are three main ways to boost the productivity of an economy: creating new dynamic and innovative firms, with higher-than-average productivity; increase the productivity of existing firms; and shifting workers from less productive to more productive firms and sectors. For instance, a friendly business environment facilitates the opening of new firms, as well as the closure of uncompetitive firms and the reallocation of labor between them. It also incentivizes productivity-enhancing competition by creating a transparent and level playing field. Access to finance is critical for new and existing firms to make productivity-enhancing investments. FDI can bring foreign firms that are more productive and can transfer technology to local firms. Upgrading participation in global value chains entails adopting more productive technologies and producing higher value-added exports. Innovation and entrepreneurship are fundamental to the creation of dynamic startups and new and better products and processes within firms.

10. The COVID-19 crisis has intensified the urgency for reforms to support the recovery and sustainable growth of micro, small and medium enterprises (MSMEs) as well as younger firms. The supply and demand shocks caused by the COVID-19 pandemic have intensified the need to boost productivity and economic transformation in Guatemala. In this sense, the five priority areas covered in this report are highly relevant for Guatemala's recovery in the short and medium term but are also essential to achieve higher long-term growth rates and create a more equitable and inclusive economy. Many businesses that are no longer viable will have to close and capital and labor will have to be reallocated to more productive firms, requiring a flexible and agile business environment. Likewise, access to productive finance will be critical to bridge liquidity shortages. The crisis will likely open opportunities for innovative entrepreneurs to adapt their business models, increase their use of digital technologies, and produce newly demanded products and services. There is an emerging international consensus around the importance of helping viable SMEs—particularly medium-sized enterprises—survive, as their strong organizational capital and productive structures would be hard to replace if lost. Research also suggests that firm age can be an important targeting criterion, given that job creation tends to be driven by a small set of young and fast-growing firms. Accordingly, the analysis in this report is geared to micro, small, and medium enterprises (MSMEs), as well as younger firms. Section 1.1 presents an overview of COVID-19 transmission channels, impacts on firms, and high-level policy responses; greater detail on COVID-19 impacts to priority areas and their policy implications are included in each of the chapters of the report.

11. Improving the institutional framework for policymaking related to jobs and economic transformation is a cross-cutting theme in this report. Among other things, improving the institutional framework will entail increasing predictability in the implementation of laws and regulations and creating mechanisms for effective coordination among national and subnational institutions (Chapter 2); creating

Introduction

an enabling environment that fosters innovation in financial products for MSMEs (Chapter 3)¹³; and defining a clear mandate for the agency responsible for investment attraction in line with international best practices for proactive investment promotion (Chapter 4). Likewise, it is critical to improve coordination with the private sector through frequent formal and informal consultations (Chapters 5 and 6). Better coordination can yield more integrated and coherent strategies that enjoy widespread support, maximize complementarities, and avoid unnecessary overlaps in public efforts. The suggested action plans in each chapter propose short- and long-term measures to improve the institutional framework related to economic transformation in Guatemala.

12. Boosting the digital transformation of Guatemalan firms is another cross-cutting theme. Digital transformation could help MSMEs to recover faster from the COVID-19 crisis and build resilience to future shocks (BCG, 2020). Moreover, in the current global trend toward greater businesses digitization, the adoption of digital technologies will enable Guatemalan firms to better position themselves and compete in both domestic and foreign markets. Despite the high potential of digitization for business development, the Government's digital agenda remains underdeveloped, while several constraints prevent MSMEs from using digital technologies intensively. A recent Nextrade Group survey identifies the lack of knowledge about the various technologies available as the main constraint to digitization among Guatemalan MSMEs, followed by financing gaps and concerns about the return on investment in technologies (Nextrade Group, 2021). The action plans for each priority area include recommendations to boost the digital transformation of Guatemalan firms. Chapter 2 proposes multiple measures to consolidate a digital agenda and improve the efficiency in the provision of strategic government services through e-government. Chapter 3 analyses the fintech ecosystem in Guatemala and proposes actions to enable the entry and growth of e-money issuers, crowdfunding platforms and electronic factoring. Chapter 5 proposes trainings on digital marketing, feedback capture and customer relationship management for the fashion and tourism value chains. Chapter 6 proposes the implementation of small grants or vouchers for digitization and e-commerce adoption among MSMEs.

13. Increasing women's entrepreneurship and labor force participation is essential to accelerate Guatemala's recovery from the COVID-19 shock and to enable long-term sustainable growth. Significant gender biases in entrepreneurship limit the dynamism of the entrepreneurial ecosystem in Guatemala.¹⁴ Only one fifth of formal firms are managed by women, significantly below the share observed in comparable countries such as El Salvador or Honduras. Likewise, female labor force participation in Guatemala stands at 40 percent, the lowest in Central America (43 percent) and well below that of men (83 percent). Recent projections suggest that promoting greater female labor force participation would have strong positive effects on growth, investment and household consumption.¹⁵ Moreover, the social and economic dynamics generated by the COVID-19 pandemic are exacerbating the gender gaps in

¹³ For instance, by enacting several key laws (including a Credit Bureau Law, Leasing Law and Insolvency Law). Chapter 3 provides further details on these laws and other high-potential actions to build an enabling environment for MSME finance in Guatemala.

¹⁴ Entrepreneurial ecosystems gain dynamism when women are provided with factors of production and gender biases are removed. For instance, female-led firms in Guatemala offer access to formal training to a greater share of their workers than male-led firms – 80 percent vs 50 percent, respectively (see Chapter 6, based on data from the World Bank Enterprise Surveys).

¹⁵ Reducing the gender gap in labor force participation would gradually boost labor supply, it could encourage private investment (both domestic and foreign) and would benefit households through an increase in household income and consumption. Increasing women's labor force participation to reach half of that of men is estimated to increase GDP by 6.8 percent by 2030 (World Bank, 2021a).

Introduction

entrepreneurship and labor force participation in Guatemala.¹⁶ According to High-Frequency Phone Surveys conducted in 13 countries in Latin America and the Caribbean (LAC) during 2020, female workers were 44 percent more likely than male workers to lose their jobs at the onset of the COVID-19 pandemic. Women also were more likely to remain unemployed as the crisis evolved and temporarily unemployed workers returned to work (World Bank, 2021d).

14. This report proposes short term and structural measures to address key constraints to women's entrepreneurship and labor force participation in Guatemala. Proactive government policies and financial sector reforms can mitigate the effects of the COVID-19 crisis on women-owned MSMEs and improve MSME finance in the long term. Chapter 3 identifies key regulatory reforms to enable market entry and growth of fintech firms and financial cooperatives, which could greatly improve financial inclusion in Guatemala, particularly among women, indigenous populations and in rural areas. Chapter 4 highlights the need for a better articulation of the role of FDI to achieve key policy goals (e.g., economic growth and diversification, job creation and female labor force participation). This implies the introduction of a robust M&E framework for FDI attraction that integrates key performance indicators (KPIs) related to gender and diversity. Moreover, women in Guatemala tend to have smaller entrepreneurial networks than men, are more likely to become entrepreneurs out of necessity than opportunity, and are less likely to own digital and high-tech firms.¹⁷ Chapter 6 proposes the development of training and support programs that could target female entrepreneurs.

15. Aside from creating more and better jobs, economic transformation can strengthen the resilience of Guatemalan firms to climate shocks. This report approaches climate change as a cross-cutting theme, as most of the priority areas analyzed are either directly impacted by climate change or can contribute to Guatemala's mitigation and adaptation efforts. Guatemala participates mostly in global value chains of low value-added manufacturing (mostly in textiles and apparel) and its exports are concentrated in a small number of countries. Incipient export diversification limits the growth potential of Guatemalan firms and also increases their vulnerability to climate shocks.¹⁸ Furthermore, firms in several key sectors face increasing demands in sophisticated export markets to comply with environmental concerns over land use and deforestation practices. Thus, climbing the value ladder and reaching new markets may require significant changes to current production and distribution processes. For instance, Chapter 5 identifies an opportunity for Guatemala's apparel industry to move to "Sustainable Fashion", a more dynamic segment with greater value added. This repositioning would require trainings and certifications in energy and water efficiency, as well as better labor practices in design, cutting, sewing and finishing processes (Chapter 5). Likewise, R&D investments are needed to develop sustainable local fibers (e.g., hemp, cactus). Chapter 6 proposes the implementation of grant and voucher programs to incentivize technology adoption and innovation. These programs, combined with business advisory

¹⁶ According to World Bank (2021d, p. 1) "Females hold a disproportionate share of occupations requiring face-to-face interactions, such as in retail, personal care, and tourism, making them less likely to work from home and prone to becoming unemployed. Females are more likely than males to be employed in the informal sector and in other vulnerable forms of employment".

¹⁷ Based on recent data from the Global Entrepreneurship Monitor 2020 and the World Bank Enterprise Survey (2017).

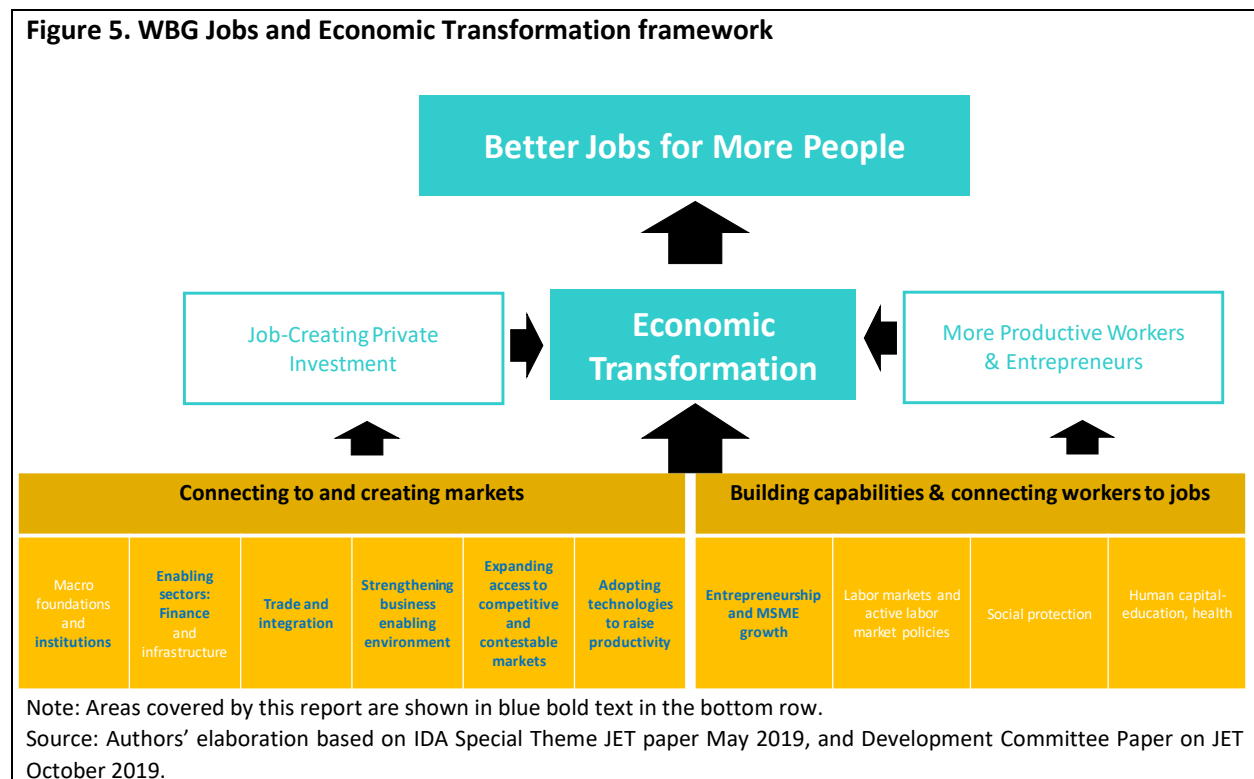
¹⁸ Empirical evidence suggest that economic diversification can create buffers against climate shocks and commodity cycles. For instance, Koren & Tenreyro (2007) find that countries with weak financial infrastructure that specialize in sectors with high intrinsic volatility usually suffer from greater aggregate volatility. Moreover, the study shows that if a country's volatility is related to high exposure to a few high-risk sectors, then diversifying the economy (as well as strengthening financial institutions) may reduce output volatility. Adapted from (World Bank, 2021a).

Introduction

services, could help firms develop and implement more sustainable and resource efficient production processes.

16. There are other challenges to Guatemala’s economic recovery and development not covered by this report. Examples included crime and violence, political stability, physical infrastructure and telecommunications, skills and labor market participation, and regional integration. Some of these challenges are covered in complementary World Bank analyses, such as *Unleashing Central America’s Growth Potential* (2021), *Guatemala Jobs Diagnostic* (2021), and forthcoming study on competitiveness in Central America. A full list of subjects affecting both labor demand and supply and whether they are covered in the report is included in Annex 1.

17. This report contributes to the World Bank Group’s global focus on Jobs and Economic Transformation (JET).¹⁹ The JET framework aims to create better jobs for more people, and accelerating economic transformation is the primary way to deliver on this goal in a sustainable way. Economic transformation is driven by job-creating private investment and more productive workers and entrepreneurs. In this sense, the JET framework aims to create deep structural changes and market integration that catalyzes additional opportunities and raises productivity. It requires facilitating private sector investment and generating a policy and regulatory environment that enables workers and entrepreneurs to take advantage of opportunities to access jobs and raise earnings (Figure 5).



¹⁹ See IDA Special Theme JET paper (May 2019) and Development Committee Paper on JET (October 2019).

1.1. COVID-19 impacts on firms and policy responses

18. The Guatemalan economy contracted by an estimated 3.5 percent in 2020, as pandemic control measures and the risk-averse behavior of households and firms restricted activity in the formal sector.²⁰

The COVID-19 pandemic hit a Guatemalan economy with stagnant productivity, high levels of informality and declining labor earnings, compounding its historical growth challenges. Formal employment, hours worked, and labor income dropped sharply across the country in 2020. Women, youth and vulnerable communities have borne a disproportionate share of job losses.²¹ Moreover, a marked decline in exports and a slowdown in remittance inflows are exacerbating the private consumption slowdown in the country.²² Overall, the large income shock has contributed to rising food insecurity in the country and is estimated to have pushed close to one million people into poverty—equivalent to a six percentage point increase in Guatemala’s poverty rate.²³

19. A significant proportion of formal firms and jobs in Guatemala are concentrated in sectors with high vulnerability to the economic impacts of COVID-19. Tourism, transport, retail, food services, and entertainment are among the sectors with the highest vulnerability to COVID-19 shocks. High-vulnerability sectors concentrate 13 percent of formal firms and 16 percent of formal employment in Guatemala. Sectors that can operate at reduced capacity, such as manufactures, wholesale and educational services, conform the moderate vulnerability category. The sectors in this category concentrate 73 percent of formal firms and generate 70 percent of formal employment. The remaining category, low-vulnerability sectors, includes agriculture, health services, and social services, among others. These sectors concentrate 14 percent of formal firms and 14 percent of formal jobs (World Bank, 2020e).²⁴

20. The COVID-19 shock is damaging otherwise healthy firms in Guatemala through multiple channels. Smaller firms are particularly vulnerable. Economic shocks are being transmitted through falling demand, reduced and disrupted supply chains, tightening of credit conditions, and rising uncertainty. Table 2 summarizes the types of economic shocks brought about by the COVID-19 epidemic and affected firms.

²⁰ Although a significant contraction, relative to its regional peers, Guatemala ranks among the countries with the lowest GDP drops as a consequence of the COVID-19 pandemic; in 2020, the combined GDP of LAC’s economies contracted by an estimated 6.9 percent (World Bank, 2021b).

²¹ Adapted from World Bank (2021b) based on Bottan, Hoffmann, & Vera-Cossio (2020) and ILO (2020).

²² World Bank (2021b)

²³ See World Bank (2020a) and WFP (2020). Moreover, recent estimates from the “Instituto Centroamericano de Estudios Sociales” suggest that extreme poverty could increase by, at least, 2.6 percentage points—from 23.4 percent to 26 percent ICEFI (2020).

²⁴ This World Bank technical note uses tax returns data from the Superintendency of Tax Administration to simulate the impact of shutdowns on profitability and payroll of formal firms in Guatemala, and finds that only 34 percent of formal firms in Guatemala would remain profitable after a shutdown of three months. In this scenario, only 15 percent of high-vulnerability firms would remain profitable. Likewise, a shutdown of 3 -5 months would result in a 23 - 41 percent decline in payroll in high-vulnerability sectors, respectively. Adding informal firms and workers would make these numbers much higher (World Bank, 2020e).

Table 2. COVID-19 economic shocks

	Shutdown shock	Demand and supply shocks (beyond shutdown)	Financial shock	Uncertainty shock
Description	Result of containment measures to halt the spread of the disease. Simultaneous supply and demand shock.	Reduced consumer and business demand due to global shutdowns, recession, value chain disruptions (also a supply shock).	Reduction of financial intermediation and credit allocation due to deterioration of banking assets and increased risk	Uncertain global economic conditions likely to dampen business investment and risk-taking
Duration	Short-term	Medium- to long-term	Medium- to long-term	Long-term
Affected firms	Non-essential businesses, especially travel/ tourism, hotels, restaurants, entertainment, personal services, retail (except food and pharmacies)	Manufacturing, particularly durables and exports (strategic sectors) Tourism, due to slow resumption of global travel	Particularly firms with less robust pre-crisis access to finance, e.g. micro, small, and nascent firms	Particularly firms with investments that have uncertain returns (e.g. innovative firms) and long payoff periods

Source: Author's elaboration. Note: In this table short-term represents less than a year, medium-term between 1 and 1.5 years, and long term more than 1.5 years.

21. Data from recent waves of World Bank Enterprise Surveys (WBES) show the dramatic impacts of the COVID-19 pandemic on formal firms in Guatemala, but also indicate that a sluggish recovery is underway.²⁵ An important measure of the effect of the pandemic on the private sector is the share of firms that have exited the market during the economic crisis. In the third quarter of 2020, nearly one out of every five formal businesses in Guatemala were temporarily or permanently closed. However, by the end of the year most formal businesses (96 percent) were back to full operations (Figure 6). Likewise, the impact of the crisis on firms' monthly sales has been severe but has lessened over time. Data from Wave 1 of the WBES show that the median firm's monthly sales had decreased by 50 percent compared to the same period one year before. By the end of 2020—Wave 2—this figure had decreased to 20 percent (Figure 7). However, sales are not recovering at the same speed across all firm sizes and sectors.²⁶ Micro and small firms experienced greater initial drops in sales and are recovering more slowly than medium and large enterprises (Figure 8). Similarly, firms in retail trade experienced less drastic average drops in sales than firms in manufacturing and other services, but their recovery has been slower (Figure 9). The data also shows that the recovery has been faster among non-exporters and women-led firms (World Bank, 2021e).

²⁵ The follow-up surveys to the standard Enterprise Surveys aim to measure the COVID-19 pandemic's impact on the private sector by combining baseline data collected before the pandemic (2017) with follow-up data, collected in two waves of surveys during the pandemic: Wave 1 (June 2020 – August 2020) and Wave 2 (December 2020 – January 2021).

²⁶ The analyses in this section use the following categorization of firm sizes: Micro (0-5 employees); Small (5-19 employees); Medium (20-99 employees); Large (+100 employees).

Introduction

Figure 6. Status of the business at the time of interview

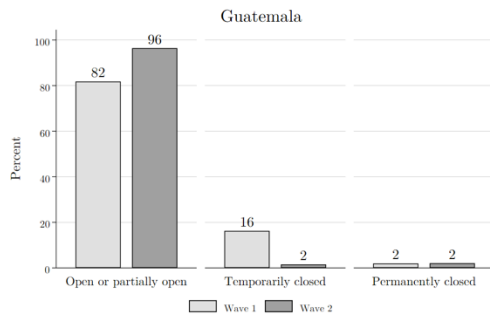


Figure 8. Average change in sales relative to same period of 2019, by firm size

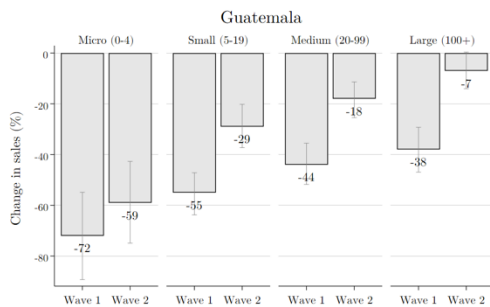


Figure 7. Shock to sales, relative to same period of 2019

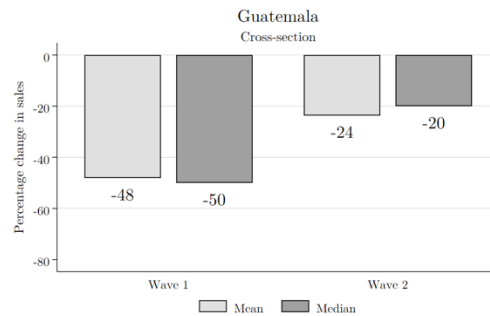
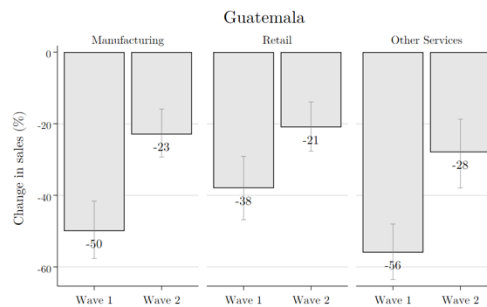


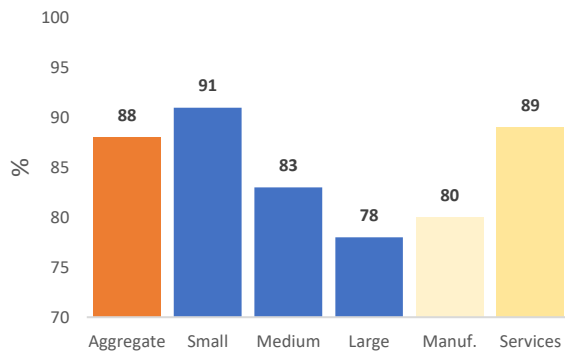
Figure 9. Average change in sales relative to same period of 2019, by sectors



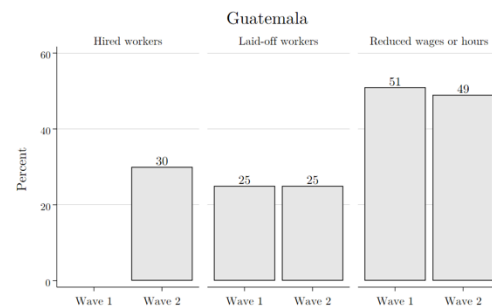
Source: (World Bank, 2021e)

22. Employment in the formal sector was hit severely, but firms are starting to hire workers again. The pandemic has had both direct and indirect effects on the workforce. Risk-averse behavior of households and firms, restrictions on mobility and other containment measures, and, in general, reduced economic activity, impacted labor demand in the formal sector drastically. One measure of the pandemic’s impact on the workforce is the share of firms that decreased the total number of hours worked per week relative to before the outbreak. Data from Wave 1 of the WBES shows that about 88 percent of Guatemalan firms experienced a decline in weekly hours worked relative to the same period one year before (World Bank, 2020c). The impact was heterogeneous among different firm sizes and sectors, with smaller firms and businesses in the services sector being impacted the most (Figure 10). However, as Figure 11 shows, in the latter part of the year and the beginning of 2021 about one third of formal firms started hiring workers again (World Bank, 2021e).²⁷

²⁷ It is worth noting that there is no correlation between the changes in sales and employment reported in the second wave of the WEBS. Thus, the adjustments in employment observed between waves seem to be motivated by other reasons (World Bank, 2021e).

Figure 10. Share of firms experiencing a decrease of weekly hours worked relative to one year ago, by size and sector (%). Wave 1


Source: (World Bank, 2020c),

Figure 11. Adjustments to firms' labor force


Source: (World Bank, 2021e)

23. The pandemic has also impacted supply chains and contributed to greater financial distress for formal firms. Restrictions on mobility and operating hours have disrupted supply chains, indirectly impacting firms' sales. As Figure 12 shows, on average, one fifth of sales orders of firms in the manufacturing and retail sectors were cancelled due to lack of inputs (reported between December 2020 – January 2021). Sales of micro and medium-sized businesses have been impacted the most by disruptions in the supply chain (Figure 13). On the other hand, formal firms have experimented growing liquidity and solvency constraints as a consequence of limited economic activity. Data from Wave 1 of the WBES shows that, in the third quarter of 2020, about 46 percent of Guatemalan firms were delaying payments to suppliers, landlords, or tax authorities for more than one week due to the COVID-19 shock (World Bank, 2020c). Moreover, Wave 2 data shows that firms expect to cover an average of 10 weeks of operating costs with the cash they have available (Figure 14). Likewise, debt ratios have increased for many firms in Guatemala but are still manageable, unless the shock persists in the long term (Figure 15).

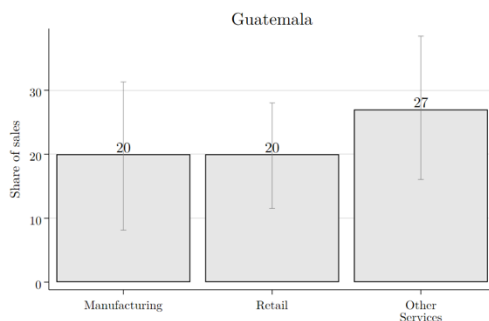
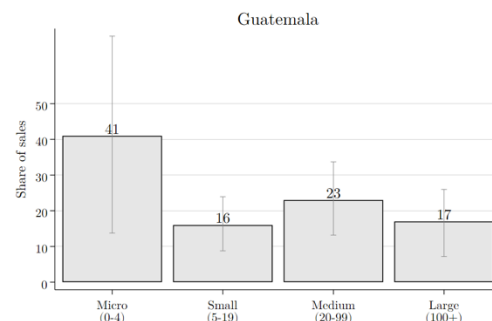
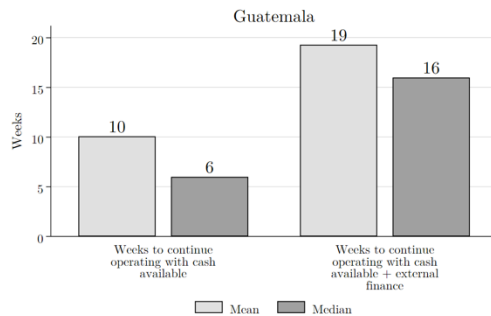
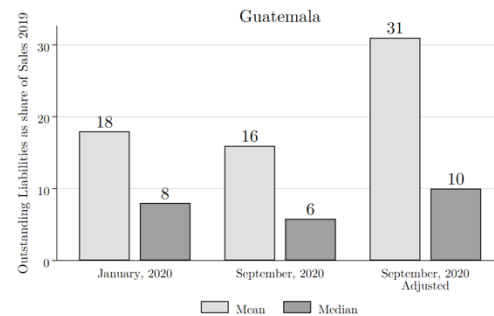
Figure 12. Value of orders cancelled because of lack of inputs as a fraction of sales, by sectors. Wave 2

Figure 13. Value of orders cancelled because of lack of inputs as a fraction of sales, by firm size. Wave 2


Figure 14. Availability of cash: average and median number of weeks firms can cover costs. Wave 2


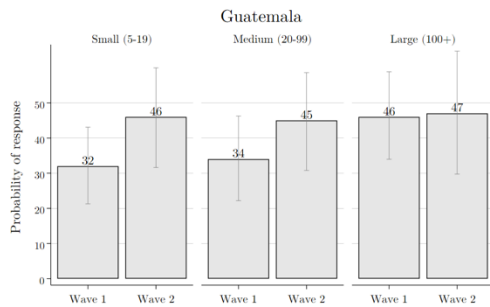
Source: (World Bank, 2021e)

Figure 15. Ratio of outstanding liabilities to total sales in 2019 and adjusted to 2020. Wave 2


24. Despite its multiple challenges, the COVID-19 pandemic has also opened up opportunities for firms to adapt and satisfy new consumer and business demands. The potential push for diversification in multinational companies may allow suppliers from Latin America and the Caribbean to increase exports and participate in new segments of GVCs that previously faced intense competition from Asian countries. Likewise, in spite of the massive disruption experienced by international travel, the pandemic may also generate opportunities for diversification and upgrading in the tourism industry in the medium term (see Chapter 5). Moreover, COVID-19 has generated a large positive shock on digitization in Guatemala, as firms have adapted to reduced physical transactions through increased use of digital platforms. Data from the COVID-19 WBES show that close to 45 percent of small and medium-sized businesses surveyed between December 2020 and January 2021 increased their use of digital technologies as a response to the COVID-19 shock (Figure 16)

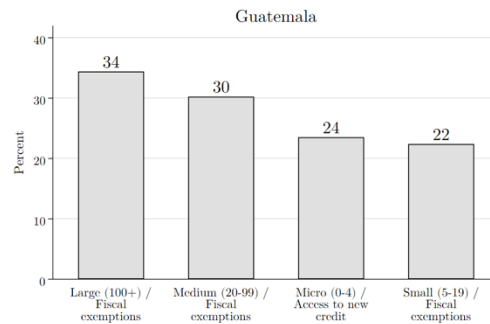
25. Guatemalan businesses report tax exemptions and access to new credit as their top needs to cope with the COVID-19 shock. When asked between December 2020 and January 2021 about what type of support would be required to weather the crisis, 45 percent of firms prioritized fiscal exemptions and 18 percent identified access to new credit (Figure 17). Fiscal exemptions seem to be more relevant for medium, small and large businesses, while microenterprises identified increasing access to credit as the most needed policy response. Other priority support areas—as reported by firms—include deferral of payments, wage subsidies, grants, and support for technology adoption (World Bank, 2021f).

Figure 16. Fraction of businesses that started or increased the use of digital technology. Differences across sizes.



Source: (World Bank, 2021f)

Figure 17. Most needed policy in each size category and fraction of businesses that demand that policy. Wave 2.



26. The Government of Guatemala has taken some swift actions to mitigate the economic impacts of the crisis, but resource allocations and sustained further action is needed. Under the umbrella of the “*Plan General de Atención a la Emergencia COVID-19*” and, more recently, the “*Plan para la Recuperación Económica de Guatemala*” the Government designed and has implemented multiple policy actions to address the immediate effects of the COVID-19 shock in the economy and promote a faster recovery in the medium and long term.²⁸ Moreover, in February 2021 the Government of Guatemala signed an intersectoral agreement to implement the “*Project Guatemala No se Detiene*”, which establishes a roadmap to attract more FDI to develop high-potential sectors and strengthen key export-oriented industries.²⁹ However, resources and detailed design and implementation plans are still needed for some of these initiatives, and only a modest fraction of firms appear to have benefitted from support programs to date. According to the results of the 1st Wave of the COVID-19 WBES (June-August 2020), 28 percent of firms had access to COVID-related national or local government assistance. By the end of the year (Wave 2 of the Survey) only 12 percent of firms reported having access to public support (World Bank, 2021f).

27. Guatemala has a unique opportunity to build back better from the crisis. Creating an enabling environment for economic transformation, and by doing so boosting productivity and creating better jobs for more people, will help mitigate the long-term impacts of the pandemic. The process of reabsorbing formal workers who have become unemployed, underemployed or inactive during the past year could be

²⁸ The “*Plan para la Recuperación Económica de Guatemala*” (presented in April 2020) was structured around (i) preventing and reducing the spread and spread of COVID-19; and (ii) containing the economic recession and mitigating its impact on the most vulnerable sectors of the population (MINFIN, 2020). The “*Plan para la Recuperación Económica*” (presented in October 2020) aims to recover and generate new sources of income for Guatemalans. The Plan is structured around three axes: (i) recover and generate more jobs; (ii) attraction of strategic investments; and (iii) promote the consumption of Guatemalan goods and services (MINECO, 2020).

²⁹ The “*Proyecto Guatemala No se Detiene*” implementation agreement was co-signed by the Ministry of Public Finance, Ministry of Foreign Affairs, Ministry of Economy, Bank of Guatemala, Foundation for the Development of Guatemala, Association of Exporters of Guatemala and the Municipality of Guatemala. High-potential sectors to be supported include pharmaceuticals, medical devices, electronic devices, manufacturing and the Business Processing Outsourcing industry. Likewise, the Plan aims to support the development of the apparel, textiles, agriculture, food, beverages, and chemicals sectors.

Introduction

lengthy, prolonging income losses for firms and households in Guatemala.³⁰ Failure to pursue policies to boost productivity, such as investments in technology adoption, infrastructure, improving access to productive finance, or skills development programs for the workforce, could stifle the economic recovery from the COVID-19 pandemic in the long term (Beylis, et al., 2020). Table 3 summarizes the types of impacts on firms and workers generated by the pandemic and possible policy responses. Further details are provided on the policy areas throughout the following chapters in the report.

Table 3. COVID-19 impacts on firms and policy responses

Types of impacts on firms and workers	Possible policy responses
Liquidity problems	<ul style="list-style-type: none"> Strengthen and expand financial sector instruments, e.g. lines of credit and partial credit guarantees, and develop financial sector products and infrastructure (see Access to Productive Finance chapter)
Layoffs	<ul style="list-style-type: none"> Strengthen unemployment insurance; time-bound wage subsidies and cash transfers³¹
Bankruptcies	<ul style="list-style-type: none"> Improve insolvency framework (see Access to Productive Finance chapter)
Reduced investment and productivity	<ul style="list-style-type: none"> Retain existing and attract new FDI; facilitate linkages between FDI and local suppliers (see FDI chapter) Strengthen entrepreneurship and innovation support programs to facilitate business adaptations (see Entrepreneurship and Innovation chapter)
Opportunities for new business models and repositioning in global value chains	<ul style="list-style-type: none"> Make it easier to start a business and adjust operations by reducing red tape (see Business Regulatory Environment chapter) Facilitate repositioning and upgrading in priority value chains (see GVCs chapter)

Source: Authors' elaboration.

1.2. Overview of priority areas

28. The report provides in-depth analyses and recommendations for: (i) the business regulatory environment; (ii) access to productive finance; (iii) FDI promotion and retention; (v) participation in Global Value Chains (GVCs); and (vi) entrepreneurship and innovation. Both COVID-19 and traditional challenges and opportunities are addressed for each area. The selection of areas is designed to be complementary. For instance, the quality of the business environment is a key factor for FDI and provides incentives for firms to innovate. Access to productive finance is critical for firms to finance technology adoption and innovation. FDI can be a key source of technology spillovers and create incentives for local suppliers to upgrade and innovate. Successful upgrading in GVCs depends on sound policies in all of the other areas. Each chapter concludes with a suggested action plan, which moves beyond analytics to provide actionable reform guidance. The paragraphs below provide a brief overview of the priority areas, which are then elaborated in detail in the following five chapters.

29. Business regulatory environment. The high cost of entering and operating in the formal sector alongside a weak contractual and institutional environment hinder firm entry, growth and competitiveness. Likewise, an inadequate regulatory environment for businesses can limit private sector

³⁰ As discussed in the World Bank's Global Economic Prospects 2021 report, the knowledge and skills lost during schooling disruptions could constrain long-term productivity and earnings potential more than expected (World Bank, 2021b).

³¹ Analyses of these social protection-type measures are beyond the scope of the report.

Introduction

demand for labor, thus impacting job creation. High regulatory and administrative costs, as well as discretion in the implementation of business regulations, undermine a level playing field for the private sector in Guatemala. The challenging business environment has impacted the private sector's capacity to generate formal jobs: although unemployment in Guatemala is relatively low, informality has hovered around 70 percent during the last 15 years –one of the highest rates across the LAC region.³²

30. Legal and regulatory reforms that improve the business environment can help firms better cope with the challenges posed by COVID-19 and facilitate the reallocation of capital and labor from firms that are no longer viable to firms that are able to adapt to new opportunities. Successful business environment reforms will need an appropriate strategy and institutional setup for reform implementation, more so in the context of the COVID-19 crisis. Improving the business environment will entail measures to reduce the cost of doing business, increase predictability, strengthen the contractual environment and improve digital readiness. Reforms will require effective coordination and accountability mechanisms across public agencies at the national, departmental, and municipal level. To move forward the reform agenda, Chapter 2 identifies possible reforms in the following areas:

- Institutional quality, property rights, and contractual environment
- Regulatory governance and predictability in implementing laws and regulations
- Cost of doing business in the formal sector
- Costs and times of trading across borders through trade facilitation
- Digital Readiness

31. Access to productive finance. Access to finance for MSMEs is critical to generate employment, productivity gains, and inclusive economic growth. A well-developed, efficient and inclusive financial sector intermediates financial resources towards their optimal use, driving productivity and economic growth. Yet MSMEs in Guatemala struggle to access affordable financing within the formal financial sector. A range of factors have historically constrained MSME access to finance in Guatemala, including limited credit histories, high interest rates, poor product design and lack of acceptable collateral. The International Financial Corporation (IFC) estimated the MSME finance gap in Guatemala in 2018 at USD 14 billion, equivalent to 22 percent of its GDP and six times the volume of MSME financing in the country.³³

32. MSMEs in Guatemala are facing unprecedented cash-flow constraints and tightened credit markets as a result of the COVID-19 pandemic. Even in non-crisis periods, many MSMEs lack access to finance and operate on thin margins. However, COVID-19 now poses a systemic risk for the viability of the MSME sector and its role as a driver of employment and economic growth in Guatemala. Proactive government policies and financial sector reforms can help to mitigate the effects of the COVID-19 crisis on MSMEs and improve MSME finance in the long term. Chapter 3 identifies a range of financial sector policies and reforms that can contribute to improve access to finance for MSMEs in Guatemala. Reform areas covered include:

- Improve the enabling environment for MSME Finance
- Facilitate availability of diverse and innovative financial products for MSMEs
- Strengthen the role of financial cooperatives in MSME finance

³² Based on data and analysis from CIEN (2019).

³³ SME Finance Forum 2018.

Introduction

- Improve the institutional sustainability, capitalization, and market outreach of the partial credit guarantee fund

33. Foreign direct investment. FDI has been a key driver of economic growth and creator of jobs for high-growth countries. FDI enables recipient countries to import ideas, technologies, and know-how from the rest of the world, which in turn spurs productivity, innovation, and contributes to the creation of more and better jobs. FDI can also facilitate the upgrading of local suppliers and their entry into GVCs. Between 2013 and 2018, new FDI projects in Latin America helped create nearly 1.4 million new jobs.³⁴

34. In the first half of the 2010s Guatemala experienced stable FDI inflows, while simultaneously experiencing a modest increase in its inward stock of FDI. However, after 2014 FDI inflows steadily dropped; by 2018 Guatemala's FDI levels ranked the lowest relative to its structural and aspirational comparators.³⁵ Moreover, most of the FDI received has been concentrated in a narrow number of sectors with limited effects on the creation of sustainable growth and quality employment. Chapter 4 identifies a range of reforms and policy actions to position Guatemala more advantageously among its regional competitors and globally, attract new investments in high-potential sectors, and retain existing investment—which could be at risk due to the COVID-19 crisis. Identified reforms relate to:

- Strategic framework for FDI attraction
- Institutional framework for investment promotion
- Legal and regulatory framework for investment
- Investment incentives
- Investment entry and establishment
- Investor protection and retention
- Investment linkages

35. Participation in global value chains. Guatemala's current participation in GVCs is marked by specialization in agricultural and agribusiness goods and low value-added manufacturing products, such as textiles and apparel, directed primarily to the US market. Participation in other GVCs mainly occurs in low value-added services and agriculture. Agriculture, textiles and apparel are the main contributors to labor value added within export sectors in the country, mostly through unskilled labor. Strategic repositioning into dynamic segments of GVCs offers opportunities for job creation (particularly for low-skilled workers) and poverty reduction in Guatemala. Recent empirical evidence suggests that participation in GVCs benefit developing countries by boosting economic growth and productivity.³⁶

36. Although the ongoing COVID-19 pandemic has imposed many challenges for Guatemalan firms, it has also opened novel opportunities to upgrade Guatemala's participation in GVCs. For instance, in spite of the massive disruption experienced by international travel, the pandemic offers some opportunities for diversification and upgrading in the tourism industry in the medium term. Besides the COVID-19 pandemic, recent trends in international markets offer unique opportunities for repositioning Guatemala

³⁴ Financial Times' fDi markets database.

³⁵ Annex 2 presents the methodology to select aspirational and structural peers, as well as the list of peers for Guatemala.

³⁶ World Bank Group (2019). *World Development Report 2020: Trading for Development in the Age of Global Value Chains*, www.worldbank.org/en/publication/wdr2020

Introduction

toward more sophisticated segments of agricultural, manufacturing and services GVCs.³⁷ National policies play a fundamental role in ensuring that the economic and social benefits of strategic repositioning within GVC materialize. Chapter 5 analyzes selected value chains in Guatemala in terms of their strategic challenges, international trends and areas for improvement. Likewise, Chapter 5 presents policy recommendations for strategic repositioning of the analyzed value chains. Recommendations focus on:

- Institutional coordination
- Improving infrastructure
- Fostering human capital
- Enhancing the provision of sector-specific public goods
- Improving market access and FDI attraction
- Digitalization

37. Entrepreneurship and innovation. Business innovation—the introduction of new products, technologies, business processes, and ideas in the market—plays a central role in improving firm-level productivity, which in turns influences overall productivity and economic growth. Innovation is not only the product of knowledge creation arising from research and development, but also a function of technology adoption and incremental use of new technologies and processes by businesses. Entrepreneurship plays a critical role in the generation and adoption of new ideas, and consequently in the productivity and economic growth of nations. Guatemala possesses one of the highest entrepreneurship potentials in the LAC region, however several supply- and demand-side factors keep the entrepreneurship ecosystem from realizing its full potential. Insufficient access to finance, high regulatory burdens, inadequate human and knowledge capital, among other factors, impact the ability of individuals to start a business, as well as the potential of local businesses in Guatemala to mature and grow over time.

38. Guatemala needs to encourage the development of innovative entrepreneurs if it is to create attractive jobs for the future. Moreover, Guatemalan firms need to be innovative to adapt to changing demands and business model requirements if they are to survive and build back better from the COVID-19 crisis. Governments can play a critical role in creating an innovation and entrepreneurship-friendly business environment, including supportive financing and advisory programs. Chapter 6 analyses the performance of the entrepreneurship ecosystem in Guatemala and identifies possible constraints limiting its dynamism. Possible policy actions related to the following themes:

- Innovation and entrepreneurship ecosystem governance
- Innovation
- Entrepreneurship and business development capabilities
- Business adaptation and technology adoption
- Entrepreneurship
- Local ecosystems

³⁷ The specific value chains addressed in Chapter 5 include: cocoa (bean to bar cocoa), seafood (ready to cook fish and shrimp), coffee (small batch / specialty coffee), tourism (explorer /adventure tourism) and other services (Business Processing Outsourcing, BPO), and textiles (sustainable fashion).

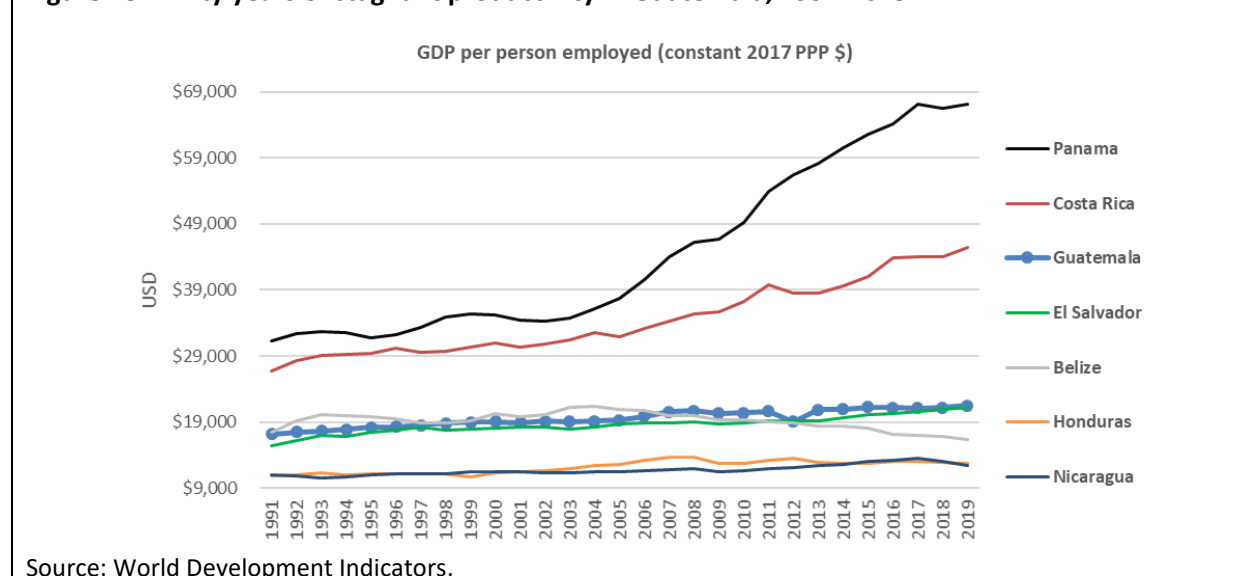
Introduction

- Linkages with knowledge providers

2. Business Regulatory Environment

39. The government has developed various strategies to tackle the jobs and productivity challenges highlighted in the previous chapter. The National Competitiveness Program (PRONACOM) launched in 2018 the National Policy on Competitiveness 2018-2032 that is based on the “11-11-9” strategy, which consists of boosting the productivity of 11 economic clusters through 11 priorities across 9 geographical territories. The two main objectives of this national policy are to reach by 2032 an annual economic growth rate above 6 percent and have created 5.6 million formal jobs.³⁸ In October 2020, the President of Guatemala presented the Plan for Economic Recovery of Guatemala.³⁹ The plan from the Ministry of Economy (MINECO) has three main axis: i) Recover and generate more jobs; ii) Attract more strategic investments; and iii) Foster consumption for Guatemalan products at the national, regional, and global levels.⁴⁰ Additionally, the project “*Guatemala no se detiene*”, which is underpinned by an interinstitutional agreement, seeks to implement a focused investment attraction strategy through: 1) Strengthening the sectors in which Guatemala is already performing efficiently in order to increase an additional \$5 billion in exports through sectors such as clothing and textiles, agriculture, food, drinks and chemical products; 2) Attracting new investments by leveraging the competitive advantages of proximity to major markets (nearshoring) via sectors such as pharmaceutical, medical equipment, manufacturing of electronic equipment and Business Processing Outsourcing (BPOs). These industries together have the potential to attract an additional \$300 million of foreign direct investment. Entities of the executive branch together with the private sector have already signed an agreement to ensure the implementation of the project.⁴¹

Figure 18. Thirty years of stagnant productivity in Guatemala, 1991-2019



40. Achieving these goals will require, among others, significant improvements to the business environment. International benchmarks, such as the World Economic Forum’s (WEF) Global

³⁸ CIEN (2018b)

³⁹ SOY 502. Website visited on October 23, 2020. See [link](#).

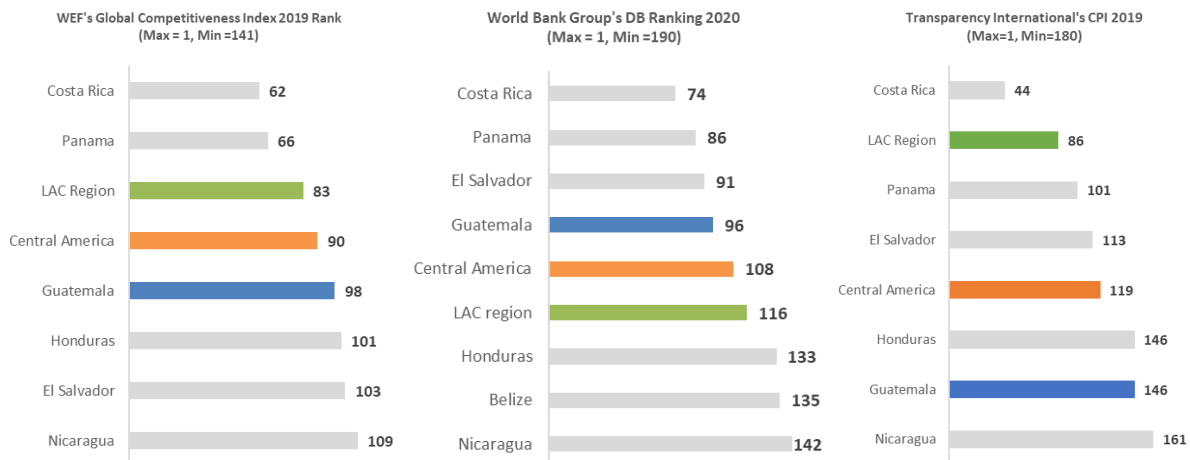
⁴⁰ MINECO (2020)

⁴¹ Communication with MINECO, July 15, 2021

Business Regulatory Environment

Competitiveness Index (GCI)⁴² and the World Bank Group's (WBG) Doing Business (DB) index⁴³, point to weaknesses in Guatemala's business environment and overall competitiveness. Transparency International's Corruption Perception Index (CPI) 2019⁴⁴ suggests that high corruption levels could also hinder the effective development of the private sector (Figure 19).

Figure 19. Guatemala's performance on business environment and corruption



Source: WEF's Global Competitiveness Index 2019, Doing Business 2020, Corruption Perception Index 2019 databases.

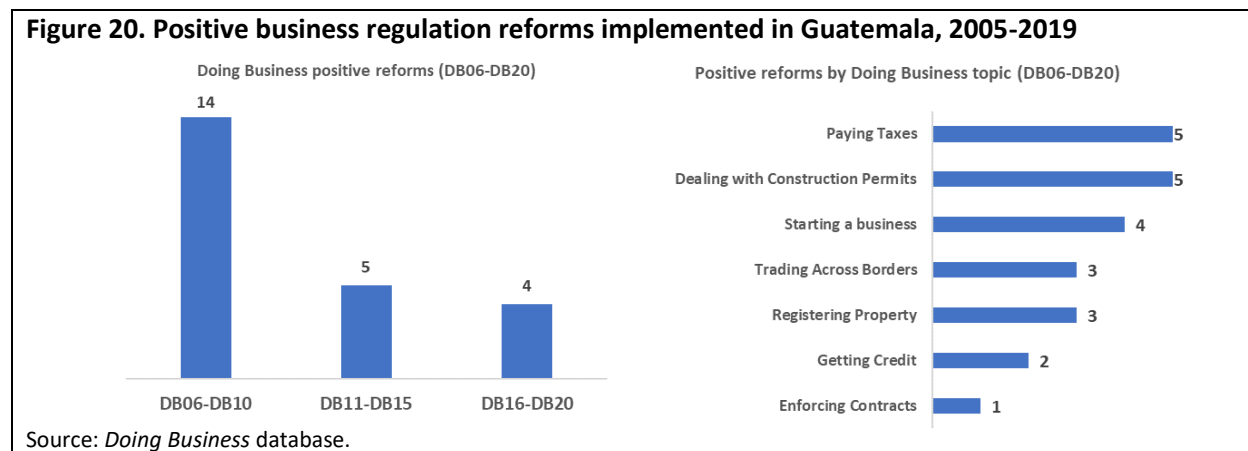
Note: The GCI and CPI do not include Belize.

41. The pace of reforms in Guatemala has slowed, especially during the last five years. According to Doing Business, between 2005 and 2019 the government implemented 23 business regulation reforms. This makes Guatemala the economy with most reforms during the last 15 years in Central America, and the seventh across Latin America and the Caribbean (LAC), just behind Colombia (37), Jamaica and Peru (27), Mexico (26), and Brazil and the Dominican Republic (24). Nevertheless, and although Guatemala was considered by Doing Business as a top reformer in the 2014 report, more than 60 percent of these reforms were implemented between 2005 and 2010. Efforts focused on reducing bureaucracy and transaction costs for firms to pay taxes, obtain construction permits, register a business or property, and trade. Furthermore, Guatemala introduced a major secured transaction reform. (Figure 20).

⁴² WEF, (2019)

⁴³ (World Bank, 2019)

⁴⁴ (Transparency International, 2020)

Figure 20. Positive business regulation reforms implemented in Guatemala, 2005-2019

42. Aside from security, the high cost of entering and operating in the formal sector and weak contractual and institutional environment hinder private sector growth and competitiveness. After security, the WEF's GCI highlights as a major concern for businesses and investors the labor market (ranking 122nd out of 143 countries), institutions (121st), transparency (121st) and Information and Communication Technologies (ICT) adoption (110th) as comparatively weak areas (Figure 21). According to the 2017 World Bank Enterprise Survey, most companies identified corruption; political instability; practices of the informal sector; and crime, theft and disorders, as the top major obstacles for their businesses. Thanks to the effectiveness of some reforms, Guatemala compares favorably on measures capturing the quality of credit infrastructure, getting electricity, and trading across borders in the Doing Business report. At the same time, complex regulatory requirements continue to present barriers to entry, while legal protections for investors and the overall contractual environment remain weak (Figure 22). Particularly in the context of the economic crisis due to COVID-19, investing in more effective bankruptcy and insolvency, as well as dispute and debt resolution mechanisms in and outside of courts will be essential. More broadly, the regulatory environment lacks predictability and the digital government agenda is needs to be strengthened.

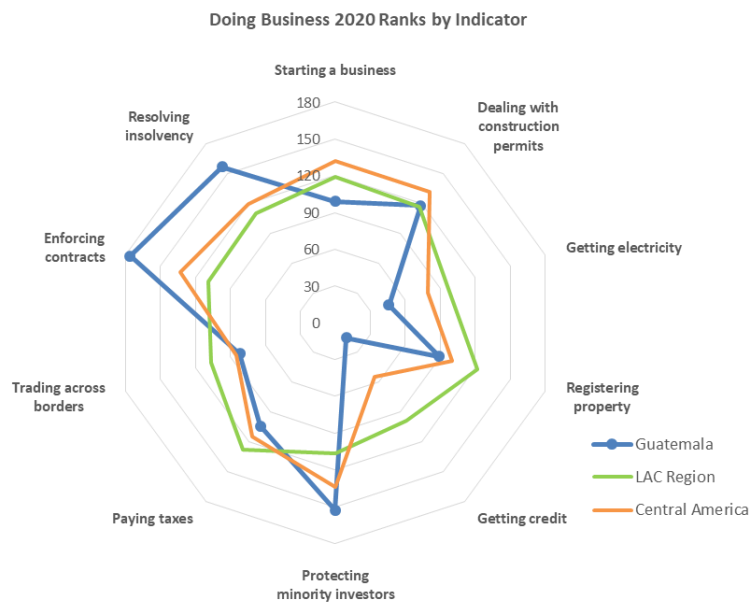
Figure 21. Guatemala’s overall performance on GCI 2019 (by pillar)



Source: WEF’s Global Competitiveness Index 2019.

Note: Overall performance and the 12 pillars are measured by a score that goes from 0 to 100, being 100 the best score.

Figure 22. Guatemala’s performance in Doing Business 2020 (by indicator)

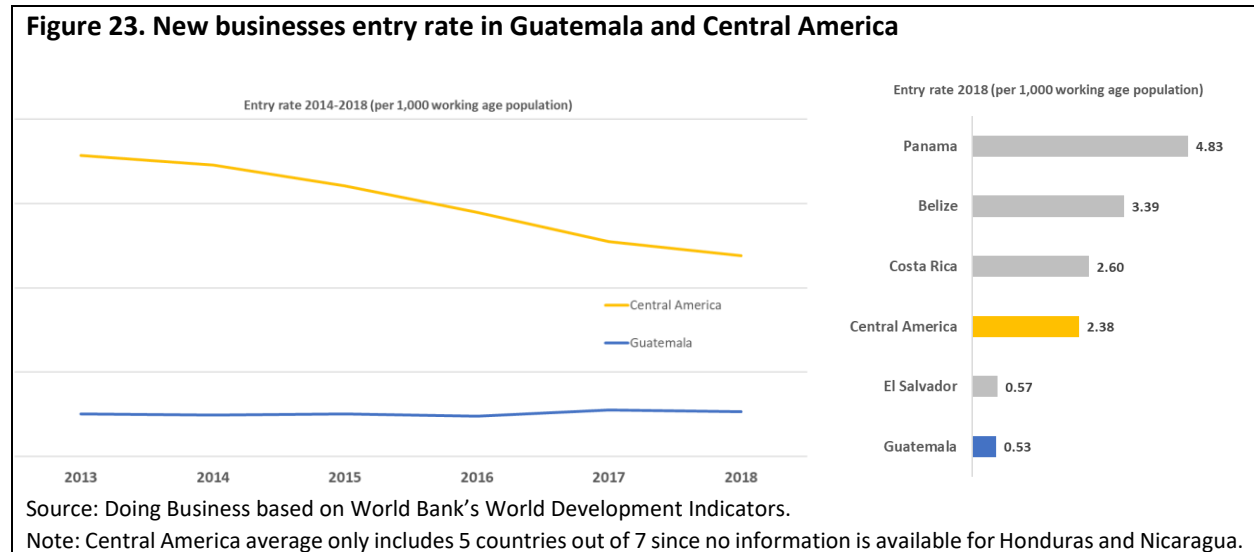


Source: Doing Business database.

43. The comparatively high cost of operating in the formal sector may inhibit firm entry. Regulatory barriers and high administrative costs have been identified as a binding constraint for new firms to enter

Business Regulatory Environment

and for existing firms to grow, limiting private sector demand for labor and thus job creation.⁴⁵ Discretion in the implementation of business regulations can leave room to favor specific incumbent firms, creating de facto barriers to market entry for new entrepreneurs.⁴⁶ For the last eight years the new entry rate of formal firms in Guatemala has been stagnant and in 2018 it had the lowest entry rate across Central America (Figure 23).⁴⁷



44. Another aspect that can impose barriers to entry and inhibit well-functioning markets is the absence of a competition and anti-trust legal framework. Effective application of competition policy can lead to productivity increases and price reductions in key input sectors, thus boosting GDP growth in the short to medium term. Nevertheless, Guatemala lacks a clear competition policy, a competition authority to address anticompetitive behavior and high market concentrations, and a merger control regime for both general application and for regulated sectors.⁴⁸ Examples of restrictive business practices can be found in various sectors of the economy.⁴⁹ A World Bank study from 2015 assessed, for example, that in the sugar sector, one company holds a monopoly on the distribution of sugar and thus sets the prices for consumers. There are dominant suppliers of construction materials (cement, steel, and bitumen), canned beans production, and poultry production. In road freight service the lack of competition results in an almost 100 percent markup in freight prices per ton-kilometer.⁵⁰

45. Guatemala has not been able to approve a competition law in more than four years. As part of the commitment under the Association Agreement between Central America and the European Union, the Government of Guatemala agreed to approve a competition law by November 2016 and in May 2016 submitted a draft competition law to Congress.⁵¹ MINECO is currently working on a strategy to promote the approval of the draft law on competition. This draft introduces good international practices on

⁴⁵ (Arnold & Schwellnus, 2008)

⁴⁶ (Pritchett, Sen, & Werker, 2017)

⁴⁷ The new business entry density is defined as the number of newly registered corporations per 1,000 working-age people (those ages 15–64). World Bank's World Development Indicators, 2018.

⁴⁸ (World Bank, 2016)

⁴⁹ (UNCTAD, 2011)

⁵⁰ (Dumitrescu, Smith, & Osborne, 2015)

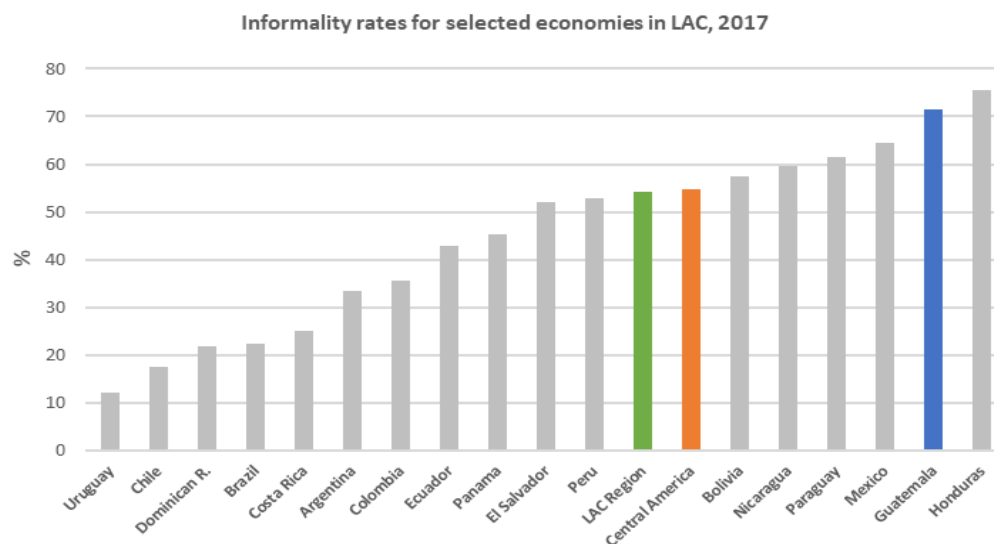
⁵¹ (U.S. Department of State, 2020)

Business Regulatory Environment

competition and allows the government to have the mechanisms to ensure markets' efficiency. The draft law is expected to be approved in 2022; therefore, as of April 2021, Guatemala is the only country in LAC without a specific law on competition.⁵²

46. The accumulation of legal, institutional and regulatory factors is a deterrent to formal job creation. Although Guatemala reports unemployment rates of less than 3 percent on average between 2014-2019, informality has hovered around 70 percent during the last 15 years, one of the highest across the LAC region (Figure 24).⁵³ This figure rises up to 83 percent in rural areas.⁵⁴ To mitigate the COVID-19 economic impact, as of December 2020, the Government of Guatemala had disbursed more than Q1,700 million from the Employment Protection Fund. This policy has benefited more than 16,450 companies and 191,110 formal jobs.⁵⁵ Nonetheless, depending on how severe the economic recession will be, the Interamerican Development Bank (IDB) estimates that formal employment in Guatemala can decrease between 7.5 percent and 21.1 percent due to COVID-19, and it is expected that the economic consequences of the virus will also affect informal jobs.⁵⁶

Figure 24. Guatemala has one of the highest informality rates in LAC



Source: OECD and World Development Indicators (WDI) databases.

Note: Data for Nicaragua from 2014. Data for Honduras and Panama from WDI.

47. Improving the business environment can help formal firms recover more quickly after the crisis and mitigate the risk of a growing informal sector. Already before the crisis, three quarter of formal firms found themselves competing against informal businesses in 2017, and close to half of formal firms identified practices of competitors in the informal sector as a major constraint.⁵⁷

⁵² Republica.gt, website visited on August 30, 2020. See [link](#).

⁵³ CIEN, 2019)

⁵⁴ National Institute of Statistics (INE), 2018.

⁵⁵ Data provided by the Minisry of Economy from the report "Ejecución: Programas de Atención al COVID-19".

⁵⁶ (IDB, 2020)

⁵⁷ Based on data from World Bank Enterprise Survey 2017 for Guatemala.

48. Security and crime significantly affect performance and growth of businesses in Guatemala.⁵⁸

The country ranks 134th of 141 on the security sub-pillar from the WEF's Global Competitiveness Index. Larger formal firms are more likely to be impacted by security issues than younger, smaller and informal ones. This weakens incentives to grow and become formal. The 2017 Enterprise Survey showed that 38 percent of firms identified crime, theft and disorder as a major constraint.⁵⁹ Furthermore, "CentralAmericaData"⁶⁰ estimates that a business in Guatemala spends on average between 8 percent and 15 percent of its budget on security.⁶¹ During 2017, almost 65 percent of businesses paid for security; however, while security costs represented 2.9 percent of large firms' annual sales, they represented 3.4 percent of small firms' sales.⁶² The cost of crime and violence constitutes a tax on firms' profitability, making them less competitive in comparison with their global peers. Moreover, high levels of crime and violence increase the costs of doing business and lower returns to investment. Likewise, productivity in Guatemala is hampered by absenteeism or by the need to limit working hours for workers who are concerned about their personal security.⁶³

49. Successful business environment reforms will need an appropriate strategy and institutional setup for reform implementation, particularly in the context of COVID-19.

Improving the business environment will entail measures to reduce the cost of doing business, increase predictability, strengthen the contractual environment, and the increase security of property rights. Reforms will have to be implemented in a broader context with significant challenges related to low levels of education, crime and violence, and lack of ICT adoption. The last is particularly important for the implementation of the digital government reform agenda. Furthermore, reforms will require effective coordination and accountability mechanisms across public agencies at the national, departmental, and municipal level. The COVID-19 crisis exacerbates these challenges while increasing the urgency of improving the business environment to support economic recovery.

50. Legal and regulatory reforms can facilitate the reallocation of resources across the economy and help firms better cope with the challenges posed by COVID-19.

Such changes are often not costly, an important consideration for fiscally constrained governments such as Guatemala. Guatemala can look to implement cost-effective reforms, such as decreasing the burden of regulatory compliance, while improving the operational flexibility of nascent enterprises and cash-constrained firms alike. Strengthening procedures and institutions to facilitate entry, debt resolution, and exit will be key for effective resource allocation. Currently, the judiciary is characterized by long lead times to resolve commercial disputes, inefficient bankruptcy proceedings, and lack of adequate protection for minority investors. Another area of concern is the lack of e-government services. Not only ICT infrastructure is lacking, but the legal framework is not adapted to digital business models (e.g. e-commerce, sharing economy, fintech).⁶⁴ Finally, the perceived capacity of the government to roll-out policy actions is weak. According to the WBG's World Governance Indicators, Guatemala ranks among the lowest countries in

⁵⁸ Security and crime are a key obstacle to doing business in Guatemala but for the purpose of this chapter will not be covered. CIEN found in 1999 that the cost of violence in Guatemala represented 6.7% of Gross Domestic Product (GDP). The Foundation for Development of Guatemala (FUNDESA) reported in 2014 that the cost of violence in Guatemala represented 8.7% of GDP. Later, the Institute for Economics and Peace (IEP) estimated that this cost could represent as much as 9% of GDP in 2019, positioning Guatemala among the 45 countries out of 163 with the highest cost of violence in the world.

⁵⁹ Based on data from World Bank Enterprise Survey 2017 for Guatemala.

⁶⁰ CentralAmericaData is a company with experience in market research and business intelligence in the LAC region.

⁶¹ (PRONACOM, 2018).

⁶² Centralamericadata.com, website visited on August 30, 2020. See [link](#)

⁶³ (World Bank, 2016)

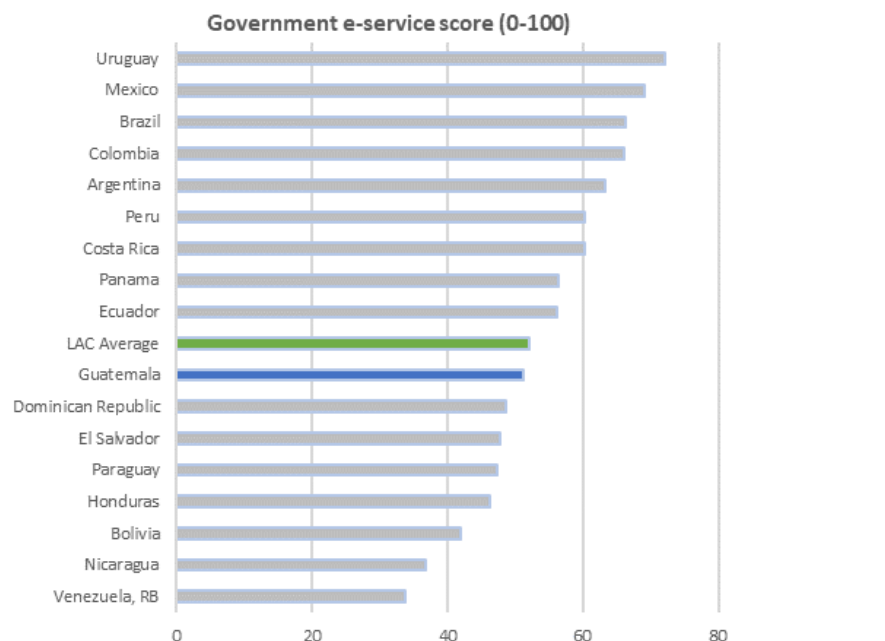
⁶⁴ The WEF's GCI ranks Guatemala 90th out of 141 on the adaptability of the legal framework to digital business models.

Business Regulatory Environment

the region on the perception of the quality of public services, as well as the degree of its independence from political pressures and the quality of policy formulation.

51. Improving digital readiness of the public and private sectors can support businesses during the reopening and recovery period. Governments that have invested in e-government services and digitization have been better prepared to continue functioning in the context of social distancing. Countries with sound e-government infrastructure and services are also better positioned during the reopening phases as some social distancing measures are expected to continue. Several countries are using the crisis to fast-track the digitization agenda. Currently, Guatemala scores below the LAC average on government e-services (Figure 25).

Figure 25. Guatemala is positioned below Latin American average when it comes to e-government



Source: WB's Global Business Regulation Unit (GBRU).

Note: The GBRU's Government e-service scores are an average of three measures: (i) the UN e-government survey, (ii) the Online Government Service Score of the Global Innovation Index, and (iii) WEF's Legal Framework Adaptability indicator.

52. Based on an assessment of available data, analytics, and firm surveys, this chapter covers five areas relevant to improving the business environment in Guatemala. These are: i) institutional quality, property rights and contractual environment; ii) regulatory governance and predictability in implementing laws and regulations; iii) cost of entry, exit and conducting every-day business in the formal sector (such as registration, permitting and licensing requirements); iv) trade facilitation; and v) digital readiness. Detailed policy recommendations reflecting private sector priorities and relevance for recovery from the COVID 19 crisis are presented in the action plan at the end of the chapter.

2.1. Institutional quality, property rights and contractual environment

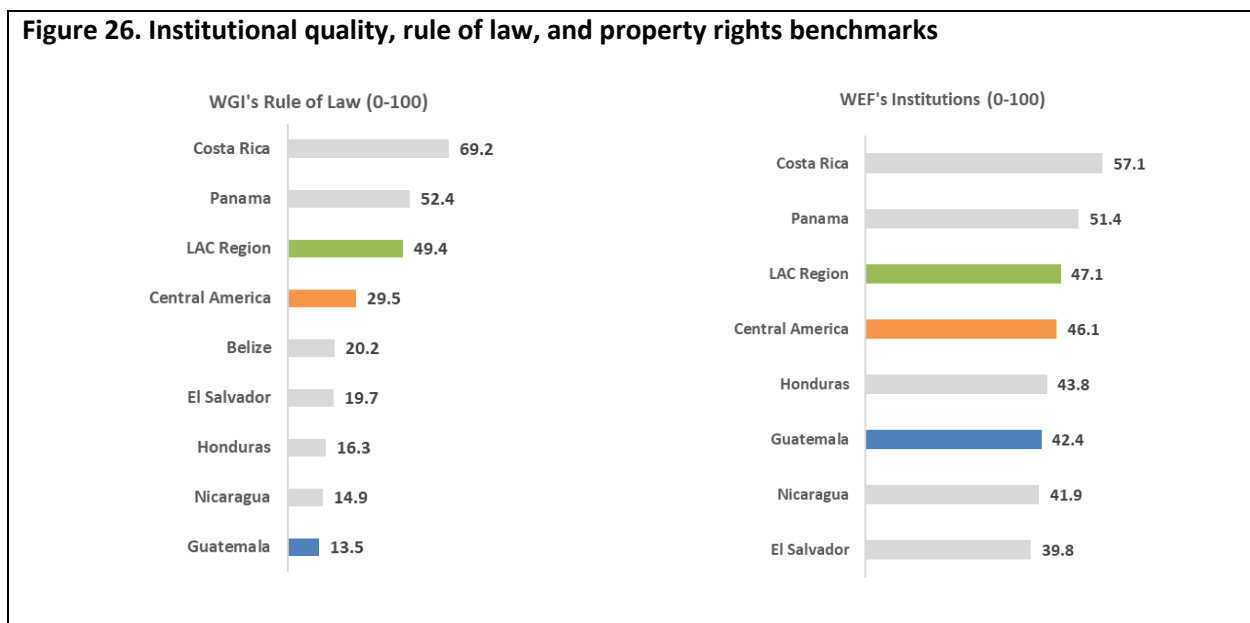
53. The institutional structure and arrangements, rule of law and contract enforcement have been identified as aspects that significantly hinder private sector development in Guatemala. Lack of courts'

Business Regulatory Environment

automation and case management systems, as well as the absence of specialized commercial courts are factors that affect judicial performance on resolving commercial disputes. This makes Guatemala one of the countries with one of most complex and lengthiest processes to enforce a contract. Similarly, Guatemala has one of the weakest protections of minority investors in LAC and cumbersome insolvency proceedings. Guatemala could also further improve the quality of its land management system by increasing geographical coverage on property titles registration and land plot mapping. This section describes these aspects in more detail.

54. Weak institutions and lack of enforcement create an unpredictable environment for firms and investors, negatively impacting their propensity to invest. Among other aspects, investment in the private sector is constrained by the lack of enforcement of the laws related to contracts and property rights.⁶⁵ Similarly, low property rights in Guatemala hinder businesses' growth.⁶⁶ Different international benchmarks identify deficiencies on Guatemala's institutional quality, rule of law, property rights and contract enforcement. Guatemala ranks 181st out of 209⁷⁷ on the "Rule of Law" component of the World Governance Indicators, the lowest score in Central America.⁶⁸ The "Institutions" pillar from the WEF's GCI positions Guatemala in rank 121 out of 141. Similarly, Guatemala's ranking on the "Rule of Law Index 2020" from the World Justice Project (WJP) is 101 of 128.⁶⁹ Last, Guatemala ranks 85th out of 131 on the Property Rights Alliance's (PRA) International Property Rights Index (IPRI) 2019 (Figure 26).⁷⁰

Figure 26. Institutional quality, rule of law, and property rights benchmarks



⁶⁵ (World Bank, 2016)

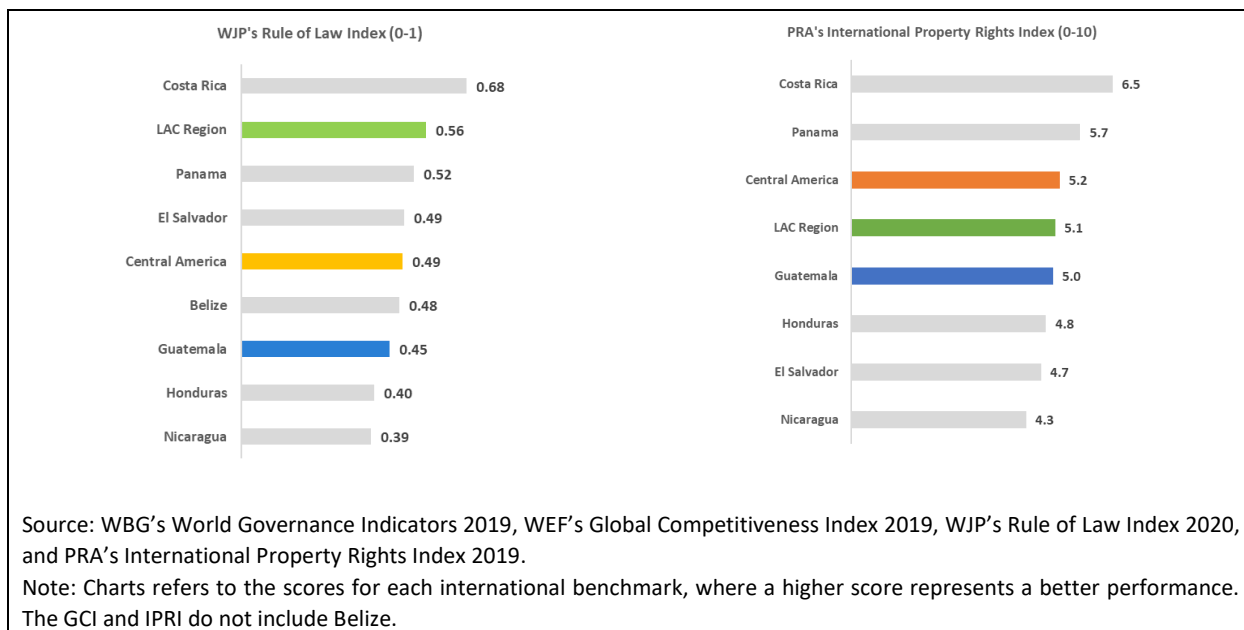
⁶⁶ (CIEN, 2013)

⁶⁷ The WGIs do not publish rankings, therefore the rank for Guatemala was estimated based on its score.

⁶⁸ The World Bank's WGI report assesses the quality of the rule of law by measuring the extent to which agents have confidence in and abide by the rules of society in quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

⁶⁹ (World Justice Project, 2020.)

⁷⁰ (Property Rights Alliance, 2020)



55. Contract enforcement in Guatemala is not only complex but one of the lengthiest in the world.

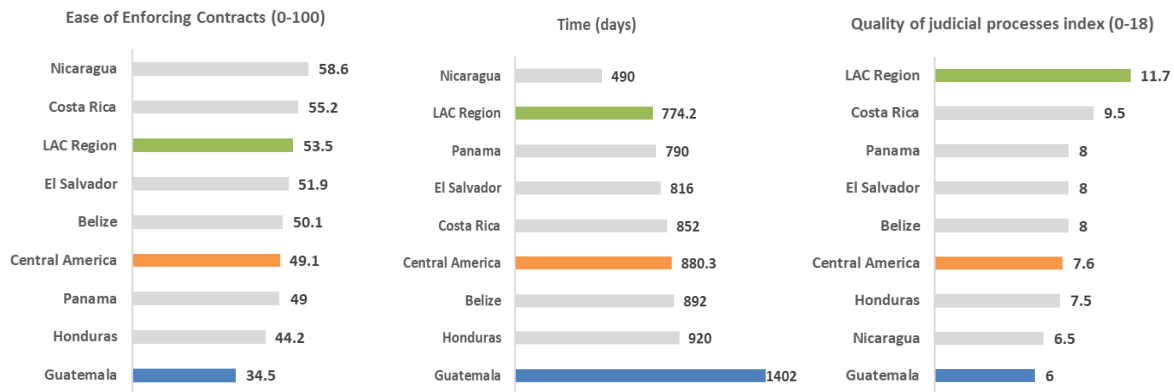
Citizens will be unwilling to engage in productive investment if they are concerned about contract enforcement and property rights. According to Doing Business, resolving a commercial dispute between two companies takes almost four years in Guatemala (Figure 27, center).⁷¹ This is not only the longest period in Central America, but the seventh longest in the world. Almost 60 percent of the time refers to the trial and judgement phase. Partly due to the formalism of proceedings, causes of delays include abuse of appeals through nullity actions (*recursos de nulidad*) and *amparos*⁷², and adjournments are the rule rather than the exception.⁷³ Lengthy court proceedings not only undermine investor confidence but in the context of the COVID-19 crisis pose a particular challenge given the likely increase in debt defaults. Additionally, Guatemala only scores 6 out of the 18 points on the Quality of judicial processes index, which refers to the adoption of a series of good practices in the court system in four areas: court structure and proceedings, case management, court automation and alternative dispute resolution (Figure 27, right).⁷⁴

⁷¹ Doing Business 2020.

⁷² Decree 1-86: Ley de Ley de Amparo, Exhibición Personal y de Constitucionalidad from 1986.

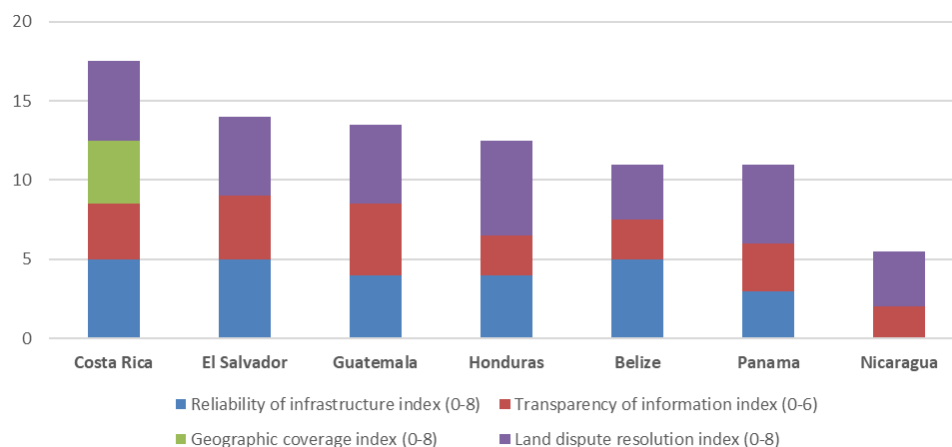
⁷³ (Flores, 2017.)

⁷⁴ The Law on Arbitrage (4802) is at the Congress of the Republic. The draft law is at the third reading phase and it is expected that will be approved during 2021.

Figure 27. Guatemala underperforms all its regional peers on resolving a commercial dispute


Source: Doing Business database.

56. Beyond contractual enforcement in and outside the courts, upgrading the land administration systems can strengthen property rights and increase confidence. Transferring property in Guatemala can be done within a month, compared to two months on average in LAC, and the cost to transfer property (3.6 percent of property value) is below Central America and LAC averages (4.2 percent and 5.9 percent respectively). Nonetheless, the quality of the overall land administration system could be improved. For instance, the Property Registry and Cadaster databases are not linked, geographical coverage of the immovable property registry is limited, and not all privately held land is mapped (neither economy-wide nor in Guatemala City) (Figure 28).

Figure 28. Quality of Land Administration


Source: Doing Business database.

Note. Equal access to property rights index (-2-0) was omitted since all Central America economies score 0 points.

57. Protection of minority shareholders is weak in Guatemala. Empirical research shows that stricter regulation of self-dealing⁷⁵ is associated with greater equity investment and lower concentration of

⁷⁵ Self-dealing refers to the use of corporate assets by company insiders for personal gain.

Business Regulatory Environment

ownership.⁷⁶ Stronger legal protections make minority investors more confident about their investments, reducing the need for concentrated ownership to mitigate weaknesses in corporate governance. In Guatemala, this matter is regulated by the Commercial Code of 1970.⁷⁷ Although the Commercial Code was amended in 2017⁷⁸, the Code does not provide enough transparency and protection to minority shareholders.⁷⁹ Although the Commercial Code regulates the disclosure requirements and the responsibility of the directors in case of transactions⁸⁰, Doing Business 2020 indicates as areas of opportunity: i) the degree of transparency (a buyer is not required to immediately disclose to the public or in periodic reports about transactions carried out); ii) Directors' liability (a claimant shareholder cannot hold the director liable for damages arising from a transaction or the director is not required to return to the company the profits obtained from the transaction on the occasion of a shareholder's successful lawsuit); iii) strength of the corporate governance structure (the same individual may be appointed as CEO and chairman of the board of directors or the board of directors is not required to include an audit committee); among others.⁸¹ Globally, Guatemala ranks 153rd out of 190 on the ease of protecting minority investors. Currently, MINECO is working on a draft law on protection of minority shareholders. As of April 2021, the initiative is in hands of the Program "Creando Oportunidades Económicas". It is expected that the draft law could be approved during 2022.

58. Reforming the contractual environment and enforcement inside and outside of the courts will be vital to support Guatemala's path to recovery. Many businesses will not make it through the COVID-19-induced recession, so enabling the surviving ones to bounce back quickly or restart will be critical. There are important opportunities to improve the rule of law, property rights and the judicial system. Case management systems, automation of judicial processes, prevention of excessive use of adjournments and other delay tactics, together with a modern mediation and arbitration system, could make dispute and debt resolution more efficient. Transferring a property is relatively efficient compared to most economies in the region, but the coverage of the property registry and cadaster can significantly improve. At the same time, it is necessary to provide a modern legal framework to strengthen the protection of minority shareholders. Additionally, the insolvency law should be enacted and aligned to international best practices (see chapter on access to productive finance).

2.2. Regulatory governance and predictability in implementing laws and regulations

59. The lack of a coherent regulatory governance agenda can negatively impact significant progress on business environment reforms. Current initiatives from the government involve the participation of the private sector. Similarly, organized private sector associations such as the Committee for Agricultural, Commercial, Industrial and Financial Associations (CACIF), as well as different business chambers, are part of the consultation process. However, as reported by the U.S. Department of State, the promulgation of laws, bylaws and secondary regulations in some cases do not involve public participation and the private sector is able to provide feedback on specific bills, but with limited effect. Similarly, the Congress publishes all draft bills on its website portal, but these cannot be commented by the public.⁸² A major gap is the lack

⁷⁶ (Djankov, LaPorta, López-de-Silanes, & Shleifer, 2008)

⁷⁷ Decree 2-70.

⁷⁸ Decree 18-2017.

⁷⁹ (Nájera, 2018)

⁸⁰ Articles 47, 52, 100, 155, 169, 171, 174 of the Commercial Code.

⁸¹ For further details see: https://www.doingbusiness.org/en/data/exploreconomies/guatemala#DB_pi.

⁸² (U.S. Department of State, 2020).

Business Regulatory Environment

of a regulatory improvement law, as well as the creation of an agency in charge of defining and monitoring a regulatory governance agenda or granting these competencies to an existing institution. Without these elements, any simplification initiatives to eliminate the excessive administrative burden from current regulations, or any intent to put order on the design and implementation of new regulation, will have limited benefits and potential improvement actions will be implemented in silos and be less effective.

60. In spite of some progress towards greater transparency of public sector policymaking, regulatory uncertainty and overall complexity discourage firm creation and growth. According to the National Expert Survey from the Global Entrepreneurship Monitor (GEM), public policies, regulatory uncertainty and red tape in Guatemala do not favor creation and growth of businesses.⁸³ Following the 2008 Law on Access to Public Information, in 2017 the government received more than 69,800 information requests, all of which were solved. In 2017/ 2018 the Guatemala's Open Data web portal was created, as well as the Presidential Commission of Open Public Management and Transparency, which is responsible for promoting initiatives related to transparency, electronic government and anti-corruption mechanisms.⁸⁴ Additionally, the Presidential Commission for Open and Electronic Government (GAE) is in charge of monitoring the implementation of the "4th National Action Plan on Open Government 2018-2020", which includes 24 commitments and 137 actions across 12 pillars. As of June 2020, only 47 actions have been completed.⁸⁵ Similarly, the "National Policy on Open Data" was published in June 2018. This National Policy is based on six principles: i) Open by default; ii) Timely and comprehensive; iii) Accessible and usable; iv) Comparable and interoperable; v) To improve governance and citizen participation; and vi) For inclusive development and innovation.⁸⁶ Yet, Guatemala still ranks 121st out of 143 on GCI's transparency sub-pillar, just above Nicaragua (127th) from the Central America region.

61. The lack of a comprehensive regulatory governance agenda results in low efficiency and accountability of regulatory decision making. In contrast to other regional peers, such as Costa Rica, El Salvador and Honduras, Guatemala does not have a law on regulatory improvement, nor a specific institution responsible for the implementation of a regulatory governance agenda. Consequently, administrative simplification efforts and involvement of the private sector in regulatory processes are limited. Along with the design, approval, and implementation of a law on regulatory improvement, it is advisable to apply administrative law improvements.

62. Perceptions of government effectiveness and control of corruption in Guatemala are low. The Worldwide Governance Indicators' (WGI) government effectiveness component reflects, among other aspects, perceptions of the quality of the civil service and quality of policy formulation and implementation. The WGI's component on control of corruption reflects perceptions of the extent to which public power is exercised for private gain, as well as "capture" of the state by elites and private interests. In 2018 Guatemala had one of the lowest scores on the WGI's government effectiveness and control of corruption across Central America, just above Nicaragua (Figure 29). In the same year, the Organization for Economic Co-operation and Development (OECD) reported that Guatemala had one of

⁸³ (PRONACOM, 2018)

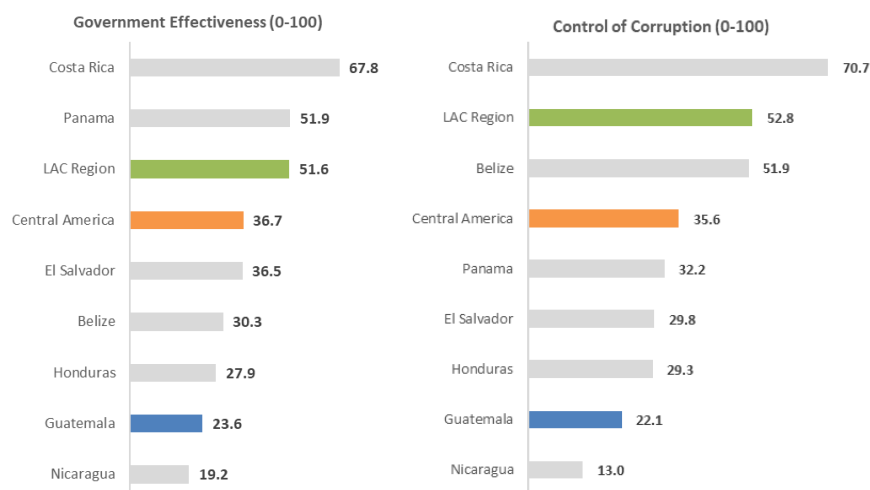
⁸⁴ (PRONACOM, 2018b)

⁸⁵ Website visited on April 8, 2021: <https://transparencia.gob.gt/ejes-de-accion/gobierno-abierto/>.

⁸⁶ Website visited on April 8, 2021: <https://transparencia.gob.gt/wp-content/uploads/PoliticaDatosAbiertos.pdf>.

the lowest scores on the “Index of quality of regulations against undue influence” (1 out of 9 points),⁸⁷ while the LAC region average was 4 points.⁸⁸

Figure 29. WGI’s Government effectiveness and control of corruption, 2018



Source Worldwide Governance Indicators 2019.

63. A basic measure to increase regulatory transparency is a catalogue of administrative requirements and procedures. Access to relevant and updated information reduces search costs and eliminates the need for intermediaries who charge a fee to guide individuals and companies to go through administrative processes. In 2013, the Ministry of Economy (MINECO) launched the web portal “Asisehace.gt”, which provides detailed information on laws and regulations and administrative procedures, including number of steps, required documents and conditions, costs, and processing time of different procedures, such as company registration, tax payments, licenses and permits, hiring personnel and social security issues, among others.⁸⁹ Currently, Asisehace.gt provides information for more than 400 administrative procedures from different public agencies.⁹⁰ Nevertheless, without a strategic exercise to map the critical procedures for growth in different levels of government across all agencies, efforts to provide relevant information and reduce the administrative burden to citizens and businesses are limited.

64. Administrative procedures and regulatory burden are among the highest in Latin America. According to Roseth, Reyes and Santiso, 37 percent of administrative procedures in Guatemala between 2017 and 2018 required three or more interactions to be resolved, one of the highest across Latin America (Figure 30, top).⁹¹ Additionally, Roseth *et al* found a positive correlation between simplified administrative procedures and level of satisfaction, where Guatemala has the lowest level of citizen satisfaction in the region (Figure 30, bottom).⁹²

⁸⁷ The OECD “Quality of Regulations Against Undue Influence Index” measures the existence and reach of lobbying regulations. It also takes into account the transparency of influence seeking and the regulation of conflicts of interest.

⁸⁸ (OECD, 2020).

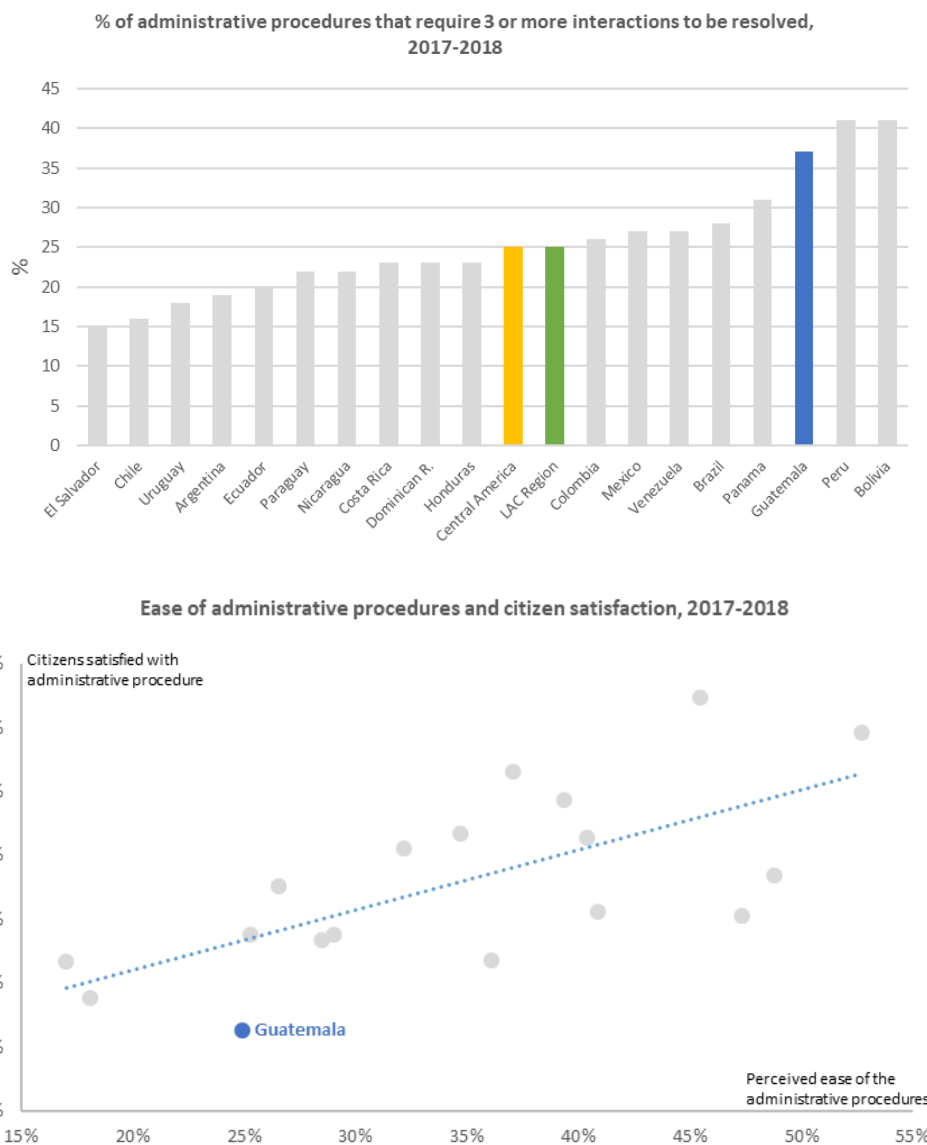
⁸⁹ (U.S. Department of State, 2020)

⁹⁰ Website visited on August 17, 2020. See <https://asisehace.gt/>.

⁹¹ (Roseth, Reyes, & Santiso, 2018)

⁹² (OECD, 2020)

Figure 30. Guatemala has one of the highest percentages of administrative procedures that require three or more interactions to be resolved, as well as the lowest citizen satisfaction in Latin America



Source: OECD database.

65. Given the extent of the bureaucracy, a systematic regulatory simplification program may be required. In Guatemala, regulations lack explicit criteria for government administrators, resulting in ambiguous requirements that are applied inconsistently.⁹³ In July 2019 PRONACOM presented an initiative for a Law on Simplification of Requirements and Administrative Red Tape.⁹⁴ This legal system

⁹³ (U.S. Department of State, 2020).

⁹⁴ Pronacom.org; website visited on August 17, 2020. See [link](#)

Business Regulatory Environment

was approved by the Congress of the Republic of Guatemala on June 1, 2021.⁹⁵ The purpose of the law is to: i) Promote the digitalization of administrative procedures, allowing Guatemalans to use the technology available to them to carry out procedures and interact with the government; ii) Regulate the simplification of administrative procedures that will result in greater government effectiveness in responding and delivering results to the people, while reducing administrative costs;⁹⁶ and iii) Facilitate interaction between people and state entities through the gradual development of systems that achieve the country's transition. If approved, the law will restrict public officials' discretion since they would not be legally able to ask for requirements not included in laws or bylaws. However, this initiative only includes agencies of the Executive and does not cover public decentralized and autonomous institutions, such as the Tax Administration Superintendence (SAT), Guatemalan Social Security Institute (IGSS), National Registry of Individuals (RENAP), and municipalities, among others. One relevant aspect often included in this type of law is the "silence is consent" criteria, which consists of granting a positive answer if the administrative procedure is not resolved within a specific timeframe foreseen in law, bylaws or secondary regulations. This significantly benefits citizens and business since it increases their certainty. Nonetheless, the initiative does not include this important feature.⁹⁷ During 2020, the first reading of this draft law (Initiative 5766) was approved by the Economy and Foreign Trade Commission of the Congress of the Republic of Guatemala.⁹⁸ It is expected that the draft law will be approved during 2021.

66. While simplifying current and cutting outdated regulation is necessary, new regulation should be designed based on a cost benefit assessment. So-called Regulatory Impact Assessments (RIAs) allow governments to elaborate regulations within a systematic framework that provides tools, such as social cost-benefit analysis, as well as the involvement of relevant stakeholders from the private sector. Guatemala lacks such mechanism. However, before implementing a RIA system it is necessary to have some conditions, such as political commitment, an explicit body that oversees the RIA implementation preferably located in a central area of the government, a coherent program across all agencies at the national and subnational level, as well as to provide training to public officials on the RIA process.⁹⁹

67. Without a regulatory governance policy established in law, it will be difficult to effectively reduce the administrative burden and improve the regulatory framework. An important challenge in Guatemala is the need to address many problems at once. Also, it will be necessary to identify policies that will collectively create synergies and multiply the effect of each separate action.¹⁰⁰ The way the Executive branch copes with the slow production of the necessary legislation is by issuing cooperation agreements, letters of understanding, and creation of temporary commissions, so institutions can coordinate and carry out the different policies. However, the different initiatives to simplify the regulatory framework in Guatemala have historically been isolated and limited. To effectively and sustainably reduce the administrative burden, a coherent regulatory governance policy and an agency responsible for defining and implementing a regulatory improvement agenda are needed. Usually, agencies in charge of overseeing regulatory policy are located in an executive office of the Presidency (e.g. the Office of Information and Regulatory Affairs in the U.S.), or under a Ministry (e.g. National Commission for

⁹⁵ Website visited on July 20, 2021. See

https://www.congreso.gob.gt/assets/uploads/info_legislativo/decretos/3a603-5-2021.pdf.

⁹⁶ These costs can include significant savings in human resource time, supplies and/or equipment, as well as reducing pollution and excessive use of paper, helping the environment.

⁹⁷ Website visited on August 12, 2020. See <https://elsiglo.com.gt/2020/04/30/ley-de-simplificacion-de-tramites/>.

⁹⁸ Website visited on December 7, 2020. See https://www.congreso.gob.gt/detalle_pdf/iniciativas/5699#gsc.tab=0.

⁹⁹ (Bank, 2010.)

¹⁰⁰ (World Bank, 2016)

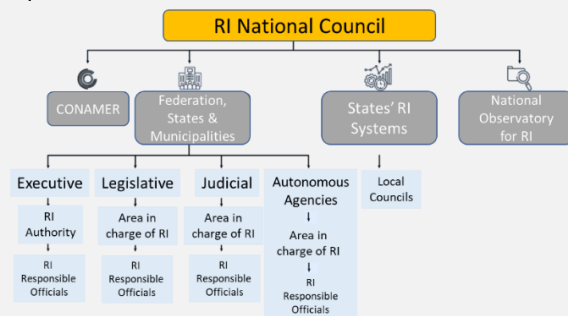
Business Regulatory Environment

Regulatory Improvement within the Ministry of Economy in Mexico).¹⁰¹ According to the OECD, the main mandates and powers of these types of agencies could include: i) Issuing guidelines for the conduct and quality of impact assessments (e.g. RIAs) and other evaluative tools; ii) Reviewing such RIAs and recommending or requiring changes to improve quality; iii) Reviewing proposed new regulatory actions and recommending or requiring changes; iv) Rejecting proposed regulations (where they fail a social welfare test or where they are not supported by adequate analysis); v) Prompting the development of new regulations that would improve social welfare and reviewing existing regulations; among others. It is also important to establish coordination channels with departments and municipalities to ensure that the national agenda is implemented at the subnational level. The Mexican experience described in Box 1 illustrates the institutional structure and political commitment necessary to realize the benefits of regulatory reform.

Box 1. International good practice examples: high impact regulatory reform

In Mexico, the 2017 Constitutional reform established that authorities from all levels of government (federal, state and municipal), as well as the legislative and judicial branches, should implement regulatory improvement (RI) policies. As a consequence, the General Law for RI was passed in 2018 and the National Commission for RI (CONAMER) was created.¹⁰²

The new General Law for RI also established the National System for RI, which is executed based on the RI National Strategy and implemented by the RI National Council. The National Council is comprised of the federal (including all its branches), state and municipal governments, as well as by the National Observatory for RI, a private think tank. With the new law, each state and municipality should create a RI coordinating authority led by a high-level official (e.g. undersecretary or equivalent). CONAMER is responsible for designing the RI national agenda, guidelines and tools. Members of the RI National Council should harmonize their policies to this national framework. This reform provides a comprehensive coordination mechanism between the federal, state, and municipal levels.



In parallel, CONAMER leads specific RI subnational programs in coordination with states and municipalities:

- **Administrative Simplification Program (SIMPLIFICA):** Measures the economic costs of procedures and recommends simplification and modernization actions. Between 2017-2019, CONAMER reviewed 18,500 procedures from 1,129 agencies across 20 states and 12 municipalities.
- **Simplified Window for Construction Permits (VECS):** Introduces a single window to grant construction permits in a maximum of 10 days for low risks constructions of less than 1,500m².
- **Commercial Oral Proceedings Program (JOM):** Promotes the homogeneous implementation of commercial oral proceedings in courts across the 32 states.
- **Priority Sectors Reform Program (PROREFORMA):** Improves the national regulatory framework of specific economic activities or sectors.
- **System for Quick Business Start-Up (SARE) and SARE's quality certificate (PROSARE):**¹⁰³ This program started in 2002 and by 2018, 331 SAREs had been rolled out across Mexico. Between 2014-2018, SAREs

¹⁰¹ Wiener, Jonathan B. 2008. "Issues in the Comparison of Regulatory Oversight Bodies", paper prepared for the OECD Working Party.

¹⁰² CONAMER replaces the Federal Regulatory Improvement Commission (COFEMER).

¹⁰³ SARE is a risk-based approach to business start-up. Businesses with low risks activities can go through a fast track incorporation process wherein commercial licenses are granted within 72 hours. PROSARE certification recognizes that a business is opened in

Business Regulatory Environment

helped create 6,681 firms and 26,850 jobs. Research found that the implementation of this reform increased the number of registered businesses by 5 percent and employment by 2.8 percent in eligible industries. Moreover, the competition from new entrants lowered prices by 0.6 percent and decreased the income of incumbent businesses by 3.2 percent.¹⁰⁴

Source: CONAMER.

2.3. Cost of doing business in the formal sector

68. Opening, operating and closing businesses in Guatemala is burdensome. Guatemala has a heavy administrative framework that imposes unnecessary costs on entrepreneurs and formal companies and disincentivizes formalization. Some efforts have been undertaken to improve the business environment (especially prior to 2015), but implementation gaps have limited the potential benefits of these reforms. For example, not only is creating a company expensive in Guatemala but closing a business requires numerous steps and requirements, especially for Limited Liability Companies (LLCs). Similarly, obtaining construction permits is slow and costly in Guatemala, with a lack of clear zoning rules in various municipalities outside of Guatemala City. Moreover, there are areas of improvement regarding the payment of taxes given that, for example, taxpayers allocate a significant amount of hours to the fulfillment of tax obligations; the time to be able to voluntarily correct an income tax return is long; and the VAT refund is not possible other than for exporters or taxpayers who contract with exempt persons. This section covers the following business areas for Guatemala: i) starting and closing a business; ii) dealing with construction permits; and iii) paying taxes.

69. While Guatemala has one of the highest levels of entrepreneurial activity, businesses growth expectations are low. The Global Entrepreneurship Monitor estimates that during 2019, Guatemala had a “Total early-stage Entrepreneurial Activity” (TEA) of 25 percent, the 3rd highest out of 50 countries.¹⁰⁵ However, when it comes to growth expectations, less than 22 percent of early-stage entrepreneurs expect to create six or more jobs in five years (rank 33rd out of 50), while this figure is 66 percent for United Arab Emirates, 41 percent for Ireland, and 36 percent for Chile.¹⁰⁶

70. Excessive red tape, as well as costly and lengthy government services inhibit business registration, growth and hence job creation. According to the World Economic Forum’s Global Competitiveness Index 2019, Guatemala ranks 114th out of 141 on administrative requirements, one of the lowest scores in the region, just above Honduras (115th). Micro, small, and medium-sized enterprises (MSMEs) are more vulnerable to excessive regulatory burdens. In 2017, firms in Guatemala operated without formal registration on average 1.7 years. Yet, this time measurement was six months for large companies, while small businesses operated under this scheme for one year and medium-sized firms for

less than 72 hours using one single registration form and with no more than two visits to the SARE module. Based on an evaluation this certificate can be renewed every one, two, or three years.

¹⁰⁴ (Bruhn, 2008).

¹⁰⁵ GEM’s Adult Population Survey captures both informal and formal activity, moving beyond a reliance on business registrations which explain only a small proportion of entrepreneurship in many societies. The TEA refers to the percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business.

¹⁰⁶ (GEM, 2019).

Business Regulatory Environment

more than four years.¹⁰⁷ MSMEs in Guatemala not only contribute to 40 percent of GDP but generate more than 80 percent of jobs.¹⁰⁸

71. Since 2006, Guatemala has implemented a number of reforms to lower the cost of starting a business. In May 2006, Guatemala inaugurated a one stop shop at the commercial registry, called "Ventanilla Ágil". With a single registration form, entrepreneurs can complete the commercial, social security and tax registrations at the commercial registry. By 2014 the Registry of Commerce, as well as notaries, decreased their registration fees and charges.¹⁰⁹ During the same year the Official Gazette (*Diario de Centro América*) modified its internal processes reducing the time to publish an edit. Later in 2017, Decree 18-2017 simplified the business registration process, established that the edict must be published on the website of the Mercantile Registry instead of the Official Gazette, which decreased the cost by more than 70 percent.¹¹⁰ The reform also reduced the minimum capital requirement for a corporation (*Sociedad Anónima*) from Q5,000 to Q200.¹¹¹ These reforms, most of them implemented between 2006 and 2014, have significantly improved Guatemala's ease of starting a business (Table 4). More recently, since August 2020, the Mercantile Registry has published the "Guides on registry qualification for mercantile companies". These Guides allow users to know in advance all the procedures and requirements needed to register a company. This speeds up the process by providing the correct information to entrepreneurs, as well as reducing discretion from public officials in charge of company registration.

Table 4. Guatemala's evolution on Starting a Business between 2006 and 2019

Indicator	2006	2019
Procedures	16	6
Time (days)	41	15
Cost (% GNI pc)	58.4%	17.3%
Paid-in minimum capital (% GNI pc)	29.3%	0.6%

Source: Doing Business database.

Note: Data represents business registration for Guatemala City.

72. Despite significant improvements, implementation challenges hamper the impact of the online registration portal. Although businesses are registered through the web portal Minegocio.gt, users have to visit the Registry of Commerce three times.¹¹² Additionally, the one stop shop should process the registration not only with the Registry of Commerce, but also with SAT, IGSS, and the Ministry of Labor. Nevertheless, based on data from the Doing Business 2020 report, as of May 2019 entrepreneurs need to visit the IGSS to register company's employees and the Ministry of Labor to register employees' contracts. Registration outside the capital is even more complex. While in Guatemala City starting a business requires six procedures and takes 15 days, in other municipalities the use of Minegocio.gt is lower.¹¹³ For example, entrepreneurs in Escuintla have to go through eight procedures and wait 30 days, and in Cobán and Quetzaltenango 10 procedures and 41 and 47 days, respectively.¹¹⁴ In April 2021, the Mercantile

¹⁰⁷ Based on data from the World Bank Enterprise Survey 2017 for Guatemala.

¹⁰⁸ (MINECO, 2019)

¹⁰⁹ Article 1, Acuerdo Gubernativo 118.

¹¹⁰ This is applicable to small and medium enterprises with a capital under Q500,000, which are exempted from registration tariffs and only have to pay the edict fees.

¹¹¹ Decree 18-2017 modified the Commercial Code, published on October 31, 2017 and entered into force on January 29, 2018.

¹¹² (PRONACOM, 2019)

¹¹³ (World Bank, 2015.)

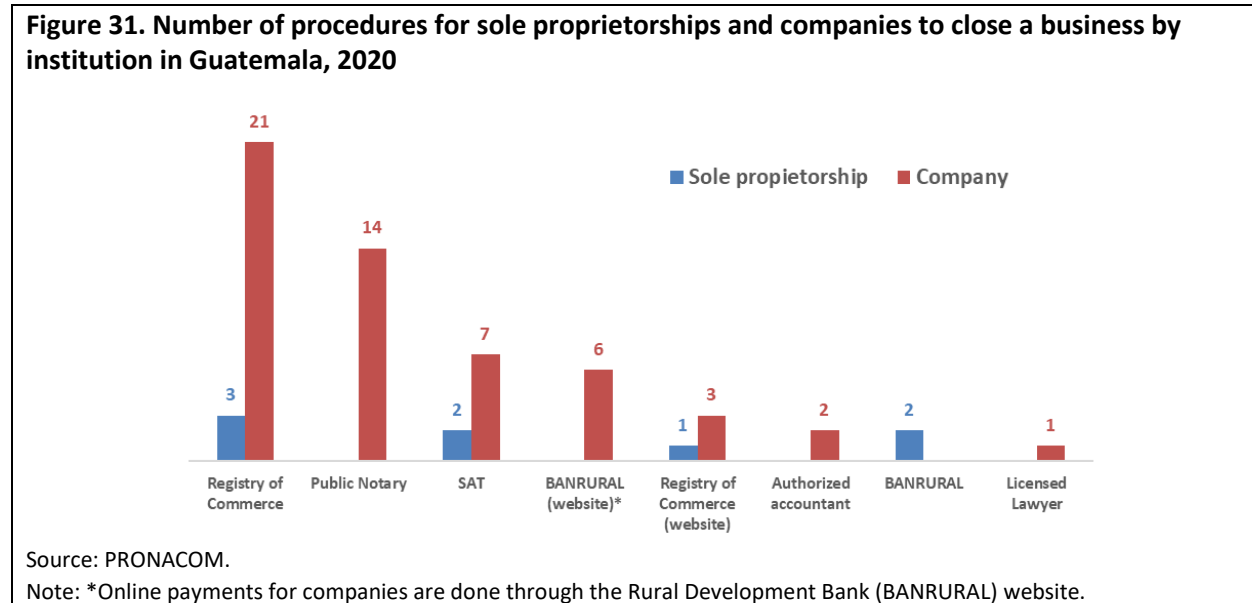
¹¹⁴ Data for Guatemala City from 2019 and for Escuintla, Cobán and Quetzaltenango from 2014.

Business Regulatory Environment

Registry reported that it is currently working on improving the web portal Minegocio.gt to make the registration process more efficient. The improvements also include the interconnection of the Mercantile Registry with other agencies, especially with SAT and IGSS, so registration records of companies are electronically shared.

73. Formalization is not only affected by how easy is to open a business but also how easy it is to close it. To close a business, a sole proprietorship has to go through 8 different procedures and 10 requirements across four different public agencies and private institutions.¹¹⁵ However, for companies it takes 54 steps and 49 requirements involving six public agencies and private institutions (Figure 31).¹¹⁶

Figure 31. Number of procedures for sole proprietorships and companies to close a business by institution in Guatemala, 2020



74. Guatemala has implemented a number of reforms to streamline construction permitting since 2005. The Ministry of Environment and Natural Resources (MARN) simplified obtaining an environmental impact assessment. Two years later MARN delegated its staff to the Municipality of Guatemala City to expedite the process of issuing the decision and relevant requirements. In 2009, the Municipality of Guatemala City introduced a new Land Management Plan (*POT-Plan de Ordenamiento Territorial*), and new building control regulations that also regulate the construction permit issuance. In 2012, the Municipality of Guatemala City issued a new Technical Manual for construction permitting. This manual introduced a risk-based approach on inspections carried out during the construction process.¹¹⁷ Between 2012 and 2013, the Municipality of Guatemala City created a one stop shop (*Ventanilla Ágil*), which not only integrated MARN, but also Guatemala City’s Water Company (EMPAGUA), the General Property Registry, as well as the Directorate of Cadastre and Real Estate Appraisal (DICABI). Currently, the Ministry of Economy is working on the project “*Ventanilla Ágil de la Construcción (VAC)*”, which aims to streamline the procedures necessary to obtain a construction license with the municipal governments. The VAC is

¹¹⁵ Website visited on August 19, 2020: <https://asisehace.gt/procedure/804/856?!=es>.

¹¹⁶ Website visited on August 19, 2020: <https://asisehace.gt/procedure/140/134?!=es>.

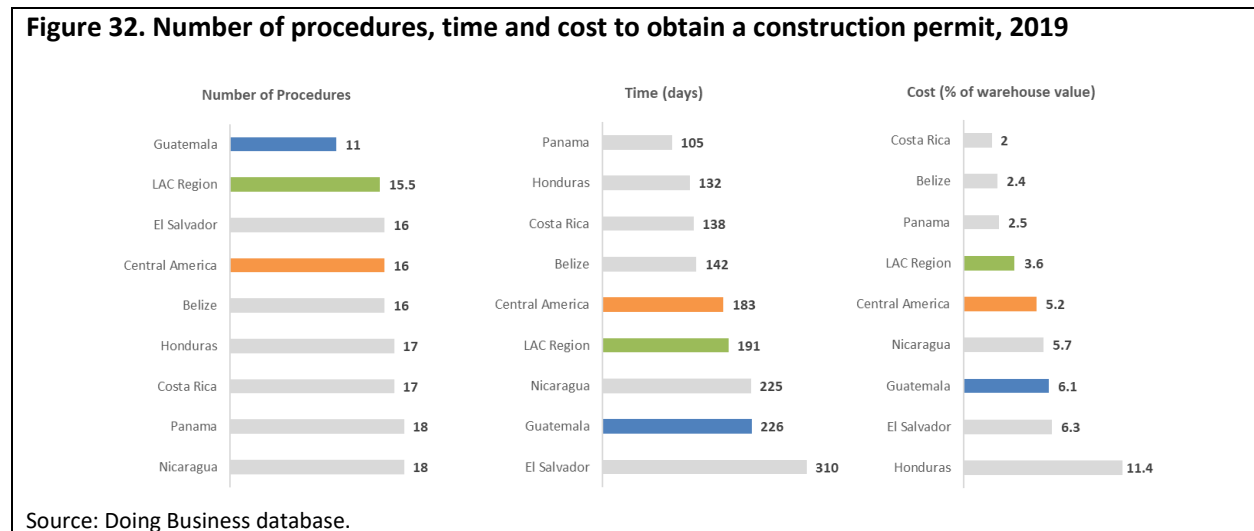
¹¹⁷ Low risk projects (below 3,000 square meters and with less than 4 floors) will be exempt from inspections during the construction process but will still be subject to a final inspection.

Business Regulatory Environment

being developed in a platform where the involved institutions will be able to process applications in a digital manner.¹¹⁸

75. Yet, obtaining construction permits remains slow and costly. Guatemala currently ranks 118th out of 190 on the Doing Business dealing with construction permits indicator, and no reforms have been recorded since 2013. While Guatemala has the lowest number of procedures to obtain a construction permit in Central America, the whole process takes more than seven and a half months and costs 6.1 percent of the warehouse value, one of the lengthiest and most costly in the region (Figure 32). Over the last 5 years the time to get a construction permit in the capital has even increased from 138 to 226 days. Entrepreneurs from Quetzaltenango need to go through 13 different procedures, while in Escuintla and Cobán it takes 18 and 22 procedures, respectively.¹¹⁹

Figure 32. Number of procedures, time and cost to obtain a construction permit, 2019



76. Clear and easily accessible zoning rules should go beyond Guatemala’s capital. The lack of clear zoning rules generates uncertainty. Clear, up-to-date, and easily accessible rules could help streamline procedures, such as the need to obtain a separate construction line and site qualification, and feasibility studies for water, sewage and electricity connections. According to the 2009 Land Management Plan (POT) of Guatemala City, the land use classifications were changed based on the principles of sustainability, certainty, and better quality of life. In the old system the land was divided into industrial, residential, and commercial zones. The new zoning regimes are established according to general use of land, which, among other elements, introduced mixed use of zoning regimes and transportation corridors.¹²⁰ Since then, in Guatemala City zoning is solved together with the construction permit based on its POT. Nonetheless, in municipalities such as Cobán, Escuintla and Quetzaltenango this procedure is omitted due to the lack of this type of norm,¹²¹ possibly due to the technical and financial capacity of local authorities to design and implement such norms.

77. Between 2008 and 2012, Guatemala implemented reforms to facilitate tax payments for companies, but institutional issues inhibit the Tax Administration’s performance. These reforms

¹¹⁸ Website visited on April 8, 2021: See [Link](#).

¹¹⁹ (World Bank, 2015.)

¹²⁰ This tool was developed in consultation with both private and public sector, widely publicized and also introduced a more sophisticated risk based system of approval of construction permit.

¹²¹ (World Bank, 2015.)

Business Regulatory Environment

consisted of implementing systems such as “Declaraguat”, as well as allowing electronic filing for all taxes—e.g. value added tax (VAT) and corporate income tax—, except for social security contributions, which are filed and paid via the IGSS’ website. A Tax Legislation Update passed in October 2012 gradually reduced the corporate income tax from 31 percent to 25 percent.¹²² Nevertheless, the 2015 political and institutional crisis exposed the extent of the Tax Administration’s (*Superintendencia de Administración Tributaria*, SAT) underlying structural problems, such as: inefficient tax administration processes; governance structure that lacks transparency, adequate internal controls, and effective information sharing between units; fragmented and vulnerable information systems; and lack of a human resource strategy. To address this situation, in 2016 SAT’s Organic Law was amended to address critical governance issues. Recently, SAT has started a process to reduce the cost of doing businesses and digitalizing transactions with new processes, such as the electronic invoice (*Factura Electrónica en Línea*—FEL).¹²³ The FEL is the mechanism through which SAT issues fiscal electronic documents (*Documentos Tributarios Electrónicos*—DTE),¹²⁴ which allow contributors to fulfill with their fiscal obligations in an efficient manner.¹²⁵ FEL’s benefits are multiple. For example, DTEs are automatically authorized, it reduces time and compliance costs for contributors, allows for automation and integration of invoices reception process, avoids human errors, among others. The tax authority reports that it has incorporated into the fiscal regime more than 200,000 contributors, who had issued more than 800 million DTEs during 2019 and 2020. Additionally, in 2019 it was created the “Special Electronic Regime for Tax Credit Return” for exporters, as well as it was approved the “Tax Simplification, Updating, and Incorporation Law”, which created new simplified tax regimes on VAT for agricultural and small contributors.¹²⁶ Despite these efforts, the public perception is that tax compliance is costly and tax administration inefficient.¹²⁷

78. For the average taxpayer, deadlines to comply with tax obligations remain high and access to tax authorities limited.¹²⁸ According to Doing Business, Guatemala ranks 104th out of 190 on the ease of paying taxes. Guatemalan taxpayers spend an estimated 248 hours per year to comply with fiscal obligations, one of the highest in Central America. Additionally, as measured by Doing Business, unless you are an exporter or a taxpayer who contracts with exempt persons, no VAT refund is available in Guatemala, which limits this tax benefit for most businesses.¹²⁹ This situation is one of the main factors why Guatemala scores low on the post filing index, which counts the time required to obtain a VAT refund and corporate income tax correction (Figure 33). Based on results from the 2017 Enterprise Survey, tax administration burdens increase with the size of the company. Almost 43 percent of small and 53 percent of medium businesses visited or were required to meet with tax officials, while this percent was almost 70 percent for large firms.

¹²² The Government of Guatemala published Decree No. 2-2012 in October 2012 and entered into force on January 1st, 2014. The Decree decreased corporate income tax rate from 31% to 28%. Later, it was introduced Decree 10-2012 in December 2012, which entered into force on January 1st, 2015. According to this Decree, corporate income tax rates were reduced from 28% to 25%.

¹²³ (IMF, 2019)

¹²⁴ DTE certification is provided by the SAT, as well as by 15 authorized certifiers.

¹²⁵ Decree 4-2019. Article 29 “A” of Decree 27-92 was incorporated so contributors can use the FEL.

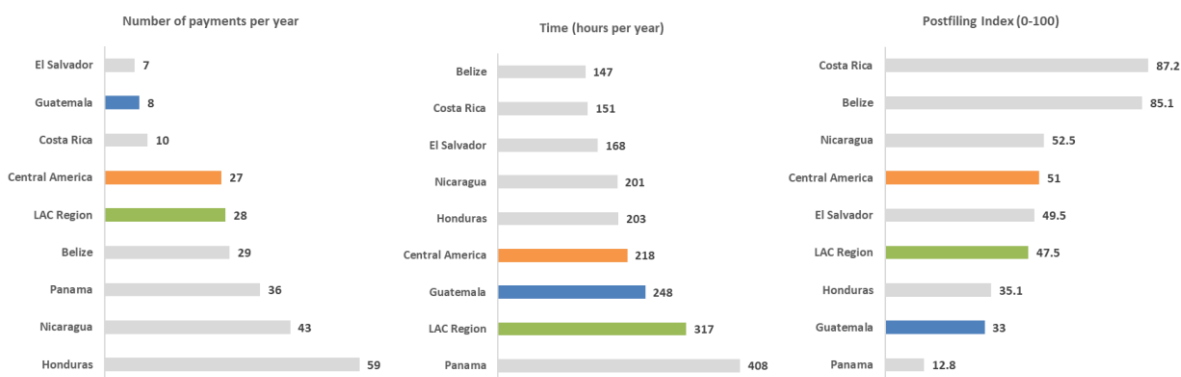
¹²⁶ Decree 7-2019 from September 24, 2019.

¹²⁷ (World Bank, 2016b)

¹²⁸ (CIEN, 2018c)

¹²⁹ The case study used by DB for VAT refund is based on operations of a limited liability company of 60 employees and with a turnover of 1,050 times income per capita, that is 100% domestically owned and has five owners, all of whom are natural persons. This company made in June 2018 a capital purchase of one additional machine for manufacturing pots. The value of the machine is 65 times of income per capita of the economy. The seller of the machinery is registered for VAT. Excess input VAT incurred in June will be fully recovered after four consecutive months if the VAT rate is the same for inputs, sales and the machine and the tax reporting period is every month. Input VAT will exceed output VAT in June 2018.

Figure 33. Number of payments and time to pay taxes, as well as how easy is to obtain a VAT refund or to correct a mistake after filing the corporate income tax, 2019



Source: Doing Business database.

79. Reducing the cost of doing business can support businesses already impacted by COVID-19. The Central Bank of Guatemala (BANGUAT) estimates that the economy contracted between 1.5 and 3.5 percent in 2020,¹³⁰ while the World Bank estimates that contraction to be 3.5 percent due to the COVID-19 pandemic.¹³¹ Jobs and firms, particularly MSMEs, are affected significantly due to lockdown measures, falling demand, bottlenecks in supply chains and drying liquidity as revenues collapse. The new administration prepared and obtained approval in Congress for two emergency packages to provide liquidity to firms, including MSMEs that are hit the most by the crisis.¹³² However, this support will not alleviate the administrative complexity that generates significant costs for formal businesses and impedes informal ones from formalizing. Lack of clear rules and excessive discretion further increase the cost of doing business. The impact of improvements to starting a business and construction permitting have been lagging due to implementation problems. Also, the lack of harmonization of regulatory requirements across municipalities contributes to regulatory complexity and uncertainty. Furthermore, Guatemala's tax revenue is one of the lowest in LAC and the world.¹³³ This limits the country's debt capacity, especially to cope with the effects of COVID-19.¹³⁴

2.4. Trade facilitation

80. Guatemala can improve firm competitiveness by making it easier to export and import. Border compliance costs and times to export and import in Guatemala are comparable to LAC averages, but higher than OECD countries (Table 5). Traders and firms linked to global value chains would benefit from the implementation of trade facilitation mechanisms, especially the simplification and digitalization of procedures in all regulatory and border control agencies (Agriculture, Health, Security and others). Port, airport and border infrastructure require agile processing and communications systems that interoperate to maintain effective controls at the domestic level and with regional Central American counterparts. Guatemala can improve trade openness and reduce the costs and times of trading goods across borders

¹³⁰ Website visited on April 8, 2021: See [Link](#).

¹³¹ (World Bank, 2021b)

¹³² (World Bank, 2020a)

¹³³ (World Bank, 2016b)

¹³⁴ (IMF, 2019)

Business Regulatory Environment

by reviewing its legal framework, improving administrative procedures, and enhancing trade facilitation coordination among agencies.

Table 5. Doing Business Trading Across Borders 2020: Guatemala

Indicator	Guatemala	LAC	OECD high income	Best Regulatory Performance
Time to export: Border compliance (hrs)	36 ¹³⁵	55.3	12.7	1 (19 Economies)
Cost to export: Border compliance (USD)	310	516.3	136.8	0 (19 Economies)
Time to export: Documentary compliance (Hrs)	48	35.7	2.3	1 (26 Economies)
Cost to export: Documentary compliance (USD)	105	100.3	33.4	0 (20 Economies)
Time to import: Border compliance (hours)	72	55.6	8.5	1 (25 Economies)
Cost to import: Border compliance (USD)	405	628.4	98.1	0 (28 Economies)
Time to import: Documentary compliance (hrs)	32	43.2	3.4	1 (30 Economies)
Cost to import: Documentary compliance (USD)	37	107.3	23.5	0 (30 Economies)

Source: World Bank Group, Doing Business database

81. The importance of revenue collected through Customs make it necessary to implement smart and efficient controls. The tax administration (*Superintendencia de Administración Tributaria, SAT*) is responsible for the collection of tariffs and duties on imports, which represented 29 percent of total Central Government tax revenues in 2019.¹³⁶ The importance of tariffs and duties for government revenues highlights the importance of smart and efficient border controls that minimize the burden on firms.

82. Limited ports and land borders infrastructure, increasing trade volumes and international transit require efficient procedures, while maintaining revenue, sanitary controls and security. Guatemala operates three main maritime ports, which handle the largest volumes of Guatemalan exports of agricultural commodities, manufactured goods and imports: Puerto Santo Tomas de Castilla (30 percent of total maritime cargo in 2019) and Puerto Barrios (15 percent) in the Atlantic and Puerto Quetzal (55 percent) in the Pacific.¹³⁷ The main ports are operated by decentralized public enterprises. The main land borders, Tecun Umán (border with Mexico) and Pedro de Alvarado (border with El Salvador), handle terrestrial trade along the Mesoamerican Trade Pacific Corridor, including most exports to Central American countries. Guatemala serves as an important trade corridor between Mexico and the rest of Central America and provides port services to neighboring Honduras and El Salvador. Mexico borders with Guatemala, especially Tecun Uman, are not only important to trade between both countries, but also to transit through CA. Tecun Uman is the entrance point to all CA countries. This makes international transit

¹³⁵ The government indicated that this has been reduced due to recent reforms described in the text below.

¹³⁶ SAT.gov.gt; website visited <https://portal.sat.gob.gt/portal/estadisticas-tributarias-sat/#1506903647072-b0b5ebcd-fec4>

¹³⁷ [Central American Commission of Maritime Transport](#)

Business Regulatory Environment

an important part of total trade operations. Land border infrastructure is limited and causes delays and bottlenecks to trade. Despite many efforts supported by donors, significant areas for improvement at border crossings remain, such as advanced processing, traffic redesign, pre-check points and border administrative buildings infrastructure. Under the Central American Economic Integration framework, the Government of Guatemala is currently working on a “model customs” at El Corinto border with Honduras. The model is expected to serve as a best-practice benchmark and is expected to be completed by May 2021. Following this project, infrastructure improvement plans will continue with main border crossings with El Salvador (Pedro de Alvarado) and Mexico (Tecún Umán).

83. Air cargo is efficiently operated by COMBEX-IM as a private concession, however limited airport infrastructure is becoming a constraint. COMBEX-IM is highlighted as a regional best practice to handle express cargo. COMBEX-IM has efficiently handled procedures, and reduced costs and times for air cargo. With the increase of e-commerce and other express shipments, La Aurora International Airport infrastructure capacity has reached its limit. Air cargo infrastructure capacity will need to be expanded to avoid saturation of existing operations. The current administration is planning a new international cargo airport in Puerto San Jose on the Pacific coast.

84. Guatemala is working on implementing the WTO Trade Facilitation Agreement. Guatemala is a member of the World Trade Organization (WTO) and ratified the WTO Trade Facilitation Agreement (TFA). The country committed to adopt 68 percent of the TFA, while the remaining parts of the agreement will be adopted in later stages. The Guatemala Trade Facilitation Committee’s priority for full implementation of the TFA is to work on transparency in access to information through an integrated single window covering both imports and exports.

85. An integrated single window for exports and imports, backed by simplified administrative procedures of all border control agencies, is a main challenge to reduce trade times and costs. The single window for exports, VUPE (*Ventanilla Unica para las Exportaciones*), has physically integrated the offices of border control agencies and can electronically issue export permits. The operation has been run by AGEXPORT, the Exporters Association, through a concession by the Ministry of Economy since 1997. On the imports side, the current single window (*Ventanilla Agil para las Importaciones*, VAI) did not seem to fill the legal requirements of Customs and other border control agencies to access data, issue authorizations and implement controls and administrative responsibilities. The operation agreement ended in 2019. The Government of Guatemala is currently planning the Foreign Trade Single Window, to integrate both import and exports, and interconnect border control agencies.

86. While the SAT has upgraded ICT systems and procedures, other border control agencies such as MAGA, MSPAS, DIPAFRONT, still need to streamline procedures. In line with a national crosscutting effort to reduce bureaucratic barriers, border control agencies (other than Customs) need to invest in improving, simplifying and digitalizing procedures, with a trade facilitation lens, while maintaining effective controls. This will allow other border control agencies to interoperate with Customs, integrate risk management strategies, coordinate border management, and connect with private sector operated single windows services) and with other regional initiatives such the Digital Central American Trade Platform.

87. SAT is implementing a comprehensive modernization program with clearly defined goals and metrics, that gives certainty to the private sector, but still faces challenges for its full implementation.¹³⁸

¹³⁸ [Integrated Modernization Plan. SAT 2019.](#)

Business Regulatory Environment

In 2019 SAT launched an ambitious modernization plan (*Modernización Integral Aduanera*, MIAD), which is demonstrating good progress in simplifying and automating procedures, expanding the authorized economic operators program, registering customs agents, and increasing interoperability between SAT and ports and airports. A baseline study (in 2019) of times at ports and borders¹³⁹, combined with a follow-up survey in 2021 will provide evidence of the impact of specific interventions. An important part of MIAD is the open and permanent dialogue with the private sector. SAT acknowledges that challenges remain for full implementation, especially to enhance post clearance audits and controls. As part of MIAD, SAT is investing in improving infrastructure, ICT and institutional capacities.¹⁴⁰

88. SAT has partnered with the private sector to promote the Authorized Economic Operators Program (AEO), with tangible benefits for participating firms. The AEO program¹⁴¹ has over 55 registered operators spanning the logistics chain: exporters, importers, manufacturers, transporters, freight forwarders, warehouses, and customs agents. SAT has partnered with the private sector to promote the AEO program and train trade operators and customs professionals to support firms in the certification process. Firms perceive benefits through reduced inspections and cargo clearance times, and an extended period to pay taxes. In addition, SAT is pursuing mutual recognition agreements with other trade partners, mainly Central American neighbor countries, to increase the benefits of the program for participating companies.

89. Guatemala is part of the Central American Economic Integration Framework, which has been slow to reform and adapt to modern trade, efficient logistics and industry technical standards. A World Bank study and recommendations to reform the Central American Customs Code (CAUCA) and its regulations (RECAUCA) were presented to Central American governments and business sector in 2018.¹⁴² It is expected that the revised norms will improve transparency, expedite customs clearance, and increase integration of border control agencies, in line with the WTO Trade Facilitation Agreement. One of the proposed reforms to CAUCA and RECAUCA is the implementation of an advanced customs declaration for land transported goods, which is key to accelerate border crossings. It is expected that during 2021 the regional Customs Committee will agree on a new version of CAUCA and RECAUCA. In addition to CAUCA Customs regulations, Guatemala and its regional trading partners should harmonize sanitary and phytosanitary standards, cross border e-commerce, expedited shipment regulations, and common international transit and multimodal transportation regulations, among others. Central American countries have been working on a Trade Facilitation Strategy since 2014, including the Central American Digital Platform that seeks electronic interoperability among all border control agencies.

90. Processing times for bilateral trade between Guatemala and Honduras have dropped from 8 hours to 7 minutes through Customs Union integration.¹⁴³ Both countries have made significant progress in integrating customs procedures at the El Florido and El Corinto land border and harmonizing part of phytosanitary inspections and standards. Most recently, starting March 21, 2021, Guatemala and Honduras implement the advanced declaration, which is transmitted digitally from the exporter to import authorities for approval. As a result, border crossing times can be reduced to 7 minutes. In addition, peripheral controls for customs offices outside the Customs Union territory were established in Tecun

¹³⁹ [Customs Time Release Study. SAT 2019.](#)

¹⁴⁰ SAT.gob.gt. Website visited <https://portal.sat.gob.gt/portal/descarga/12651/modernizacion-internacional-aduaneramiad/38269/miad-modernizacion-internacional-aduanera-2019-2023.pdf>

¹⁴¹ [Authorized Economic Operators Program. SAT 2020.](#)

¹⁴² [World Bank Group, 2018. Legal Gap analysis on the Uniform Customs Code of Central America and its regulations and recommendations for implementing the Trade Facilitation Agreement of the World Trade Organization and other best practices.](#)

¹⁴³ (USAID, 2020)

Business Regulatory Environment

Umán (border with Mexico) and Puerto Cortes in Honduras, which will result in improved trade and logistics corridors. Still, the benefits of the Customs Union cover only half of Guatemala–Honduras bilateral trade. The remaining goods depend on the harmonization of sanitary standards and/or are subject to specific duties and taxes. The Guatemala–Honduras Customs Union has proven to be an effective model to deepen regional integration.

2.5. Digital readiness

91. Guatemala is not well prepared to provide online government services and promote the digital economy, which is a key factor to increase firms' productivity. Besides not having a consolidated digital agenda, Guatemala is missing relevant legal frameworks on key digital enablers, such as laws on data protection, eCommerce, and cybercrime. Furthermore, Guatemala has very low fixed and mobile broadband penetration rates and low levels of digital skills among the population. This situation is more severe in the rural areas. Not only is the telecommunications legal framework outdated, but the scarce radioelectric spectrum allocation negatively impacts the availability and quality of mobile services, which may delay the introduction of 5G networks. All these factors locate Guatemala at the bottom of international benchmarks on ICT adoption and digital practices.

92. Despite some efforts during the last ten years, Guatemala has not been able to consolidate its Digital Agenda. Since 2010, Guatemala has been working on the definition of a digital agenda. In 2015, the National Science and Technology Secretariat (SENACYT) launched a “Roadmap for a Digital Agenda” that included guidelines and projects in four pillars (digital inclusion, efficient government, transparent management, and digital education for all).¹⁴⁴ During the last years there have been different initiatives related to a National Digital Agenda, nevertheless they had limited results given the lack of a clear mandate and institutionalization.¹⁴⁵ Currently, the GAE is working on a digital government program based on the four pillars from the Roadmap for a Digital Agenda.¹⁴⁶

93. Guatemala lacks a relevant legal framework to enable the digital economy. In 2008 the Government of Guatemala took an important step with the enactment of the Law on the Recognition of Communications and Electronic Signatures.¹⁴⁷ In 2018 the Ministry of the Interior (MINGOB) launched the National Open Data Policy, which sets standards and best practices for digitizing records and encourages the publication of datasets.¹⁴⁸ The policy also creates targets to be reached, a standardized vocabulary to be used in government, and a tool to monitor its implementation.¹⁴⁹ However, Guatemala does not have legal instruments that are key digital enablers, such as a law on data protection, which is critical to ensure the protection of personal data, as well as specific laws on eCommerce and cybercrime.

94. Intellectual property rights, especially of copyrights and patents, are key to promote investment in the digital services sector. Since 1983, Guatemala has been a signatory of the World Intellectual Property Rights Organization (WIPO) treaties. Relevant legislation includes the Law on Copyright and Related Rights from 1998 (amended in 2006 and 2018) and the Industrial Property Law from 2000

¹⁴⁴ (SENACYT, 2015)

¹⁴⁵ A4AI-GT. 2018. *Ayuda Memoria de la reunión de la Mesa de Trabajo: Nación Digital*. <https://a4ai.org/guatemala/13-14-febrero-2018-mesas-de-trabajo/>.

¹⁴⁶ (CIEN, 2020)

¹⁴⁷ Decree 47-2008.

¹⁴⁸ (MINGOB, 2018)

¹⁴⁹ (World Bank, Forthcoming)

Business Regulatory Environment

(amended in 2005 and 2013).¹⁵⁰ However, the amount of requests for intellectual property rights protection filed from Guatemala is low compared to some regional peers. From 2009 to 2018, while Guatemala filed 175 patents, Costa Rica filed 457.¹⁵¹ Similarly, Guatemala filed 24,827 trademarks, while Costa Rica filed 63,667 during the same period.¹⁵²

95. The absence of policies that foster a digital environment inhibits the use of eGovernment and eCommerce in Guatemala. Guatemala is lagging in terms of digital readiness as illustrated by international benchmarks that assess the degree of adoption of ICT, innovation, as well as eGovernment and eCommerce practices (Table 6).

Table 6. Guatemala's performance on international benchmarks related to ICT adoption and digital practices

Source	Index or Indicator	Rank	Year
World Economic Forum	ICT adoption pillar	110 th out of 141	2019
World International Property Organization	Global Innovation Index	107 th out of 129	2019
International Telecommunications Union	ICT Development Index	125 th out of 176	2017
United Nations	E-Government Survey	121 st out of 193	2018
World Bank Group	Digital Adoption Index	90 th out of 183*	2016
Portulans Institute	Network Readiness Index	96 th out of 121	2019
International Telecommunications Union	Global Cybersecurity Index	112 th out of 175	2018
A4AI	Affordability Drivers Index	47 th out of 61	2018

Note: The Digital Adoption Index does not publish rankings, therefore the rank for Guatemala was estimated based on its score.

96. eCommerce in Guatemala lacks a law that regulates online shopping and electronic payments. In November 2019, PRONACOM launched a joint effort with Kolau to create marketplaces for 1,500 small and medium enterprises (SMEs).¹⁵³ The service is free of charge for SMEs, and it provides training and assistance to develop a strategy to increase usage of the digital platform as part of their business development.¹⁵⁴ Currently, the MINECO Viceministry for Integration and Foreign Trade is negotiating the terms of the agreements and commitments with the WTO on topics such as spam, eSignature, consumer protection, open data, paperless trade, and access to open Internet. Once these negotiations are concluded, amendments on national legislation or design of new legislation will be defined. Despite these efforts, a specific eCommerce law is needed to protect online transactions.¹⁵⁵ This has been a demand from the eCommerce union (*Gremial de Comercio Electronico*, GRECOM) and the Chamber of Commerce of Guatemala.¹⁵⁶ Based on UNCTAD's B2C E-Commerce Index 2019, Guatemala ranks 108th out of 152, only above El Salvador (110th) and Nicaragua (132nd) in Central America. The 2017 World Bank Enterprise Survey found that less than 50 percent of small firms had their own website, compared to 75 percent of medium firms and more than 98 percent of large companies.

¹⁵⁰ Website visited on August 18, 2020: <https://wipolex.wipo.int/en/legislation/profile/GT>.

¹⁵¹ Website visited on August 18, 2020: https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=GT.

¹⁵² Website visited on August 18, 2020: https://www.wipo.int/ipstats/en/statistics/country_profile/profile.jsp?code=CR.

¹⁵³ Website visited on August 18, 2020: <https://www.kolau.es/guatemala>.

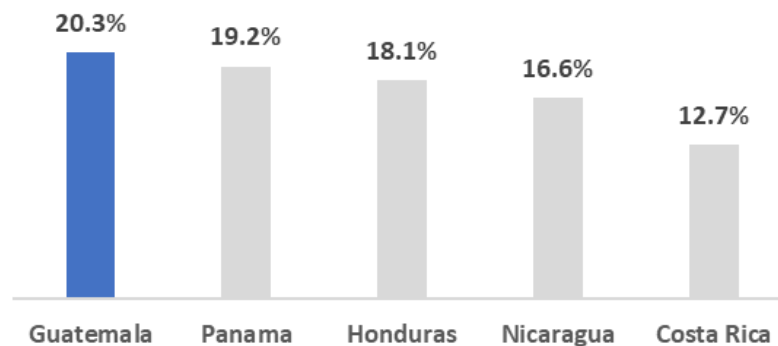
¹⁵⁴ World Bank (Forthcoming). *Digital Dashboard for Guatemala*. Washington, D.C.: World Bank.

¹⁵⁵ This law should include measures on consumer protection for online transactions (e.g. return of goods).

¹⁵⁶ Website visited on August 18, 2020: <https://www.prensalibre.com/economia/guatemaltecos-compran-10-veces-mas-fuera-del-pais-por-comercio-electronico/>.

97. Users of digital services are more vulnerable without a legal framework for cybersecurity. In 2018, Guatemala had the highest percentage of users subjected to phishing attacks compared to its regional peers (Figure 34).¹⁵⁷ Within this context, the government of Guatemala launched a National Cybersecurity Strategy in June 2018.¹⁵⁸ Nonetheless, a national interinstitutional coordinator agency for the implementation of the strategy has not been appointed yet. Although Guatemala has developed or amended norms that regulate aspects related to cybercrime, privacy and data protection, such as the Criminal Code and Laws on: Consumer and User Protection, Electronic Communications and Signature Recognition, Copyright and Related Rights, Comprehensive Protection of Childhood and Adolescence, among others; the country has not enacted specific cybercrime legislation. In 2019, the government drafted and submitted to the Congress a law against cybercrime, which is currently under review.¹⁵⁹

Figure 34. Countries most targeted by phishing attacks in Central America, 2018



Source: Statista: <https://www.statista.com/statistics/997956/phishing-attack-user-share-latin-america-country/>.

Note: Information not available for Belize and El Salvador.

98. Reforms are needed to encourage the adoption of digital business models in the public and private sectors, particularly in light of the COVID-19 crisis. The crisis has accelerated the need for efficient digital services at all levels, including Government-to-Business (G2B), Government-to-Citizen (G2C), Business-to-Business (B2B), and Business-to-Consumers (B2C). However, in the World Economic Forum’s “Legal framework’s adaptability to digital business models” indicator, Guatemala ranks 90th out of 141 countries, compared to a rank of 76 in Honduras.¹⁶⁰ Guatemala’s government has not yet adapted its legal framework to digital business models. This also applies to eGovernment services. Latinobarometer reported that only 2 percent of administrative procedures in Guatemala were fully digital in 2017.¹⁶¹ For example, a basic G2B service is the registration of companies. Guatemala has a centralized business registry with full national coverage, an electronic database to search all company records, all registered company records are stored in digital form, and it is possible to pay online fees related to company incorporation. However, there is no electronic system that covers the entire company registration process and it is not possible the electronic exchange between the registry and other agencies. It is also not

¹⁵⁷ Observatorio Guatemalteco de Delitos Informáticos (OGDI). 2019. Estadísticas. Estadísticas Nacionales 2019.

<http://ogdi.org/estadisticas>

¹⁵⁸ (MINGOB, 2018b)

¹⁵⁹ Congreso de la Republica. 2019. Registro [5601.2019](#).

¹⁶⁰ (WEF, 2019)

¹⁶¹ (CIEN, 2020)

Business Regulatory Environment

possible to use eSignatures for companies' registration and there is no unique business identification that all government agencies can use.¹⁶²

99. Fixed and mobile Internet penetration are important to develop the digital economy. In 2016, although Guatemala registered high levels of mobile telephone penetration of more than 110 subscriptions per 100 inhabitants,¹⁶³ mobile broadband subscriptions were only 9 subscriptions per 100 inhabitants,¹⁶⁴ while El Salvador had 36, Belize 50, and Costa Rica more than 86. When it comes to fixed broadband, in 2017 penetration was only 3 subscriptions per 100 inhabitants. Overall, 65 percent of the 10 years and older population use the Internet.¹⁶⁵ However, there are disparities in access to digital devices and broadband between urban and rural populations in Guatemala, where only 1.6 percent of the households in rural areas have access to broadband.¹⁶⁶

100. Digital economy development challenges are related to supply of reliable telecommunication services and demand for ICTs and digital services. Among other sociodemographic and economic aspects, low use of ICTs and Internet could be explained by lack of skills and trust from consumers (demand side), as well as insufficient telecommunications infrastructure (supply side). Even if eGovernment platforms are introduced to provide online public services and digital governance policies are implemented to incentivize eCommerce, given the limited Internet use in Guatemala only a small portion of the population will benefit from what the digital environment offers. In fact, Guatemala ranks 125th out of 141 on the "Digital skills among active population" from the WEF's Global Competitiveness Index. Under these circumstances, comprehensive educational programs and socialization campaigns could aim to increase ICT skills. From the supply side, to have effective competition and affordable services, regulatory telecommunication policies should foster infrastructure deployments (including infrastructure sharing), specially of fiber optics, as well as enough radioelectric spectrum allocation that extends coverage and enables 5G mobile networks. Guatemala is not only characterized by low coverage but also by high prices on fixed and mobile broadband.¹⁶⁷ For example, as regards mobile tariffs, the price of 1 Gigabyte (GB) is 8 percent of Gross National Income (GNI) per capita, the highest in the region and above the 2 percent threshold recommended by the ITU. The average cost in Central America is 4.3 percent and in LAC is 6 percent of GNI per capita.¹⁶⁸

101. Overall, the digital regulatory environment in Guatemala is weak. Different international benchmarks show that Guatemala has a low use and adoption of ICTs and Internet, as well as of eGovernment and eCommerce practices. The General Law of Telecommunications of 1996 is outdated, data protection, eCommerce and cybercrime laws have not been approved by the Congress, and the government is still developing a national broadband plan. There is a lack of regulation to promote competition and infrastructure sharing, low transparency in the assignment of spectrum and no policies covering data protection and consumers online privacy. To boost the digitalization of public institutions and the private sector, the digital divide should be closed through a combination of educational programs, digital inclusion policies and awareness campaigns aiming to increase digital skills of the population;

¹⁶² Doing Business database.

¹⁶³ International Telecommunications Union (ITU) database.

¹⁶⁴ Website visited on August 18, 2020: <https://knoema.com/atlas/Guatemala/topics/Telecommunication/Telecomm-Services/Mobile-broadband-subscriptions-per-100-inhabitants>.

¹⁶⁵ ITU database.

¹⁶⁶ (UN, 2020)

¹⁶⁷ (CIEN, 2015)

¹⁶⁸ (World Bank, Forthcoming)

Business Regulatory Environment

together with regulatory policies that incentivize investment in infrastructure and level the playing field in the telecommunications sector to increase access to affordable digital services and platforms.

2.6. Business regulatory environment suggested action plan

102. Based on these findings, the below table presents a possible roadmap for improving the business regulatory environment in Guatemala with estimated timeframes. In the short-term, the government could achieve quick and visible results by streamlining specific regulatory processes such as business registration, construction permitting, property registration, and paying taxes, as well as facilitating trade. These reforms facilitate firm entry, operation and exit, and thereby make it easier for businesses and the overall economy to adjust for a faster recovery and renewed growth in the context of the COVID-19 crisis. The government may also want to consider advancing more medium-term reforms related to recovery from the crisis, particularly on insolvency proceedings, minority shareholders protection, and creating effective mechanisms for debt and dispute resolution within and outside of the judiciary to facilitate the reallocation of resources across the economy. The regulatory improvement and governance and the digital agenda are cross-cutting and impact almost all aspects of the regulatory environment, including the cost of doing business and trade facilitation.

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
Institutional quality, property rights, and contractual environment	<p>Strengthen contract enforcement and promote alternative dispute resolution mechanisms PRIORITY</p> <p>a) Review and amend the Law on <i>Amparos</i> and related legislation to avoid the abuse of appeal resources.</p> <p>b) Map court processes to identify sources of delays and implement an electronic case management system (This could be done based on the Law on Simplification of Requirements and Administrative Red Tape).</p> <p>c) Invest in court infrastructure and automation of courts by allowing cases' electronic filing and service of process, as well as online payment for court fees (This could be done based on the Law on Simplification of Requirements and Administrative Red Tape).</p> <p>d) Promote out of court enforcement by implementing a modern mediation and arbitration system, as well as provide training and awareness campaigns to key stakeholders.</p> <p>e) Review and amend the Code on Civil and Mercantile Legal Proceedings and approve the Law on Arbitrage (4802) to introduce international good practices, as established in the UNCITRAL model law from 2006. The approval of this Law should foresee the necessary resources and institutional capacity for its implementation.</p>	<p>a) Organismo Ejecutivo, Judicial system, Congress, and relevant line institutions</p> <p>b) Judicial system and relevant line institutions</p> <p>c) Judicial system and relevant line institutions</p> <p>d) Relevant line institutions</p> <p>e) Judicial system, Congress, and relevant line institutions</p>	Laws, Codes, and regulations	<p>a) MT</p> <p>b) ST</p> <p>c) MT</p> <p>d) ST</p> <p>e) MT</p>	<p>a) None</p> <p>b) Small</p> <p>c) Large</p> <p>d) Small</p> <p>e) None</p>
	<p>Improve property registration and strengthen quality of land administration system</p> <p>a) Streamline the property transfer process and implement a one stop shop to reduce procedures and processing time of property registration.</p> <p>b) Fully implement the online platform for property transfers.</p> <p>c) Increase national geographic coverage of privately held land plots at the Property Registry and National Cadastre.</p>	<p>a) MINECO, PRONACOM, General Registry of Property (RGP), Registry of Cadastral Information (RIC), and National Association of Municipalities (ANAM)</p> <p>b) Congress, RGP and RIC</p> <p>c) RGP, RIC, and ANAM</p>	None	<p>a) ST/MT</p> <p>b) MT</p> <p>c) MT</p>	<p>a) Small</p> <p>b) Small</p> <p>c) Large</p>
	<p>Increase protection to minority investors</p> <p>a) Review and amend the Commercial Code to increase shareholders rights and require greater corporate transparency. PRIORITY</p> <p>b) Build capacity of stakeholders to comply with the legal reforms.</p>	<p>a) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, Mercantile Registry, Judicial system, and relevant line institutions</p>	Codes	<p>a) ST/MT</p> <p>b) MT</p>	<p>a) Small</p> <p>b) Small</p>

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
		b) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, and relevant line institutions			
	Strengthen the insolvency framework (see Access to Productive Finance chapter's Action Plan)	MINECO, Congress	Finalize and enact the law	ST	Small
Regulatory governance and predictability in implementing laws and regulations	<p>Design and implement a regulatory governance framework</p> <p>a) Adequate human and financial resources should be assigned for the implementation of the Simplified Requirements and Administrative Formalities law. PRIORITY</p> <p>b) Initiate a systematic review of laws and regulations at the national and municipal level and eliminate the ones lacking a legal basis. At the same time, it is advisable to implement improvements to administrative law.</p> <p>c) Initiate works on the design of a law on regulatory improvement, which includes at least: i) registration of all national and municipal procedures at the web portal "Asisehace.gt"; ii) implementation of RIAs; iii) setup formal participation of the formal social and productive sectors in the design of regulations; iv) establish a coordination mechanism among national and subnational public institutions. PRIORITY</p> <p>d) Create an agency in charge of the sustainable implementation of the regulatory governance agenda. This institution should provide training to public officials from national and subnational public agencies.</p>	<p>a) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, and Congress</p> <p>b) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, ANAM, and relevant line institutions</p> <p>c) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, Congress, and relevant line institutions</p> <p>d) MINECO (Vice Ministerio de Inversión y Competencia), PRONACOM, Congress, National Office for Civil Service (ONSEC), and relevant line institutions</p>	Laws, by-laws, and tertiary legislation	<p>a) ST</p> <p>b) ST/MT</p> <p>c) ST/MT</p> <p>d) MT</p>	<p>a) None</p> <p>b) Small</p> <p>c) Large</p> <p>d) Large</p>
Lower the cost of doing business in the formal sector	<p>Strengthen the competition framework PRIORITY</p> <p>a) Amend the current Competition Law project in Congress (initiative 5074) so that it is consistent with the development and competitiveness of the Guatemalan economy, especially in international markets. The amendments should, among other things, recognize the economic efficiency of other economic actors in addition to consumers and include notification of economic concentrations instead of only their "authorization or rejection".</p>	<p>a) MINECO, Congress, and relevant in line institutions</p> <p>b) MINECO, Congress, and relevant in line institutions</p>	Law	<p>a) ST</p> <p>b) MT</p>	<p>a) None</p> <p>b) Large</p>

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
	b) Enact and implement a competition law to regulate anti-competitive practices (e.g., monopolies and cartels), supervising mergers and acquisitions, and eliminate entry barriers in the Guatemalan market. Adequate human and financial resources should then be assigned to the competition agency to ensure effective implementation of the law.				
	<p>Facilitate opening and closing a business</p> <p>a) Include in the one stop shop for companies' registration all relevant institutions.</p> <p>b) Amend the Commercial Code to eliminate the minimum capital requirement.</p> <p>c) Fully implement and promote the adoption of web portal "Minegocio.gt". PRIORITY</p> <p>d) Make notarization optional for all types of companies.</p> <p>e) Streamline procedures to close a business and improve coordination among the agencies involved through implementation of ICT solutions.</p>	<p>a) MINECO (Vice Ministerio de Asuntos Registrales), PRONACOM, Registry of Commerce, SAT, IGSS, Ministry of Labor, ANAM, and relevant in line institutions</p> <p>b) Congress, MINECO (Vice Ministerio de Asuntos Registrales), and Registry of Commerce</p> <p>c) MINECO (Vice Ministerio de Fomento a la MIPYME), PRONACOM, Registry of Commerce, SAT, IGSS, Ministry of Labor, and relevant in line institutions</p> <p>d) Congress, MINECO (Vice Ministerio de Asuntos Registrales), and Registry of Commerce</p> <p>e) MINECO (Vice Ministerio de Asuntos Registrales), PRONACOM, Registry of Commerce, and relevant line institutions</p>	Laws, Codes, by-laws, and internal rulings	<p>a) ST/MT</p> <p>b) ST</p> <p>c) MT</p> <p>d) ST</p> <p>e) ST/MT</p>	<p>a) Small</p> <p>b) None</p> <p>c) Large</p> <p>d) None</p> <p>e) Small</p>
	<p>Improve obtaining construction permits</p> <p>a) Improve the Guatemala City one stop shop for construction permits (<i>Ventanilla Ágil</i>) and replicate it in other municipalities. PRIORITY</p>	<p>a) MINECO (Vice Ministerio de Inversión y Competencia), MARN, Ministry of Health, RGP, EMPAGUA, National Coordinator on Mitigation</p>	Laws, by-laws, and tertiary regulations	<p>a) ST/MT</p> <p>b) MT</p> <p>c) MT</p> <p>d) MT</p> <p>e) ST</p>	<p>a) Large</p> <p>b) Large</p> <p>c) Small</p> <p>d) Large</p> <p>e) None</p>

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
	<ul style="list-style-type: none"> b) Streamline construction permitting by merging procedures and developing an online application to facilitate the processing of construction permits and connection to utilities. c) Implement a risk-based approval and inspections system, and, if warranted, assess the possibility of introducing third party inspections and audits to strengthen agencies' enforcement and surveillance capacities. d) Elaborate clear zoning rules and make them available to the public across the country. e) Review taxes and fee structures and assess the feasibility of reducing fees based on a cost-recovery principle. 	<ul style="list-style-type: none"> for Disasters (CONRED), ANAM, and relevant in line institutions b) MINECO (Vice Ministerio de Inversión y Competencia), MARN and relevant line institutions c) MINECO (Vice Ministerio de Inversión y Competencia), MARN, ANAM, and relevant line institutions d) MINECO (Vice Ministerio de Inversión y Competencia), MARN, ANAM, and relevant line institutions 			
	<p>Make tax filing and payment easier</p> <ul style="list-style-type: none"> a) Create a unified system of electronic filing and payment of taxes and social security contributions between SAT and IGSS. b) Simplify tax filing, as well as review and streamline SAT's internal processes. c) Allow and promote VAT refund beyond exporters or taxpayers who contract with exempt persons. d) Carry out communication campaigns, workshops, or events to disseminate and explain the reforms and improvements implemented by the tax authority to the private sector, accountants, associations, etc. 	<ul style="list-style-type: none"> a) SAT (Intendencia de Aduanas), IGSS, and relevant line institutions b) SAT (Intendencia de Aduanas), IGSS, Congress, and relevant line institutions c) SAT (Intendencia de Aduanas) and Congress d) SAT (Intendencia de Aduanas) 	None	<ul style="list-style-type: none"> a) MT b) MT c) ST/MT d) ST 	<ul style="list-style-type: none"> a) Large b) Large c) Small d) None
Reduce the costs and times of trading across borders	<p>Streamline and digitalize border control agencies trade procedures</p> <ul style="list-style-type: none"> a) Revise the regulatory framework for border control agencies (MAGA, MSPAS, DIPAFRONT, etc.) trade permits in line with a new Administrative Procedures Simplification Law, simplification roadmaps, and WTO TFA. 	MINECO, MAGA, MSPAS, DIPAFRONT, other. SAT, VUPE, and SIECA.	None	<ul style="list-style-type: none"> a) ST b) ST c) ST d) ST 	<ul style="list-style-type: none"> a) None b) Small c) Small d) Small

Business Regulatory Environment

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
through trade facilitation	b) Improve, streamline and digitalize procedures of MAGA, MSPAS, DIPAFRONT and other border control agencies, including sanitary and phytosanitary license management systems. ¹⁶⁹ PRIORITY				
	c) Start the implementation of the Single Window for Foreign Trade, integrating the procedures of all border control agencies: SAT-Customs, MSPAS, MAGA, DIPAFRONT, MARN, and others PRIORITY				
	d) Develop ICT interoperability between SAT, private sector single windows (VUPE), and the Central American Digital Platform.				
	Expand the Authorized Economic Operators program				
	a) Expand the number of participating firms. b) Expand tangible benefits to participating firms (recognition by trade partners, certifications of global standards, expedited clearance times, and other) c) Increase mutual recognition agreements with main trade partners	SAT, CIG, AGEXPORT	Admin procedures ; protocol	a) ST b) ST c) MT	a) Small b) Small c) Small
	Continue implementation of the Customs Integrated Modernization Plan (MIAD) PRIORITY Strengthen institutional capacities for staff specialization and ICT, mainly for post-clearance audits and controls.	SAT	None	MT	Medium
	Deepen regional integration and collaboration with neighbor trading partners through trade facilitation and harmonization				
	a) Expand implementation of advanced customs declaration for land transported goods, promote coordination and joint procedures at borders to expedite trade flows with neighboring countries (El Salvador and Mexico) b) Complete the revision of the Regional Customs Code Regulations (RECAUCA), in line with the WTO TFA.	SAT, MINECO, MAGA, MSPAS, SIECA.	Administrative procedures ; regional regulations	a) ST b) ST c) ST d) ST e) ST	a) none b) Small c) Small d) Medium e) Small

¹⁶⁹ In line with the recently approved Law for the Simplification of Administrative Procedures Requirements, it is recommended that regulatory entities (MSPAS, MAGA, MARN and DIPAFRONT) carry out an inventory of the procedures to obtain registrations, permits and payment of fees, and analyze current processes and requirements in order to simplify them. Once the processes have been mapped, they will be able to define those procedures that can be digitized and the laws, rules and regulations that must be modified to carry out this simplification. The experiences of the Federal Commission for Protection Against Sanitary Risks (COFEPRIS) in Mexico and the National Institute for Food and Drug Surveillance (INVIMA) in Colombia are good simplification practices that can guide the Government of Guatemala.

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
	<ul style="list-style-type: none"> c) Continue harmonization of technical regulations, promoting mutual recognition of sanitary and phytosanitary standards; and seek equivalent requirements for transit regulations, e-commerce and expedited shipments, multimodal transport, among others. d) Expand the Customs Union with Honduras to cover more goods and to other CA trading partners. e) Implement joint clearance procedures between Mexico and Guatemala (initiating at Tecun Uman), using El Paso model between the US and Mexico. 				
Digital Readiness	<p>Consolidate a Digital Agenda</p> <ul style="list-style-type: none"> a) Define a Digital Agenda including guidelines on pillars included in the “Roadmap for a Digital Agenda” (digital inclusion, efficient government, transparent management, and digital education for all). b) Implement the Law on the Recognition of Communications and Electronic Signatures in G2B and G2C public services. At the same time, based on Article 23 of the Law for the Simplification of Procedures and Administrative Requirements, promote systems that allow the completion of procedures and issuance of resolutions by electronic means. PRIORITY c) Draft and approve laws on data protection, and cybercrime. Adequate human and financial resources should then be assigned to the agencies tasked with implementing the laws. PRIORITY d) Continue negotiations on e-Commerce with WTO to reach agreements and establish an implementation schedule e) Draft modifications to current laws on issues related to e-Commerce and draft a new law on new e-Commerce issues¹⁷⁰ PRIORITY f) Appoint a national interinstitutional coordinator of the National Cybersecurity Strategy. g) Speed-up the G2C and G2B digitalization process, focusing on key high volume, high frequency and high impact procedures, where procedures are streamlined. PRIORITY h) Design and provide ICT and Internet educational programs and awareness campaigns to citizens and businesses, especially to micro and small firms. 	<ul style="list-style-type: none"> a) GAE, MINECO (VM de Asuntos Registrales) and relevant line institutions b) MINECO (VMde Asuntos Registrales) and the General Comptroller's Office c) Congress and relevant line institutions d) MINECO e) SENACYT, Ministry of Communications, Infrastructure, and Housing (CIV), MINGOB, MINECO, PRONACOM, Superintendence of Telecommunications (SIT), and relevant line institutions f) Relevant line institutions g) GAE, MINECO, PRONACOM, and relevant line institutions h) Ministry of Education, SENACYT, SIT, and relevant line institutions 	Laws, by-laws, and tertiary legislation	<ul style="list-style-type: none"> a) ST b) ST/MT c) ST d) ST e) MT f) ST g) ST/MT h) ST/MT i) ST/MT 	<ul style="list-style-type: none"> a) None b) Small c) None d) None e) Small f) None g) Large h) Small i) Small

¹⁷⁰ Including: The Consumer and User Protection Law, the Law on the Recognition of Communications and Electronic Signatures; the Law on Copyright and Related Rights; the Law for the Comprehensive Protection of Children and Adolescents, and the General Telecommunications Law of 1996, among others

Business Regulatory Environment

Reform	Action	Responsible Entity	Required legal change	Timing: ST (<1 year), MT (>1 year)	Fiscal cost: none, small, large
	i) Update the General Law of Telecommunications and implement regulatory policies that foster infrastructure deployment and increase allocation of radioelectric spectrum for telecommunication services. ¹⁷¹	i) SIT, CIV, and relevant line institutions			

Note: Potential higher priority reforms, based on feasibility of implementation and likely impact, can be identified by the marker

PRIORITY

¹⁷¹ For more details see: (World Bank, Forthcoming)

3. Access to Productive Finance

103. Access to finance for MSMEs is critical to generate employment, productivity gains, and inclusive economic growth. Well-developed, deep, efficient, and inclusive financial sector are necessary to intermediate financial resources towards their optimal use and drive growth and productivity in the real economy. Yet MSMEs in Guatemala have often struggled to access affordable financing that meets their needs within the formal financial sector. From the perspective of an MSME in Guatemala, a range of factors have historically constrained access to finance, including: limited credit histories, high interest rates, poor product design, and lack of acceptable collateral.

104. According to estimates by the International Financial Corporation (IFC), the MSME financing gap in Guatemala represents 22 percent of its GDP. The financing gap of the MSME segment was estimated above USD 14 billion, more than six times the current volume of MSME financing.¹⁷² As a share of the current volume, the MSME financing gap in Guatemala is larger than several regional peers (e.g., Honduras, Costa Rica) as well as the regional average

105. The COVID-19 pandemic has generated unprecedented cash-flow constraints and tightened credit markets. Even in non-crisis periods, many MSMEs lack access to finance and operate on thin margins. However, COVID-19 now poses a systemic risk for the viability of the MSME sector and its role as a driver of employment and economic growth in Guatemala. Demand for goods and services dropped sharply as the government implemented social distancing measures to limit the spread of the virus. Banks and other lenders have been hesitant to provide financing to firms affected by COVID-19 given significant economic uncertainty and their own liquidity constraints. Supply chain disruptions further compound the negative effects of COVID-19 on MSMEs. This is particularly important for women-owned MSMEs which are more financially constrained than men-owned MSMEs.

106. Proactive government policies and financial sector reforms can help to mitigate the effects of the Covid-19 crisis on MSMEs and improve MSME finance in the long term. This chapter presents a brief overview of the current state of MSME finance in Guatemala, the financial impacts of the Covid-19 crisis on MSMEs and the implications of the crisis on financing options for MSMEs. The chapter also identifies a range of financial sector policies and reforms—with an emphasis on financial infrastructure and the legal/regulatory environment—that can help Guatemalan MSMEs survive and recover from the Covid-19 crisis and generate better access to finance for MSMEs in the long term.

3.1. Current trends in MSME finance

107. Guatemala's financial system entered the Covid-19 pandemic well-capitalized, profitable, and liquid. The financial system entered the Covid-19 crisis in a relatively strong position with capital adequacy ratio at 16.2 percent as of end Q1-2020, above the mandated 10 percent.¹⁷³ Bank profitability and loan portfolio quality was solid with return on assets making up 1.7 percent and non-performing loans amounting to 2.1 percent of total assets as of end Q1-2020. Bank liquidity buffers were adequate with

¹⁷² IFC 2018. MSME Finance GAP Database. Updated 2018. Online: <https://www.smefinanceforum.org/data-sites/msme-finance-gap>

¹⁷³ The legal requirement is 10 percent. See art. 64 of the Banking Law (Decree 19-2002), and art. 2, of the annex - Resolution JM 46-2004

Access to Productive Finance

liquid-assets-to-total assets equal to 31.6 percent and liquid-assets-to-short-term-liabilities equal to 24.2 percent. According to the 2019 World Economic Forum Global Competitiveness Report, Guatemala ranks 15 of 141 economies on financial sector stability.

108. Guatemala’s financial sector appears to be weathering the Covid-19 crisis. As of February 2021, banks capital adequacy remains high, at 16.4 percent, although levels of Tier 1 capital are below most regional peers. The financial sector remains liquid. NPLs have not risen, although forbearance measure may still be obscuring the real impacts on asset quality on bank balance sheets. Profitability measures have dipped but remain within the range observed over the past several years.

109. The financial system in Guatemala is highly concentrated and dominated by the banking sector. Banks, financial companies, and offshore entities are the main regulated and supervised players providing financial services to the MSME segment. The *Junta Monetaria* (JM) and the Superintendencia of Banks (SIB) are the authorities responsible for the regulation and supervision (respectively) of the financial system. Banks hold 84 percent of total financial sector assets.¹⁷⁴ Within the banking sector, the five largest banks hold 81 percent of total assets. Outside the supervisory perimeter of SIB, financial cooperatives, credit-only microfinance institutions (MFIs), and factoring companies also provide financing tools to the MSME segment (Table 7).

110. Domestic credit to the private sector is below the average of peer countries and has been stagnant in recent years. The total volume of credit directed to the private sector as a percentage of GDP is 33.4 percent in Guatemala, significantly lower than peer economies. By comparison, the comparable value is 51 percent in Honduras and 62 percent in El Salvador. The average across Latin America is 52 percent (see Figure 35). The total volume of domestic credit to the private sector has been stagnant in recent years in Guatemala, increasing only 8.3 percent between 2012 and 2019. In contrast, across all Latin American countries, this ratio has increased 21 percent over the same time period.

¹⁷⁴ This percentage differs from the one in Table 7 because it was calculated without non-regulated providers.

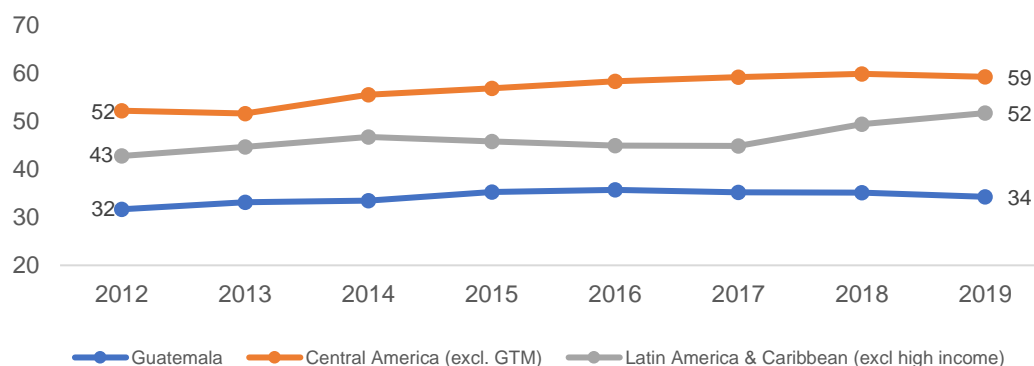
Table 7. The financial system in Guatemala is bank-centric

Institutions	# of institutions	Assets (thousand, USD)	Supervisory Authority
Banks	16	48,127,442	SIB
Financial companies	22	1,343,409	SIB
Credit card companies	8	820,748	SIB
Insurance companies	28	1,469,798	SIB
Off-shore entities	4	3,170,061	SIB
General Deposit Warehouses	14	84,896	SIB
Brokerage houses	8	99,726	SIB
Deposit-taking microfinance institutions	0	-	SIB
Non-deposit-taking microfinance institutions	0	-	SIB
Unlicensed microfinance institutions	15	163,000	None
Financial cooperatives	410	1,963,782	INACOP / INGECOP
Factoring companies	20	-	None

Source: Prepared by the authors based on SIB, MINECO, REDCAMIF 2020, INGECOP and World Bank 2017 technical assistance to build an enabling regulatory and supervisory framework for non-financial cooperatives).

Notes:

1. The exchange rate used to convert quetzals to dollars was 0.129 (September 8, 2020)
2. MFIs data on assets is not available. The amount reported correspond to the total credit portfolio of 14 MFIs as of March 2020.
3. The number of cooperatives only include active cooperatives. Cooperative numbers correspond to information of 211 institutions gathered by SIB in 2016.

Figure 35. Domestic credit to the private sector is below regional peers and has been stagnant


Source: World Bank World Development Indicators

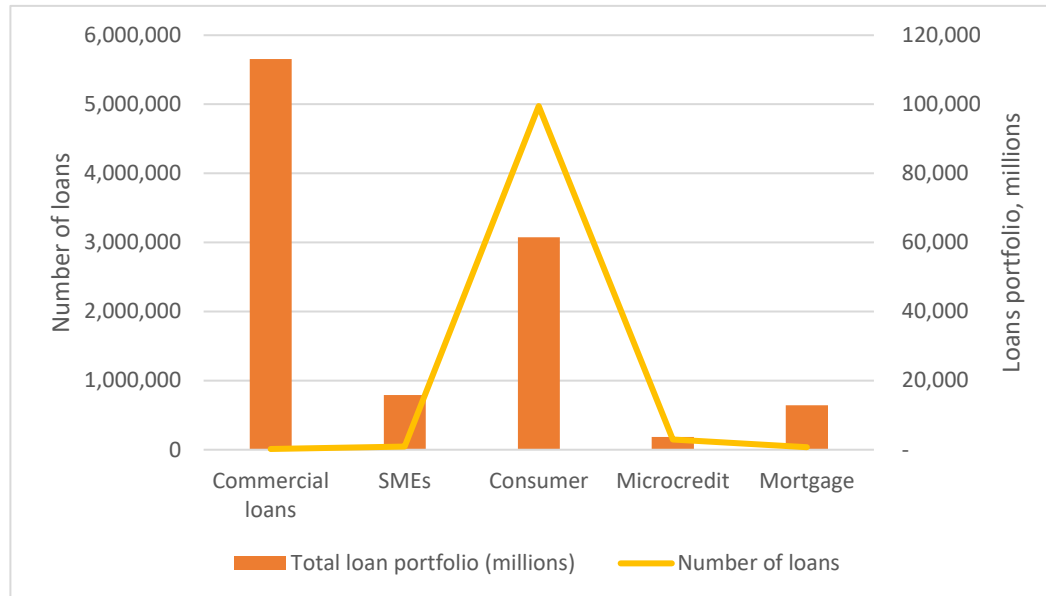
111. Most lending is directed to corporate and consumer segments.¹⁷⁵ As of February 2021, lending to SMEs accounts for just eight percent of credit portfolio volumes and less than one percent of the total number of loans (Figure 36). Microcredit portfolios from regulated financial institutions by SIB account for

¹⁷⁵ These figures do not include institutions not supervised by SIB, such as credit unions and microfinance institutions.

Access to Productive Finance

just two percent of credit portfolio volumes and four percent of the total number of loans. Lending volumes are dominated by corporate loans (accounting for 55 percent), while the largest number of loans are allocated to consumer lending (95 percent).

Figure 36. Most lending is directed to corporate and consumer segments



Source: SIB, 2021 (February) Boletín mensual de estadísticas.

Note: "SME" defined as total levels of indebtedness below USD 650,000 (excluding microcredit); "Microcredit" includes individual or groups loans for micro and small enterprises (as defined by MINECO) for productive activities.

112. Lending to MSMEs has been stagnant since 2016, with high but declining rates of non-performing loans (NPLs). While the overall credit portfolio increased by 24 percent between 2016 and 2020, the increase was mainly driven by corporate and consumer lending. Lending to MSMEs increased by only three percent, and decreased as a share of the total credit portfolio from nine to seven percent. NPLs in the MSME portfolio (local currency) have dropped from 8.1 percent in December 2018 to 5.3 percent in February 2021. A fragmented and unregulated credit information environment may contribute to elevated NPLs in the MSME portfolios.

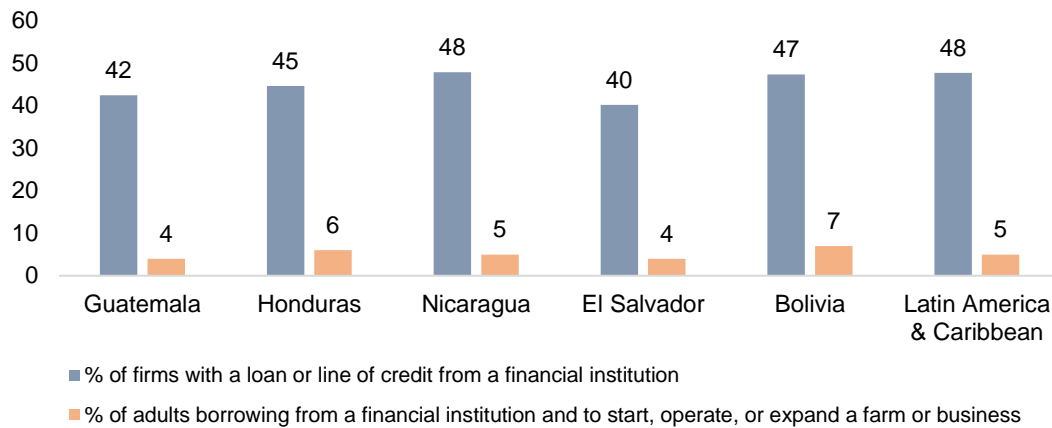
113. Approximately 42 percent of firms in Guatemala have a loan or line of credit from a financial institution. According to data from the 2018 World Bank Enterprise Survey, 42 percent of firms with five or more employees report having a loan or line of credit from a financial institution (Figure 37). This places Guatemala below the regional average of 48 percent. Just 3 percent of firms report having had a loan application rejected in the past year.

114. Small firms and those in the retail sector are less likely to report borrowing from financial institutions. There is significant variation in access to finance across firm size in Guatemala: among small firms (those with 5-19 employees), just 34 percent report having a loan or line of credit but this value rises to 53 percent among medium-sized firms (20-99 employees) and to 84 percent among large firms (100+ employees). This variation is significantly larger than the average observed across Latin America which ranges from 41.5 percent among small firms to 69 percent among large firms. As compared to firms in manufacturing and services, retail firms are also less likely to report having a loan or line of credit. No significant differences in access to finance are observed when comparing firms with female vs. male top

Access to Productive Finance

managers. Supply-side data also indicates that the loan portfolio is highly concentrated in the ‘Metropolitana’ Region including Guatemala City (over 70 percent of total loan volumes).

Figure 37. Use of Financing by Firms and Individuals



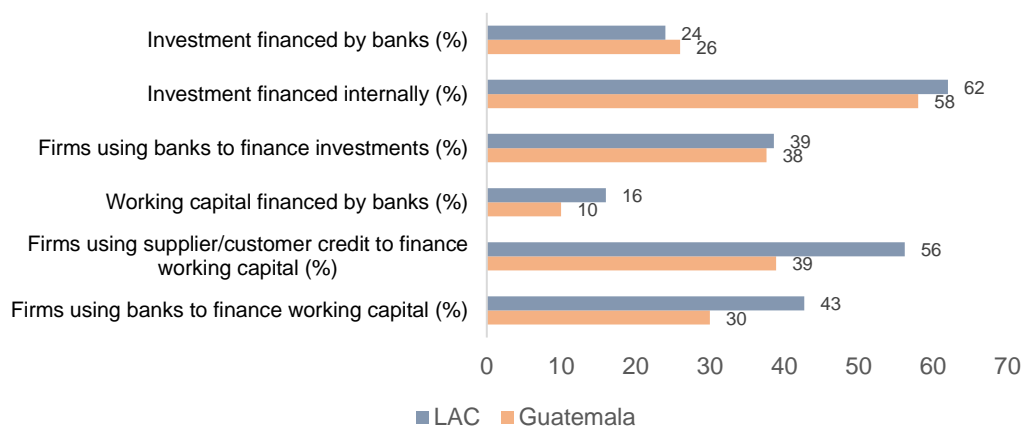
Source: World Bank Enterprise Surveys (2016-2018); World Bank Global Findex Survey (2017).

115. Firms report high collateral costs. Firms report that 67 percent of loans require collateral, with an average collateral value equivalent to 190 percent of the loan amount. Medium-sized firms (those with 20-99 employees) report the highest share of loans requiring collateral (72 percent) and value of collateral (217 percent). This may indicate a bottleneck that constrains firm growth.

116. Firms do not rely on financial institutions as their primary source of funding for investments or working capital. Firms report financing the majority of their investments (58 percent) with internal funds, with just 26 percent coming from financial institutions. Supplier and/or customer credit is the most commonly reported source of funding for working capital, reported by 39 percent of firms, as compared to 30 percent who report financing working capital via financial institutions (Figure 38).

117. Despite financing constraints, firms cite corruption, political instability, and the informal sector as the most significant barriers to growth.¹⁷⁶ Over 21 percent of firms chose corruption and political instability as top business environment obstacle for firms, and 17 percent chose the informal sector as the biggest obstacle. While 13 percent of firms cite access to finance as a major constraint to growth, just 5 percent identify access to finance as the biggest obstacle. Further, 54 percent of firms report not needing a loan and just 2.7 percent of firms report having had a loan application recently rejected. However, such behaviors and perceptions are influenced by the status quo market structure and may not reflect the potential for a more efficient and inclusive financial sector to better serve MSMEs.

¹⁷⁶ World Bank Enterprise Survey 2017.

Figure 38. Firms do not rely on financial institutions for investments or working capital


Source: World Bank 2017. Enterprise Survey

118. Four percent of adults report both borrowing money from financial institutions and borrowing to start, operate, or expand a farm or business in the past year. While the Enterprise Survey data cited above covers the financial behaviors of firms with five or more employees, data from the Global Findex (a nationally representative survey of adults ages 15+) can shed some light on access to finance for microentrepreneurs. While eight percent of adults report borrowing from a financial institution in the past year and eight percent of adults report borrowing money to start, operate, or expand a farm or business, just four percent of adults report both activities (i.e., some adults borrowing for entrepreneurial purposes do so from informal sources). This yields an inexact estimate of formal borrowing for entrepreneurial purposes —due to the structure of the questionnaire, it is not possible to link the two behaviors. However, it suggests that approximately four percent of adults are borrowing from financial institutions for entrepreneurial purposes.

3.2. Impact of COVID-19 on access to finance for MSMEs and Government response

119. MSMEs in Guatemala are facing decreased demand for their goods/services and tightened credit markets as a result of COVID-19. As the government implemented social distancing measures to limit the spread of the virus, demand for goods and services dropped sharply. Reliance on in-person, cash-based interactions for everyday economic activity, as well as an underdeveloped ecosystem for digital financial services, further exacerbated the drop in demand. Banks and other lenders have been hesitant to provide financing to firms affected by COVID-19 given significant economic uncertainty and their own liquidity constraints. Supply chain disruptions further compound the negative effects of COVID-19 on MSMEs.

120. The Covid-19 crisis is having severe consequences in the financial systems, particularly because of its impact on the MSME portfolio. In Guatemala, the state of calamity was declared on March 13, 2020, accompanied by the suspension of non-essential activities. This disrupted the restaurant industry, manufacturing, and transportation activities, among others.¹⁷⁷ Eight out of 10 enterprises in Guatemala

¹⁷⁷ See IMF (2020).

Access to Productive Finance

expected their economic situation to gravely deteriorate by the end of 2020,¹⁷⁸ which would severely impact the repayments of their commitments with financial institutions or access to additional financial instruments.

121. Over 80 percent of firms report experiencing decreased liquidity or cash flow availability, often resulting in delayed payments. Among firms surveyed by the World Bank Enterprise Survey between June and August 2020, and December 2020 and January 2021 (the same firms interviewed for the 2018 Enterprise Survey), 82 percent report experiencing decreased liquidity or cash flow availability (Figure 39). Firms in the manufacturing sector and medium-sized firms (20-99 employees) were most likely to report this trend. In many cases liquidity or cash flow shortages have resulted in payment delays: sixty-two percent of firms report delaying payments to suppliers, landlords, and tax authorities. Such payment delays are particularly common among small firms (68 percent) and manufacturing firms (72 percent).

122. Approximately one in five firms report being overdue on obligations to financial institutions. Among survey firms, 22 percent report being overdue on obligations to financial institutions. This is particularly prevalent among small and medium firms while large firms, firms with foreign-ownership, and non-exporters are less likely to report the same.

Figure 39. Guatemalan firms are cash-constrained and delaying payments



Source: World Bank Enterprise Surveys (2020-2021)

Note: "Other Central America" includes Honduras, El Salvador, and Nicaragua

123. Financial sector authorities have enacted regulatory forbearance measures to address liquidity and loan repayment pressures among borrowers and lenders. The *Junta Monetaria* enacted forbearance measures (until December 2020) to enable loan restructuring, loan payments moratorium, and the use of generic provisions for borrowers impacted by the COVID-19 crisis. The measures also provided flexibility on credit risk classification (the past due loans definition switched from a 90-day threshold to 180 days).¹⁷⁹ These measures covered loans past due by 30 days or less (as of end February 2020) and were applied at the discretion of banks on a case-by-case basis. Under such measures, the credit history of borrowers was not negatively affected. The JM enacted some transitory rules to dismantle progressively (throughout 2021) forbearance measures particularly regarding credit risk classification and accounting methods for

¹⁷⁸ Statement of Jorge Briz from the Chamber of Commerce of Guatemala, in Forbes Centroamérica 2020, online: see [link](#).

¹⁷⁹ See Resolucion JM 32-2020, 63-2020 and 88-2020 and SIB online: see [link](#)

Access to Productive Finance

interests and other perceived income.¹⁸⁰ Financial sector authorities also modified reserve requirements and activated standing facilities to ensure liquidity in the financial sector. Banguat has not extended or created a transitory regime for these measures, which expired in December 2020.

124. As of end December 2020, nearly 1.1 million loans covering more than 580,000 borrowers and 26% percent of the credit portfolio had been adjusted as a result of the temporary forbearance measures. The application of these measures largely reflected the credit portfolio structure: the largest volume of adjusted loans were corporate loans, and the largest number of loans were in the consumer lending portfolio. However, over 9,900 SME loans and 20,000 microcredit loans were also adjusted, representing approximately 35 and 14 percent of outstanding loans in each portfolio, respectively.

125. The government allocated approximately US\$ 440 million across three funds to provide financing to entrepreneurs, professionals, firms, and cooperatives affected by the COVID-19 crisis. The measures establish and capitalize two new funds – the Working Capital Fund and the Capital Protection Fund – which are operated by *Banco Crédito Hipotecario Nacional (CHN)*, a state-owned bank. The measures also re-capitalize an existing fund – the Fund for MSMEs – which had insufficient capital to respond at the scale necessary to mitigate the impacts of the COVID-19 crisis. Together, these three funds are expected to provide much-needed liquidity to help MSMEs survive the unpredicted and simultaneous demand, supply, financial, and uncertainty shocks.

3.3. Providers and products: innovation and diversification

126. Financing tools for MSMEs in Guatemala are focused on loans delivered mainly by private banks. Other financial products include savings provided both by banks and savings and loans (or financial) cooperatives, electronic payments offered by regulated and non-regulated providers (cooperatives and MFIs), insurance, and investment products. Factoring and leasing offered by private sector firms, were regulated in 2018 and 2021¹⁸¹, and must be registered in the movable collateral registry to make them an enforceable right against third parties.

Cooperative Sector

127. Financial cooperatives in Guatemala have a strong presence throughout the country, with an estimated membership base of over two million individuals (around 20 percent of the adult population). Financial cooperatives play an important role for financial inclusion, MSME finance and economic productivity, particularly in rural areas and among indigenous populations which are not well-served by commercial banks.

128. Greater integration and adoption of digital technologies is necessary to expand the role of financial cooperatives in MSME finance. The majority of members and assets in the sector are associated with the 25 cooperatives federated under FENACOAC (*Federación Nacional de Cooperativas de Ahorro y Crédito*, also known under the brand name of MICOOPE). However, there are an additional 260 independent financial cooperatives that do not belong to any federation. The main reasons to keep an “independent” status include their inability to comply with minimum standards required by the federation, the fear of losing their identity (since they would have to use the federation brand) and the low level of perceived benefits. This high level of fragmentation in the sector limits opportunities to

¹⁸⁰ See Resolución JM 149-2020 and SIB online: see [link](#)

¹⁸¹ Decreto 1-2018. Ley de los contratos de factoraje y de descuento y Decreto 2-2021 Ley de Leasing.

Access to Productive Finance

achieve economies of scale and therefore constrains investments in core infrastructure and digital technologies that are necessary to increase operational efficiency, improve product design, and reach new members.

129. MICOOPE has mechanisms to strengthen the soundness and product portfolio of its 25 members. This network provides its members with liquidity mechanisms through FENACOAC, provides coverage to individuals' savings through the MICOOPE guarantee fund¹⁸², and insurance products through “Seguros Columna”, an insurance company focused on its members, licensed and supervised by the SIB. The size of these 25 cooperatives varies widely. The majority have less than 50 thousand members and 6 of them have over 150,000 members. FENACOAC (MICOOPE) is supporting FEDECOPE's (*Federación Integral de Cooperativas de Ahorro y Crédito del Occidente*) members (another network with 7 cooperatives) to improve their standards to eventually merge.¹⁸³

130. MICOOPE's credit portfolio has been growing over the past years, and it is focused on commercial, consumer, and housing loans. The total credit volume of MICOOPE surpasses US\$ 1,759 million, approximately three percent of the financial system's total credit portfolio, with annual growth around 10 percent over the past several years. SME financing plays an important role here, since the commercial portfolio (18 percent of total loans) likely target SMEs, e.g., for the acquisition of products and immovable assets (see Figure 40). Microcredit loans, which are a very small share of the total portfolio, facilitate investments in working capital and immovable assets by individuals or families undertaking economic activities. These loans should be below US\$ 20,000.

131. The MICOOPE credit portfolio is solid and has increased over the past years but is showing signs of deterioration due to the COVID-19 crisis. The number of borrowers hasn't shown the same growth, increasing only by 6 percent from 2018 to 2019, followed by a net decrease of 1.3 percent by June 2020. This is probably explained by the COVID-19 crisis but may also reflect a trend of these credit unions to increase the size of their loans but target the same customer base. Interest rates are around 13 percent for all credit portfolios, slightly above the banking sector, although reasonable. Microcredit and consumer loans are the exceptions, since these rates are significantly lower compared to peer countries, and even compared to the banking sector.¹⁸⁴ Its portfolio quality has deteriorated, as shown by an increase in past due loans between 2019 and 2020 (Figure 41. MICOOPE past due loan portfolio 2019 and 2020). The use of movable collaterals, similarly to in the banking sector is low (Figure 42)

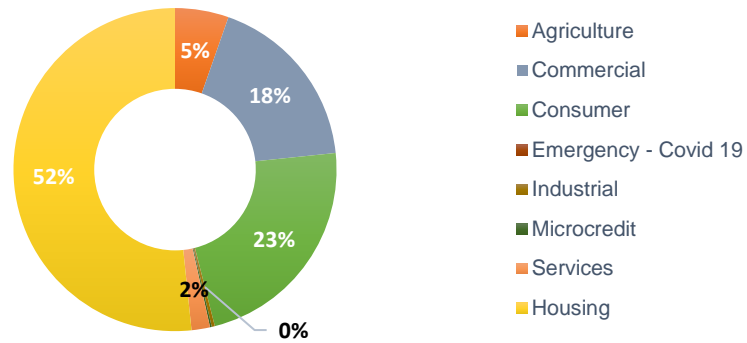
¹⁸² Cooperatives members savings are covered up to US\$ 12,866 (QTZ 100,000)

¹⁸³ World Bank (2017b)

¹⁸⁴ According to SIB data average interest rates for consumer loans are 24 percent and for microcredit 22.3 percent.

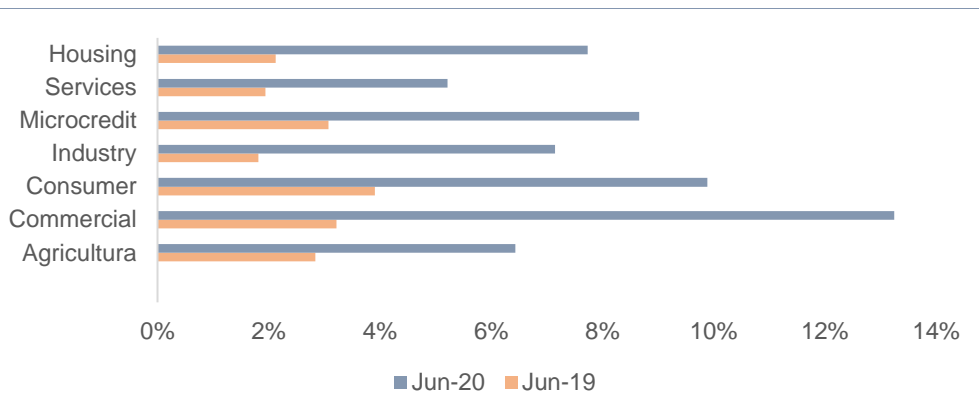
Access to Productive Finance

Figure 40. Loan Portfolio of MICOOPE, by type



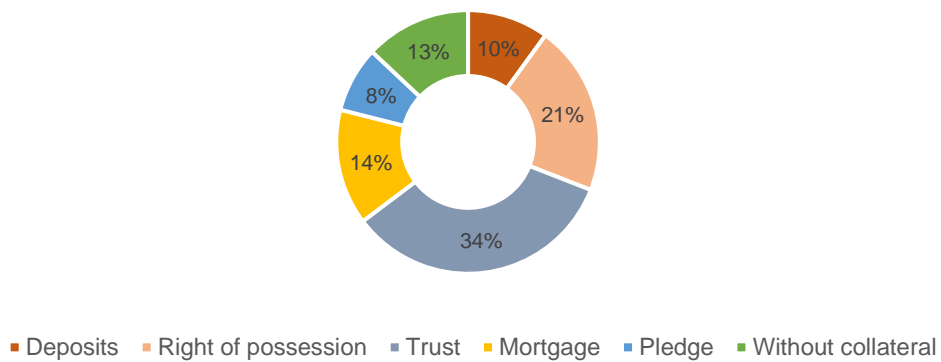
Source: Elaborated by the authors, based on data provided by Micoope, 2020

Figure 41. MICOOPE past due loan portfolio 2019 and 2020



Source: Elaborated by the authors, based on data provided by Micoope, 2020

Figure 42. MICOOPE type of collaterals



Source: Elaborated by the authors, based on data provided by Micoope, 2020

132. A strengthened legal, regulatory and supervisory framework is needed to address weaknesses and vulnerabilities that impede the cooperatives sector from realizing its potential to generate inclusive economic growth. Financial cooperatives—including large entities that may represent a systemic risk—are not subject to prudential or market conduct supervision by financial sector authorities. Although some federations have implemented self-regulation and supervision schemes, such schemes do not cover the entire sector and their voluntary nature presents limitations and conflicts of interest. Reforms are needed to establish supervisory responsibility for large, systemically important financial cooperatives and to put in place risk-based prudential and market conduct rules. These reforms should facilitate the inclusion of financial cooperatives in credit and payments infrastructures as well as financial safety net schemes. Such legal and supervisory reforms will ensure that the cooperatives sector can improve its product offering to MSMEs and that members of cooperatives are not exposed to unnecessary risks (e.g., mismanagement, fraud, irresponsible lending practices). The Banking Supervisor has included the development of a dedicated legal and supervisory framework for financial cooperatives in its Institutional Plan for 2020-2021.

Microfinance Sector

133. The microfinance sector comprises both for-profit and non-profit institutions. The 2016 Law on Microfinance and Non-profit Microfinance Entities establishes three types of microfinance institutions:

- a. Deposit-taking Microfinance Institutions (*Microfinanciera de Ahorro y Crédito* or MAC), which can be funded by deposits from the public or by issuing debt (a microfinance entity regulated and supervised by the SIB);
- b. Non-deposit-taking Microfinance Institutions (*Microfinanciera de Inversión y Crédito* or MIC), which can be funded by issuing debt (a microfinance entity regulated and supervised by the SIB); and
- c. Non-profit Microfinance Entities, which cannot take deposits or issue debt (registered with MINECO).

134. However, since 2016, no licenses have been issued to microfinance entities (MFEs). As of January 2021, one institution has applied for a MAC license. The main networks, Redimif, Red Fasco, and the Camara de Microfinanzas, gather financial and outreach data from their members, who in some cases belong to more than one network. Red Fasco, for example, includes the Reficom credit union within its 9 members, and Reficom is also a member of REDIMIF. Red Fasco provides most of its services to rural areas (86 percent) and reports around 50 access points.

135. Given the lack of market response to the 2016 legal and regulatory framework, a detailed diagnostic review could help determine whether adjustments are needed. For example, a diagnostic review could consider the degree to which the existing framework reflects a proportional and risk-based approach to microfinance regulation.¹⁸⁵ The permitted activities of MFEs are limited compared to the range of activities allowed to banks (see Table 8). This differentiated approach is justified given but should also be adequately reflected in other regulatory requirements (licensing, capital adequacy, liquidity and risk management requirements). Yet many such requirements for MFEs are similar and in cases more

¹⁸⁵ The EIU Global Microscope on Financial Inclusion 2019 stated that non-banks institutions face disproportionate restrictions regarding initial capital requirements.

Access to Productive Finance

strict when compared to the ones applicable to the banking sector.¹⁸⁶ For example, the limit on concentration of exposure for MFES, regarding their stakeholders, staff or others linked to the MFE is 1% while the limit for banks is 15% for individuals or 30% for two or more individuals linked to the bank.¹⁸⁷ While this can be justified by a previously identified weaker governance structure,¹⁸⁸ the fact that licensing requirements for corporate governance are very similar between banks and MFES doesn't seem to back up this differentiated treatment. Another example can be seen in the minimum capital requirements for a non-deposit-taking MFE (US\$ 1.8 million), equivalent to 14 percent of that of commercial banks. This contrasts with minimum capital requirements for example in Peru, for non-deposit taking MFE's, the same requirements are below US\$ 400 thousand (equivalent to 5 percent of that of commercial banks).¹⁸⁹

136. A detailed review of the existing regulatory framework should also assess whether the existing framework generates an unlevel playing field across institutions offering similar microcredit products.

Basel Core Principle 8 for Microfinance entities advise that both banks and non-banks should take into account the specificities of microlending for effective credit risk management.¹⁹⁰ A recent revision to the credit risk management regulations for the microcredit and the MSME portfolio for banks has improved alignment with some relevant regulations for MFES but a more comprehensive approach may be necessary.¹⁹¹ For example, the microcredit definition for MFES cover a wider range of activities (including housing and consumer loans), and its credit risk management rules are in some cases more stringent than the ones applicable to banks (regarding for example information requirements or requirements to assess borrowers' repayment capacity). A detailed review is needed to determine whether the current regulatory framework is consistent across microcredit products offered by different institutional types.¹⁹²

¹⁸⁶ The Basel core principles for Microfinance Institutions highlight the need of applying a risk-based approach in the licensing frameworks, risk management rules, and capital requirements, commensurate with their type of transactions

¹⁸⁷ See art. 47 Banking law and 27, MFIs law.

¹⁸⁸ See Principle 11 of Basel Core Principles for Microfinance Institutions.

¹⁸⁹ See Circular 206 – 2020 SBS.

¹⁹⁰ See Basel Core Principles for Microfinance Institutions – Principle 8.

¹⁹¹ The new regulation altered the definition of microcredit by replacing a loan amount-based definition with a definition focused on lending that finances productive activities by micro and small enterprises – more in align with the definition of microcredit under the MFI regulations. Other areas covered included information requirements for potential or actual borrowers, making them more flexible for the microcredit and MSME portfolio, requirements to assess the borrower' repayment capacity, also giving flexibility to financial institutions for the definition of these requirements, and the schedule for past due loans, making it more stringent to compensate for the additional flexibility previously described.

¹⁹² The proposed revision should include whether the current regulation for the microcredit portfolio in banks provides incentives to offer these loans uncollateralized. For example, if the rules for capital adequacy requirement allow the inclusion of loans with movable collaterals.

Table 8. Allowed activities to banks and MFIs in Guatemala

Banks	Deposit taking MFEs
Passive Operations	
<ol style="list-style-type: none"> 1. Receive deposits (checking, saving, term) 2. Issue and trade bonds or debt titles previous JM authorization 3. Get funding from Banguat 4. Get loans from domestic and foreign banks 5. Issue and trade convertible debt 6. Issue and trade subordinated debt 7. Carry out repurchase operations as reported 	<ol style="list-style-type: none"> 1. Receive deposits (savings and term) 2. Issue and trade bonds or debt titles previous JM authorization 3. Get loans from domestic and foreign banks 4. Issue and trade subordinated debt 5. Carry out repurchase operations as reported
Active Operations	
<ol style="list-style-type: none"> 1. Grant credits 2. Discount documents 3. Grant financing in a letter of operations 4. Grant advances for exports, 5. Issue and operate credit cards 6. Leasing 7. Factoring 8. Invest in securities issued or guaranteed by the State, private banks or private entities 9. Acquire and retain ownership of real or personal property that they will use 10. Held deposits in domestic or foreign banks 11. Carry out repurchase operations as reporter. 	<ol style="list-style-type: none"> 1. Grant microcredits 2. Grant loans to non-deposit taking MFEs and NGOs 3. Invest in securities issued or guaranteed by the State, or financial institutions regulated and supervised by the SIB. 4. Acquire and retain ownership of real or personal property that they will use 5. Held deposits in domestic or foreign banks 6. Carry out repurchase operations as reporter.
Services	
<ol style="list-style-type: none"> 1. Payments on behalf of someone else. 2. Receive deposits with the option of financial investments 3. Buy and sell securities for someone else's account 4. Serve as financial agent taking care of debt service payment 	<ol style="list-style-type: none"> 1. Payments on behalf of someone else. 2. Send and receive remittances and fund transfers. 3. Buy and sell foreign currency 4. Technical assistance for MSMEs 5. Support to the commercial activities of MSMEs

Source: Elaborated by the authors based on the Banking law and the MFIs law.

Factoring

137. Factoring is an important tool to support the financing needs of MSMEs. Factoring can increase MSMEs' working capital, optimizing their cash flows, increasing their capacity to produce and commercialize goods and services. Factoring products can also ease access to finance to MSMEs based on the payment history and solvency of the buyer (rather than the MSME). A 2020 diagnostic by the World Bank provides a roadmap for improving the ecosystem for electronic factoring in Guatemala.

138. Guatemala has made significant progress over the past few years to align the legal, regulatory and institutional framework to the best international standards. In 2018, a law regulating factoring and discount contracts was passed, together with the changes in the movable collaterals law. The movable collateral registry is centralized, online, allows for registry of all movable collaterals and contracts over movable assets, and has regulated tariffs. The SAT revamped the regulation for electronic invoicing and established a plan for its adoption for all taxpayers that should be completed by 2023. This plan included

Access to Productive Finance

incentives such as the automatic pre-filing of tax declarations, SAT as a certifier without additional costs, and its use through mobile apps.

139. However, the use of factoring has not increased as expected. By September 2020, there were only 67,715 borrowers using factoring out of over 1.2 million total borrowers. The volume of factoring was about 1 million QTZ, representing about 0.01% of the total loan portfolio.

140. Limited awareness of factoring – including legal requirements and key processes – constrain the growth of factoring as a tool for MSME finance. Despite the recent communication campaign undertaken by the RGM (Movable Collateral Registry), the legal framework around factoring is not known by many of the relevant stakeholders, including public sector authorities. Businesses using factoring often do not understand the difference between negotiating a credit right or negotiating an electronic invoice and may not understand how to register a factoring transaction in the collateral registry. Anecdotal evidence points out that eligibility requirements determined by the factor are too restrictive.

141. The functioning of the movable collateral registry could be eased through regulatory reforms and some technical adjustments. More transparent and simplified rules governing the registration of a factoring transaction in the movable collateral registry are needed. For example, confirming contracts or trade credit rights contracts should be registered in the collateral registry (or another registry coordinated with this one) using a dedicated form. The existing requirement to get a proof of the communication regarding a credit right transfer makes the process costly and cumbersome; the registration of the transfer in the movable collateral registry should be sufficient. Finally, the current requirement to fill in every feature of the collateral in the registry to perform a risk assessment could be simplified.¹⁹³

142. The uptake and effectiveness of the electronic invoice presents some opportunities for improvement. Although the electronic invoice regulation follows international standards, currently it only includes tax and accounting information; leaving aside commercial and financial information, which can be useful to enable efficient factoring transactions. Information on whether an invoice has been traded or not is not currently recorded in the document, which could be easily solved by using a dynamic .xml file allowing the registry of all relevant features for tax and trading purposes. There should be a field to register its endorsement or transfer to a financial institution as a consequence of a factoring transaction. There should be also a mechanism to differentiate invoices payable immediately from invoices documenting the purchase of products or services on credit.¹⁹⁴

143. Finally, the reform of specific financial and tax regulations could also enable the expansion of electronic factoring. The Banking Law (art. 51) does not recognize accounts receivable or invoices as valid and independent guarantee for a loan, without requiring an additional guarantee from the assignor. Amendments to tax regulations could establish rules for circumstances in which a company pays an entity other than the one who issued the invoice as a result of a factoring transaction. Also, the tax authority could clarify the way in which an assignment should be documented so that the assigned debtor can pay the assignee smoothly and do not encounter obstacles in the use of VAT for tax credit.

¹⁹³ Guatemala's authorities are working on a reform of the current framework for the collateral registry.

¹⁹⁴ Recent changes in the e-signature framework might also help to increase uptake and usage of this tool.

The Fintech ecosystem

144. The Fintech ecosystem is nascent and unregulated. Services are focused on payments, financing products, and automation (of internal processes by financial institutions). It is self-organized under Guatemala's fintech association, and as of August 2020, it had 29 members. There is not a regulatory framework for fintech companies. They have to operate as third-party providers of financial institutions, and thus are not directly regulated by the *Junta Monetaria* or supervised by the SIB. Banks are becoming more open to close deals with fintech companies, although the process is still very long (about 1 year), which limits significantly growth opportunities. Seven institutions offer mobile wallets and remittances, 9 companies offer financing products, 3 companies work in the area of Insurtech, and 2 companies manage payment platforms.

145. The SIB has created the "SIB Innovation Hub" to support innovation and financial inclusion.¹⁹⁵ Digital transformation is one of the strategic goals of the SIB. For that purpose, it created a unit (UNIDE) responsible for connecting SIB with fintech companies, generating knowledge on new market trends, and generating a better understanding of the applicable regulatory framework for these new products and services.¹⁹⁶

146. Many fintech providers focus on tools to improve access to finance by SMEs, covering gaps left by incumbent providers. In the payment space, a few FinTech companies are providing tools for e-commerce such as payment gateways or electronic payment instruments (pre-paid cards, wallets, etc.). Regarding financing tools to increase lending, there are a couple of companies using alternative data to complement traditional credit scoring assessments and are currently working with banks and MFEs. In the financing space, there are 3 factoring companies, 5 working with alternative finance platforms, and 1 working with crowdfunding. Since the network and its members are so young (the movement started in late 2019), they are likely still developing their business models and setting up deals with financial institutions. Many of these activities should be regulated and supervised by SIB or other public sector entities, due to the potential operational and consumer protection risks. It is advisable to enact a legal framework that allows for the market entry and growth of fintech companies, including e-money issuers and crowdfunding platforms. In some cases, this process would imply a strengthening of existing laws, such as the Securities Market Law in the case of crowdfunding.

3.4. Enabling environment and market Infrastructures

Credit Infrastructure

147. Credit information systems in Guatemala present important opportunities to increase access to finance by MSMEs. The flow of credit information is incomplete, inefficient and fragmented, given a lack of a regulatory framework for credit bureaus, among other reasons.¹⁹⁷ Coverage ratios for credit bureaus

¹⁹⁵ See the SIB Innovation Hub online: <https://www.sib.gob.gt/SIBInnovationHUB/web/sib/inicio> and https://www.youtube.com/watch?v=Cw-1h_3ZF84

¹⁹⁶ There is another innovation hub managed by Imagenes Computarizadas de Guatemala, which allow Fintech companies to make transfers and receive funds, using the services of the automated clearing chamber (privately owned). It works under a scheme of indirect participation, since the Fintech company has to make an agreement with a direct participant to access to these services. There are 3 Fintech companies currently using this service.

¹⁹⁷ See World Bank (2020f).

Access to Productive Finance

and the credit registry are low: 37 percent and 23 percent of the population, respectively, in 2019.¹⁹⁸ Non-banks cannot access the credit registry, and credit bureaus only have partial information about the non-regulated sector. There is also scope to incorporate alternative sources of data to inform credit decisions and value-added services for MSMEs. Some regulatory reforms needed include changes in the Banking Law to allow MFIs and cooperatives to access the credit registry, push forward the draft law on credit bureaus, and identify the institution that will be responsible for the oversight of credit bureaus, among others.¹⁹⁹

148. The legal and institutional infrastructure for the use of movable collaterals is in place. Guatemala has a unified legal framework for secured transactions that extend to the creation of publicity and enforcement of security interests in movable assets.²⁰⁰ More recently (2018) the country revamped the Movable Collaterals Registry (RGM). Managed by MINECO, this institution is responsible for creating, modifying, executing, and publicizing movable collaterals. It covers a wide range of assets, such as inventory, stocks, raw materials, intangible assets, among others. Prices for the usage of this registry are advertised through its website and can vary from US\$ 1.29 for online searches in the database to US\$ 39 to register a leasing contract.²⁰¹

Insolvency

149. Guatemala currently has an outdated insolvency system, offering low recovery rates to creditors. When institutions guarantee strong contractual rights and fast bankruptcy procedures, it becomes easier for companies to redirect economic activity to meet new market demands and for new companies to emerge. Guatemala lacks special insolvency legislation, maintaining the regime established more than half a century ago by the Civil and Commercial Procedure Code.²⁰² The resulting insolvency proceedings are lengthy and inefficient. Data from Doing Business reveals that creditors take 3 years to recover their credit, almost twice the OECD average (1.7 years). The recovery rate is 28.1 cents on the dollar, lower than the average for LAC and Central America (31.2 and 46.2 cents respectively). Likewise, Guatemala obtains 4 out of 16 points in the insolvency regulatory framework index, which indicates the weakness of the regulatory framework itself. Guatemala ranks 157 out of 190 in terms of ease of resolving insolvency, the lowest in the entire Central American region and one of the lowest in LAC.

150. Weaknesses of the insolvency legislation also make it difficult to restructure companies that are going through a temporary crisis. The current system focuses on paying creditors through the realization of the debtor's assets, thus limiting their use. There is a need to better filter viable and non-viable firms that enter the insolvency system in Guatemala. COVID-19 related real sector impact, combined with financial sector liquidity constraints, increase the risk of pushing viable firms into insolvency, especially already vulnerable MSMEs. The current system funnels firms into liquidation regardless of the prospects

¹⁹⁸ WDI 2019.

¹⁹⁹ See World Bank (2020f).

²⁰⁰ See Decree 51-2007 and Decree 69-2014, regulating the Movable collaterals law, and World Bank (2019).

²⁰¹ The Exchange rate used is 1 QTZ= 0.13 US\$ (xe.com, September 14, 2020). See applicable prices here: <https://www.rgm.gob.gt/informacion-arancel>

²⁰² This Code from the 1960s contains a specific chapter on bankruptcy proceedings, in which creditors can request inclusion in the list of creditors, request insolvency proceedings when the debtor has suspended payment of liabilities to creditors, and constitute a general board of creditors to be informed of the proceedings against the debtor.

Access to Productive Finance

a distressed firm may have. In the context of the COVID-19 crisis, such a system may lead to unnecessary employment losses and widespread fire sale of assets.

151. The establishment of a comprehensive and effective legal framework for insolvency is needed to ensure that viable firms are not forced into liquidation and that assets of nonviable ones can be put back to productive use. A robust insolvency framework should: (i) allow for an agile entry into a reorganization procedure; (ii) determine clear effects of opening the procedure; (iii) allow for post-filing financing; (iv) contemplate a reorganization mechanism that allows for agile court confirmation of reorganization plans; and (v) strengthen creditors' rights, including to ensure creditor participation in the restructuring process and an adequate regime of priorities. Recently, several initiatives to reform the insolvency legislation in the country were proposed, among them is the current draft of the Insolvency Law (initiative 5446). The draft law contains structural weaknesses, which should be solved in line with good international practices. A comprehensive and effective insolvency framework will be an important aspect for minimizing economic damage and accelerating recovery.

Financial Consumer Protection

152. A lack of transparency in prices creates an uneven playing field among financial consumers and providers and limits uptake of formal financial products. The 2015 World Bank – IMF Financial Sector Assessment Program (FSAP) and 2016 financial consumer protection diagnostic noted a number of practices that are not aligned with international good practices for financial consumer protection. For example, information on product prices and features available to MSMEs and other consumers is limited and inconsistent, making effective comparison shopping nearly impossible. Loan documents mostly provide only monthly nominal interest rates, apply flat interest rates or do not make up-front commissions and costs for overdue loans sufficiently transparent. Many lenders also engage in product bundling which limits consumer choice. Reforms are necessary to clarify institutional arrangements for financial consumer protection and put in place a comprehensive regulatory framework with adequate supervisory and enforcement capacity, that applies to all financial providers regulated or not by the SIB.

3.5. National policies and access to finance for the MSME segment

153. Improving access to finance for the MSME segment is one of the priorities of the National Financial Inclusion Strategy 2019-2023 (NFIS). MSME financing is one of the four policy areas in the NFIS. The goal of this policy area is to increase access and use and expand the supply of financial products, supported by innovation, the use of non-conventional collaterals, and comprehensive credit information systems. The action plan for this policy pillar includes many legal and regulatory changes in the areas of movable collaterals, credit information systems, consumer protection, credit bureaus, credit unions, and other laws to promote the development and financing tools for the MSME segment (see Box 2).²⁰³

²⁰³ See SIB (2019)

Box 2: MSME financing in the National Financial Inclusion Strategy

The NFIS has defined four complementary thematic areas: payments, financing, insurance, and savings, to advance in financial inclusion, and MSMEs are an important segment for all of them. The expansion of digital payments in the MSMEs segment, for example, will undoubtedly contribute to increasing access to finance of these firms, by generating new data on their transactional flows and formalizing in many cases their records.

In the thematic area of financing, the work is structured around 15 actions, including legal and regulatory measures as well as actions with a more practical approach. Examples of these actions include:

- Draft law on regulation on credit registries
- Implement the law on leasing
- Implement the MFI registry for non-profit institutions
- Develop financing tools for the MSME segment, focused on non-conventional guarantee systems
- Reduce information asymmetry and prevent over indebtedness through information campaigns
- Financial education initiatives on access to finance

Source: National Financial Inclusion Strategy 2019-2023

154. Improving access to finance is also a key objective of the Ministry of Economy (MINECO). The Vice Ministry of MSME Development has the goal to promote y strengthen entrepreneurship, and the MSME sector, facilitating access to finance and other services to increase their productivity, jobs, and finally contributing to poverty reduction.²⁰⁴ The creation of guarantee funds and designing programs to support access to finance to entrepreneurs are among its prerogatives.²⁰⁵

155. MINECO manages different programs to support access to finance to the MSME segment, all of them in collaboration with financial institutions and non-regulated providers. Currently, the ministry manages the National Program for the Development of the MSME, responsible for executing all projects in this area. It is supported by a national council formed by private sector representatives (MSMEs and NGOs) who manage, implement, and oversee the execution of the national program.²⁰⁶

156. Since 2015, MINECO has also administered the “Fondo de Garantía Mipyme” to support access to financing by MSMEs. Banks, financial companies, cooperatives, and industry associations can access these funds (housed in a trust in *Banco de los Trabajadores*) to provide services to the MSME segment.²⁰⁷ Previous diagnostic work by the World Bank has highlighted the need to strengthen the sustainability and impact of the guarantee fund, with operational and governance models in line with international good practice. For example, the guarantee fund has historically been undercapitalized, with capitalization of less than US\$ 2 million prior to the Covid-19 support legislation. Onerous document requirements and a guarantee delivery approach that does not facilitate scale-up (e.g., a low leverage ratio and cumbersome approval process) further constrain the guarantee funds’ effectiveness. A key first step to reform the current model would be to identify an independent legal entity to administer the guarantee fund (outside of MINECO), potentially under new development finance institution. International experience shows that

²⁰⁴ See Mineco online: <https://www.mineco.gob.gt/desarrollo-de-la-mipyme>

²⁰⁵ See Mineco online: <https://www.mineco.gob.gt/node/90>

²⁰⁶ See MINECO 2019. Elección y nombramiento de delegados de organizaciones no gubernamentales y de beneficiarios / empresarios ante el Consejo Nacional para el desarrollo de la microempresa, pequeña y mediana empresa. Online: [link](#)

²⁰⁷ MINECO 2015. Reglamento para operaciones financieras del programa nacional para el desarrollo de la microempresa, pequeña y mediana empresa. Available online: [link](#)

Access to Productive Finance

autonomous administration, sound corporate governance (with an independent and competent board of directors), and technical capacity at the management and staff level are key success factors for public credit guarantee funds.²⁰⁸ Improvements to the current approach are necessary to ensure a sustainable and market-oriented channel for public sector support for MSME financing, including to promote economic recovery once the Working Capital Credit Fund (and related funds) have been exhausted.

²⁰⁸ See World Bank (2015).

3.6. Access to productive finance suggested action plan

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
Improve the enabling environment for MSME Finance	Enact a Credit Bureau Law that includes all relevant providers of credit information. PRIORITY	MINECO, Congress	ST	Finalize and enact law	Small
	Enact an Insolvency Law, with the necessary regulations for its implementation. The current draft Insolvency Law (initiative 5446) should be amended or replaced in line with international good practices. Build capacity to improve the insolvency system. PRIORITY	MINECO, Congress	ST	Finalize and enact law	Small
	Improve financial consumer protections by strengthening institutional mandates for financial consumer protection; establishing a legal/regulatory framework to promote transparency, fair practices, and dispute resolution; and building supervisory and enforcement capacity.	MINECO, SIB, DIACO or other entity, Congress	MT	Draft and enact law	Small
Facilitate availability of diverse and innovative financial products for MSMEs	Implement the Leasing Law and build capacity of industry to develop and scale leasing products. PRIORITY	MINECO, association of leasing entities	ST	Issue regulations	Small
	Strengthen the ecosystem for electronic factoring. PRIORITY	MINECO, SAT, SIB	ST	None	Small
	Enact a legal framework to enable market entry and growth of fintech firms, including e-money operators and crowdfunding platforms.	SIB, Congress	MT	Finalize and enact law	Small
	Review the legal framework for microfinance institutions and identify barriers to licensing by existing MFIs. PRIORITY	SIB, MINECO	ST	TBD based on review	Small
Strengthen the role of financial cooperatives in MSME finance	Enact a dedicated legal framework and secondary legislation to establish prudential and market conduct supervision of financial cooperatives by SIB. PRIORITY	SIB, INGECOP, Congress	MT	Draft and enact law	Small

Access to Productive Finance

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	Establish a safety net and resolution framework for financial cooperatives.	SIB, INGECOP, Congress	MT	Legal amendments to cooperatives law	Small
	Encourage integration and modernization within the sector. PRIORITY	Industry, INCACOP, INGECOP, MINECO	MT	None	None
Improve the institutional sustainability, capitalization, and market outreach of the partial credit guarantee fund	Identify a sustainable and independent institutional arrangement for the Fondo MiPYME, in line with international best practice on governance of partial credit guarantee programs. PRIORITY	MINECO	MT	TBD based on identified arrangement	Small
	Review the guarantee delivery approach to reflect a trade-off between outreach, additionality and financial sustainability.	MINECO	MT	TBD	None
	Ensure sufficient capitalization and technical capacity of management and staff.	MINECO	MT	None	Small

Note: Potential higher priority reforms, based on feasibility of implementation and likely impact, can be identified by the marker **PRIORITY**

4. Promotion and retention of foreign investment in Guatemala

157. Sustained economic growth requires high rates of investment from both domestic and foreign sources.²⁰⁹ In the globalized economy where the value of knowledge is rising and where progress depends on productivity enhancements spurred by innovation and new ideas, foreign direct investment (FDI) is very important to economic growth.²¹⁰ Foreign firms can help countries upgrade their technical and managerial capacity, provide access to new technology, help diversify exports and integrate into regional and global value chains.²¹¹ The new knowledge and access to international markets may be worth more than the capital itself. However, these benefits are not automatic, and government need to undertake strategic reforms to increase investment flows and subsequently benefit from their impact.

158. To protect the private sector and investor confidence from negative impacts of the COVID-19 crisis, governments are challenged to push for key reforms quickly. Investment Promotion Agencies (IPAs) and other institutions at the front line of interaction with investors can play an important role in driving these reforms.

159. This chapter provides a high-level analysis of Guatemala's FDI trends over time and presents a quick assessment of the investment climate and some policy options to increase Guatemala's investment competitiveness, taking into account the massive drop in global FDI flows due to the COVID-19 crisis. The analysis employs global FDI data, as made publicly available through UNCTAD and the IMF's Balance of Payments, as well as proprietary project-level data from the Financial Times' fDi Markets database.

4.1. Guatemala's FDI performance

Recent trends

160. The rise in FDI stock in Guatemala is correlated with growth in GDP per capita (Figure 43). Between 2009 to 2018, Guatemala saw increases in both its per capita GDP and FDI stock. Although this does not prove that one caused the other, the correlation indicates a relationship between increases in FDI and GDP growth in Guatemala. As a source of external financing over the same period, FDI inflows exceeded official development assistance (Figure 44).

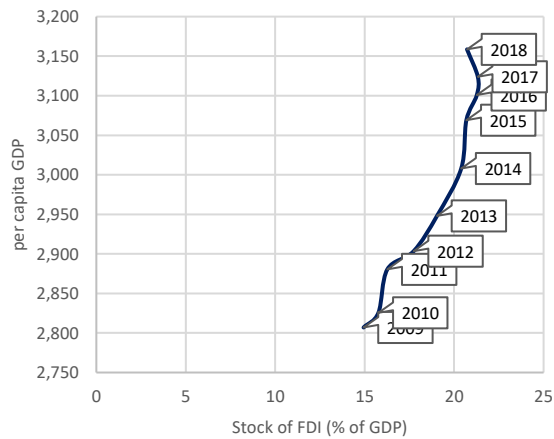
²⁰⁹ (World Bank, 2008)

²¹⁰ Abbes, Mostéfa, Seghir, & Zakarya (2015) and Agrawal (2015) find that FDI can bolster economic growth and structural transformation.

²¹¹ Arnold & Javorcik (2009), Du, Lu, & Tao, (2012), Farole & Winkler (2014), Zhang (2014), Newman et al., (2015), and Lu et al., (2017) find that FDI promotes technology transfer and raises productivity growth, while (Amador & Cabral, 2014), (Bajgar & Javorcik, 2016), and Buelens & Tirpák (2017) find that FDI can help economies integrate into global value chains and improve export quality.

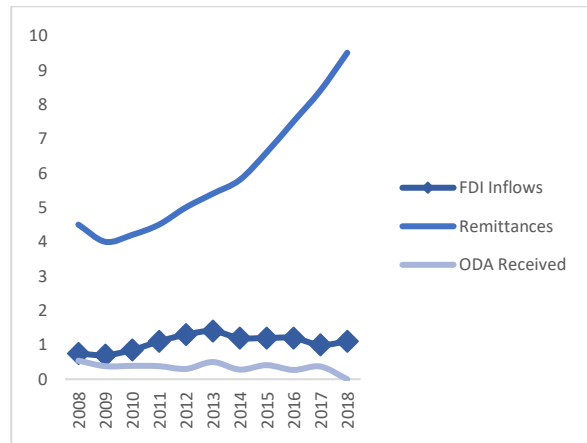
Foreign Direct Investment

Figure 43. Guatemala's FDI & GDP Growth Path (2009-2018)



Source: UNCTAD.

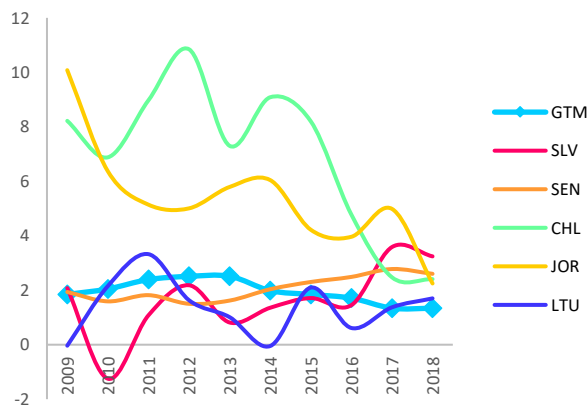
Figure 44. Guatemala's Sources of External Financing (USD bn) (2009-2018)



Source: World Development Indicators.

161. In the last decade, Guatemala has seen relatively stable FDI inflows and a modest increase in FDI stock. Between 2009 to 2013, Guatemala saw its FDI inflows rise steadily, peaking at 2.5 percent of GDP in 2012/13. From 2014 onwards, FDI inflows steadily dropped, landing at 1.3 percent of GDP by 2018 (Figure 45). The 2018 level was the lowest seen by Guatemala over the previous decade and the lowest among its structural and aspirational comparators. Over the same period, Guatemala's inward FDI stock steadily increased, rising from 14.9 percent of GDP in 2009 to 20.7 percent in 2018. Yet, Guatemala's inward stock of FDI remains among the lowest relative to its comparators (Figure 46).

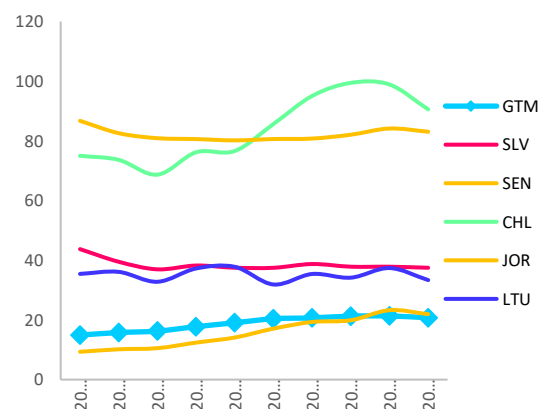
Figure 45. Guatemala vs. Comparators: FDI Inflows (% of GDP) (2009-2018)



Source: UNCTAD.

Note: FDI flows are on a net basis (capital transactions' credits less debits between direct investors and their foreign affiliates).

Figure 46. Guatemala vs. Comparators: FDI Inward Stock (% of GDP) (2009-2018)



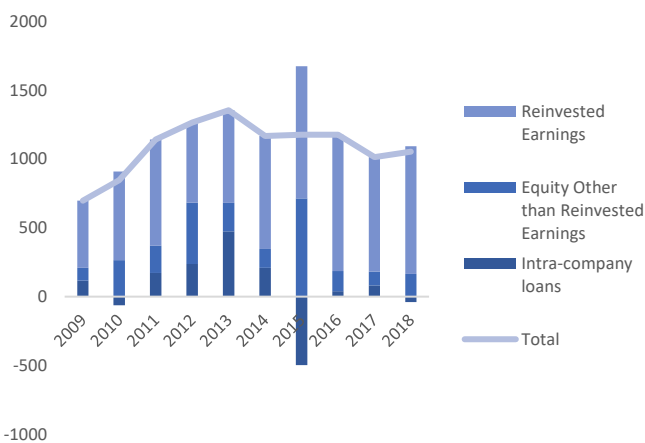
Source: UNCTAD.

Note: FDI stocks are presented at a book value or historical cost. For many economies, FDI stocks are estimated by cumulating FDI flows over a period of time or adding flows to an FDI stock that has been obtained for a particular year.

Foreign Direct Investment

162. FDI flows have been mainly comprised of reinvested earnings (most significant and stable type), followed by new equity²¹² (second type in importance) and intercompany loans²¹³ (modest contribution with a more significant role between 2011-2014) (Figure 47). Guatemala's experience differs drastically from that of the LAC average, where FDI is comprised primarily of new equity. Guatemala also has a more diverse portfolio of investing countries relative to its comparators. Based on bilateral FDI data from 2017, Guatemala had a concentration measure of roughly 0.08 (on a scale of 0 to 1 where 0 is the least concentrated), which renders it the best performing among its comparators (Figure 48).

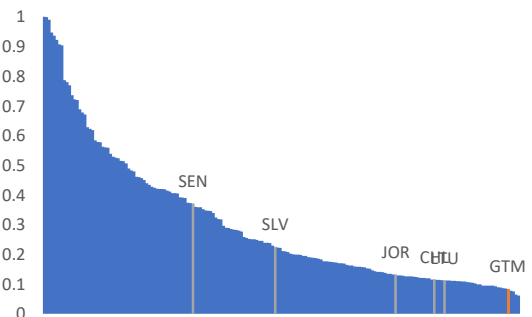
Figure 47. Guatemala's Composition of Inward FDI Flows (USD bln) (2009-2018)



Source: International Monetary Fund, Balance of Payments.

Note: Not all economies report FDI flows disaggregated by component for all years. See accompanying note for explanation of negative flows and other data issues.

Figure 48. Dependency of FDI on Source Countries: Guatemala vs. Comparators (2017)



Source: Computation based on UNCTAD data.

Note: The Herfindahl-Hirschman Index (HHI) of geographic concentration is defined as the sum of the squares of FDI inward stock from a given country. It would take the value of 1 in the case where all FDI originates from one country and approach zero the more dispersed FDI projects are across source countries.

163. Guatemala primarily receives FDI greenfield investments in services (Figure 49).²¹⁴ Over the last sixteen years, Guatemala saw an average of 68 percent of projects in services.²¹⁵ Investments in the manufacturing sector have grown slowly, constituting slightly less than one quarter of projects, while investments in extractives dropped over time. The agriculture sector has received few projects over the time period analyzed and has also declined over time. According to national data (Figure 50), most FDI

²¹² A foreign direct investor's purchase of shares of an enterprise. A threshold of 10 percent or more of the ordinary shares of voting stock is applied to determine the ownership of a foreign direct investment.

²¹³ Intercompany loans refer to loans made from one business to another.

²¹⁴ There are two types of FDI projects: Mergers & Acquisitions and Greenfield. Broadly speaking, Mergers & acquisitions investments refer to the numerous types of transactions that occur as companies merge and acquires assets. On the other hand, greenfield investment projects are the brand-new foreign investment projects in a country. Thus, greenfield investments provide a good measure of the entry of new FDI in a country across time. For this reason, this note presents only greenfield project data for sectoral and project analysis.

²¹⁵ Due to data limitations, this is estimated using number of projects, not size of projects.

Foreign Direct Investment

flows since 2007 have been in commerce (20 percent), manufacturing (19 percent), and banks and insurance (19 percent). The share of FDI inflows to banks and insurance doubled between 2007 to 2017 (from 6 to 12 percent). FDI flows in agriculture spiked in 2012 but have since declined (from 22 percent of FDI inflows from 2007-2012 to 13 percent from 2013 to 2017).

Figure 49. Greenfield FDI (# of Projects) by Industry for Guatemala (2003-2018)

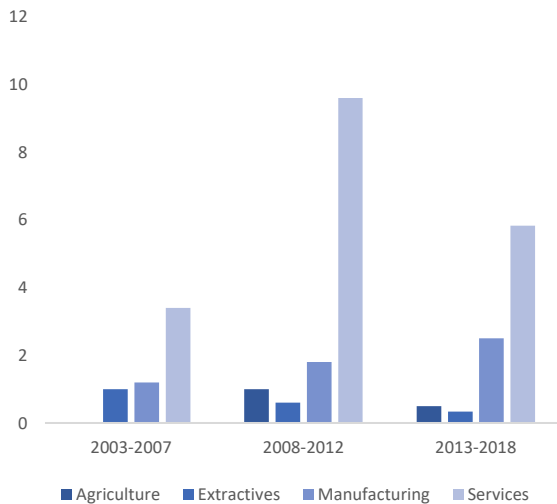
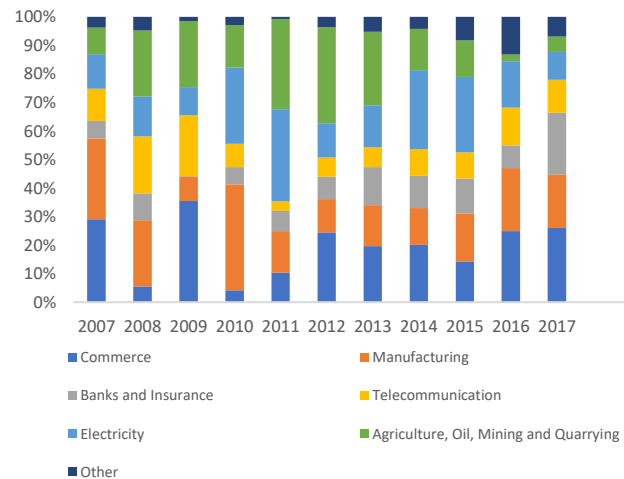


Figure 50. Greenfield FDI (# of Projects) by Sector for Guatemala (2003-2018)



Source: Financial Times fDi Markets.

Note: Data is based on the sum of announced Greenfield projects over the time period.

The nature of the FDI received. FDI typology

164. Challenges and opportunities vary by type of FDI. The ‘Investment Typology’ (developed by John Dunning) demonstrates that different types of investment are driven by varying investor motivations (Figure 51). Natural resource-seeking investment occurs when foreign investors establish companies in the host country to access immobile natural resources, often seeking to establish production bases for export. Market-seeking investment is driven by an investor’s intention to establish production facilities in the host economy, with the ultimate intent of supplying goods and services to the host country’s market. The 2017/18 Global Investor Survey found that most investors are market-seeking and report having multiple motivations.²¹⁶ Strategic asset-seeking investment occurs when an investor seeks control of a firm- or country-specific asset, such as a brand, technology, or distribution network.

165. Efficiency-seeking investment is export-oriented and has the potential to help Guatemala improve the productivity of its workforce and connect domestic suppliers to global value chains. This fourth type of FDI occurs when investors seek to increase the cost-efficiency of production, by taking advantage of location-specific competitive factors, such as a knowledgeable workforce, supply of key inputs, transport or logistics, etc. Given the mobility of efficiency-seeking investment, global competition for this type of FDI can be fierce and attracting it can be difficult. Efficiency-seeking FDI generally relies on a strong investment climate in the host country. The 2017/18 Global Investor Survey found that efficiency-

²¹⁶ See World Bank (2018)

Foreign Direct Investment

seeking investors may be more responsive to policies aimed at improving the host country business environment.²¹⁷

Figure 51. Investment motivation typology (Dunning and Lundan)

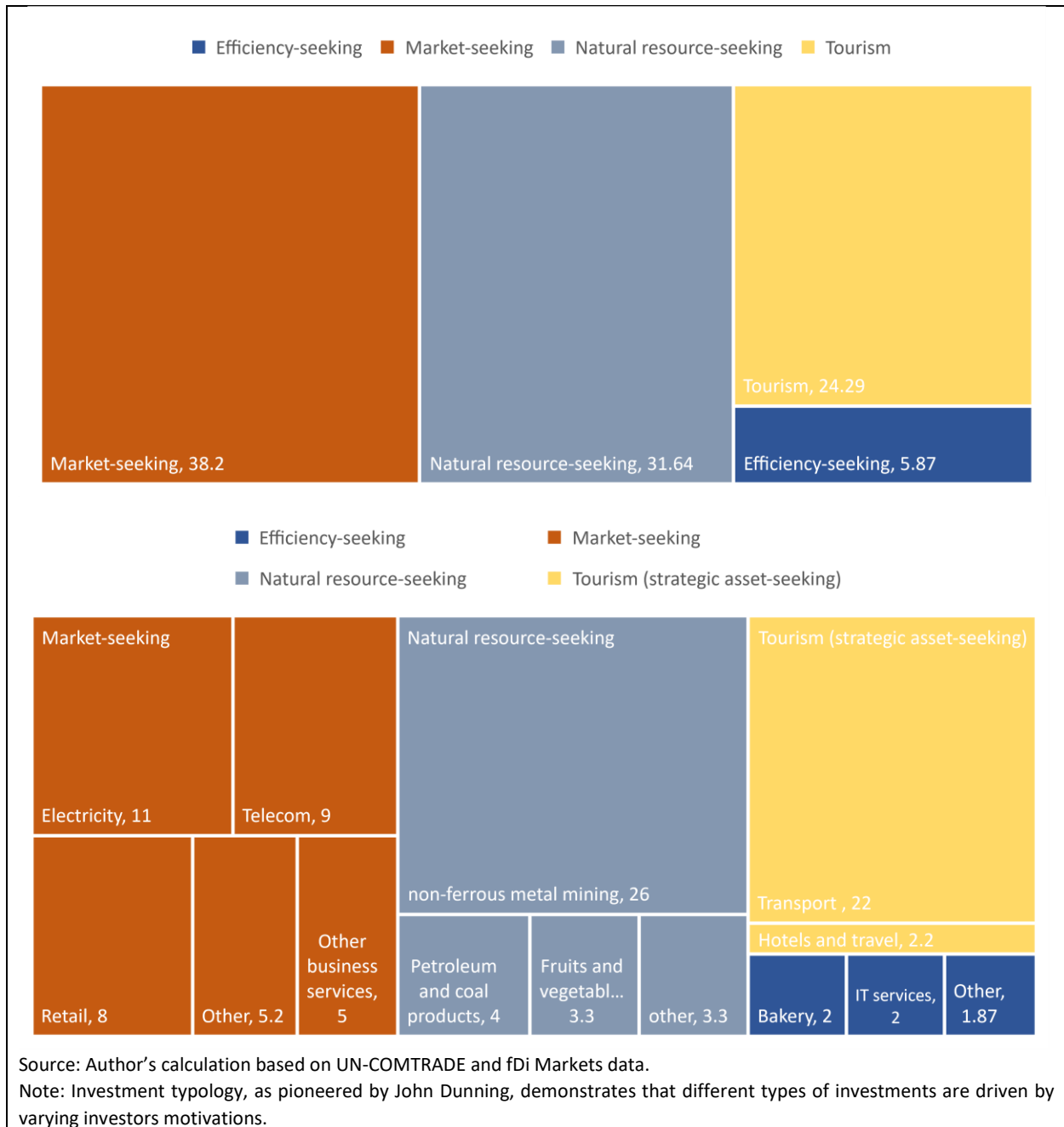


166. Of Guatemala’s greenfield investments between 2012-2016, 38 percent have been market-seeking. 31 percent of investments have been focused on the natural resources offered by the country, while only 6 percent have been efficiency-seeking investments (Figure 52, left). Guatemala has seen market-seeking investments in electricity, telecom, retail and business services, among other sectors (Figure 52, right).

²¹⁷ See (World Bank, 2018)

Foreign Direct Investment

Figure 52. FDI Typology: Share of Guatemala's Greenfield FDI by Type (top) and Type and Sector (bottom). 2012-2016



167. The role of outward FDI in Guatemala has been small. Guatemala has seen a stable and comparatively low trend in its outward FDI over the last ten years (Figure 53). Outward FDI flows have hovered around 0.3 percent of GDP, comparable to the regional average. The stock of outward FDI slightly increased over the same period, from 0.95 percent of GDP in 2009 to 1.5 percent in 2018 (Figure 54). The top destinations of Guatemala's greenfield investors over the same period have been mostly countries in the region. The top five includes: El Salvador, Panama, Honduras, Costa Rica and Mexico.

Foreign Direct Investment

Figure 53. Guatemala vs. Comparators: Outward FDI Flows (% of GDP) (2009-2018)

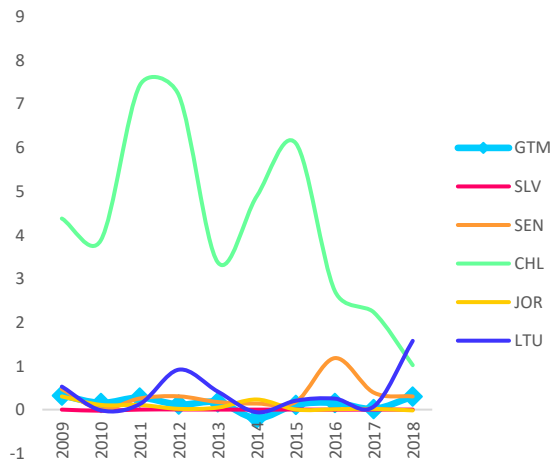
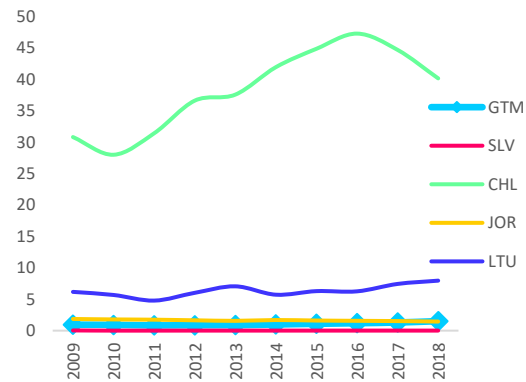


Figure 54. Guatemala vs. Comparators: Outward FDI Stocks (% of GDP) (2009-2018)



Source: UNCTAD

Note: Outward FDI captures investments of companies from Guatemala in their affiliates abroad. Not to be confused with negative FDI inflows.

4.2. Summary of constraints affecting investment

Guatemala's Investment Climate

168. The quality of the overall investment climate affects FDI, as investors prefer locations where it is easier to do business. This includes issues such as infrastructure, security, and human capital, which are outside the scope of this report. Constraints in the business regulatory environment are covered in Chapter 2 of this report, while this section focuses on areas more directly related to investment policy, including the institutional and legal environments for FDI and investment incentives.

Institutional environment

169. The institutional framework for the regulation and promotion of foreign investment in Guatemala is unclear and not fully aligned with international good practices. There seems to be a gap between the provisions in the law and the institutional practice. The FIL under Article 12 provides that the agency responsible for regulation and implementation of the law is the "Investment Office" (established by Government Decision No.532-92). This agency provided in the law does not seem to be very active anymore. In 2004, The Ministry of Economy created the *Programa Nacional de Competitividad* ("PRONACOM") a participatory program, facilitator of efforts and inter-institutional alliances between the public, private, civil society and academia sectors, for the development of the competitiveness of human and business capital that generates investment.²¹⁸ In 2008, the government created "Invest in Guatemala" to perform general advisory functions such as proposing, fostering and developing actions and procedures aimed at improving investment promotion in the country. In practice, "Invest in Guatemala" seemed to

²¹⁸Pronacom.org, web visitada: <https://www.pronacom.org/en/sobre-pronacom/>

Foreign Direct Investment

play the role of the investment facilitator. In 2018, Invest Guatemala was closed as the agency did not receive the necessary political support to continue its existence.

170. After the disappearance of “Invest Guatemala” the Government drafted a new Bill to create “ProGuatemala”. This agency would focus on increasing national competitiveness, attracting investment and promoting exports; however, the Bill did not get the necessary support and the project was dropped. A government body mandated with investment promotion functions does not exist at the moment. It is “PRONACOM” the body that is carrying out the traditional functions of an investment promotion agency now. PRONACOM has recently undertaken commendable efforts to promote investments in the country, however, it is not legally mandated to do so and its capacity presents room for improvement.

171. This institutional framework presents two key issues. First, it can generate inconsistencies between the law and practice. Second, it leaves investors with no clarity on the principal agency responsible for and capable of carrying out the functions specified in the FIL. The lack of a specialized agency that proactively promotes the country as an investment destination and advocates for policy reform to increase investment competitiveness is also a major weakness. Ideally, a full-blown IPA should provide a wide range of services to both potential and existing investors.

Box 3. Key principles for effective FDI institutional arrangements

- Strong alignment across government that stems from a clear national development plan or objective, vision, or strategy—including FDI—with clear priorities and sequencing;
- Government support for FDI promotion from the highest level (for example, the president or prime minister) that directly or indirectly champions the needed policy, legal, regulatory, and institutional reforms;
- Systematic and reform-oriented consultation with the private sector;
- A strong, clear, and uncontested mandate for each institution that also stems from the national development objectives and avoids any possible conflicts of interest;
- Sufficient and sustained financial and human resources to properly deliver the mandate of each agency;
- A clear focus on results management; and
- Strong partnerships and coordination mechanisms with both public and private sectors at both national and subnational levels to ensure consistency between institutions.

Legal environment for FDI

172. The principal legal instrument governing FDI is the Foreign Investment Law (FIL, Decree No. 9 of 1998). The key objectives of the law are to promote and facilitate foreign investment. The law also seeks to provide a single legal instrument for the regulation of FDI. The law only provides protection to foreign investors and their investments in the country; only the foreign capital invested by a foreign shareholder in the company, and not the company itself, is protected. Annex 3 provides a brief description of the legal instruments governing FDI, and a non-exhaustive list of laws that govern investments in Guatemala.

Investment Incentives

173. Consistent with good practice, all fiscal incentives are offered under the relevant customs, VAT and income tax laws of Guatemala. The FIL does not cover an incentives framework, and as a result, there

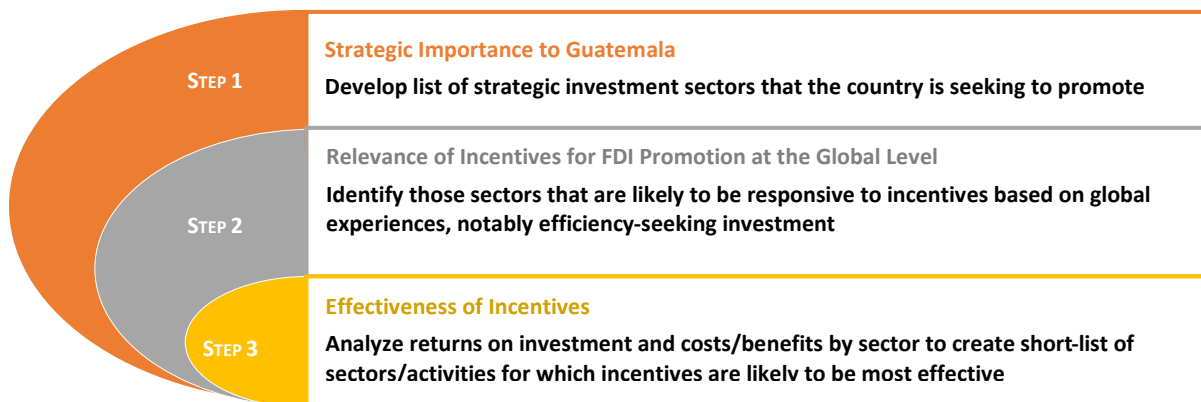
Foreign Direct Investment

are no stabilization clauses²¹⁹ in the FIL. The income tax law, fiscal code, export promotion law, and free zones act, among others²²⁰, form the basis of the incentives framework in Guatemala.

174. The legal regime in Guatemala offers investors a variety of incentives, both financial and non-financial. The tax administration (SAT) is the principal agency responsible for administering tax incentives in Guatemala. The key incentive schemes are aimed at supporting export activities. The Law of Promotion and Development of Export Activities and Drawback (Law 29 of 1989) provides incentives for activities that involve the import of primary goods to be processed for export. According to this law, investors receive a 10-year exemption from the corporate income tax; exemptions from VAT and import duties of machinery, equipment, components and accessories necessary for production; and exemption from export duties. Similarly, the Free Zone Act (Law 65 of 1989) provides investors in the free trade zones a 12-year exemption from corporate income tax; exemption from VAT for transactions within or between free zones; exemption from stamp duties on the transfer of immovable properties, etc., provided they are involved in export related activities.

175. The current incentives regime for foreign investment has room for improvement. It may be hampering the ability of the state to generate revenue to provide essential public services and address the economic and social needs of the population. Despite the legal changes that took place in 2016, some companies under the incentives regime try changing their name to be able to continue benefiting from the associated fiscal incentives, especially in SEZs. The Government should keep strengthening the capabilities at *Zonas Francas* to avoid these manipulations. Administrative and auditing capabilities could be improved to prevent these practices. In parallel, the government should develop strategies to align / bring together existing incentives and, to the extent possible, conduct the necessary cost-benefit assessments to align incentives to sectors and companies that will create the social and economic benefits pursued by the government.

Figure 55. Good practices for the design of investment incentives



Source: World Bank Group elaboration.

²¹⁹ Stabilization clauses are a tool used by host states to attract FDI and generate economic growth. Using these clauses host states commit to provide regulatory stability (which includes maintaining specific fiscal benefits) during a period of time.

²²⁰ The main instruments include: Decreto 29-89; Decreto 65-89; Decreto 22-73; Decreto 30-2018; Decreto 2-2015; Decreto 27-96; Decreto 52-2003.

Box 4. International good practices on incentives' governance and design

1. **Simplicity and access to information:** The incentives regime should be simple, and information provided in a user-friendly and accessible format.
2. **Streamlined procedures and minimal discretion:** The process for applying for and granting investment incentives should be simple and minimize discretion. In the case of tax incentives, the approval process should be automatic (with verification).
3. **Consolidation of tax incentives in law:** Tax incentives should be clearly laid out in the relevant law, ideally the Tax Law, and should not be negotiated on a case-by-case basis.
4. **Regular assessment of fiscal cost:** The fiscal cost of incentives should be systematically tracked and published, including through tax expenditures.
5. **Consistency with international investment regimes and minimizing distortions to competition:** Incentives should be designed in a way that minimize distortions to competition and follow international investment regimes.
6. **Defining policy objectives:** Incentives should be linked to clearly defined policy objectives and instruments tailored based on these.
7. **Targeting the marginal investor:** To optimize benefits, incentives should be precisely targeted, focusing on marginal investors (those who would not have invested had it not been for the incentive). In the context of incentives used to attract FDI (locational incentives), incentives targeting efficiency-seeking investment should be prioritized.
8. **Monitoring & Evaluation:** Monitoring and evaluation mechanisms should be in place to verify whether the policy objective of incentives is accomplished and to evaluate the cost-effectiveness.

Investment Competitiveness Benchmarking

176. The Investment Competitiveness Benchmarking analysis aims to identify sector-specific constraints in a country, by comparing the country's performance on various indicators to the performance of all other countries that have attracted FDI to a given sector and business activity. The underlying intuition is that if a given indicator (say, electricity supply) is relevant for a sector (say, business services), only countries with good electricity supply will see successful foreign investment in business services and thus, the benchmark will be relatively high. For other sectors that depend less on electricity supply, e.g. agriculture, countries with poor electricity supply may nevertheless see successful foreign investment, and thus, the benchmark would be lower. Annex 6 and Annex 7 provide details on the methodology and indicators used for the benchmarking. The section below benchmarks Guatemala in the following sectors: food and tobacco; hotels and tourism; textiles; logistics distribution and transportation; and manufacturing. Overall, Guatemala appears better positioned to attract investment in lower value-added activities.

Food & Tobacco as a proxy for agribusiness

177. Guatemala will find it easier to attract FDI for lower-value-added agribusiness activities. The size of its domestic and foreign market, the availability of labor and skills and key inputs, and the existing institutional landscape are sufficient for foreign firms to invest in agricultural production or processing, manufacturing, or retail and sales. However, the same areas present constraints for higher value-added activities such as testing, design or R&D in agribusiness. The most constraining dimensions are related to the weak rule of law, the contestability of the market and the macro and political stability of the country.

Foreign Direct Investment

Hotels and tourism

178. Low value-added activities (e.g., construction) within the sector do not seem to present significant constraints to FDI. On the other hand, there are barriers to investment in higher-value-added activities, such as customer centers and headquarters for tourism sector multinationals. These barriers include: (1) a lack of qualified labor and the skills in demand; (2) size of the market and poor capabilities of domestic firms; (3) the regulatory barriers and issues related to energy and transportation within the country; (4) inefficient bureaucracies; and (5) a lack of competition in the general market. Moreover, the country's political instability, as measured by the World Bank Worldwide Governance Indicators seems to be discouraging foreign companies from investing in Guatemala, according to the ICB exercise.

Textiles

179. As in other industries, it would be more difficult for Guatemala to attract foreign investors into higher value-added textile and apparel activities (design, development and headquarters), according to the ICB analysis. These more complex activities present constraints across almost all the pillars analyzed. On the other hand, activities within the textile value chain that are less complex in nature (manufacturing, retail and sales, for example) would not present major constraints with the exception of weaknesses in the rule of law indicators and labor and skills for sales and marketing activities.

Logistics distribution and transportation

180. According to the ICB analysis, Logistics Distribution and Transportation business activities present severe constraints for almost every sector analyzed. Similar to other sectors, institutional dimensions such as the rule of law, market contestability and macro political stability are affecting Guatemala's performance on FDI attraction. Domestic demand and labor and skills availability are also weak areas highlighted by the analysis.

Manufacturing across sectors

181. Manufacturing activities seem to present major constraints on a significant number of pillars in sectors of higher complexity and value addition. This is the case for biotechnology and space and defense, for example, and to some extent for minerals and semiconductor manufacturing. Dimensions that seems to hamper investment attraction across lower and higher value addition sectors are rule of law and property rights, severely affecting manufacturing investments in 11 different sectors.

4.3. Foreign direct investment suggested action plan

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal Change	Fiscal cost: none, small, large
FDI Strategic Framework	<p>Revise pre COVID-19 approaches and develop targeted FDI attraction strategy, aligned with “Proyecto Guatemala no se Detiene”, aimed at encouraging investments in specific sectors and niches with a high potential for growth and jobs in the new post-COVID context, taking into account potential opportunities for nearshoring. Building on existing efforts²²¹ PRIORITY</p> <p>The strategy should:</p> <ul style="list-style-type: none"> • Articulate the role of FDI and its contribution to policy goals (e.g. economic growth and diversification, job creation). • Define specific objectives and targets for investment attraction. • Establish priority target sectors and segments for investment attraction. • Define the roles and responsibilities of key government agencies and other stakeholders in investment attraction. An efficient investment promotion agency is needed (see below). • Introduce a robust M&E framework with key performance indicators. 	Ministerio de Economía; PRONACOM	ST	None	Small
Institutional Framework	<ul style="list-style-type: none"> • Continue strengthening PRONACOM as an acting IPA (in addition to its other functions) or design and establish a new (or redesigned) government agency for proactive investment promotion in line with international best practice (with a single investment promotion mandate). PRIORITY 	Ministerio de Economía; PRONACOM	MT	Small	Small
Legal and regulatory framework for investment	<ul style="list-style-type: none"> • Conduct a detailed assessment of the regulatory environment for investments to identify investment constraints in key economic sectors. PRIORITY 	Ministerio de Economía; PRONACOM	MT	Medium	Small

²²¹ At the end of 2020 the Government of Guatemala received technical assistance from the Guatemala Development Foundation (FUNDESA) to prepare the “Proyecto Guatemala no se Detiene-GNSD: Vamos por empleo, inversión y prosperidad”.

Foreign Direct Investment

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal Change	Fiscal cost: none, small, large
	<ul style="list-style-type: none"> Revise the FIL of 1998 and other regulations with the view of aligning them with modern investment laws per international best practices and international commitments.²²² PRIORITY Ensure that there are no gaps between the mandates enshrined in the laws and in practice implementation of the laws and regulations (de jure vs. de facto barriers) 				
Investment incentives	<ul style="list-style-type: none"> Continue enhancing the transparency of the incentives regime by periodically compiling and publishing a comprehensive inventory of incentives available to investors. Develop strategies to align / bring together existing incentives to rationalize supply To the extent possible and within existing resources and capacities: Conduct a cost-benefit analysis of the existing incentives regime to identify its efficiency and suitability in a post COVID-19 environment with a reduced fiscal space. Compile firm level data on recipients of investment incentives and conduct economic analysis to evaluate whether incentives are reaching the marginal investors or used in a redundant manner. PRIORITY Use findings from the economic analysis to design an incentive targeting regime that reaches the marginal investor (i.e., those who would not invest in the absence of incentives). 	Ministerio de Economía; PRONACOM; Ministry of Finance	MT	None	Small
Investment Entry and Establishment	<ul style="list-style-type: none"> Ensure the entry regime is coherent with country's development objectives with regards to specific sector level restrictions. Reduce red tape affecting entry/ establishment of investment in key sectors of the economy, for instance additional approval requirements for tourism businesses. Assess the effect of work permit restrictions²²³ on investment entry, particularly for higher value-added sectors. Evidence-based reform of the entry visa regime could support investment policy objectives. 	Ministerio de Economía; PRONACOM	MT	Small	Small

²²² The Government is aware of some of the areas for improvement in the FIL and has the capacity to work on improving it.

²²³ Ongoing government efforts on this front to establish an online platform that would streamline the process.

Foreign Direct Investment

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal Change	Fiscal cost: none, small, large
Investor Protection and Retention	<ul style="list-style-type: none"> Ensure effective access to alternative dispute resolution mechanisms. Information on the alternatives should be easily available to investors. 	Ministerio de Economía; PRONACOM	MT	Medium	Small
Investment Linkages	<ul style="list-style-type: none"> Assess the status of linkages between FDI and domestic firms within priority sectors. Consider developing a strategy to strengthen these linkages. This strategy should consider, among other issues, the identification and development of knowledge and key productive capacities to increase the attractiveness of the Guatemalan market among companies with foreign capital (particularly those that are efficiency-seeking investors). 	Ministerio de Economía; PRONACOM	ST	None	Small

Note: Potential higher priority reforms, based on feasibility of implementation and likely impact, can be identified by the marker

PRIORITY

5. Global value chain participation and development in Guatemala

182. Guatemala's current participation in Global Value Chains (GVCs) is marked by specialization on agricultural and agribusiness goods and low value-added manufacturing products, such as textiles and apparel, directed primarily to the US market. Participation in other GVCs also mainly occurs in low value-added segments such as in services (e.g., massive tourism and contact centers) and agriculture (e.g., coffee, cocoa and tropical fruits). Agriculture and textiles and apparel are the main contributors to job creation, mostly through the generation of unskilled jobs.

183. Despite this situation, a wide range of fruits have achieved export quality and some cooperatives are developing new commercial varieties. Similarly, some Guatemalan coffee growers are competing in sophisticated markets with good quality products and fetching relatively high prices. The area located in the north of Petén is producing fine woods thanks to the adoption of more efficient tree use techniques. In the Northern Triangle, Guatemala is the most advanced tourist destination and some local tourism operators are offering high-value added propositions to travelers. VESTEX (Association of the Apparel and Textile Industry of Guatemala) is supporting local apparel and textile producers in upgrading towards more value-added, sustainable and technology intensive niches within the massive consumption market segment. Some weaving cooperatives and social enterprises, like *Consejo de Tejedoras of Santo Domingo Xenacoj* and *Meso Goods*, are already taking their first steps in the sustainable fashion market. A thriving diaspora of US-based Guatemalan fashion designers is also successfully breaking into the global sustainable and high-end fashion segments. These trends suggest that Guatemala has opportunities for upgrading into dynamic segments of GVCs.

184. Strategic repositioning into dynamic segments of GVCs offers opportunities for job creation and poverty reduction in Guatemala. Recent empirical evidence compiled by the World Bank suggests that participation in GVCs provide great benefits to developing countries by boosting economic growth and productivity.²²⁴ GVCs can lift average incomes and foster job creation, particularly for low-skilled workers, thus helping reduce poverty and inequality.

185. Even the ongoing COVID-19 crisis could open novel opportunities to upgrade Guatemala's participation in GVCs. The potential push for diversification in multinational companies may allow suppliers from other developing countries to increase exports and participate in new segments of GVCs that previously faced intense competition from Asian countries. In spite of the massive disruption experienced by international travel, the pandemic may also offer some opportunities for diversification and upgrading in the tourism industry, at least in the medium term.

186. Besides the COVID-19 pandemic, recent trends in international markets offer unique opportunities for repositioning Guatemala toward more sophisticated segments of agricultural, manufacturing and services GVCs. Examples include cocoa (bean to bar cocoa), seafood (ready to cook fish and shrimp), coffee (small batch / specialty coffee), tourism (explorer /adventure tourism) and other services (Business Processing Outsourcing, BPO), and textiles (sustainable fashion).

187. National policies play a fundamental role in ensuring that the economic and social benefits of strategic repositioning within GVC materialize. Competitiveness in Guatemala is hampered by some

²²⁴ (World Bank, 2019)

cross-sectoral constraints: corruption, weak human capital and innovation capabilities, lack of security, and poor transport and logistic infrastructure (World Bank, 2012). Programs for supporting SMEs and value chains are partially reliant on foreign funding. They are also managed by public agencies with heterogeneous technical and organizational capabilities and beset by coordination challenges.

188. This chapter analyzes selected value chains in Guatemala in terms of: (a) strategic challenges; (b) international trends; and (c) areas for improvement. The current situation of each value chain is compared to an “ideal” value chain based on desktop analysis and interviews with public and private stakeholders. The chapter then presents policy recommendations for strategic repositioning of the analyzed value chains in six areas: (a) institutional coordination; (b) improving infrastructure; (c) fostering human capital; (d) enhancing the provision of sector-specific public goods; (e) improving market access and FDI attraction; and (f) digitalization.

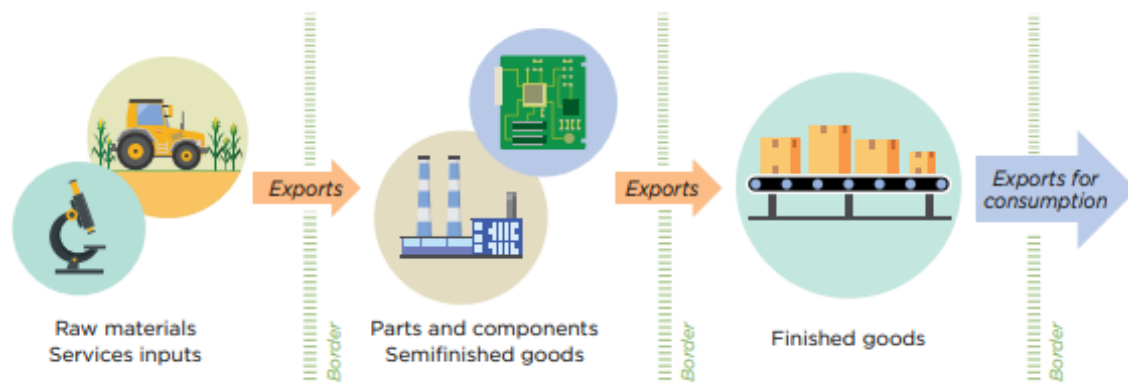
189. The remainder of the chapter is organized as follows: Section 2 presents the analytical framework and discusses recent evidence on the impacts of participation in GVCs on job creation and poverty reduction in developing countries. Section 3 briefly discusses the challenges and opportunities created by the COVID-19 crisis for increased participation in GVCs. It also examines the impacts of the pandemic on global and Latin-American tourism and outlines some policy recommendations based on the World Bank’s global experience. Section 4 delves into Guatemala’s current GVC performance, particularly in selected agricultural, manufacturing and services value chains. Section 5 identifies the main challenges and reforms areas in the selected value chains, as well as the public policies and programs supporting SMEs and value chains in Guatemala. It also presents a preliminary action plan for upgrading Guatemala’s participation in some niches of the selected GVCs.

5.1. GVCs for jobs and economic transformation

190. This section summarizes the analytical approach for understanding the economic importance and recent dynamics of Guatemala’s participation in GVCs. It describes what a GVC is, discusses recent empirical evidence on the economic impacts of GVC participation, and analyses the determinants of GVC participation and the role of national policies.

191. What is a GVC? A global value chain breaks up the production process across countries. Firms specialize in a specific task and do not produce the whole product (Figure 56).

Figure 56. What is a GVC ?

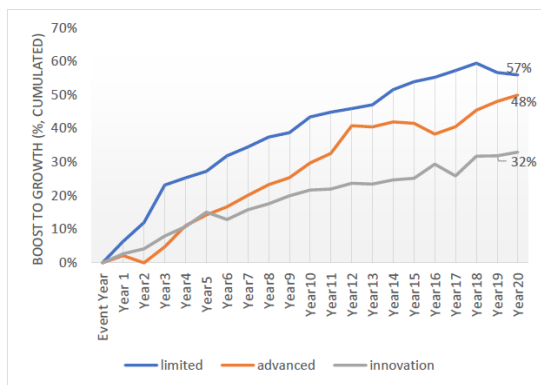


Source: (World Bank, 2019)

192. Empirical evidence indicates that participation in GVCs plays a key role in fostering productivity, growth and better jobs. Recent studies collected in the World Bank’s World Development Report 2020 show that participating in GVCs can significantly boost real incomes in developing economies, with even steeper increases in growth during earlier stages of GVC participation (Figure 57a). These positive economic effects are, in turn, largely driven by the higher productivity of firms that engage in international trade vis-à-vis inwardly-oriented companies (Figure 57b). Available evidence also indicates that participation in GVCs is linked to boosting local jobs and wages (Figure 57c-d).

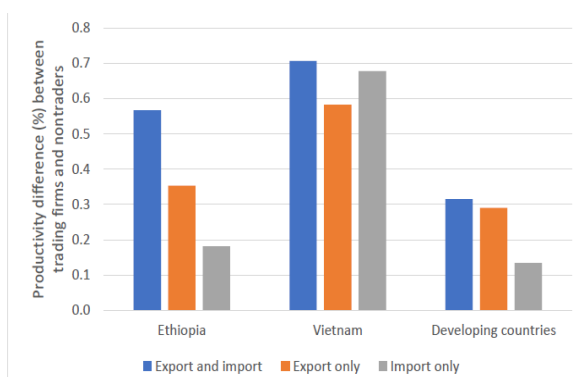
Figure 57. GVCs and growth, productivity and jobs

a. Growth and participation in GVC

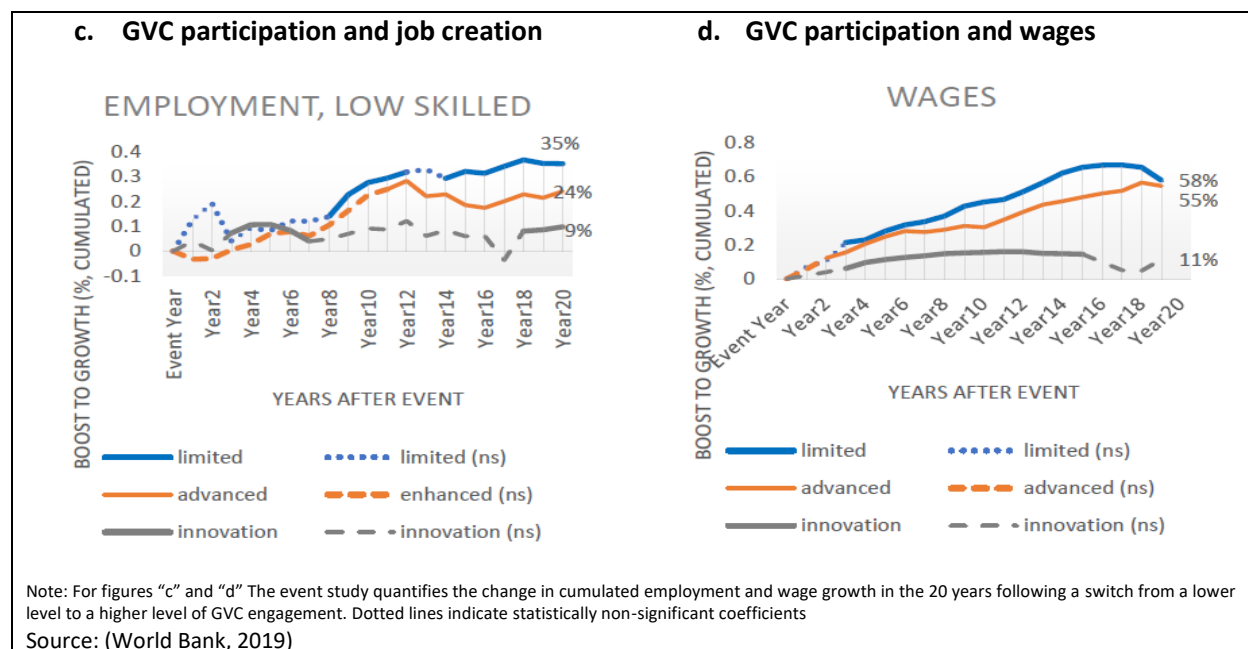


Note: The event study quantifies cumulated boost to real income growth in the 20 years following a switch from a lower to a higher stage of GVC engagement.

b. Productivity and integration into GVC



Note: The figure plots the coefficient estimates of a regression of log of labor productivity (sales per worker) on dummy variables if the firm exports and imports (GVC firm), exports only, or imports only, controlling for capital per worker. The samples control for various fixed effects.

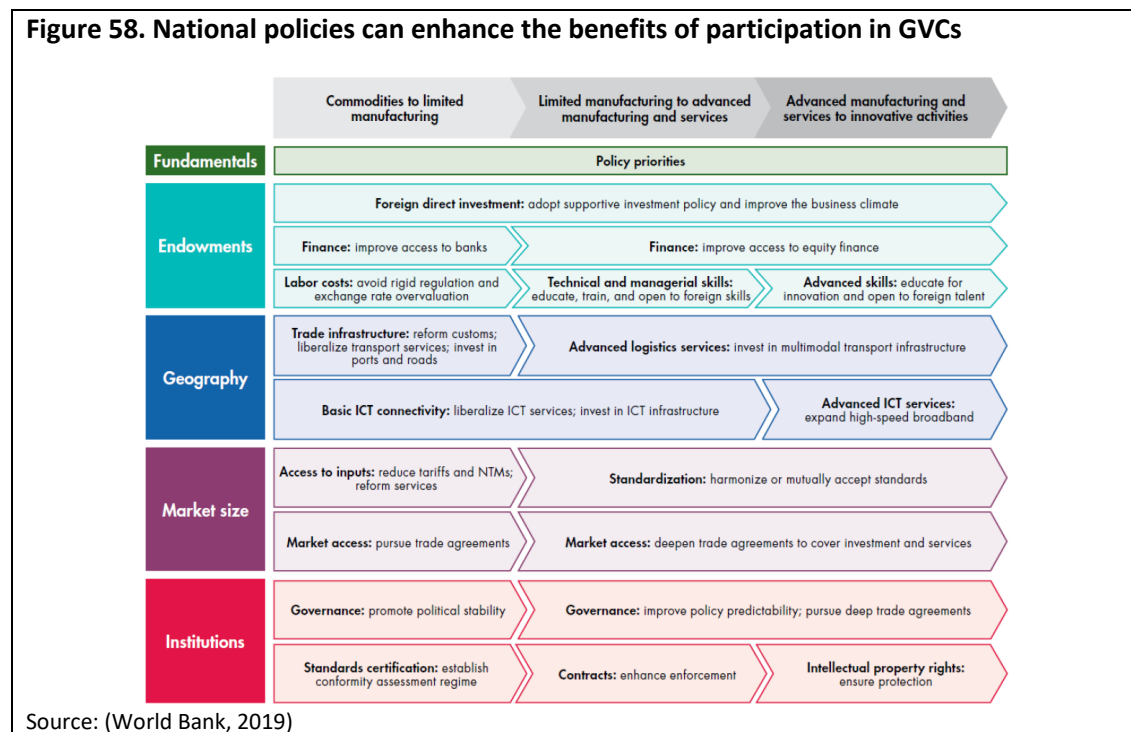


193. Participation in GVCs is largely driven by endowments, market size, geography, and institutions.

As noted in the WDR 2020, the extent and the modalities through which developing countries participate in GVCs are determined, first, by the relative abundance of factor endowments (e.g. skilled / unskilled labor or natural resources). A second determinant is the relative size of the market, and therefore, the attractiveness of an economy for enticing market-seeking foreign direct investment (FDI). A closely related determinant is geography, and specifically, the distance to the principal export destination markets and imported input sourcing economies. Also important are access to markets and the quality of local institutions (Figure 58).²²⁵

194. National policies can enhance the benefits of participating in GVC. Notwithstanding the importance of these “fundamental” determinants, national policies can enhance the benefits of participating in GVC for developing countries. Improving access to finance, ensuring adequate labor regulation policies, avoiding real exchange appreciations, and boosting technical, managerial and advanced skills are all important. Investments in logistics and connectivity can ameliorate the restrictions imposed by physical distance and geography. Likewise, public policies that aim to strengthen or complete national markets and promote local consumption can play an important role in the development of companies with greater capacity to participate in regional and global value chains. Finally, engaging in comprehensive free trade agreements (FTAs) can improve access to export destinations and input sourcing markets, as well as contribute to enhance local regulations and governance in key areas for fostering exports and FDI (e.g., standards certification, contract enforcement, policy predictability, intellectual property rights’ protection and political stability) (Figure 58).

²²⁵ (World Bank, 2019)

Figure 58. National policies can enhance the benefits of participation in GVCs


5.2. COVID-19 implications for GVCs²²⁶

195. The COVID-19 pandemic has posed a systemic challenge to GVCs. The closing of factories, disruptions in transport, and concerns about essential supplies have affected how multinational enterprises (MNEs) operate worldwide. As a result of the supply restrictions, the demand shock and general decline in investor confidence, COVID-19 is expected to reduce FDI to developing countries by 30 to 40 percent in 2020. Additionally, the top 5,000 MNEs have reduced their earnings estimates by 30 percent for 2020.²²⁷

196. Small and open economies are particularly vulnerable to the COVID-19 shock with suppliers to MNEs facing the largest pressures. Vulnerability to the COVID-19 shock may be the highest in small economies highly reliant on international trade. Suppliers to MNEs are being specially affected by supply chain disruptions.

197. Nevertheless, the potential shifting of GVCs could also open new opportunities for suppliers from small economies such as Guatemala. The recent tensions between the United States and China have created incentives for MNEs to diversify their supplier base away from the Chinese market to other developing countries. The COVID-19 shock may intensify the push of global chains to diversify, and regional value chains may gain more momentum. This may open new opportunities for suppliers in some small economies like Guatemala in line with its comparative advantage.

²²⁶ Section draws on Zhenwei Qiang, et al. (2020)

²²⁷ Zhenwei Qiang, et al. (2020)

The impacts of the covid-19 pandemic on global tourism

198. The COVID-19 pandemic has caused a massive negative shock to the global tourism industry. International tourist arrivals are estimated to have dropped by more than 65 percent in 2020. This has caused huge drops in revenues for airlines, hotels, restaurants, and other tourist services. For instance, airlines are estimated to have lost close to \$84 billion in Latin America.²²⁸ Millions of tourism-related jobs are also estimated to be at risk in Latin America.

199. Nevertheless, the pandemic opens new challenges and opportunities for the tourism industry in the short and medium term. Regional and local tourism is expected to recover faster than international travel, driven by the demand of small groups of younger and higher-income individuals looking for remote destinations. From a policy perspective, seizing this short-term opportunity will require designing and adopting robust health and security standards and protocols as well as fostering diversification in the touristic offer, emphasizing sustainability and value added. Developing a fluid communication strategy with potential and actual travelers will also play a crucial role for restarting tourism. Official statistics need to incorporate sources of non-traditional data (“big data”) for providing accurate and updated information on conditions in destination markets. Coordination and communication between public agencies and private operators must be also strengthened. Finally, the adoption of digital platforms and technologies ought to be promoted by providing training and technical assistance to firms, especially SMEs. Box 5 provides an overview of what has and has not changed in the tourism sector due to the pandemic. Table 9 provides examples of policy measures to cope with the pandemic in the tourism sector based on the World Bank’s global experience.

Box 5. What has changed with Covid-19 and what has stayed the same in the tourism sector?

What has changed?	What has <u>not</u> changed?
<ol style="list-style-type: none"> 1. Demand is going to be lower and market segments will be different <ul style="list-style-type: none"> Increased focus on health/hygiene Increased domestic/regional tourism Increased nature-based, wellness and sustainable tourism Less business events 2. Business models are changing with consolidation and corporate restructuring 3. Greater innovation & digitization 4. Most tourism-related enterprises are in difficulty and fiscal space for support is limited 	<ol style="list-style-type: none"> 1. People continue to want to travel (but may have less income in the short term) 2. Rich natural and cultural endowments (parks and monuments need visitors) 3. Need for tourism jobs has never been greater 4. A clean environment remains key for tourism development 5. Higher diversity and higher yield tourism are needed

Source: World Bank analysis.

²²⁸ See IATA’s Press Release No: 50, “Industry Losses to Top \$84 Billion in 2020” (June 9, 2020) <https://www.iata.org/en/pressroom/pr/2020-06-09-01/>

Table 9. Possible Measures to Cope with the COVID-19 pandemic in the tourism sector

Short-term (12 months)	Medium and long-run (12-36 months)
<p>Reinforcing health and sanitary systems</p> <ul style="list-style-type: none"> • Designing, adopting and enforcing sanitary and cleaning protocols • Enforcing COVID-19 prevention protocols • Effective communication of social-distancing and sanitary guidelines for travelers and citizens <p>Financial assistance and employment support</p> <ul style="list-style-type: none"> • Temporary income support to the self-employed; payroll & other liquidity support to firms for operating costs • Temporary tax exemptions/reductions • Reskilling (especially newly unemployed) <p>Sector-specific actions</p> <ul style="list-style-type: none"> • Improve tourism data collection, conduct pulse surveys • Digitize licensing, registration and payments • Recovery planning and destination assessments • Soft public investments to enhance existing destinations and safety • Improve training programs for SMEs 	<p>Diversification, competitiveness and inclusiveness</p> <ul style="list-style-type: none"> • Strengthen the business environment • Increase public investments to upgrade site infrastructure, facilitate connectivity and leverage private investments in existing and new destinations • Leverage complementarities between international and domestic tourism • Facilitate development of new products through SME financing, digital skills and training • Strengthen value chain linkages to support livelihoods <p>Enhanced sustainability</p> <ul style="list-style-type: none"> • Encourage sound natural resources management and green/ circular economies <p>Strengthened governance</p> <ul style="list-style-type: none"> • Foster public-private dialogue and a whole-of-government approach to facilitate policy coordination

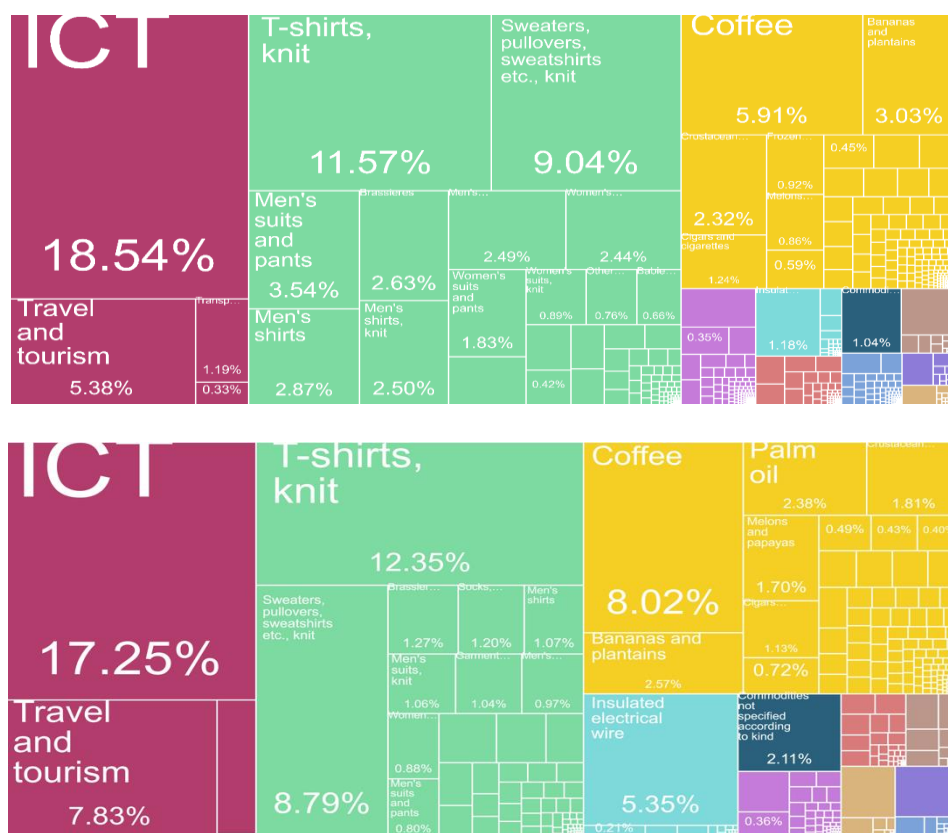
Source: World Bank analysis.

5.3. Current GVC participation and performance in Guatemala

Exports

200. Textiles, agriculture products, ICT and tourism explain the lion's share of Guatemala's exports. Textiles comprise around a third of exports, followed by agricultural products (25 percent), information and communication technology services (ICT, 17 percent), and tourism (8 percent). The relative share of primary products in exports increased noticeably between 2000 and 2018. Manufacturing products other than textiles (e.g., electrical wires) have also increased their participation in the Guatemalan export basket (Figure 59).

Figure 59. Export Basket Composition 2000 (above) and 2018 (below)



Source: Atlas of Economic Complexity

201. The US and Central America are the main destination markets for Guatemalan exports. The US receives around third of the exports, followed by other Central American economies like El Salvador (12 percent), Honduras (9 percent), Nicaragua (5 percent), Costa Rica (4 percent) and Panama (2 percent). Mexico is also a relevant export destination (4 percent). The US and Central American markets are also the main destination for the principal exported products (Figure 60).

202. Agricultural value chains contribute the most to labor value-added in exports. Similar to other sectors, the vast majority of labor value-added comes from unskilled labor. The labor value-added comes from a mix of both direct and indirect inputs. (Figure 61).

Participation of Guatemala in selected GVCs

203. The government of Guatemala has prioritized a range of value chains over time. Examples include wood, fruits and vegetables, processed food, beverages, apparel, light manufacturing, metal-mechanic, tourism, logistics and ICT in the National Competitiveness Policy 2018-2032 (“Política Nacional de Competitividad 2018-2032”). Interviews conducted by the World Bank in 2019 revealed that government agencies, international organizations, and some private sector representatives identified some potential value chains to work on in the future. These include ten value chains spanning agriculture and seafood, services, and manufacturing, as shown in Table 10. The following sections analyze the challenges and opportunities within these selected value chains. Annex 8 provides more in-depth analyses of the shrimp and sustainable fashion value chains.

204. These value chains were selected for analytical purposes—prior to the current government’s communications on priority sectors, e.g., in “Proyecto Guatemala no se Detiene”—to cover a range of sectors with representative challenges and opportunities. Their selection does not imply World Bank prioritization of these sectors over others. Other emerging or less developed value chains recently highlighted by the government could potentially be analyzed in future work, such as sesame, cardamom, achiote, and black pepper.

Table 10. Selected value chains

Sector	Value Chain
Agriculture and Seafood	<ul style="list-style-type: none"> • Coffee • Tropical Fruits • Seafood • Cocoa
Services	<ul style="list-style-type: none"> • Tourism • BPO services
Manufacturing	<ul style="list-style-type: none"> • Forest products • Textiles and apparels

Source: Secondary sources and interviews

205. The World Bank has supported value chain development in Guatemala through lending operations, particularly in the agriculture sector. For example, the \$150 million Responding to COVID-19: Modern and Resilient Agri-Food Value Chains Project was approved by the World Bank in January 2021. The Enhancing MSME Productivity Project, which closed in 2016, aimed to stimulate the growth of MSMEs in selected value chains. The analysis in this chapter complements those operations by highlighting examples of opportunities for upgrading.

Agriculture and Seafood Value Chains

206. The production of basic agricultural products is a volume business with low margins and commodity prices determined by few global players. Sustainable, quality products are the most dynamic segment. Producers face increasing demands to comply with environmental concerns over land use and deforestation practices in sophisticated export markets.

Tropical Fruit Value Chain

207. Understanding the tropical fruit ready-to-eat value chain. Tropical fruits are a volume business, with low margins and dominated by few global players. Over the past years import prices for bananas, for

Global Value Chains

instance, have remained stable in US and EU, but agro-chemicals and pesticides costs have increased almost 200 percent and shipping costs 233 percent, squeezing margins for producers. The main international players (Del Monte, Dole and Chiquita) have profit margins of less than 2 percent. There are environmental concerns over single use plastic and other residues and the industry displays socio-economic spillovers limited to job creation. Companies specialized in the fresh tropical fruit segment (e.g. mango, melon, papaya, pineapple) have seen increases in volume of 300–1000 percent over the past decade. Tropical fruits for agroindustry are, like the banana segments, a low margins business marked by high rivalry from Asian players (China, Thailand) over past decade.

208. The ideal tropical fruit ready-to-eat chain for export to the most sophisticated international markets requires innovation in the varieties of fruit and utilization of fertilizers complying with organic certification. Production requires using qualified labor and adopting irrigation systems, harvest time control, manual harvest, maturation and pest control, cold chains and packaging. Conditioning requires thermal treatments for washing, selection, high-quality control, and sustainable packaging.

209. Export and logistics involve the presence of cold chains along the entire route, frequent and personalized deliveries and service-oriented processes with long term contracts. Manufacturing is done through elaboration of small batches, innovating in product assortment, requiring sustainable packaging guarantees for short term freshness and guaranteeing traceability, high quality controls and a skilled work force. Sales entail the provision of nutritional information at the point of sale and taste and convenience guaranteed through specialized supermarkets looking for stable relationships with producers working in this niche. The production of ready-to-eat fruits is intensive in the use of technology, especially in the adoption of traceably and real time information systems.

210. While tropical fruits in Guatemala are mainly produced by small growers using low quality processing methods and distributed through fragmented logistics networks, some fruits have achieved export quality and some cooperatives are developing new commercial varieties. A recent report indicates that Guatemalan tropical fruit exports have increased noticeably in the first five months of 2020 due to the rising global demand for foods that may contribute to strengthen the immune system, particularly in the US market, in the context of the COVID-19 pandemic (AGEXPORT, 2020). Small farmers are organized in associations, committees and cooperatives. As in other Northern Triangle countries, production is fragmented, with poor sanitary practices, heavy use of fertilizers, and a lack of traceability systems. Producers also tend to use old varieties, minimum technological infrastructure, and a low skill labor force. During processing, ready-to-eat quality requirements are not met by local producers due to little control in the ripening stages, minimum conditioning and non-continuous use of cold chain over the entire process. Regarding the distribution stage, growers tend to not consolidate sales, as they generally have fixed buyers who distribute to local markets. Nonetheless, a wide range of fruits have already achieved export quality production in Guatemala and some cooperatives are involved in the development of new commercial varieties. Yet, even the best producers fetch lower prices than competitors from Mexico, Canada, China and Peru. Intermediaries concentrate most of exports, and few growers sell directly to international buyers.

Seafood products

211. Understanding the ideal fish product value chain. Handling and extraction (from the water) require the adoption of advanced management plans, while logistics requires short and rapid distribution channels and cold chains. Conditioning and manufacturing require some minimum processing (ready to cook/eat), gastronomic innovation (e.g. recipes), alliances with specialists (e.g. chefs), industrial kitchens, sustainable packaging, high sanitary controls, and a highly skilled workforce. Export and distribution

Global Value Chains

require cold chains along the entire route and frequent and personalized deliveries. Finally, sales typically involve innovative and responsible gastronomic experiences that value quality and origin, adequate infrastructure for differentiated experiences (e.g., chefs involved in promoting differentiated fish), and retailers that value differentiated food (e.g., fresh, local and sustainable).

212. Fish is produced in Guatemala under poor quality conditions and inadequate distribution processes. Similar to other Northern Triangle countries, the production phase needs to incorporate sustainable management plans, including perimeter delimitation, catch rates, fishing gear, among others. It needs also to strengthen systems of extension, technical assistance, technology transfer and incorporation of good health practices, quality control, safety, traceability and ICT systems. There is also a need for genetic improvement of fishing species and boats, machinery, gear and fishing methods. The processing phase of the value chain needs to improve technical standards, labelling, voluntary certification of biological sustainability, as well as social and working conditions. Producers do not meet ready-to-eat quality requirements due to little control of hygiene standards and appearance, minimum control of conditioning processes and lack of maintenance of the cold chain. The distribution phase of the value chain is characterized by deficiencies in the management, ordering and commercialization processes, which is accentuated by the lack of infrastructure in the main handling and transport centers. The industry also lacks downstream alliances with restaurants, chefs and supermarkets.

213. Shrimp is produced with inefficient handling practices in processing and distribution. In 2017, shrimp accounted for about 62 percent of Guatemalan aquaculture production (World Bank, 2019b). Recently, small producers in the Pacific coastal zone have displayed strong production growth. Shrimp farms have collection centers, including some docks, ice plants, cold chambers, workshops and input warehouses. Like in other countries in the Northern Triangle, the main obstacles for shrimp producers in Guatemala are linked to the ability to meet changing European import requirements with respect to quality and safety. Competitiveness in the processing phase is hindered by the lack of handling control practices, errors and inefficiencies in production systems, and little access to technical assistance and technology transfer. Distribution is hampered by frequent errors in the handling of the cold chain during transport from the harvest to the final consumer and low development of managerial and commercial skills.

Coffee Value Chain

214. Opportunities for strategic repositioning in the niche small batch specialty coffee segment. Currently, much coffee production falls in the stockable calories segment, which is a volume business. Craft or specialty coffee falls under the “fresh indulgence” strategic segment for final elaboration with higher prices, and international growth trends are positive for coffee in this segment.

215. Understanding the ideal value chain of specialty coffee is helpful to guide strategic repositioning. Small-batch craft coffee production requires the utilization of varieties of specialty coffee adapted to terroir and desired flavor, as well as fertilizers and pesticides complying with organic certification. Its production entails the adoption of special organization practices (e.g., soil treatment, pest and weeds control, etc.) and manual harvest and bean selection techniques. Product conditioning demands selection, washing, drying at 11-13 percent humidity, and packaging. Export logistics and storage require specialized exporting companies or cooperatives that sell directly to specialized buyers, product traceability to the farm, and short storage periods with optimal humidity grade. Roasting is typically done by specialists, just before consumption, while marketing normally entails the use of sustainable packaging that guarantees short term freshness. Finally, small batch coffee is commercialized in specialty coffee shops, which are focused on the full consumption experience. These segments are supported by the

Global Value Chains

provision of agricultural, technical, financial and transport and logistic services. Additionally, there are several support institutions along the value chain, encompassing research and development (R&D) organization, training providers, regulatory bodies and associations and cooperatives.

216. Coffee is produced in Guatemala utilizing low quality varieties and harvesting techniques, while processing and distribution do not meet the most demanding international standards except for the Huehuetenango area. Like in other countries in the Northern Triangle, coffee production in Guatemala is characterized by the lack of soil preparation and the selection of varieties according to resistance to pests instead of quality. Harvesting tends to mix beans that are ripe and un-ripe with little or no coordination among stakeholders. Most of the production is centralized in a single processing center, using basic quality standards with insufficient washing and non-optimal drying, while storage is done under poor humidity and temperature conditions. In spite of these general conditions, some cooperatives in the Huehuetenango area are following high standards processes for the production of specialty coffee. Coffee is mainly sold through cooperatives to the Belgium, German and US markets.

Cocoa Value Chain

217. Understanding the ideal bean-to-bar cocoa value chain. The bean to bar cocoa value chain offers the opportunity to move from a commodity product with unstable prices (set in London or New York) and very low margins for primary producers to niche quality products in short distribution circuits with significantly higher margins. In cocoa, for example, selling high-end fine cocoa with quality local conditioning can fetch producer prices that are 350-400 percent higher than commodity prices.

218. Producing bean to bar cocoa requires multiple intermediate inputs, as well as technical and managerial capabilities. For instance, it requires the utilization of varieties of fine aroma cocoa adapted to terroir and desired flavors, as well as fertilizers and pesticides complying with organic certification. It also requires the adoption of organic practices in soil treatment and pest and weed control and manual harvest to carefully select the best beans. Conditioning requires fermentation with optimal temperature and humidity using small-scale machinery, drying and careful bean selection and triage. The entire production process is certified by the specialized buyer (craft chocolatiers) who also tends to provide direct technical assistance and demands bean tasting and traceability. Manufacturing and marketing entail the elaboration of small batches, innovating in organoleptic experiences (e.g. taste, color, odor, and feel), and combinations with spices and other ingredients. They also benefit from the use of sustainable packaging with guarantees for short term freshness and communication of traceability and organoleptic characteristics. Finally, sales are normally made through chocolatiers' own craft chocolate shops focused on full consumer.

219. Cocoa is produced by small, low-productivity and poorly organized growers in Guatemala under poor processing conditions, and it is exported to a few concentrated markets. Cocoa is produced by small growers displaying relatively low levels of productivity. Cocoa production is estimated to amount to 255 quintiles harvested annually. It is also estimated that there are 1,200 workers employed in the cocoa sector (full-time equivalent jobs). Most of the production is directed to the domestic market and it is concentrated in the Alta Verapaz (30%), Suchitepéquez (30%) and San Marcos (13%) departments²²⁹. The average field size is less than 1 hectare with yields of less than 0.3 Tm/Ha. It is estimated that 40 percent of producers are not formally organized. Similar to other countries in the region, production entails little diversification of varieties of fine-scented cocoa, high use of fertilizers, and low organic production.

²²⁹ (MAGA, 2016)

Global Value Chains

220. Cocoa processing in Guatemala, like in the rest of the Northern Triangle, mainly involves fermentation and drying with basic infrastructure and no bean selection. Drying is done in yards, but in humid regions solar tunnel dryers or wood dryers are used. Some producers simply break the cobs and let them dry in sacks or crates, while some organizations collect beans in order to improve and unify qualities. Producer organizations establish direct commercialization contacts with commercial buyers, whereas some SMEs have established direct contracts for the purchase and sale of crops under quality standards through private companies with access to the export market. The distribution to international markets is concentrated through intermediaries and wholesalers.

Services Value Chains

221. Selected services value chains include tourism and BPO. Each has different challenges and repositioning opportunities.

Tourism

222. International tourism in Guatemala has been growing in recent years, mainly due to improved promotional efforts from the government. The country has unique natural and cultural assets suited for adventure tourism, cultural tourism (related to the Mayan Cosmovision), and ecotourism— these assets can be particularly attractive for millennials, who tend to have greater acceptance of moderate risks and look for uncharted destinations.²³⁰ Adventure and eco-tourism also have potential for significant socio-economic impacts in under-developed regions. Moreover, adventure tourism is likely to be one of the earlier tourism segments to recover from the COVID-19 crisis given that it tends to attract less risk-averse and younger travelers and may be more suitable for outdoor and socially-distanced pursuits.

223. Changes in global tourism demand could constitute an opportunity for Guatemala. Explorer / adventure tourism is one of the most dynamic segments of international tourism. The global adventure market is estimated to be worth between US\$ 683 billion (Adventure Travel Trade Association (ATTA), 2018) and US\$ 745 billion (IFC, 2018). According to ATTA (2018), it shows a 21 percent cumulative annual growth rate (CAGR) since 2012. (USAID, 2018) estimates this segment produces 4.5 times more income and twice the employment of mass tourism. This type of tourist aims to collect rare, customized, and authentic experiences. Such tourists are also interested in “giving back”, including through eco-friendly and socially responsible activities. Tourist operators in this segment intensively use ICT tools for direct marketing. Guatemala has an opportunity to better target high value, low volume risk takers seeking transformative experiences.

224. The ideal value chain of adventure tourism includes three stages: (a) pre-trip, (b) during trip, and (c) post-trip. The pre-trip segment requires information readily available online. Decisions on reservations are often made while scouting for information, and therefore should be immediately actionable. Regarding inbound logistics, trips need to be safe and reliable to avoid wasting time. During the trip, local attractions should be highlighted and made accessible for the tourist to experience “controlled authenticity”; and experience formats should be regularly reviewed. Accommodation and food should be eco-friendly and highlight local uniqueness. Finally, post-trip online reviews and feedback should be promptly addressed. CRM databases should be used to encourage repeat visits with new experiences. Therefore, the capacity to collect data on destinations, trips, and experiences plays a key role in developing all the stages of the adventure and ecotourism value chains.

²³⁰ AGEXPORT’s “Comisión de Turismo Sostenible” provided valuable inputs for the identification of high-potential segments in the tourism value chain.

225. Guatemala is considered to be the most advanced tourist destination in the Northern Triangle. However, information on explorer and adventure tourism is not readily available, the service offering is heterogeneous, and there is limited visitor feedback. Some local operators are already offering high value-added tourist propositions targeted to international travelers. Between 2013 and 2019, the entry of non-resident visitors increased by 7 percent annually, partly as a result of increased promotional efforts.

226. Nonetheless, national promotion institutions lack readily available information and advertising online material focused on adventure and exploring tourism. During trip, destination service offerings are not well differentiated, and there are no minimum quality standards. Guatemala also has relatively poor infrastructure, which limits accessibility, decreases security, and increases costs. Further, natural and cultural assets could be better presented to increase the value that tourists derive from them. The use of digital resources to market and disseminate information about those assets is limited, as is the adoption of non-traditional experiences and events. The COVID-19 pandemic has significantly constrained the budget of the Guatemalan Tourism Institute (INGUAT), limiting its ability to promote Guatemala's tourism industry internationally.²³¹ Moreover, there is limited visitor feedback post-trip, hence, tourists return more due to the inertia of business than to an active retention strategy.

Business Processing Outsourcing (BPO)

227. Understanding the ideal BPO services value chain. Process outsourcing refers to third-party providers of operations and other non-primary business processes. By outsourcing some services, firms can focus on their core business and reach beyond their own capabilities by transferring some tasks to a third party. Outsourcing services include business process outsourcing (BPO), as well as the higher value services associated with knowledge process outsourcing (KPO), information technology outsourcing (ITO), and Application Service Provision (ASP, which normally refers to subscriptions to Software-as-a-Service, such as from Microsoft, Oracle, or SAP).

228. There are two major types of BPO services: back-office outsourcing and front office outsourcing. The former involves tasks like data entry, management, and analysis; surveys; accounting, etc. The latter deals with customer relations, including voice services (call centers), email service, tech support, and others. BPO services contribute to greater operational efficiencies in many business functions and areas. Human Resources outsourcing is the largest BPO segment, accounting for 28 percent of the market's total value, according to MarketLine.

229. BPO is one of the more dynamic and fast-growing business sectors globally and in the Americas. The global BPO sector grew by 13.6 percent in 2019 (year on year), reaching a value of US\$135.5 billion and is expected to grow by nearly 40 percent by 2025. In recent years, the Americas market became a global lead in BPO services provision, as measured by industry revenue.²³² Overall, Central American countries lag in developing an outsourcing sector relative to Brazil, Mexico and Colombia. However according to the AT Kearney Global Services Location Index (GSLI) Study in 2019, Panama and Costa Rica are represented in the Top 50 overall Country Rankings listing, and there are established BPO sectors in Guatemala and El Salvador.

²³¹ INGUAT is the entity that governs the promotion of Guatemala's tourism industry internationally. INGUAT finances its promotion efforts through a lodging tax (10 percent of the suggested price per occupied room). In the second quarter of 2020, INGUAT temporarily suspended the charge of the lodging tax. See [link](#).

²³² According to data on the global outsourcing revenue compiled by Statista.
<https://www.statista.com/statistics/189795/global-outsourcing-industry-revenue-by-region/>

Global Value Chains

230. Guatemala's BPO sector employs around 42,000 workers and generates about 100,000 indirect jobs. The BPO industry in Guatemala provides voice, chat, email, and back-office support for US companies. Around 90 percent of the jobs are related to voice-based services, of which about 67 percent are English-Spanish bilingual activities, 30 percent are Spanish-based services and 3 percent are services based on other languages (e.g., French, German and Portuguese). In addition to these direct jobs, the BPO sector generates indirect jobs in telecommunications, security, transportation, infrastructure, health and other related activities.²³³

231. BPO exports as percent of GDP have declined in recent years. In 2019, BPO and contact center services exports reached US\$ 600 million, 12 percent less than the US\$ 720 million reported in the previous year.²³⁴ According to World Trade Organization (WTO) data, Guatemala displays the lowest BPO exports in the Northern Triangle and it is well behind the largest Spanish-speaking exporters in Latin America and the Caribbean, like Argentina, Brazil and Colombia.

232. Despite offering relatively low-wage costs compared to other Central American countries, Guatemala's BPO services are hampered by the lack of connectivity, and limited English proficiency, although there are some recent incipient public-private efforts directed to address these skill-related constraints. Guatemala ranks near the bottom in average monthly hourly wages within Central America.²³⁵ The lack of connectivity is reflected in overall internet penetration: Guatemala ranks very low not only in LAC, but also among countries at the same level of development.²³⁶ In English proficiency, the country ranks 14 out of 19 among the LAC economies and 63 out 100 countries/regions worldwide.²³⁷ Partly as a response to these shortcomings, the call center and BPO industry, together with AGEXPORT (the Guatemalan Export Association), created the Guatemala BPO Commission, which developed a finishing school certification for call centers with the help of the Ministry of Economy. Different municipal governments such as Villanueva, Guatemala, and Xela have also partnered with the Guatemala BPO Commission to recruit young students into the finishing school through local employment fairs.²³⁸

Manufacturing Value Chains

233. Selected manufacturing value chains include apparel and knitwear and wood products. Each has different challenges and repositioning opportunities.

Textiles, apparel, and knitwear

234. Sustainable fashion represents an opportunity for Guatemala. Apparel and knitwear is a high-volume business with low margins that faces constant competition from Asian players. Considering the availability of natural fibers locally, there is an opportunity for repositioning toward sustainable fashion. The ideal sustainable fashion value chain in apparel and knitwear comprises five stages: (a) fiber production, (b) spinning, weaving and dyeing, (c) design, cutting, sewing, and finishing; (d) distribution; and (e) retail. Fiber production requires adopting efficient energy and water consumption practices, improving soil health, enhancing fiber quality, preserving fiber quality, reducing use of cotton, and fostering the use of new local fiber products such as hemp and cactus. Spinning, weaving and dyeing

²³³ AGEXPORT: Contact Center and BPO. <https://export.com.gt/sector/contact-center-bpo>

²³⁴ CenralAmericaData.com: Guatemala: Negative Year for the BPO Sector. 2019. https://www.centralamericadata.com/en/article/home/Guatemala_Negative_Year_for_the_BPO_Sector

²³⁵ (World Bank, 2021g)

²³⁶ (World Bank, 2021g)

²³⁷ (EF, 2020)

²³⁸ NearshoreAmericas.com: The Nearshore English Evolution: Guatemala BPO Dependent on Private-Public Alliance. 2017. <https://nearshoreamericas.com/nearshore-english-evolution-guatemala-bpo-private-public-alliance/>

Global Value Chains

demands less consumption of water and efficient energy consumption, eutrophication and acidification, zero discharges of hazardous materials, and the use of natural dyes such as walnut shells. For distribution, sustainable fashion entails the use of redesigned packages, less polluting transport, and agile logistics to different points of sale. Retail involves the adoption of energy efficiency and renewable programs, the use of social media, the development of “smart products”, and -e-commerce as well as establishing business-partnerships with the diaspora of successful innovative Guatemalan fashion designers based in the US market²³⁹. There is a nascent group of weaving cooperatives and e-markets offering “ethical” artisanal fashion, like *Consejo de Tejedoras* of Santo Domingo Xenacoj, and social enterprises like Meso Goods²⁴⁰. VESTEX is also proving technical assistance and support to traditional apparel and textile producers for the adoption of sustainable production practices, environmental and labor internationally recognized certifications and advanced technologies.

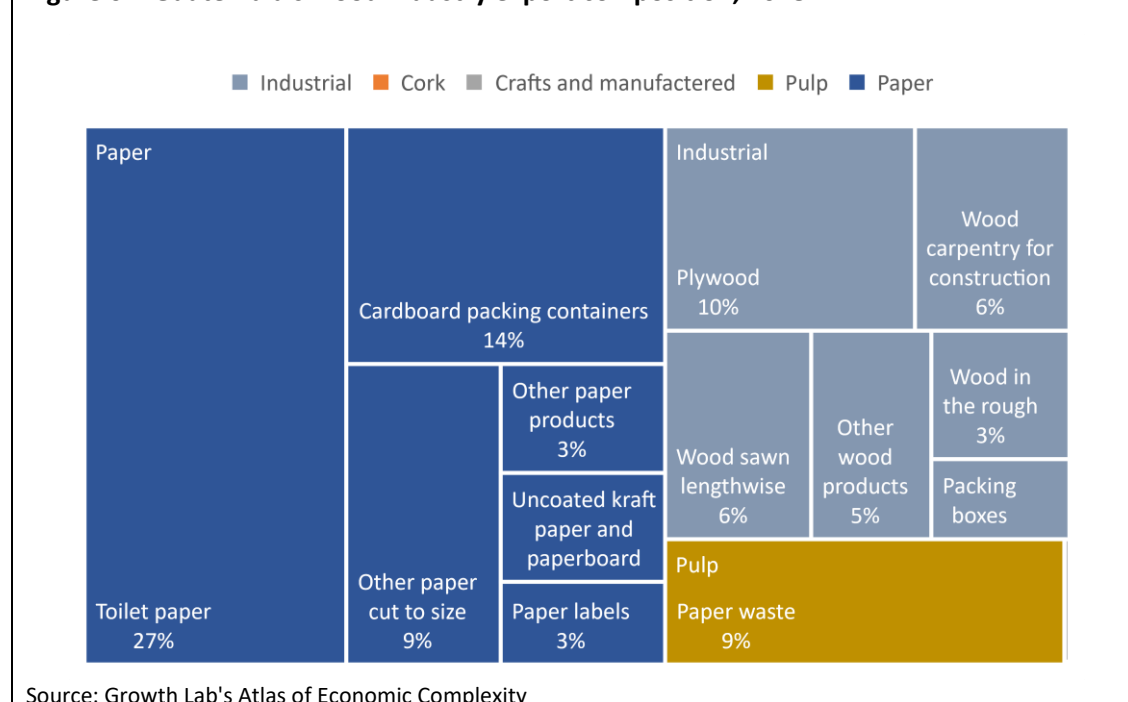
235. Apparel and knitwear producers in Guatemala specialize in a few low value-added and standardized products for the US market. Local companies mainly import materials (which can be semi-finished) from foreign contracting companies without using local fibers or incorporating local R&D. Guatemalan companies import cotton from the US, synthetic fibers from Asia and fabrics from other Central American countries and Asia. Domestic production is dominated by SMEs, while large firms specialize in production directed to export markets, mainly the US. Around 70 percent of garment factories are owned by foreign firms, mostly of Korean origin. Like in the rest of the countries in the region, there is little local participation in logistics and retail and Guatemalan companies do not develop their own digital strategies. Most companies are located in urban areas, which are usually saturated with transit at certain times, hindering agility in transport of goods. For instance, some companies located in the Palin and Escuintla region and further contributed to the urbanization and densification of those areas.

Forest products

236. The wood industry encompasses several distinct economic activities with varying degrees of sophistication. The wood industry's value chain is divided in multiple distinct segments based on type of end-users and types of activities. End-users include institutional, commercial, and individual buyers, while activities include fuel, heating & energy; pulp & paper; crafts, manufactured consumables & others; habitats & constructs; and interior wooden spaces and furnishings. Guatemala's wood industry is highly concentrated in the low-value-added (low-margin) segments of the value chain, specifically in utility-driven industrial woods (e.g., plywood, constructs, basic furnishings) and paper products (e.g., toilet paper, cardboard).

²³⁹ TheCultureTrip.com. 7 Fashion Designers from Guatemala You Should Know. 2017. <https://theculturetrip.com/central-america/guatemala/articles/7-fashion-designers-from-guatemala-you-should-know/>

²⁴⁰ Fashionista.com. In a world of knockoffs and appropriation, Guatemalan artisans are taking their traditions global. 2020 <https://fashionista.com/2020/02/guatemalan-artisans-weaving-cooperatives>

Figure 62. Guatemala's wood industry export composition, 2018

237. The competitiveness of wood production in Guatemala is hampered by lack of investment in technology, informality and high transport and input costs. Guatemala has access to copious forest resources, including high-margin non-coniferous woods. Moreover, Guatemala's proximity to the U.S., one of the largest importers of industrial, sawn and pulp wood, gives the country a great locational advantage. However, common to other Northern Triangle countries, the production phase of the value chain is hampered by the lack of efficient forest management practices, investment in advanced machinery, lack of specialized labor and access to technology. Competitiveness is further hindered in Guatemala by high costs of wood production due to remoteness of logging areas and lack of adequate machinery. The north of Petén area is producing fine woods due to improved efficiency in tree use, which has an impact on productivity and profitability. Informality in sawmills and furniture factories, doors and parts, as well as high competition with portable sawmills and illegal wood, leads to a decrease in the selling price of wood in the processing stage of the value chain. Inadequate road infrastructure translates into high transport costs and low value added of export products. Local producers lack direct contact with final markets and knowledge of international trends.

5.4. Main challenges and reform areas

238. This section identifies missing segments and potential coordination failures in some of the selected value chains. The section also considers existing government programs to identify policy gaps and potential synergies and overlaps. The following analysis is based on the above comparisons between the ideal and current value chains in Guatemala.

Missing segments and potential areas for improvement

Agricultural Value Chains

239. Guatemala's cocoa value chain could undertake a multidimensional strategy to upgrade into the bean-to-bar segment. Upgrading into the high value bean-to-bar segment requires investing in R&D for identification of fine cocoa aromas best adapted to terroir. Coordination with other growers in Honduras and El Salvador could also help improve variety. Shifting toward the use of organic pesticides and fertilizers could also facilitate upgrading. In the production and harvesting stage, strategic repositioning would require training in organic practices and manual harvesting for optimal fruit bean selection. Training to cooperatives on how to sell small batches directly to select buyers, ICT systems for traceability, and improved storage facilities and logistics (to reduce storage periods) would also be beneficial. Potential financial and logistic constraints may also need to be addressed. Many challenges to penetrate the specialty coffee segment are similar to those for cocoa.

Manufacturing Value Chains

240. Upgrading apparel and knitwear toward the sustainable fashion segment. R&D investment to develop new local fibers (e.g. hemp, cactus) and improving energy and water efficiency during fiber production would be beneficial. In the stage of spinning, weaving and dyeing, improvements would be needed in energy and water management, eutrophication and acidification, discharge of hazardous chemicals, and use of natural dyes such as walnut shells. In design, cutting, sewing and finishing, competitiveness could be improved through training in fast fashion design activities, energy efficiency, and better labor practices. Distribution requires more agile logistics to different points of sale. In retail, local companies would need digital training for use of social media and digital marketing and e-commerce, following the recent examples of some weaving cooperatives and e-markets in the "ethical" fashion market segment

241. There are multiple paths to upgrade the wood industry. By moving from utility-driven to fashion-driven segments of the wood value chain, Guatemala could leverage its locational advantages and capitalize on the growing international market for furniture and wood interiors.²⁴¹ For instance, Guatemala could upgrade its value chain to produce high-value added plywood, veneers, and furniture made from quality timber (e.g., non-coniferous woods). This upgrade would require a significant development of the local value chain, including: strengthening design capabilities (e.g., adoption of digital tools for personalized design and virtual exposition of merchandise), more stringent quality controls, improving logistic systems to reduce inventory costs and ensure on-time delivery, and improving customer relation skills and aftercare services. Aside from industry-specific capabilities, exporting wood products competitively will require infrastructure provision to connect remote logging areas, as well as an adequate legal and regulatory framework to ensure social and environmental sustainability along the value chain.

242. Improving social and environmental standards holds promise for forest products, and particularly for the wood industry. Traditionally, the quality and hardness of the wood are key discriminating factors in international markets, with harder woods typically generating larger margins for producers. More recently, the sustainability of production processes has become a discriminating factor in sophisticated markets, as end-users are demanding more stringent social and environmental standards. The global demand for high value-added and environmentally friendly plywood products has been

²⁴¹ The U.S. is one of the largest importers of wooden furniture in the world, and most of these imports come from China and Southeast Asia.

Global Value Chains

increasing during the past five years: growing by 5.2% annually between 2010 and 2016 to reach USD 13.9bn in value. Opportunities for strategic repositioning of Guatemala's wood industry lie in producing other on-trend products with lower environmental impacts, such as corrugated paper packaging, and developing a sustainable timber value chain (World Bank, 2019b). Likewise, there are opportunities for developing eco-friendly fibers for textiles and packaging products in association with global companies (e.g. Spinnova). Capitalizing on these opportunities will require appropriate legislation to ensure correct resource management.

Services Value Chains

243. Upgrading and adapting to COVID to serve tourists in the explorer/adventure segment. In the pre-trip stage, online presence, marketing, and reservation systems could be improved, including through better public-private coordination. Digitization is particularly important in light of the COVID-19 crisis, given that travelers may want more information on safety protocols prior to a trip, as well as to conduct more transactions online prior to and during trips. Improving regional connectivity to develop regional synergies would also help. Connectivity is particularly important to develop high-potential tourist destinations in the north of the country, such as the Department of Petén—where private sector has shown interest in investing, provided that connectivity and basic services are improved.²⁴² Improved statistical data and communication with private operators could help to provide accurate and up-to-date information on on-site sanitary conditions to travelers before arrival during the COVID-19 pandemic. Better data collection and processing in the tourism sector will allow the government to better address bottlenecks and attract investment into this strategic sector in the context of constrained fiscal space. In the "during the trip" stage, technical assistance could be provided to local operators to highlight unique natural, cultural and historical assets and structure tourist experiences. Transportation within the country could be improved providing safe and comfortable transport services as to moving around the country can be a challenge in certain regions. Given the COVID-19 crisis, developing and implementing "safe tourism" certifications may also be considered, as could modifications to tourist sites and facilities to permit social distancing. Appropriate accommodations and food and beverage options are also important as well as adoption and enforcement of adequate sanitary and health protocols. Post-trip there is need to provide training on digital marketing and CRM to local operators to capture traveler feedback and reviews.

244. Upgrading the participation of Guatemala in the Contact Centers and BPO services' segment requires improving English-speaking and Science, Technology, Engineering, and Math (STEM)-skills as well as strengthening the telecommunications infrastructure. Guatemala needs to improve its telecommunication infrastructure in order to foster the expansion of its nascent contact center and BPO services sector. It also needs to strengthen the English-speaking and STEM-related skills of its workers by supporting and expanding recent public-private efforts to promote English-finishing schools as well as fostering private-led STEM and programming "boot camps", focused on the young population, with particular attention to female and other disadvantaged minorities. Subsidies or incentives to fund training and supporting training technologies could further benefit the industry's development. The Government could also support domestic entrepreneurial capabilities via support to entrepreneurs' training or entrepreneurship hubs (e.g., Technology Incubators).

²⁴² Kuestermann, A. (2020, May 03). Interview with Andreas Kuestermann, president of AGEXPORT's "Comisión de Turismo Sostenible". [Personal Interview].

Public policies and programs supporting MSMEs and value chains

245. Guatemala’s trade promotion and productive development programs are coordinated by the Ministry of Economy. MINECO provides assistance to MSMEs throughout its MSMEs Department and Investment and Competition Department. MINECO also has a unit in charge of value chains within the Commercial Promotion Department, as well as a Value Chain Development Program. MINECO is the implementing agency for the World Bank agri-food value chain loan (which is pending effectiveness). And MINECO coordinates the PRONACOM, which facilitates the formation of public-private alliances (among other things).

246. Several other agencies are involved less directly in value chain development. The National Secretariat of Science and Technology (SENACYT, which is linked to the Office of the President) promotes firm technology adoption and innovation. Regarding agricultural policies, the main agencies are the Ministry of Agriculture, Livestock and Food Industries (MAGA), the Ministry of Environment and Natural Resources (MARN), the Agricultural Science and Technology Institute (ASTI) and the Technology Training Institution (INTECAP). Finally, the National Guatemalan Tourism Agency (INGUAT) is a decentralized autonomous agency responsible for policies and regulations in the tourism sector.

247. ANACAFE and the national promotion law provide technical support and financial assistance for upgrading coffee production. The National Coffee Association (ANACAFE or *Asociación Nacional del Café*) represents and provides technical assistance to coffee growers. In 2019, the Congress of Guatemala approved the Law for the Economic Reactivation of the Coffee Sector. The law provides financial support to growers, especially small establishments, to improve productivity and upgrade production processes.²⁴³

248. VESTEX provides technical support to traditional apparel and textiles producers for upgrading in the massive consumption market and adopting COVID-19 safe health protocols. The Association of the Apparel and Textile Industry of Guatemala is supporting the adoption of advanced technologies and sustainable environmental and labor standards with the aim of fostering the upgrading of the industry into more valued-added market segments. VESTEX is also working with the Ministry of Environment in promoting the adoption of internationally recognized environmental standards, and more recently, it has been working with the Ministry of Health in the adoption of COVID-19 safe health protocols.

249. INGUAT and MINECO are already providing COVID-19-related technical assistance and financial support to the tourism sector. Following international good practices (see Section 3.1), INGUAT is already certifying and enforcing the Tourism Biosecurity Seal (*Sello de Bioseguridad Turística*), a set of health and sanitary protocols aimed at reducing contagion risk to COVID-19 in tourism establishment. This agency introduced national guidelines for the prevention of COVID-19 in international travel to and from Guatemala. The objective of these guidelines is to establish biosafety protocols for airport, civil aviation and ground borders.²⁴⁴ On the other hand, MINECO has provided financial support to distressed companies, including tourism establishments, in the context of the pandemic throughout the Employment Protection Fund (*Fondo de Protección del Empleo*) and the Credit Fund for Working Capital (*Fondo de Crédito para Capital de Trabajo*).²⁴⁵ In April of 2020, INGUAT decided to temporarily suspend the collection of the lodging tax in an effort to reduce the burden that the COVID-19 epidemic placed on tourism operators. Although the measure can help the sector in the short term, less promotion may slow down

²⁴³ Anacafé. “Decreto 4-2019 -Ley para la Reactivación Económica del Café- favorece principalmente a los caficultores de pequeñas áreas”. 2019. See [link](#)

²⁴⁴ INGUAT. “Bioseguridad Turística”. See [link](#)

²⁴⁵ “El Fondo de Protección del Empleo” executed all of its resources in December 2020, thus concluding its operation.

Global Value Chains

the recovery of the tourism industry in the medium term and thus reduce the capacity of tourism operators to finance future promotion efforts through lodging taxes.

250. Most of the activities for the promotion of trade and SMEs are funded with financing from international organizations, while some private organizations provide support to exporters. For instance, most of PRONACOM's funding came from a US\$ 28 million donation from the Millennium Challenge Corporation (MCC) that expired at the end of 2020. However, the MCC priority themes are not directly related to value chains. The Small Business Development Centers (CEMPROPYMES), a highly regarded network of agencies that provides technical assistance to SMEs, are also partially dependent on foreign funding. Originally created to promote entrepreneurship, the Seed Capital Fund currently finances several SMEs programs and part of the personnel costs of the MINECO MSMEs Department by channeling foreign resources. AGEXPORT is private foundation aimed to promote exports in Guatemala that provides technical assistance and information to exporters or potential exporters.

251. Policy efforts are fragmented in multiple programs that reach a small number of firms and are run by agencies with heterogeneous technical and organizational capabilities. According to interviews with local experts, PRONACOM, MINECO, and SENACYT stand out for having higher capacity. There seems to be a gap with respect to investment promotion functions, as covered in the chapter on FDI. All programs could likely benefit from impact evaluation mechanisms.

5.5. Global value chains suggested action plan

252. This subsection presents the possible actions for strategic repositioning of some of the selected value chains in six areas: (a) institutional coordination; (b) improving infrastructure; (c) fostering human capital; (d) enhancing the provision of sector-specific public goods; (e) improving market access and FDI attraction; and (f) digitalization. Regarding tourism, section 3.1 already outlined some of the actions that could be followed to cope with the challenges posed by the COVID-19 pandemic.

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
Institutional coordination	<ul style="list-style-type: none"> - Identify and implement short-term measures to stimulate recovery of selected GVCs (examples for tourism below). PRIORITY - Identify / validate key interventions for medium-term strategic repositioning of selected GVCs. PRIORITY - Coordinate with public and private stakeholders to implement selected interventions 	MINECO and others	ST, MT	None	See below
Improving infrastructure	- Ready-to-eat tropical fruit: improved maturation control and ripening facilities	MAGA / ASTI	MT	None	Large
	- Bean-to-bar cocoa: improved storage facilities and logistics to reduce storage periods	MAGA / ASTI	MT	None	Large
	- Specialty coffee: improved facilities for washing, drying and packaging	MAGA / ASTI / ANACAFE	MT	None	Large
	- Sustainable fashion: (a) improved energy and water efficiency during fiber production; (b) improvements in energy and water management, eutrophication and acidification, and discharge of hazardous chemicals during spinning, weaving and dyeing; and (c) more agile logistics (as well as roads and transport infrastructure more broadly) to points of sale.	MINECO / VESTEX	MT	None	Large
	- Fashion-oriented and environmentally conscious wood products: improve connectivity, logistic and complementary infrastructure to serve remote logging areas with high-potential for development.	Ministerio de Comunicaciones, Infraestructura, y Vivienda / MINECO	MT	None	Large
	- Explorer / adventure tourism: improving regional connectivity to develop regional synergies and supporting the development of appropriate accommodations and food and beverage options. In the short term, visitor management protocols could be implemented in tourist sites to permit social distancing in light of COVID-19. In the medium term, institutions and regulation should be upgraded to incorporate resiliency, agility and fast response capabilities	MINECO / PRONACOM/ INGUAT	MT	None	Large
	- BPO services: improving telecommunications infrastructure and access to high-speed internet at competitive costs to foster competitiveness of local operators.	MINECO / Guatemala BPO Commission	MT	None	None
Fostering human capital	- Ready-to-eat tropical fruit: training on harvest timing, quality management washing treatments, cold chain management, and sustainable packaging. PRIORITY	MAGA / MARN / ASTI / INTECAP / MINECO	MT	None	Large

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	- Bean-to-bar cocoa: (a) training in organic practices and manual harvesting for optimal fruit bean selection; and (b) training to cooperatives on how to sell small batches directly to selected buyers.	MAGA / MARN / ASTI / INTECAP / MINECO	ST	None	Small
	- Specialty coffee: (a) training for growers on organic practices (e.g. soil treatment, pest and weed control, etc.), specialized manual harvesting and washing, drying and packaging; and (b) training for cooperatives on how to sell directly to specialized buyers	MAGA / MARN / ASTI / ANACAFE / INTECAP / MINECO / INTECAP	ST	None	Small
	- Sustainable fashion: training in fast fashion design activities, energy efficiency, and better labor practices in design, cutting, sewing and finishing.	MINECO/ PRONACOM / Ministry of Energy and Mining / INTECAP / VESTEX	ST	None	Small
	- Fashion-oriented and environmentally conscious wood products: facilitate (coordinate, subsidize, or market) private sector trainings for MSMEs in (i) on-trend design of plywood, veneers and furniture; (ii) exposition, marketing and internationalization of products; (iii) logistics and inventory management; (iv) project management; and (v) customer relations and aftercare services.	MINECO/ PRONACOM/ INTECAP/ MAGA	MT	None	Small
	- BPO services; support public-private efforts to foster finishing school certifications for Call Centers and promote bootcamps and short courses on STEM and ICT-related skills targeted to younger people. Provide incentives for training to local companies. Support to entrepreneurs' training or entrepreneurship hubs (e.g., Technology Incubators). PRIORITY	MINECO / Guatemala BPO Commission	ST	None	Small
Enhancing the provision of sector-specific public goods	- Ready-to-eat tropical fruit: (a) identification of new varieties to keep up with international trends; and (b) promoting adoption of organic pesticides and fertilizers and smart irrigation systems	MAGA / MARN / ASTI	MT	None	Large
	- Bean-to-bar cocoa: (a) investment in R&D for identification of fine cocoa aromas best adapted to terroir; (b) coordination with other growers in Honduras and El Salvador to improve variety; and (c) promoting the use of organic pesticides and fertilizers. PRIORITY	MAGA / MARN / ASTI / MINECO	MT	None	Large
	- Specialty coffee: (a) investment in R&D for developing coffee varieties adapted to terroir and desired flavor; (b) adjust pesticides and fertilizers to comply with organic certification	MAGA / MARN / ASTI / ANACAFE	MT	None	Large
	- Sustainable fashion: R&D investment to develop new local fibers (e.g. hemp, cactus). Matching grants for innovative sustainable fashion projects with the diaspora of Guatemalan US-based fashion designers as well as local designers.	SENACYT/ MINECO	MT	None	Large

Global Value Chains

Reform	Action	Responsible Entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	- Fashion-oriented and environmentally conscious wood products: invest in technology extension services and consider voucher/grants for SMEs serving the local market to adopt digital technologies for designing and showing furniture.	SENACYT/ MINECO	MT	None	Small
	- Explorer / adventure tourism: technical assistance to local operators to highlight unique natural, cultural and historical assets and structure tourist experiences. In the short-term, the government should continue providing support for the adoption of Tourism Biosecurity Seal and help tourist facilities get certified (in light of COVID-19).	MINECO/ CONAMPYME / INGUAT	MT	None	Small
	- BPO services: improving technical assistance to local companies in the provision of more sophisticated BPO services. PRIORITY	MINECO / Guatemala BPO Commission	ST	None	Small
Improving market access and FDI attraction	- All value chains: improved access to destination markets and attraction of FDI in the targeted segments. PRIORITY	MINECO / PRONACOM / AGEXPORT / INGUAT	MT	None	Small
Digitalization	- Bean-to-bar cocoa: improved ICT systems for traceability	MAGA / MARN / ASTI	MT	None	Large
	- Sustainable fashion: digital training for use of social media and digital marketing and e-commerce in retail. Support for improving online presence and sales platforms for artisanal weaving cooperatives and innovative sustainable fashion projects. PRIORITY	MINECO/ PRONACOM / VESTEX	ST	None	Small
	- Explorer / adventure tourism: (a) improved online presence, marketing and reservation systems (particularly given COVID-19); and (b) training on digital marketing and CRM to local operators to capture traveler feedback and reviews PRIORITY	MINECO/ PRONACOM / INGUAT	MT	None	Small

Note: Potential higher priority reforms, based on feasibility of implementation and likely impact, can be identified by the marker **PRIORITY**

6. Entrepreneurship and innovation

253. Innovation is a key driver of productivity and economic growth. Innovation is one of the internal factors triggering productivity growth at the firm level, which in turn influences overall productivity (Syverson, 2011). Innovation - or new ideas - are the engine behind productivity growth, which in turn determines long-term economic growth and quality of life. Because of their non-rival nature, an idea can be used, replicated and expanded by other entrepreneurs. Innovation facilitates business renewal, enabling the improvement and replacement of obsolete goods, services and processes (Schumpeter, 1942). Evidence shows that innovation is strongly associated with long run productivity improvements (Easterly & Levine, 2001) and with social mobility (Aghion, et al., 2019). Innovation is not only a product of knowledge creation arising from research and development (R&D), but it is also a function of technology adoption and incremental innovation by businesses. In this sense, entrepreneurship plays a critical role in the generation and adoption of new ideas, and consequently in the productivity and economic growth of nations.

254. Entrepreneurs in developing countries do not take full advantage of opportunities to adopt global technologies. Closing the technology gap between developing countries and those in the frontier are associated with high expected returns that translate into opportunities for entrepreneurs to catch-up. Yet, Cusolito and Maloney (2018) find that entrepreneurship increases with the level of development of nations. In this sense, developing countries are underinvesting in innovation at the cost of future economic growth.

255. Unfriendly business environments and low entrepreneurial capabilities help explain the low levels of entrepreneurship and innovation amid great catch-up opportunities. Poor business conditions and missing complementary factors decrease the returns of technological adoption (Cirera and Maloney, 2017). Likewise, barriers to entry or exit, weak institutions, and restricted access to finance limit the profitability and the ability of individuals to take advantage of business opportunities. These factors are compounded by inadequate human capital, poor managerial and technological capabilities, and negative cultural biases towards entrepreneurship (Cusolito and Maloney, 2018). Policies to promote entrepreneurship and innovation should therefore aim to improve both entrepreneurship and the operating environment of companies. In addition, governments can enhance the entrepreneurship ecosystem by providing public goods, improving education and training systems, and promoting actors that facilitate entrepreneurship and innovation.

256. Guatemala possesses one of the highest entrepreneurship potentials in Latin America and the Caribbean, however several supply- and demand-side factors keep the entrepreneurship ecosystem from realizing its full potential. Insufficient access to finance, high regulatory burdens, inadequate human and knowledge capital, among other factors, impact the ability of individuals to start a business, as well as the potential of local businesses in Guatemala to become more productive, mature, and grow over time. The academic literature identifies three main avenues through which governments can promote firm productivity: (i) maximizing new firm entry and reducing inefficient firm exit, (ii) improving in-firm efficiency, and (iii) moving existing firms to higher value activity. Successfully promoting entrepreneurship and innovation (and, through it, firm productivity) may require a shift of mindset for SME policymakers, moving from a perspective of “helping small firms survive” (e.g., through horizontal measures like lower tax rates or exemptions from various regulatory requirements), to a focus on improving the articulation

and dynamism of the local entrepreneurship and innovation ecosystems.²⁴⁶ The analysis and suggested policy actions in this chapter follow the latter approach.

257. This chapter analyses innovation and the entrepreneurship ecosystem in Guatemala and identifies possible actions to enhance the efficiency of the ecosystem in the short and long term. The chapter is divided in five sections. The first section explains the entrepreneurship conceptual framework, which serves as a basis for the rest of the chapter. The second section describes Guatemala's innovation and entrepreneurship performance compared to peer countries. The third section presents the identified local entrepreneurship ecosystems in Guatemala. The fourth section summarizes the entrepreneurship and innovation policies carried out by the government and supporting activities carried out by non-governmental organizations. The fifth section presents a concrete suggested action plan to address the most pressing issues and seize opportunities identified in the previous sections.

6.1. Framework

258. An entrepreneurial ecosystem is a set of complementary factors, such as knowledge and resources, available through institutions and individuals within a region to support the development of new and economically impactful businesses.²⁴⁷ Building on Cirera & Maloney (2017) and Cusolito & Maloney (2018), the World Bank developed a methodology to assess entrepreneurial ecosystems (World Bank, 2020b). According to this methodology, for a given a set of initial conditions, entrepreneurs, firms, governments, and intermediary organizations interact within the ecosystem. As a result of these interactions, entrepreneurial ecosystems produce intermediate outputs (e.g., firm entry and exit) and final outcomes (e.g., jobs or exports).

259. The set of initial conditions of entrepreneurial ecosystems include supply factors, demand factors, and barriers to the accumulation and allocation of resources. In order to transform ideas into products and services, entrepreneurs need physical capital (infrastructure, telecom bandwidth, imported machinery, FDI, etc.), human capital (education and training systems), and knowledge capital (laboratories, efficient patent rights, universities, researchers, technology extensionists). These elements conform the supply side factors (or inputs) of an entrepreneurial ecosystem. The left side of Figure 63 presents the supply factors.

260. Firm capabilities, entrepreneur characteristics, and incentives for market access shape how entrepreneurs transform inputs into outputs. The initial conditions of the entrepreneurial ecosystem also include demand factors such as the market incentives to export and participate in global value chains. Firm capabilities to manage enterprises, such as valuing, pricing, book-keeping, risk management and other actuarial and innovation capabilities are needed to recognize and take advantage of opportunities for technological catch-up. Likewise, personality traits (drive, grit, risk attitude, openness, innovativeness) and experience can influence the success of entrepreneurs. Demand factors are portrayed on the right side of Figure 63.

261. Accumulation and allocation barriers complete the initial conditions of an entrepreneurial ecosystem. Access to finance, business regulations and social capital can either restrict or encourage entrepreneurial activities. Developed and inclusive financial markets that provide accessible funding throughout all stages of firm development are indispensable for starting and growing businesses.

²⁴⁶ (World Bank, 2021h, forthcoming)

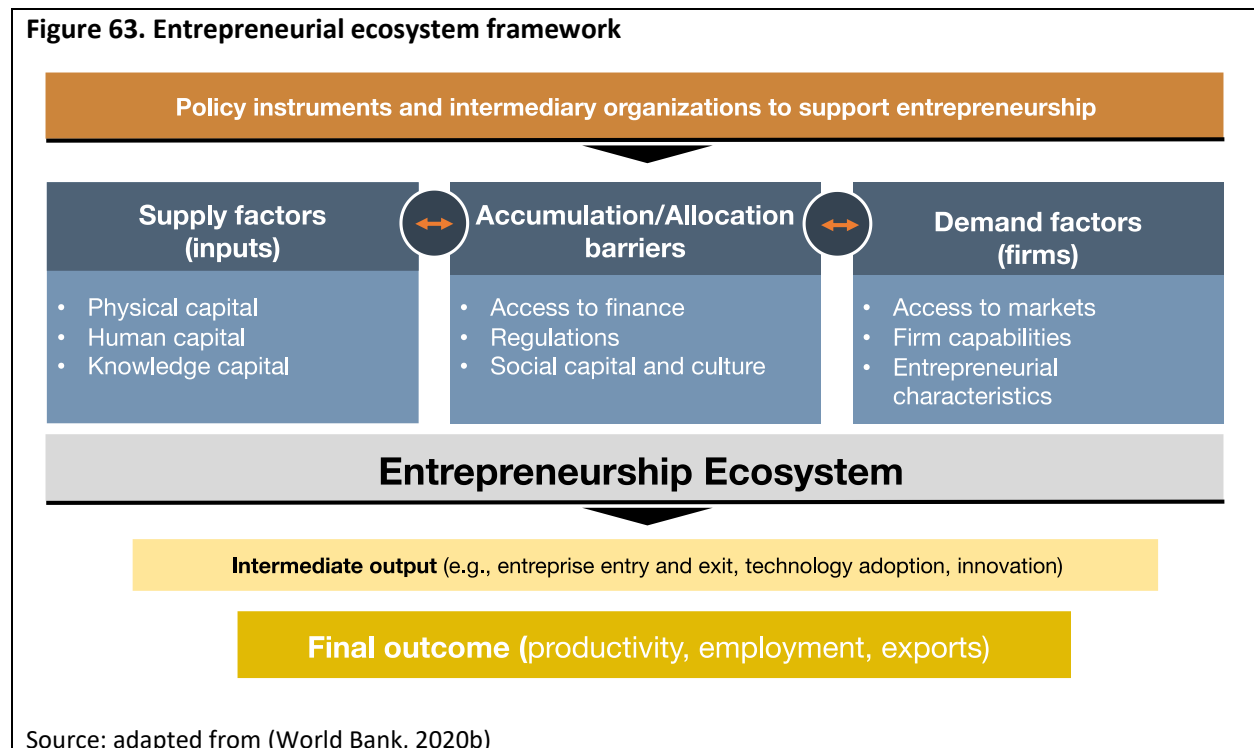
²⁴⁷ Excerpt from (World Bank, 2020b, p. 12)

Entrepreneurship and Innovation

Regulatory frameworks that allow for fluent entry and exit of firms boost productivity and generate dynamic ecosystems. Moreover, a positive attitude toward entrepreneurship can encourage the creation and implementation of new business ideas. The barriers to accumulation/allocation are depicted at the center of Figure 63.

262. The interaction between supply and demand factors within a healthy operating environment can lead to job creation, increased exports, innovation, and productivity growth. Under this conceptual framework, entrepreneurial outputs and outcomes are assessed in terms of firm dynamics (entry, exit, survivorship) and entrepreneurship impact (jobs, revenues, exports, innovation, productivity growth).

263. Policy makers can influence the entrepreneurial ecosystem to maximize job creation and economic growth by addressing market failures. Market failures can be associated with supply or demand factors or associated with the barriers to accumulation and allocation. Governments intervene in the ecosystem directly through policy instruments and regulations or indirectly through intermediary organizations that support entrepreneurship.



6.2. Entrepreneurship and innovation in Guatemala

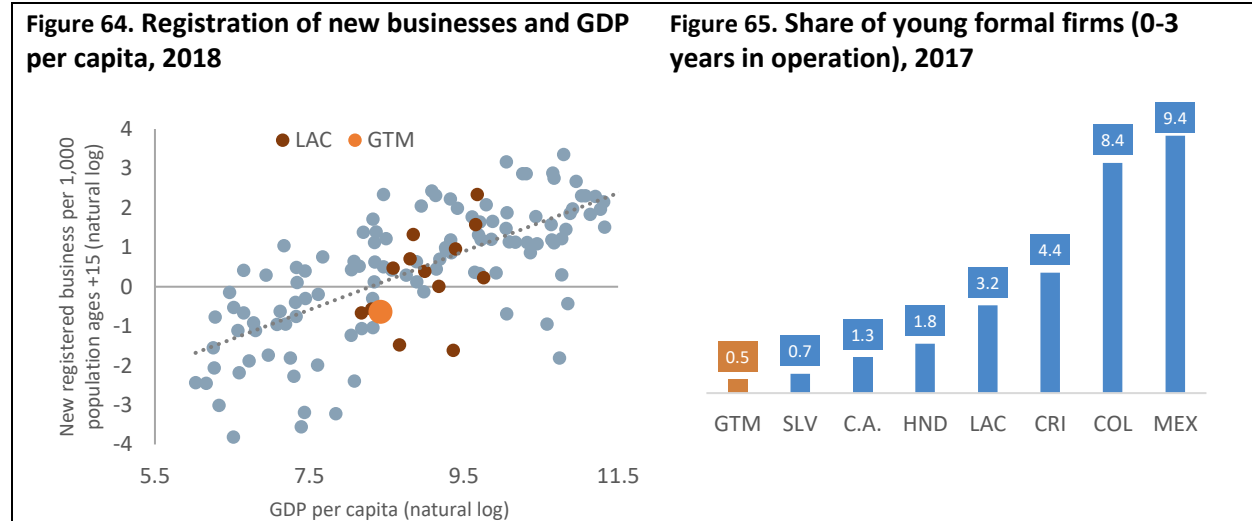
264. Business registration in Guatemala is below what could be expected given its level of development. Although Guatemala is a highly entrepreneurial country, a large fraction of firms never formalizes.²⁴⁸ The registration of new businesses per thousand people in Guatemala is below what could be expected given its level of income per capita, and below the rates of most Latin American countries. In fact, registration rates in nations with similar levels of development, such as Moldova, Kosovo and

²⁴⁸ Based on GEM (2020) and discussions with MINECO during the preparation of this document.

Entrepreneurship and Innovation

Azerbaijan are between 2 and 6 times larger than those of Guatemala (Figure 64). Likewise, the share of young formal businesses in Guatemala, those with at most 3 years of operation, is 0.5 percent; the lowest among Central American countries, with a share of 1.3 percent, on average (Figure 65).

265. Low rates of firm creation are compounded by limited growth potential. In 2017, employment in formal firms increased by 2.4 percent while, on average, it increased 5.6 percent in LAC countries (Figure 66). Recent data from the Global Entrepreneurship Monitor (GEM) suggests that only 1.3 percent of new businesses in Guatemala hires more than five employees²⁴⁹. The limited growth potential of formal businesses in Guatemala is reflected in the average size of firms with more than 20 years in operation. While the average sized 20-year-old Central American firm employs 33 workers, in Guatemala the average size is 27 workers—about half the LAC average (Figure 67). It is important to note that these numbers reflect averages among firm sizes, but there may be significant differences between types of firms (for instance, technology start-ups, informal micro-businesses, formal new skill-based businesses, etc.), not only in terms of entry, growth potential and exit, but also in terms employment generation, potential for skills upgrading, exports, and policy implications. To the extent possible given data constraints, this chapter takes into account differences in types of firms in its analyses and policy recommendations.



²⁴⁹ The GEM (2020) also points out that among established businesses in Guatemala, those that have been generating revenue for more than 3.5 years, only 4.8 percent hire more than five employees.

Figure 66. Employment growth in formal firms (%), 2017

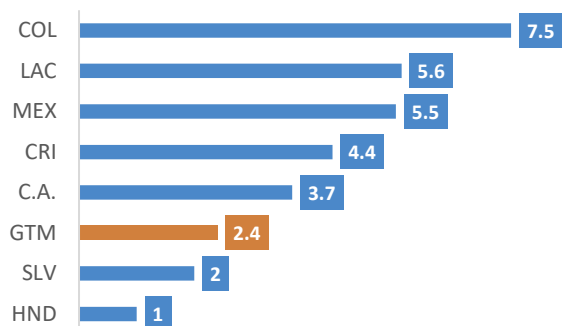
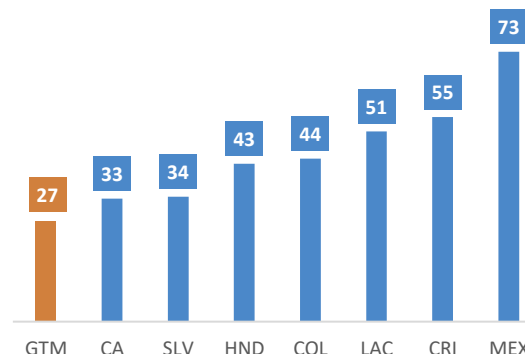


Figure 67. Average size of formal firms with more than 20 years in operation (# of workers), 2017



Source: WDI, WB Enterprise Surveys (WBES) various years (Colombia and Guatemala: 2017; Costa Rica and Mexico: 2010; Honduras and El Salvador: 2016).

266. Guatemala’s innovation performance is below what could be expected given its level of GDP per capita. The country ranked 106th among 131 countries in the 2020 Global Innovation Index (GII) study, down from 98th in 2017 (Figure 68). This downgrade is the result of both a decline in Guatemala’s own performance and the relative improvement of other countries with similar levels of performance. Guatemala lags behind countries with similar level of development, such as the Philippines, Morocco and Vietnam (Figure 69). Moreover, although the overall ranking of LAC countries has declined in the period 2017-2020 some lagging nations have managed to climb up the ladder, impacting Guatemala’s relative performance. Among the 17 LAC countries reviewed in 2020, Guatemala ranks last (Figure 70).

Figure 68. Global Innovation Index Ranking, 2020

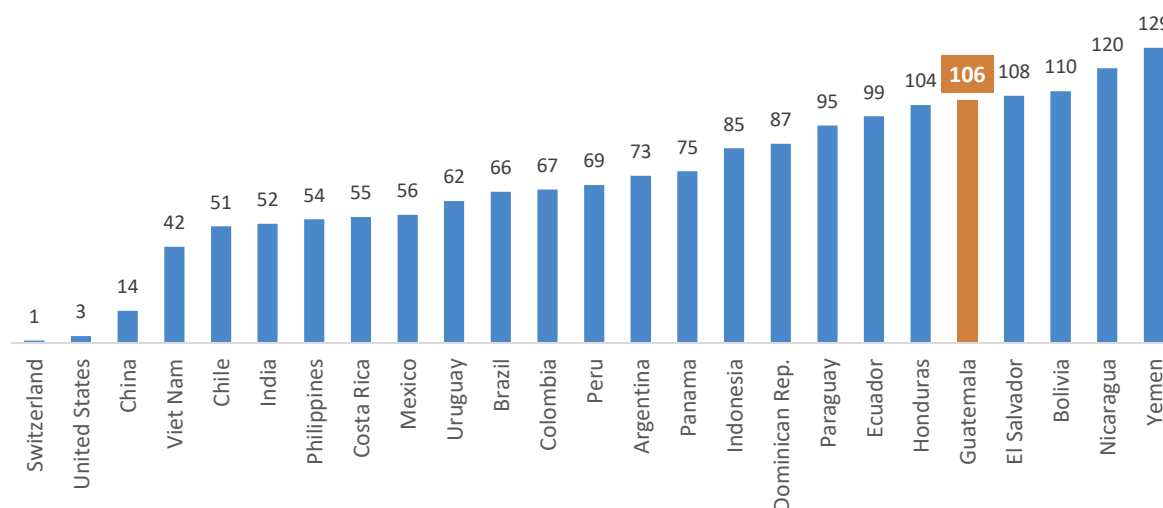


Figure 69. Global Innovation Index and GDP per capita, 2020

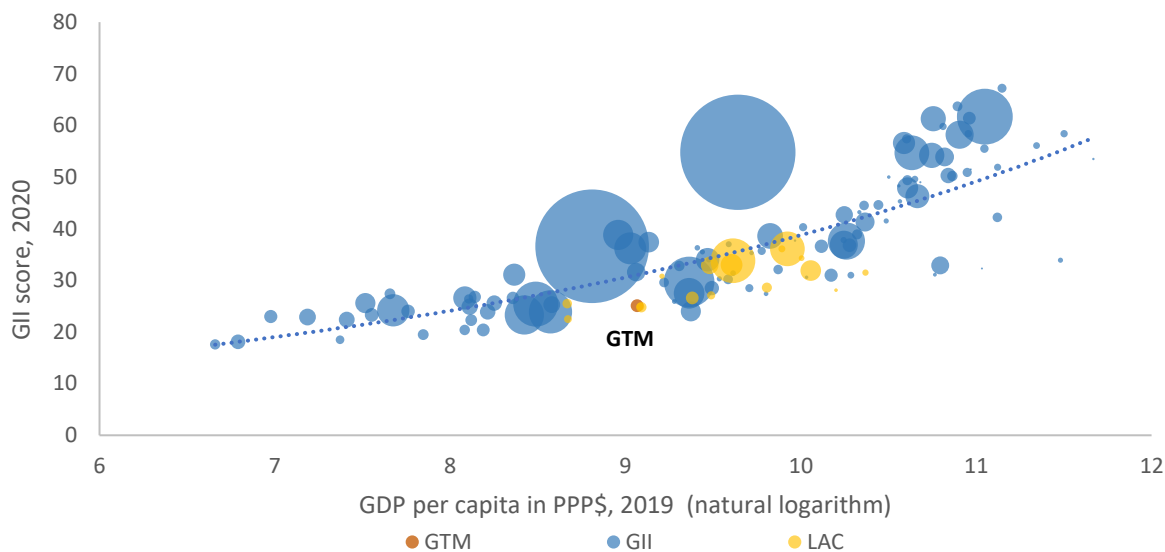
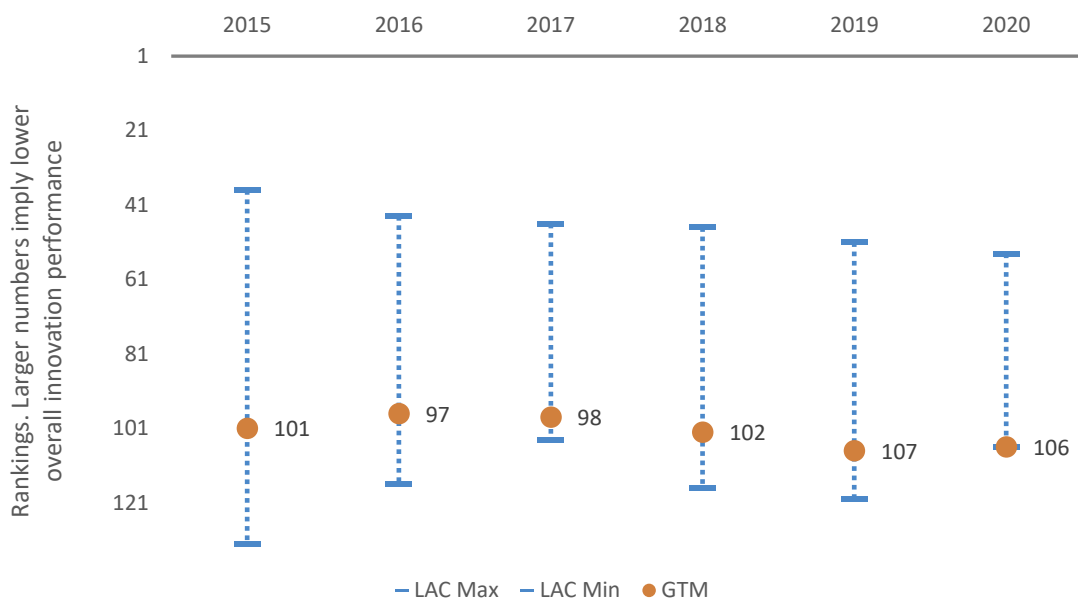


Figure 70. GII ranking of LAC countries, 2015-2020



Source: GII, 2015-2020. and World Development Indicators.

Notes: Bubbles sized by population. The latest data available for GDP per capita is 2019. The number of LAC countries varies across reports (22 in 2015, 17 between 2016-2017, 18 between 2018-2019, 17 in 2020).

267. Supply- and demand-side factors hold back innovation in Guatemala. Prominent ones include underdeveloped innovation linkages (clusters, university-industry collaboration, joint venture deals); lagging human and knowledge capital; low R&D investment; relatively low levels of technology adoption; and lagging infrastructure.²⁵⁰ Furthermore, poor regulatory and business environments and limited access

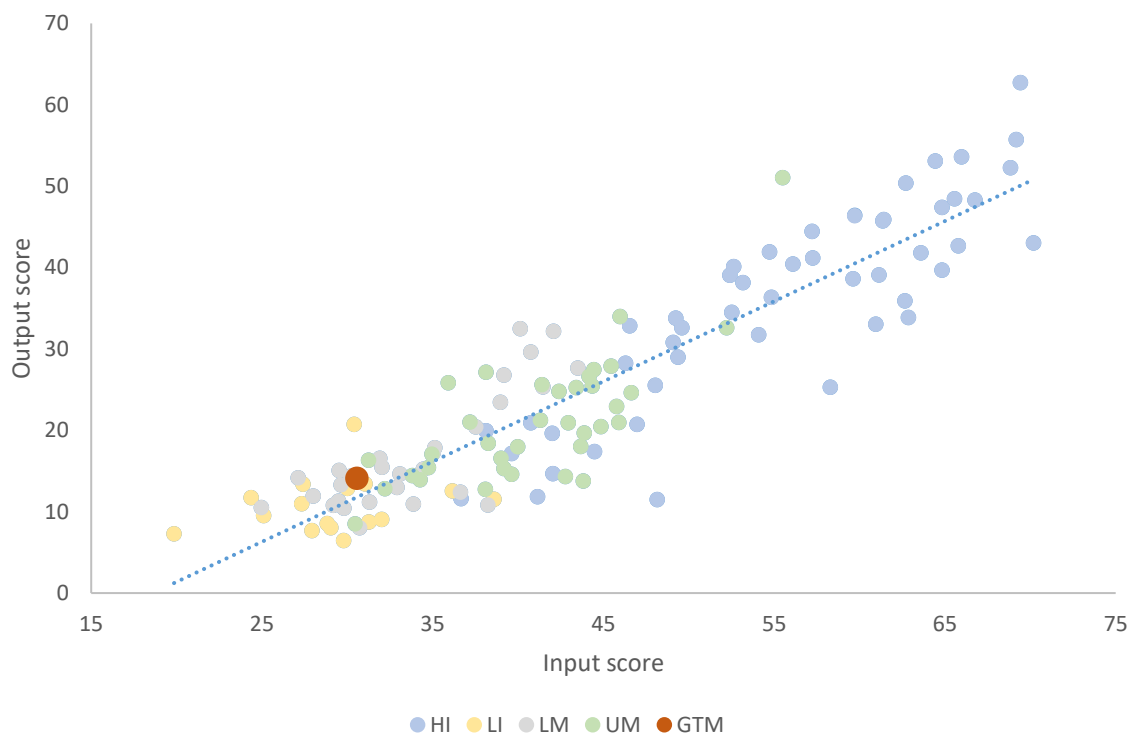
²⁵⁰ See (Berlingieri, 2020) and (Gourlay & Pentecost, 2002) for a detailed discussion and evidence from case studies.

Entrepreneurship and Innovation

to finance, particularly for startups, impose additional barriers to accumulation and allocation.²⁵¹ Conscious of these barriers, MINECO is developing a Draft Innovation Policy that seeks to “promote ‘productive innovation’ in order to improve the country's competitiveness in the next 20 years”. The Draft Policy is structured around 5 axes: (i) improving human capital; (ii) strengthening university-industry alliances; (iii) creating a framework for innovation governance; (iv) developing knowledge and skills for the productive innovation ecosystem; and (v) strengthening the digital government.²⁵²

268. In spite of these challenges, Guatemala is relatively efficient in transforming innovation inputs into outputs. Guatemala shows levels of market sophistication on par with the average LAC economy, although the country underperforms in the remaining six dimensions of innovation, according to the GII 2020.²⁵³ Moreover, while its level of innovation output is low, it is still slightly larger than what would be expected based solely on its level of innovation inputs. That is, Guatemala seems to be more efficient in transforming investments in innovation into tangible outputs than some countries (Figure 71).

Figure 71. Innovation input to output performance, 2020



Source: Adapted from the GII, 2020

269. Innovation efforts and technology adoption are limited in Guatemala. Less than 14 percent of firms in Guatemala invested in R&D (Figure 72) and only a third of the firms (36 percent) introduced

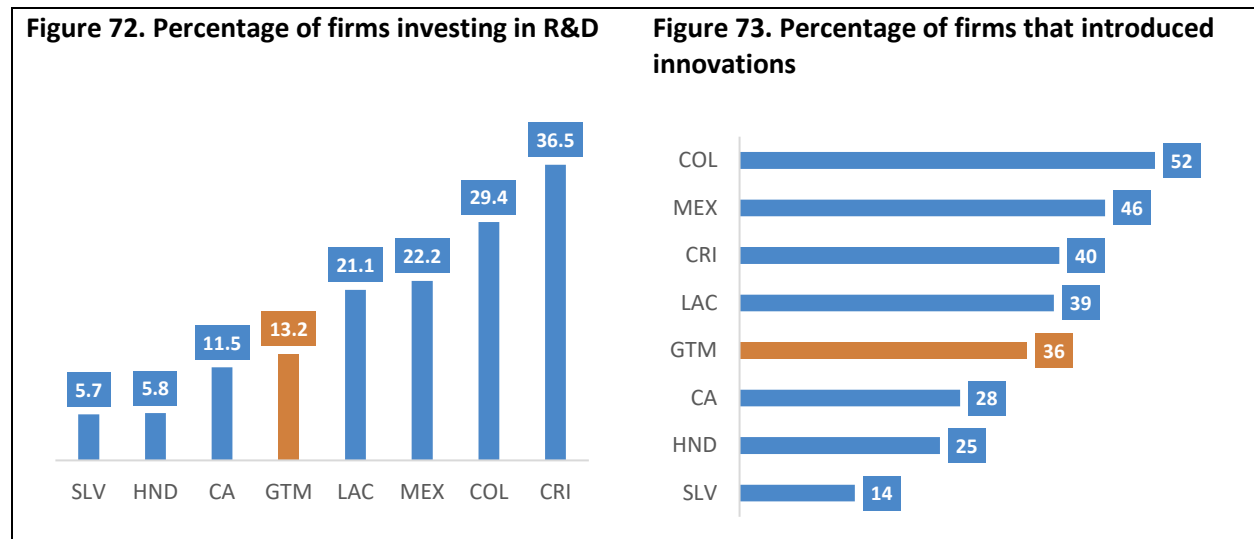
²⁵¹ The business environment and access to productive finance are covered in detail in chapters 2 and 3 of this report, respectively.

²⁵² Based on information shared by MINECO during the preparation of this report.

²⁵³ These dimensions are: Creative Outputs; Business Sophistication; Infrastructure; Knowledge & Technology Outputs; Institutions; and Human Capital and Research (GII, 2020).

Entrepreneurship and Innovation

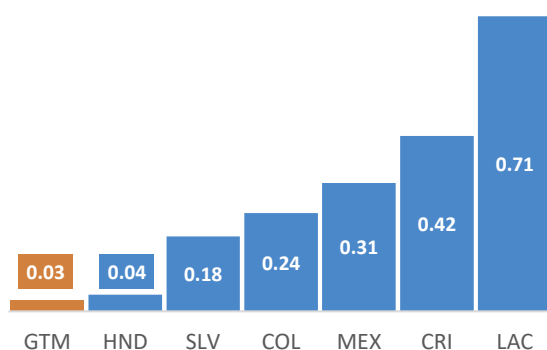
innovations into their production processes in 2017 (Figure 73). Although limited, the share of firms that invested in R&D and introduced innovations in Guatemala is above the Central America average but lower than the LAC average. Investment in R&D activities²⁵⁴ in Latin America is already very low (0.7 percent of GDP, on average) compared with the average expenditure in high- and upper middle-income countries (2.6 and 1.7 percent of GDP, respectively)²⁵⁵. Yet, the investment effort in Guatemala is significantly lower than the regional average, standing at 0.03 percent of GDP (Figure 74). The National Experts Survey (NES), carried out as part of the Global Entrepreneurship Monitor 2020, identifies knowledge and technology transfer as a significant weakness of the entrepreneurial environment in Guatemala. Eighty percent of the experts surveyed believes that frontier knowledge and new technologies are not efficiently transferred to businesses (although established firms have better access to technology than new businesses). Likewise, 92 percent of experts surveyed agree that young formal businesses cannot afford new technologies with their own resources, and all of the experts believe that the current subsidies and government support programs are insufficient to facilitate technology adoption among young firms (GEM, 2020).²⁵⁶ MINECO's Draft Innovation Policy includes specific policy actions to promote technology transfer and create incentives for academic research to focus on the demand from the country's productive sectors. Box 6 provides an example of good international practice in terms of institutional arrangements to support innovation and entrepreneurship from the Serbia Innovation Fund.



²⁵⁴ Including basic research, applied research, and experimental development.

²⁵⁵ Latest data available for high-income and upper-middle income countries is for 2018, while the Latin American average is based on data for 2017. WDI.

²⁵⁶ As discussed in Chapter 3 of this report, these issues are compounded by low access to productive financing for businesses in early stages of development.

Figure 74. GDP share of R&D investment

Sources: Figure 72 & Figure 73, WBES various years (Colombia and Guatemala: 2017; Costa Rica and Mexico: 2010; Honduras and El Salvador: 2016). Figure 74, WDI various years (Colombia: 2018; Guatemala, Honduras, El Salvador and Costa Rica: 2017; Mexico: 2016).

Box 6. International good practice example: Serbia Innovation Fund

Mission. Serbia was one of the first countries in the Western Balkans to embrace the notion that successful participation in the global knowledge economy requires the ability to adapt and advance new technological and research capabilities that involve public and private collaboration. Operational since 2011, the Serbia Innovation Fund has been a pioneering effort to operationalize and institutionalize this notion—first by increasing the capacity of startups and resources available for their growth and subsequently by implementing a broader innovation strategy.

Governance. The Serbia Innovation Fund established an independent governance structure, with a robust international peer review system and a distinguished Investment Committee that includes international and diaspora professionals experienced in managing technology firms, scientific research, commercialization, and the investor community. External evaluators (two independent professional peer reviewers per application) perform the first part of evaluation/technical review, followed by the independent Investment Committee’s pre-selection decision. The final decision for financing is made by the Investment Committee at a live pitch event.

Applications are accepted from all sectors, and beneficiary companies have demonstrated potential in sectors as diverse as agribusiness, construction, ICT, and bioengineering. Since its inception, 1,900 applications for innovative projects have been submitted to public calls. A total of over EUR 20 million has been approved for about 700 projects.

M&E and external support. The Innovation Fund programs and operations undergo regular evaluations, from independent application reviews to a thorough internal as well as independent external monitoring and evaluation process, including awardees visits and reporting over a project’s duration and upon its completion. The fund has benefited from financing and technical assistance from the World Bank and European Commission. Fund staff have been mentored by the Investment Committee members and a strategic advisor with senior experience from Israel. They also received various trainings and participated in study visits to Israel, Finland, Croatia and the UK.

Support programs

- The **Mini Grants Program** is aimed at private young enterprises engaged in the development of technological innovations with a clear market need. This Program supports the survival of companies during the critical R&D phase. It covers a maximum of 70 percent and up to EUR 80,000 of the total approved project budget.
- The **Matching Grants Program** is designed for enterprises looking for significant financial resources for the commercialization of research and development. It covers a maximum of 60 percent and up to EUR 300,000 of the total approved project budget.
- The **Collaborative Grant Scheme Program** incentivizes private-sector companies and public-sector R&D organizations to engage in joint scientific R&D projects with the goal of creating new, commercially viable products and services, as well as innovative pre-competitive technologies with significant future impact and market potential. It covers a maximum of 70 percent and up to EUR 300,000 of the total approved project budget, with the 30 percent co-financing coming from the private-sector partner.
- The **Technology Transfer Facility (TTF)** supports R&D organizations, with the aim of increasing their ability and efficiency in the commercialization of inventions. Besides providing commercialization support to academic and non-academic R&D institutions and private sector companies, the TTF can provide financial support to selected innovative projects coming from public academic R&D institutions to bring these projects to a higher commercialization readiness level. Grants can be up to EUR 50,000 per awarded project, while grants above EUR 20,000 require a commercial partner willing to commercialize the invention and co-finance at least 30 percent.
- The **Innovation Vouchers Scheme** supports SMEs who want to use services of the R&D organizations to raise their level of innovation. Each innovation voucher covers 80 percent of the total service costs, up to about EUR 7,000.
- The **Proof of Concept** program is intended for researchers engaged in product development for which there is a need in the market. The program offers financial and mentoring support to test ideas, hypotheses or assumptions that are, if they prove technically feasible, the basis for products based on their research. The program covers 100 percent of the total cost of project, up to a maximum of EUR 20,000.

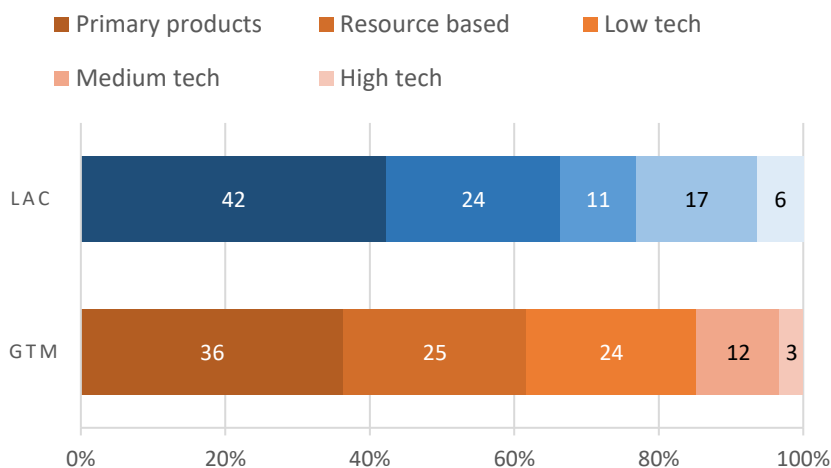
The support programs were launched in phases, starting with the mini and matching grants in 2011. The other programs were rolled out during 2016–2019 after the Innovation Fund had established a solid track record of good governance and results.

Source: Serbia Innovation Fund and World Bank.

270. Limited innovation efforts are reflected in the low share of technology-intensive exports. Guatemala's export basket is less intensive in technology than the average LAC country. Only 3.2 percent of Guatemala's total exports and 5.3 percent of its manufactured exports have a high technology content, while these shares average 6 and 15 percent in LAC, respectively (Figure 75).²⁵⁷ Moreover, the technology content of manufactured exports in Guatemala is below what could be expected based on its level of development. In countries with similar GDP per capita, such as Vietnam and the Philippines, the shares of high-tech manufactured exports reaches 40 and 62 percent, respectively (Figure 76).

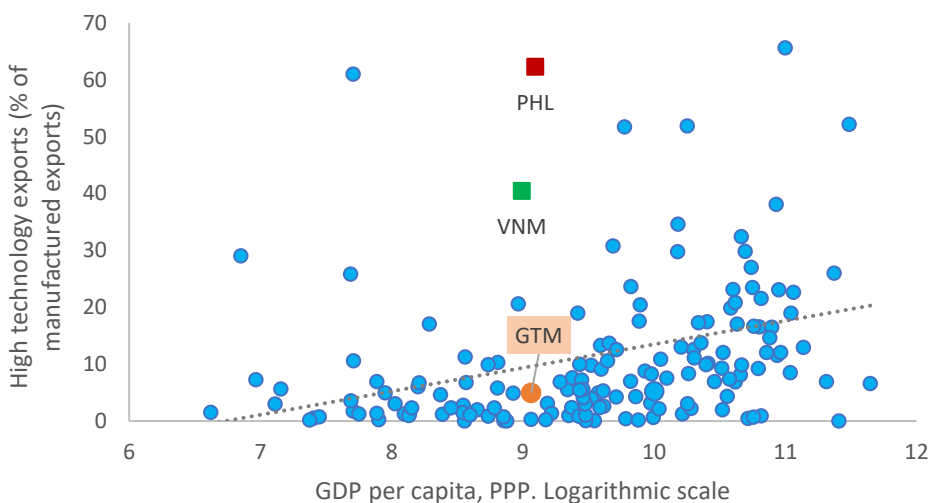
²⁵⁷ Based on the classification by Lall (2000).

Figure 75. Technological content of exports, 2017. Lall Classification



Source: adapted from Unleashing Central America's Growth Potential (WB, 2021), with data from COMTRADE, STIC Rev 2.

Figure 76. Percentage of high-tech manufactured exports and per capita income levels



Source: Source: WDI. Note: Most recent data available. For most countries, data from 2019. GDP per capita is in PPP\$ and constant prices (2017). Countries with shares of high-tech manufactures above 70% and below 1% have been excluded.

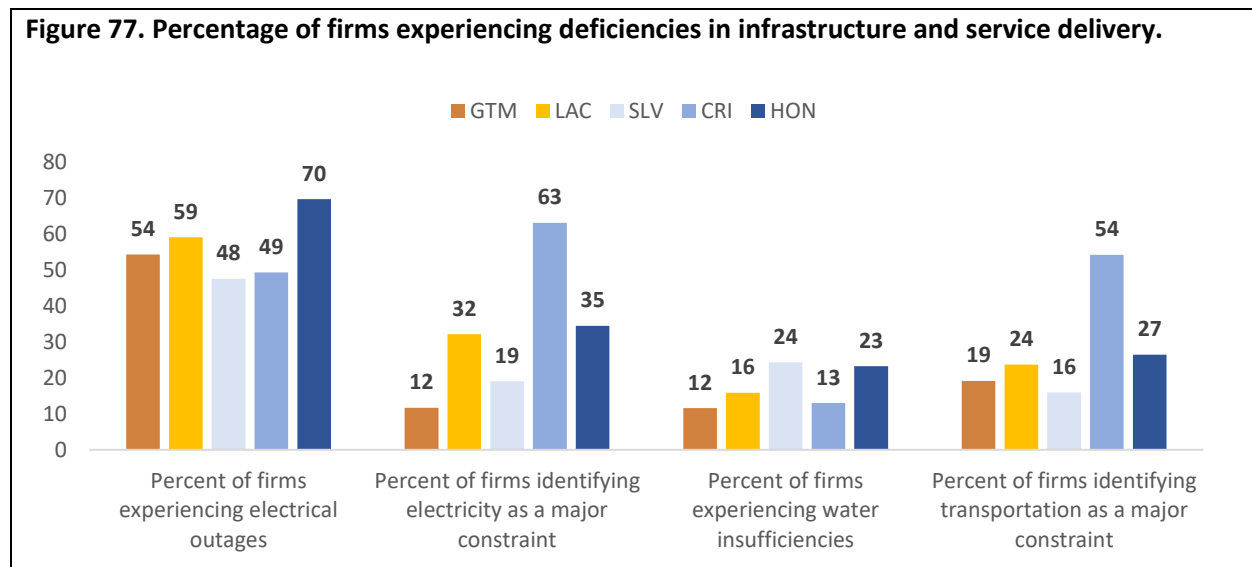
271. Guatemala lags in physical capital relative to countries with similar levels of income per capita.

Guatemala’s score on the infrastructure subcomponent of the GII 2020 positions the country below what could be expected given its level of development. Access and quality of basic services and general infrastructure imposes a challenge for productive development in Guatemala, as it directly impacts the cost of day-to-day business operation in the country. According to the World Bank’s Enterprise Survey (2017), 54 percent of firms experience monthly electrical outages, 12 percent experience water insufficiencies and about US\$ 1 out of every US\$ 50 (2%) in products shipped to domestic markets is lost

Entrepreneurship and Innovation

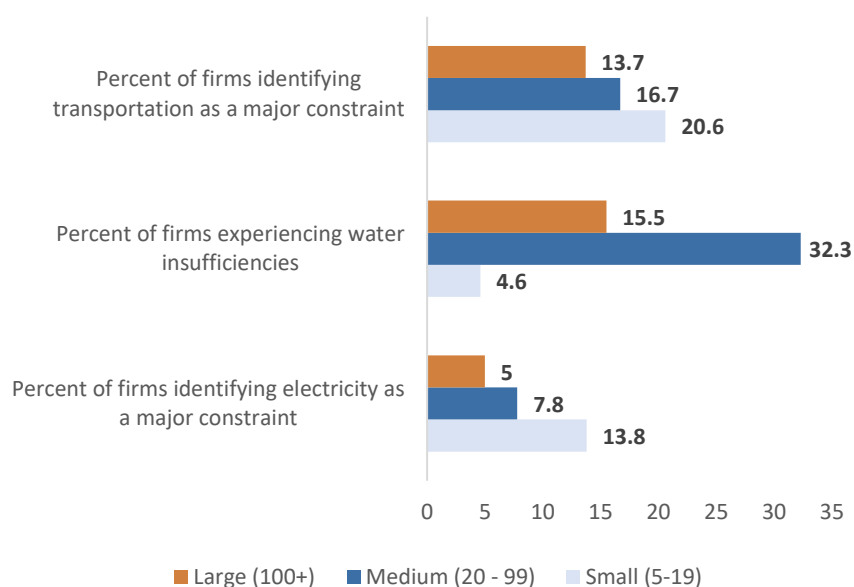
or spoiled during shipping²⁵⁸ (Figure 77). Moreover, limited access and poor quality of physical infrastructure can decrease the possibilities for small businesses to reach new markets. According to the GEM (2020) the majority of the clients (71 percent) of Guatemalan entrepreneurs are located in the same communities, towns or villages where the entrepreneurs reside, and only 6 percent of firms serve clients in other states (departments).

272. However, the quality and access to physical infrastructure is not considered a major constraint by most firms in Guatemala. Although firms of all sizes are affected by deficits in infrastructure and service delivery, smaller firms are usually impacted the most (Figure 78). About nine out of every ten experts that participated in the NES (2019) considered that physical infrastructure in Guatemala is inadequate to promote the creation of new businesses and the development of established firms. However, it is worth noting that most firms in Guatemala do not consider access and reliability of basic services and logistic infrastructure to be binding constraints for growth. About half of the firms surveyed in the WBES report experiencing power outages periodically, but this does not seem to significantly impact their activity (Figure 77).



²⁵⁸ An indicator that partially captures the condition of logistics and transport infrastructure in the country. The regional average stands at 1.3%.

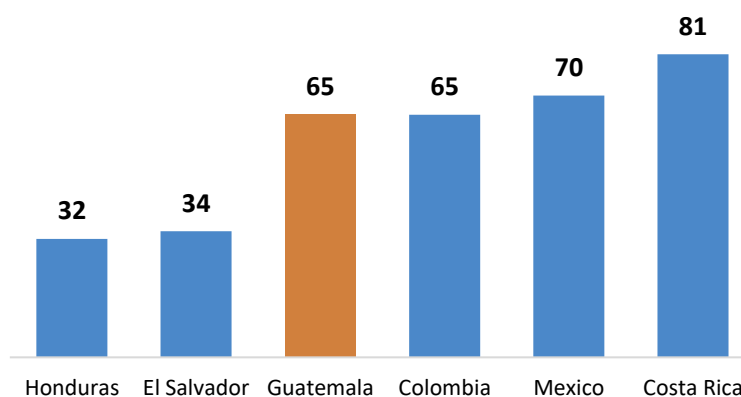
Figure 78. Percentage of firms in Guatemala experiencing deficiencies in infrastructure and service delivery, by size.



Source: WBES various years (Colombia and Guatemala: 2017; Costa Rica and Mexico: 2010; Honduras and El Salvador: 2016).

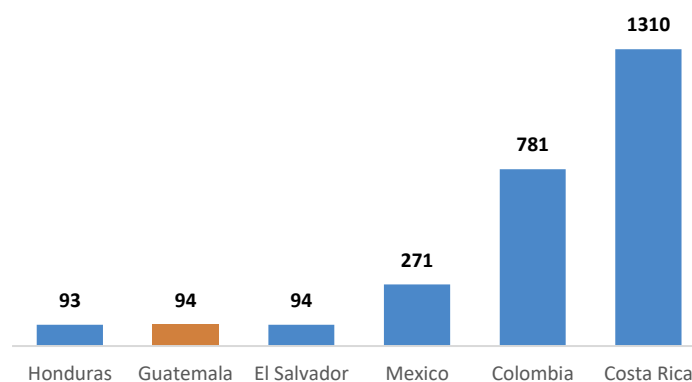
273. Guatemala also lags in infrastructure relevant to digital business and related activities. Access to the internet is on par with the rest of the region, but there is still room for improvement. About 65 percent of the population uses the Internet in Guatemala, compared to 34 percent in El Salvador, 70 percent in Mexico and 81 percent in Costa Rica (Figure 79). However, there are less than 100 secure internet servers per million people in Guatemala, while in Colombia there are 780 and in Costa Rica there are 1,310 per million people (Figure 80). According to the GII 2020 report, access and use of ICTs in Guatemala is below what could be expected given its level of GDP per capita. This situation poses a significant challenge not only to digital firms but more generally to the whole economy facing the COVID-19 crisis and post-pandemic scenario.

Figure 79. Percentage of population using Internet



Source: WDI, 2019

Figure 80. Secure Internet servers per 1 million pp, 2019



Source: Netcraft Secure Server Survey and World Bank Population estimates, 2019

274. Firms of every size have increased their use of digital technologies as a response to the COVID-19 shock, but there is still room for greater and more intensive digitization. COVID-19 generated a large positive shock on digitization in Guatemala; firms of every size have adapted to reduced physical transactions through increased use of digital platforms. According to new data from the World Bank’s COVID-19 Enterprise Surveys, close to 45 percent of small and medium-sized businesses surveyed between December 2020 and February 2021 increased their use of digital technologies as a response to the COVID-19 shock (World Bank, 2021a)²⁵⁹. Increased digitization has happened across different sectors but is most noticeable in retail and manufacturing, with about 50 percent of firms increasing their use of digital technologies (Figure 81 and Figure 82). In line with the digitization shock that the COVID-19 pandemic has brought about in Guatemala, MINECO’s Draft Innovation Policy contemplates a “Digital Government” strategic axis, which encompasses multiple ICT-based policy actions to progressively transform the provision of government services through digitization.

²⁵⁹ The data reported is for Wave 2 of the COVID-19 Enterprise Survey in Guatemala. Wave 1 of the Survey was implemented between July and August 2020.

Entrepreneurship and Innovation

275. Increased uptake of digital technologies does not necessarily imply greater effective digitization. Although these figures show a noticeable increase in businesses use of digital technologies, it is worth noting that about half of firms in Guatemala are not taking advantage of these opportunities to boost their sales, and the intensity of digitization is still relatively low. As Figure 83 shows, for most firms in Guatemala digital sales represent less than 20 percent of their total sales. Moreover, an increase in digital technology uptake does not guarantee the effective use of these technologies. Likewise, the digital technologies category encompasses a heterogeneous group of technologies, ranging from app-based tools which are easy and cheap to adopt, to artificial intelligence and blockchain, which are much more complex and costly. Box 7 discusses the adoption of digital technologies in Guatemala in more detail, differentiating by type of technology.

Figure 81. Fraction of businesses that started or increased the use of digital technology. Differences across sizes

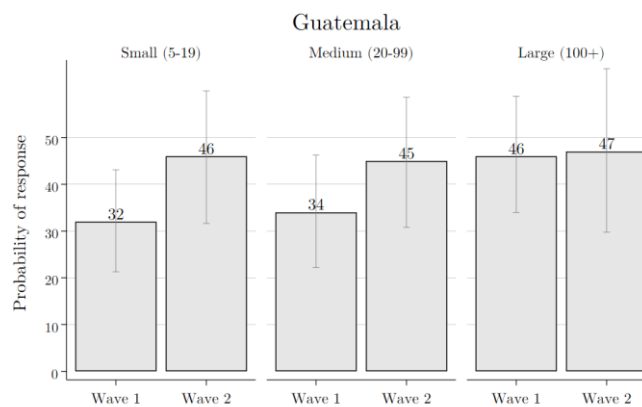


Figure 82. Fraction of businesses that started or increased the use of digital technology. Differences across sectors

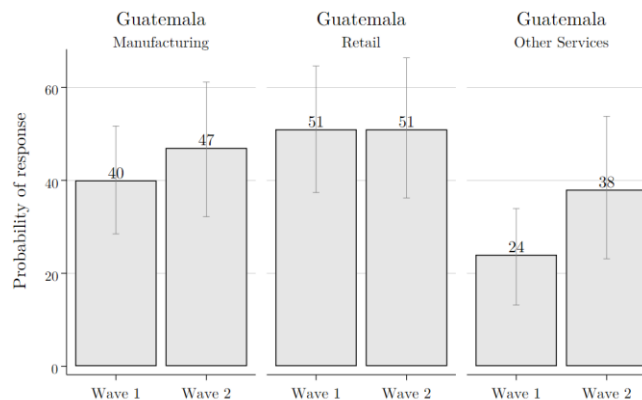
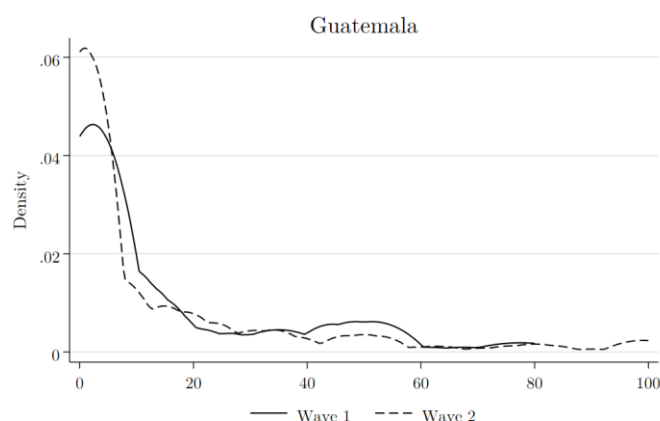


Figure 83. Distribution of the fraction of digital sales

Source: (World Bank, 2021a)

Box 7. Progress and challenges in the adoption of digital technologies in Guatemala

Most businesses in Guatemala use some digital tools, but there is room for further technology adoption. Technology use is highly correlated with business size. Midsize and large enterprises are often better placed than micro and small enterprises to cover the cost of technology adoption—including high-quality Internet that enables the use of other technologies—and to acquire new staff capabilities to use technologies. Half of the micro and small enterprises surveyed by Nextrade Group (between October 28th, 2020 and January 25th, 2021) reported using only basic technologies such as 4G mobile connections, and less than one third of these firms reported using broadband to connect online. However, 64 percent of surveyed micro and small businesses use social media to make decisions and to market goods and services. Among medium-sized and large businesses, a larger share of firms reported using digital technologies substantially to market and sell their products. Almost half of midsize and large enterprises have already started using broadband, while close to 25 percent of these firms have their own online stores to sell to customers and use AI-based technologies for data analytics (Nextrade Group, 2021).

Smaller—and younger—firms start their digitization journeys by using digital payments technologies. As the businesses grow, firms usually start adopting more complex technologies such to enhance their cybersecurity and access to real-time market information, facilitate transaction via e-commerce, and leverage cloud computing services. Larger and more sophisticated firms may adopt AI, machine learning, blockchain, or virtual reality technologies. Businesses that have adopted more sophisticated technologies tend to have bundles of them and may use one technology to augment another (Montenegro, Alfaro de Moran, & Amo, 2021).

Most Guatemalan enterprises, particularly more technologically advanced players, recognize that technology improves business performance, but several challenges prevent them from using technologies intensively. Replacing equipment is the main reason for technology adoption among Guatemalan businesses. However, about half of the surveyed businesses adopt new technologies to take advantage of opportunities to access new markets and improve their processes. Almost 90 percent of technology-intensive businesses report large gains from technology usage, especially in terms of new customers and increased productivity. Nevertheless, the surveyed businesses also cited lack of knowledge about the various available technologies, concerns about the return on investment

in technologies, and financing gaps as obstacles to the adoption of new technologies. Businesses across size categories call for more training about technologies and support for identifying the right technologies (Nextrade Group, 2021).

Figure 84. Reasons for Technology Adoption for Micro and Small Firms by Firm Size

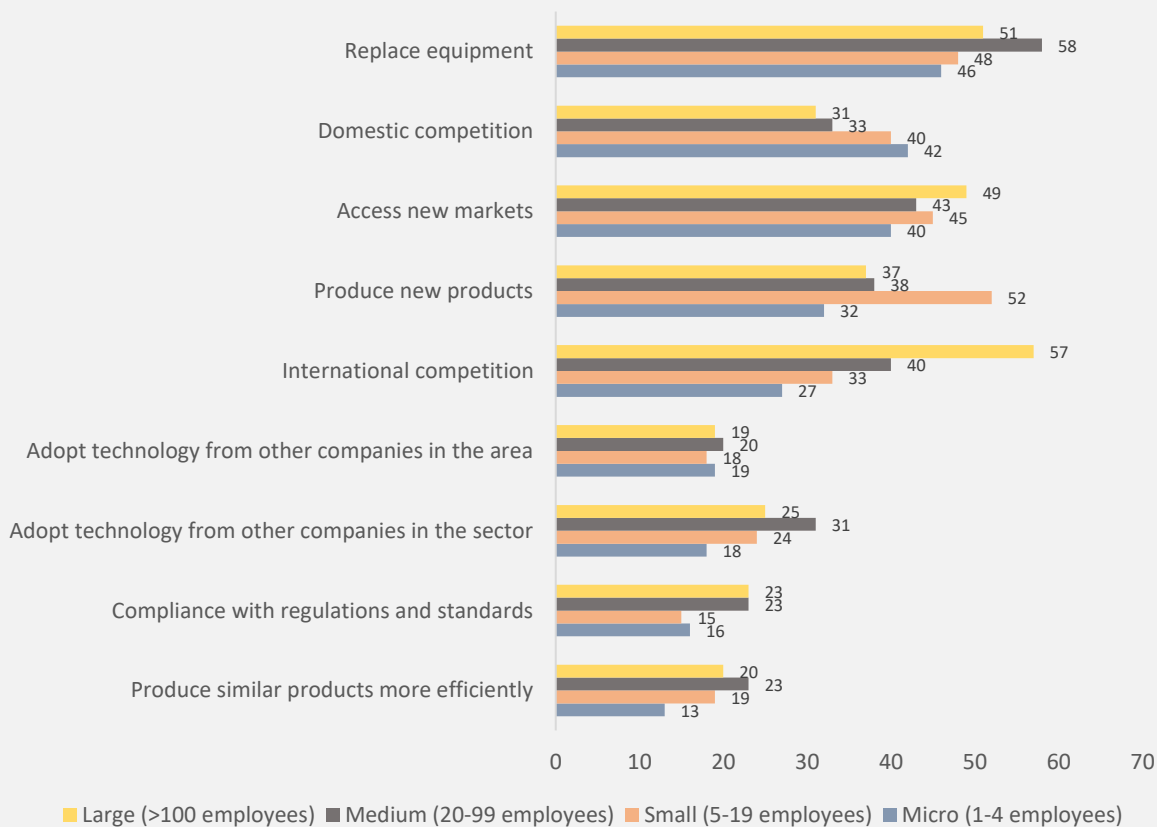
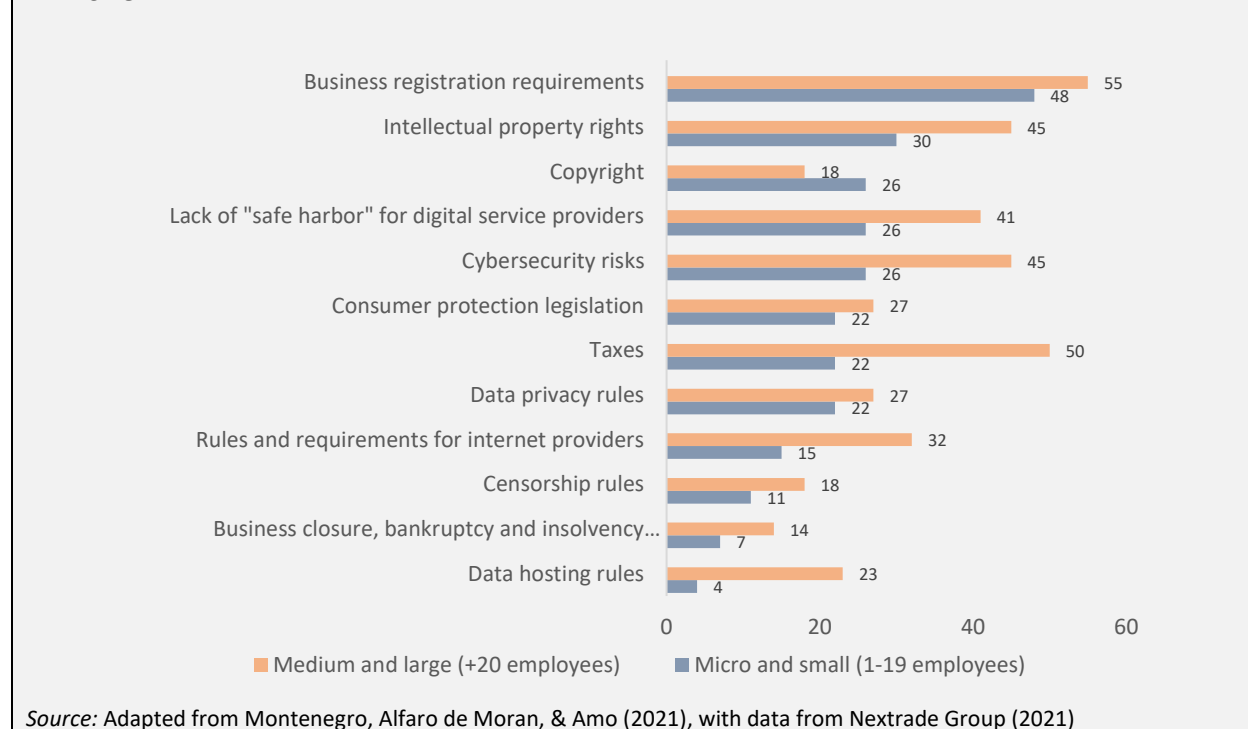


Figure 85. Reasons Percent of Surveyed Firms Citing Barriers to Digital Services in Their Country, by Firm Size

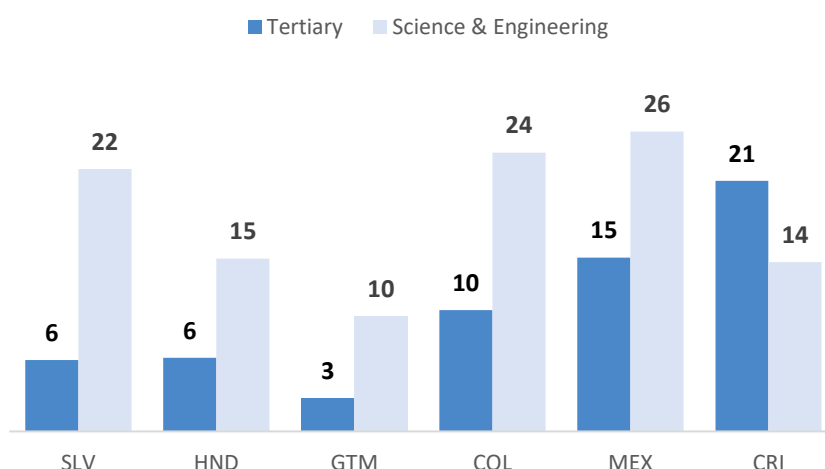


276. While digitization is an area of opportunity to increase productivity and foster innovation in Guatemalan companies, it is not the only—or necessarily the most important—one. The efforts of the public sector to increase productivity and promote innovation should address in parallel various aspects that currently represent restrictions for business development and innovation in Guatemala. For example, in addition to digitization, innovation in processes (e.g., logistics, generation and use of operation data) to increase the productivity of local SMEs, as well as the development of attractive productive capacities for FDI that allow the country to enter more sophisticated segments of GVCs (see chapters 4 and 5, respectively), are also important.

277. Low accumulation of human capital and knowledge could also hinder the performance of the entrepreneurship and innovation ecosystem in Guatemala, particularly in regard to firm’s innovation and technology adoption. In Guatemala, less than 10 percent of people age 25 and above have completed tertiary education, compared to 15 percent in Mexico and 21 percent in Costa Rica. Among graduates, only 10 percent obtain science or engineering degrees, which is below comparable countries in the region. For instance, 22 percent of graduates in El Salvador obtain a STEM degree (Figure 86). This is a relevant result on itself, but it is also important for the performance of the entrepreneurial and innovation ecosystem considering the complementarities between human capital and the use of technology. Knowledge capital is also low in Guatemala: there are only 14 formal researchers per million people,

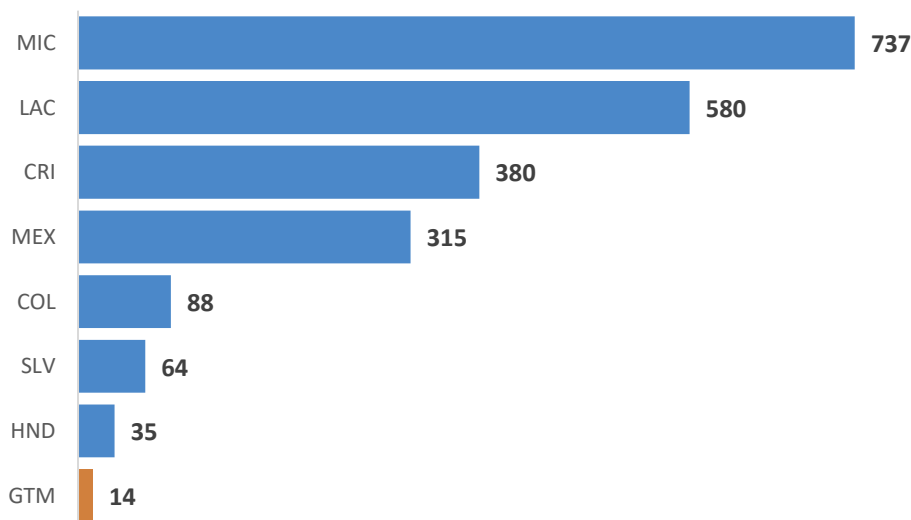
whereas comparable countries such as El Salvador and Costa Rica have between 5 and 27 times that number, respectively (Figure 87).²⁶⁰

Figure 86. Share of adults with tertiary education completed and share of sciences and engineering graduates among total graduates



Source: WDI various years (Colombia, Costa Rica and Mexico: 2015; Honduras: 2014; El Salvador: 2013) and Censo Población y Vivienda 2018 (for Guatemala) various years; GII 2019 for STEM graduates share. Note: this figure considers people +25 years old as adult population.

Figure 87. Number of researchers per million people



Source: GII 2020 for countries and WDI for regional average and MIC average. Various years (countries: 2017, LAC average 2014, MIC average: 2015)

²⁶⁰ Other sources place the rate of researchers per million people in Guatemala at 26.7, which includes informal researchers (see UNESCO, 2017, Relevamiento de la Investigación y la Innovación en la República de Guatemala, UNESCO Publishing). Nevertheless, Guatemala would still lag behind other LAC countries in terms of researchers per million people.

278. Efforts to support public research and development of new technologies (particularly industrial technologies) dwindled over the last three decades and currently are very limited. The Government of Guatemala recognizes the role of R&D, technology diffusion and adoption for national competitiveness and productivity, as well as the role of the public sector in supporting and promoting these activities—as can be seen in the Draft Innovation Policy. Public research organizations (PROs) and universities often play a pivotal role in the entrepreneurship and innovation ecosystem, given their capacity to create and diffuse new knowledge. PROs can be especially useful for SMEs conducting research to find solutions for existing problems in the industry, as well as to support research activities for new and emerging industries (World Bank, 2020g). PROs are not a new concept for Guatemala; in the 1950s the “Instituto Centroamericano de Investigación y Tecnología Industrial” (ICAITI) engaged in public R&D and technology transfer activities within the industrial space in Central America with varied degrees of success. However, the ICAITI ceased operations in 1998 due to financial constraints. Currently, PROs don’t play a large role in the creation and diffusion of technology in Guatemala, although some notable exceptions exist.²⁶¹ It is important to note that PROs by themselves may be insufficient to generate strong technological diffusion dynamics. The degree to which research from PROs and universities can influence technological change and innovation depends to a large extent on the alignment between supply and demand of knowledge, and the existence of an enabling regulatory and policy framework that effectively supports the knowledge and technology transfer between these research institutions and industry. Moreover, even if the required policy and regulatory frameworks to support public R&D, technology transfer, and adoption are in place, there is no guarantee that PROs will help develop innovations that the private sector would not have been able to develop otherwise (see Beise & Stahl, 1999).²⁶² PROs hold promise for Guatemala’s innovation ecosystem, but their technical and financial feasibility, as well as their efficiency vis-à-vis alternative policies to leverage private sector-led R&D, would need to be assessed.

279. Strengthening knowledge capital is important for Guatemala, but it must be approached as a complementary effort to the creation of capacities that allow companies to adopt existing knowledge and technologies. Traditionally, innovation is perceived as a linear process in which research centers produce R&D that is then transformed into innovations by companies. This model has been particularly influential in the development of innovation policies in developing countries. However, the model is more aligned with disruptive innovations in countries on the technological frontier than with incremental innovations. While disruptive innovations are possible—and desirable—in developing countries, most companies could realize greater productivity gains through the adoption of technology and knowledge that has already been generated and tested. Even among the companies that report dedicating resources to innovation, very few invest in R&D, so the impact of policies for the promotion of basic and applied research may be limited in this context. Empirical evidence compiled by (Cirera, Frías, Hill, & Yanchao, 2020) suggests that innovation in developing countries requires activities to accumulate knowledge that

²⁶¹ For instance, San Carlos University’s “Programa Universitario de Investigación en Desarrollo Industrial”. Other PROs exist in Guatemala, such as the “Instituto de Ciencias y Tecnologías Agrícolas” (ICTA)—a decentralized and autonomous institution linked to the Ministry of Agriculture— but their research agenda focuses on traditional and less dynamic sectors. (Based on interviews and technical exchanges with government officials during the preparation of this report).

²⁶² The authors study a sample of 2,300 product- and process-innovating firms in Germany and find that less than 10 percent of these firms introduced innovations between 1993-1995 that would not have been developed in the absence of public research. Among those that did innovate thanks to public research, these new products (public research-related) amounted to approximately 5 percent of all new product sales.

Entrepreneurship and Innovation

are not necessarily formalized in terms of R&D, such as technology imports to introduce innovations in local products and processes.

280. The ability of companies to innovate depends mainly on their capacities to implement innovation projects successfully. Therefore, the creation of productive capacities plays a fundamental role in the formulation of public policies for innovation, as well as for entrepreneurship. Identifying possible biases in public policy towards R&D (and correcting them if they exist) is essential to effectively guide innovation policies. This does not mean ceasing to finance instruments to promote R&D, rather it implies balancing the composition of budget allocations to be more aligned with the capacities of the domestic private sector. But what are these capabilities? Although there is no absolute consensus on the precise definition of these capacities - since they depend on the conformation of local industries - (Cirera & Maloney, 2017), they provide a useful conceptual framework to address the issue. Based on this framework, capabilities can be classified into three large groups: (i) technological and innovation capabilities; (ii) productive capacities; and (iii) organizational and managerial practices.²⁶³ The development of each of these groups of capabilities depends on the distance of local industries from the technological frontier and will require particular instruments (see section 6.4).

281. The scarce supply of qualified workers makes trade difficult and limits the entry of FDI into Guatemala. In fact, a third of Guatemalan companies identified an inadequately educated workforce as an important limitation for growth, this proportion is above the Central American average (only below Honduras)²⁶⁴. In this sense, in addition to fostering entrepreneurship, promoting the adoption of digital technologies, and facilitating the accumulation of capacities by companies, it is necessary for the Government (hand in hand with the private sector) to identify and promote the development of productive capacities of the workforce —that make it possible to meet the demand of companies that currently operate in Guatemala, as well as those that would be interested in entering the national market if there is an adequately qualified workforce (see section 4.2 of Chapter 4). It should be noted that one of the strategic axes of the MINECO Innovation Policy Project focuses on the "improvement of human capital" and contemplates several political actions for the creation of capacities and the increase of knowledge capital with a focus on science, technology, engineering, arts and mathematics (STEAM). Parallel to the development of this type of capabilities, work could be done to identify key activities and processes in strategic industries (e.g., fast fashion design, coffee harvesting and processing, etc.) and promote the development of specific capabilities. adjusted to international standards from INTECAP.

282. Relatively few firms in Guatemala export their products and services, as compared with similar economies in the region. About 10 percent of firms in Guatemala export at least 10 percent of their sales, below the LAC average of 14 percent (Figure 88). Likewise, the share of manufacturing firms that use imported materials or supplies (61 percent) is below the LAC average of 70 percent and significantly below other Central American countries, such as Costa Rica and Honduras, both close to 80 percent (Figure 89).

²⁶³ Within this classification, the authors consider that the strengthening of managerial capacities and organizational practices are a key element of innovation policies, arguing that "Managing R&D projects or introducing new processes efficiently and successfully requires the effective use of human resources, the successful deployment of marketing strategies, and the efficient implementation of basic business functions... companies progressively build on their accumulated capabilities, increasingly facilitating the most sophisticated innovations." The authors explore this relationship with data from companies in several countries, finding a statistically significant association between best management and organizational practices, and the probability of introducing innovations in products and processes (Cirera & Maloney, 2017).

²⁶⁴ Unleashing Central America's Growth Potential (WB, 2021), Based on data from WBES (2017 for Guatemala) and BTI 2018.

Entrepreneurship and Innovation

As discussed in Chapter 5 of this report, Guatemala participates mostly in global value chains of low value-added manufacturing and its exports are concentrated in a small number of countries.

283. Guatemala exports a relatively small number of products that many other countries can produce. Although Guatemala has managed to increase the diversification of its exports over time, the sophistication of the export basket remains low (e.g., about 80 percent of Guatemala’s exports are natural resource-based or have a low-technology content, see Figure 75). Low export sophistication and dependency to a limited number of markets limits the growth potential of its firms and increases their vulnerability to climate and economic shocks.²⁶⁵

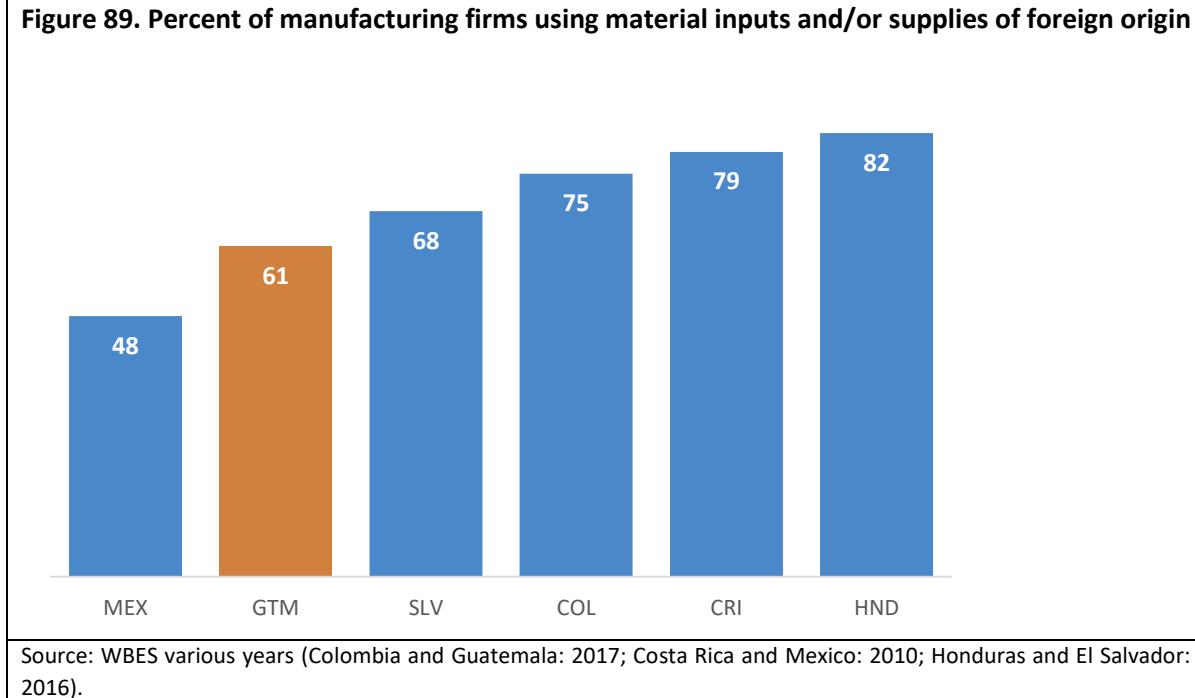
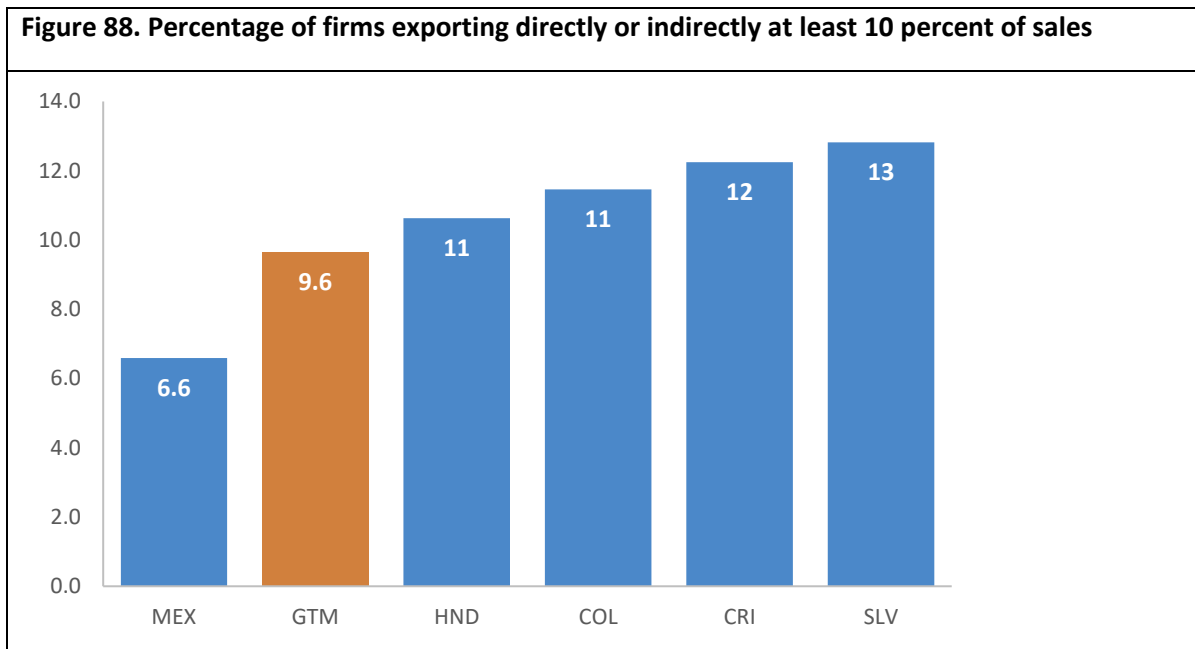
284. Entrepreneurship and innovation will play a critical role in diversifying the Guatemalan economy. Diversification strategies can take many forms—from adding value to existing exports to developing new products and services. Quality upgrading can boost productivity and support the development of the export sector by building on a country’s comparative advantages.²⁶⁶ Guatemala has untapped opportunities to increase the quality of products that the country already exports competitively (e.g., bananas, coffee, brown sugar, palm oil, and cardamom).²⁶⁷ A diversification strategy based on quality upgrading entails acquiring knowledge about evolving trends in the types of products sophisticated buyers demand, adopting new technologies, and upgrading production processes to meet international standards. On the other hand, a diversification strategy that focuses on developing new exports based on current capabilities will require a thorough identification of goods and services that are both feasible and generate opportunity value (i.e., goods that require similar capabilities to the ones that already exist in the country and, if developed, would enable further diversification).²⁶⁸ Likewise, diversification would require capable institutions that reduce barriers for, and attract, private sector investment, generate new production capabilities and provide crucial public goods—such as digital infrastructure. Therefore, robust and dynamic innovation ecosystems that facilitate the identification of new or higher quality products, enable the transfer, adoption and development of technologies, and help align local productive processes to the standards of international markets will be essential for economic diversification in Guatemala.

²⁶⁵ (World Bank, 2021a).

²⁶⁶ A common finding in the literature is that developed countries tend to export and consume higher quality products than developing countries. Consequently, the ability of developing countries to transition from low-quality to high-quality products is seen as an important step towards export success and, ultimately, economic development World Bank (2021a), based on (Khandelwal, 2010)

²⁶⁷ See World Bank (2021a).

²⁶⁸ The process of economic diversification does not occur at random, rather there is path dependence based on product similarities. In general, when countries diversify their export bundles, there is a propensity to move from products they are producing to products that are close, in terms of production knowledge and capabilities (World Bank, 2021a).



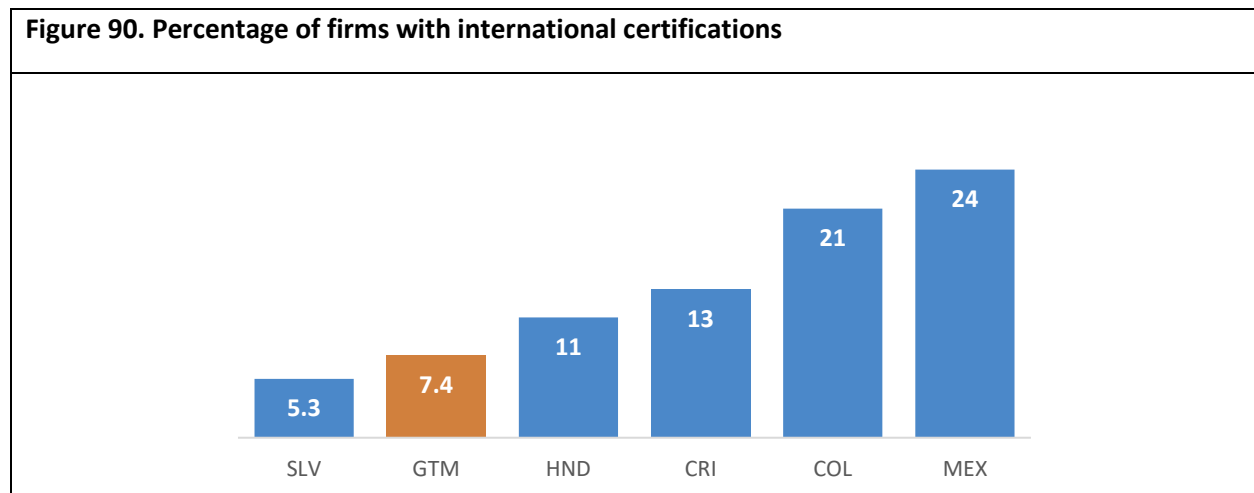
285. In addition to their low participation in global value chains, Guatemalan firms lack other key capabilities to convert accumulation of knowledge and resources into production.²⁶⁹ Firms in Guatemala lack key demand factors needed to transform capital into productive entrepreneurship. For instance, only about 7 percent of firms are internationally certified, compared with a little more than 10 percent of firms

²⁶⁹ See Chapter 5 for a detailed discussion on Guatemala’s participation in GVCs. This chapter discusses multiple issues shaping the participation of Guatemala in selected value chains. The discussion provides some context on factors shaping micro-level decisions to invest in innovation (for instance, low margins in most value chains analyzed, low demand for quality improvements in local markets, etc.).

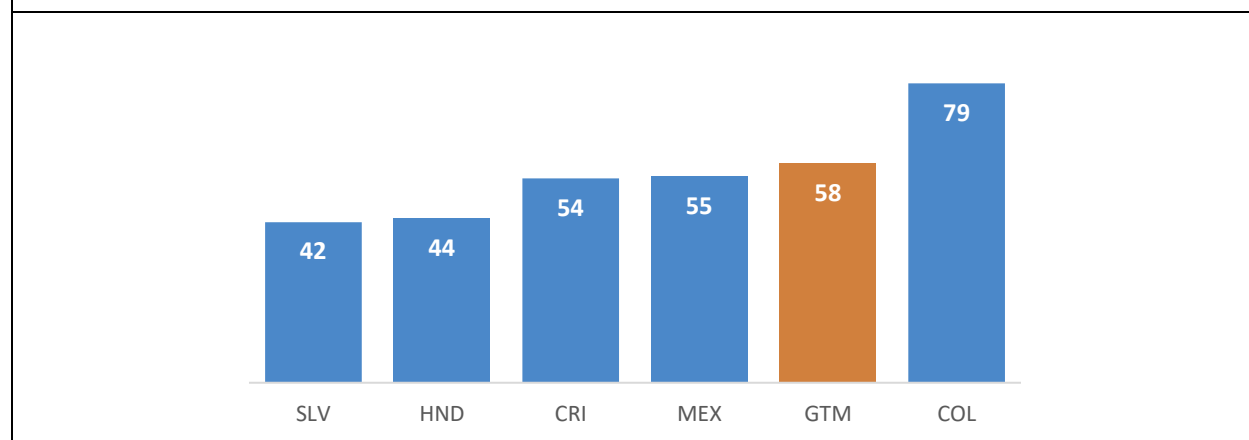
Entrepreneurship and Innovation

in Honduras and 24 percent of firms in Mexico (Figure 90). Likewise, only about half of formal firms have official websites, compared to 80 percent of firms in Colombia. It is worth noting that the share of firms with official websites in Guatemala is larger than in comparable countries in the Central American region (Figure 91). Moreover, Guatemalan firms identify their limited understanding of potential customers and the relatively low digital maturity of the entrepreneurial ecosystem as significant barriers to expand their businesses to new markets (Nextrade Group, 2021).²⁷⁰

286. Firms that use technologies intensively tend to be more productive and resilient to external shocks. This is partly because more productive firms are better suited to adopt technologies and talent, but also because technologies have made their adopters more productive. Most Guatemalan SMEs are still using manual methods and basic digital tools to manage their operations, sales, marketing, and decision-making processes. At the same time, larger firms are better prepared to use sophisticated software, big data, blockchain and AI to streamline and scale their customer interactions and business operations. Across firm size categories, export-driven firms are more likely to use sophisticated technologies. Moreover, the Covid-19 crisis has forced buyers in the region online, but the limited adoption of digital technologies among firms has constrained their capacity to use formal online stores and marketplaces, and most firms use more traditional methods such as social media, messaging apps, and cash-based transactions with their customers (Nextrade Group, 2021).



²⁷⁰ Central America - Digital Technology Support Survey (Nextrade Group, forthcoming)

Figure 91. Percentage of firms with official websites

Source: WBES various years (Colombia and Guatemala: 2017; Costa Rica and Mexico: 2010; Honduras and El Salvador: 2016).

287. Access to finance is an important constraint to expanding entrepreneurship in Guatemala.

Limited funding hinders firms' growth and leads to a greater share of small firms in the ecosystem. Most SMEs in Guatemala do not rely on financial institutions as their primary source of funding for investments or working capital. Instead, SMEs rely on own resources, family, friends and supplier/customer credit to cover their financing needs. According to the GEM 2020, more than half of the surveyed entrepreneurs (58 percent) provided the totality of initial funds to start their businesses. In fact, while the overall credit portfolio has increased by 36 percent between 2015 and 2019, lending to MSMEs has been stagnant. Despite this, only 13 percent of firms in Guatemala cite access to finance as a major constraint to growth, and just 5 percent of firms identify access to finance as the biggest obstacle (World Bank, 2017). However, the COVID-19 shock brought a sudden drop in revenues for the majority of businesses, created acute liquidity shortages and increased debt ratios for a significant proportion of firms. In this scenario access to financing may play an essential role for the survival of viable businesses.²⁷¹ Chapter 3 presents a detailed discussion of the challenges and opportunities of increasing access to productive financing in Guatemala.

288. The business regulatory environment in Guatemala constrains entrepreneurial activity, business formalization and growth potential.

Just like access to productive finance, the business regulatory environment plays a critical role shaping entrepreneurship and innovation in Guatemala— as the high level of informality hinders the performance of the entrepreneurship and innovation ecosystem. Friendly and predictable regulatory frameworks promote productivity growth by allowing for more efficient allocation of resources among firms, positively affecting entrepreneurship, business formalization, access to finance, and global market integration. According to the Adult Population Survey (APS) 2019, nearly 40 percent of informal firms in Guatemala did not formalize their activity because the processes required to formalize a business are too costly or complex. Likewise, eight out of every ten experts surveyed in the NES 2019 agreed that excessive bureaucracy, taxes and fees stifle firm entry and slow down the growth rate of established firms (GEM, 2020). Chapter 2 presents a detailed discussion of institutional quality, property rights, the contractual environment, regulatory governance, and

²⁷¹ Recent data from the World Bank Business Pulse Survey shows that the ratio of outstanding liabilities to total sales for firms in Guatemala has increased substantially during 2020. In September 2020, outstanding liabilities of firms surveyed reached (on average) 31 percent of sales. Although debt ratios are increasing, current levels are manageable unless the COVID-19 shock persists for much longer (World Bank, 2021f).

Entrepreneurship and Innovation

registration and licensing requirements, among other elements that conform the business regulatory environment and shape entrepreneurship in Guatemala.

289. Crime is a major barrier for the accumulation and allocation of resources, limiting business formalization in Guatemala. Crime discourages entrepreneurs to make their businesses visible and disincentivizes formalization, as business that gain more notoriety are more likely to be victims of a crime. Entrepreneurs are 1.5 times more likely than non-entrepreneurs to be victims of crime, and 34 percent of entrepreneurs surveyed by the APS 2019 reported having been victims of a crime during the last year (GEM, 2020). Crime, theft and disorder ranks fourth among the biggest obstacles for business development in Guatemala. In fact, eleven percent of firms surveyed in the World Bank Enterprise Survey (2017) considered crime to be the single most important challenge for entrepreneurship and business growth in the country, compared with 6.7 percent in Latin America and the Caribbean.

290. Guatemalan entrepreneurs are motivated and confident in their capabilities to start and manage a business. As Figure 92 shows, more than two thirds of adults in Guatemala (77 percent) consider themselves capable and knowledgeable to start a business, above the average self-confidence reported in other LAC countries (71 percent). This characteristic could give entrepreneurs the drive and confidence to work hard and succeed in their business. Nonetheless, this indicator should be viewed with caution, as overoptimism may bias perceived capacity upward (i.e., managers may believe they are more capable than they actually are, based on data from the World Management Surveys).

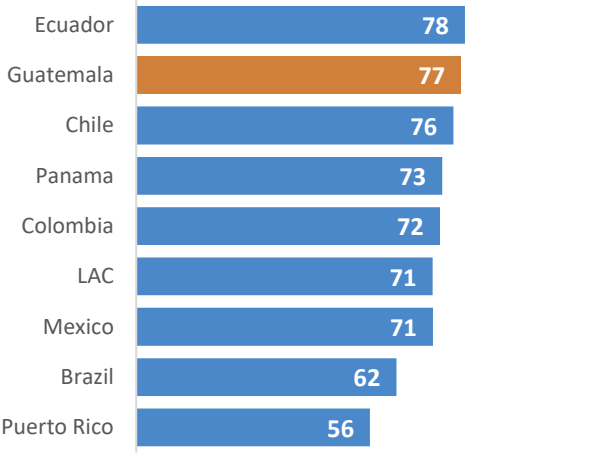
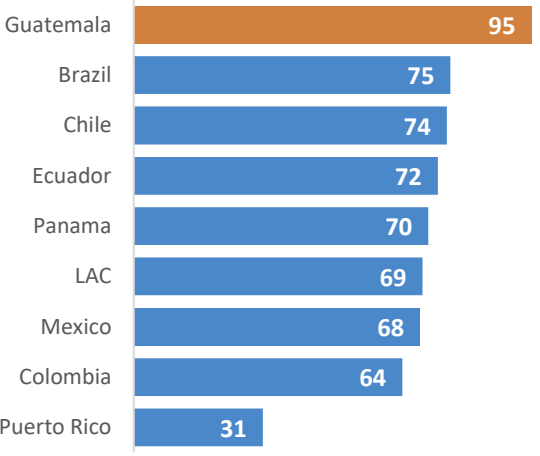
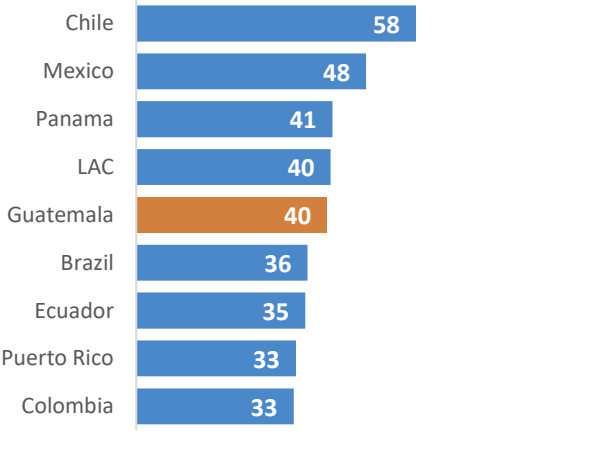
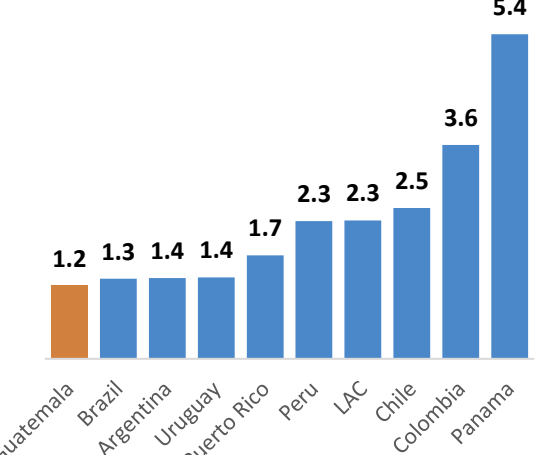
291. Entrepreneurship is considered a good career choice by most adults in Guatemala. About 95 percent of adults in Guatemala believe that being an entrepreneur is a good career choice (Figure 93); this proportion is significantly higher than the regional average (69 percent). A country's positive attitude toward entrepreneurship directly impacts the likelihood of individuals to take on risks and star businesses, it also relates to the ability of entrepreneurs to rebound from business setbacks and to the support that entrepreneurs receive from family, friends and the community (Innovation Policy Platform, 2013).

292. Despite the confidence and strong entrepreneurial attitude in the country, fear of failure may limit entrepreneurial activity. Forty percent of adults in Guatemala admit that they would not start a business for fear of failure, in line with the LAC average (Figure 94). This indicator reflects the perceived opportunity cost of becoming an entrepreneur (e.g., the income an entrepreneur could generate by following other career options). In this sense, the opportunity cost of entrepreneurship – and thus fear of failure- tends to be higher in higher-income countries with more developed labor markets and greater returns to human capital accumulation (GEM, 2020). Also, this indicator may reflect regulatory distortions or social biases that increase the risk of starting a business.

293. In Guatemala, entrepreneurs are almost as likely to start a business out of opportunity as out of necessity. The motivation to start a business is a key determinant of the potential growth of the business. In Guatemala, the proportion of entrepreneurs that start a business to take advantage of opportunities to improve their situation (“out of opportunity”) is slightly larger than the share of entrepreneurs “out of necessity, this proportion is known as the Motivation Index (GEM, 2020). As Figure 95 shows, in 2019 the Motivation Index of Guatemala reached 1.2; that is, for every 100 nascent and early-stage entrepreneurs out of necessity, there were 120 entrepreneurs seeking to take advantage of business

Entrepreneurship and Innovation

opportunities. It is also worth mentioning that Guatemala’s Motivation Index score is among the lowest in the region.²⁷²

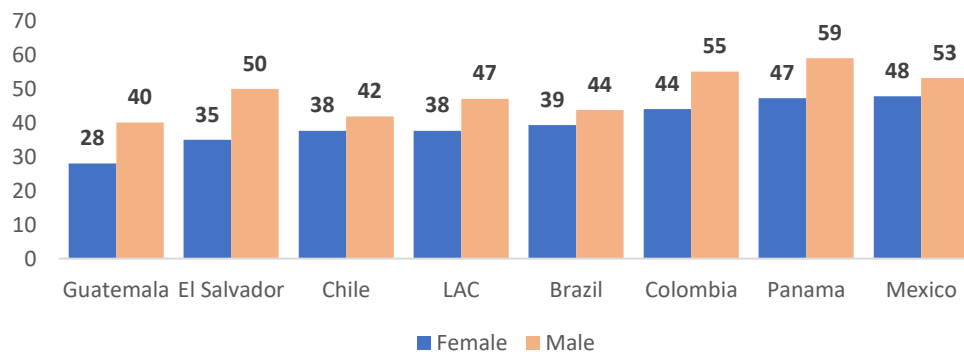
<p>Figure 92. Percentage of adults who believe they have the required skills and knowledge to start a business</p>	<p>Figure 93. Percentage of adults who believe that entrepreneurship is a good career choice</p>																																										
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<p>Source: Global Entrepreneurship Monitor (2020). Note: (*) The figure shows Improvement-driven opportunity entrepreneurs as a percentage of the Total Early-stage Entrepreneurial Activity (TEA) vs. entrepreneurs motivated by necessity as a percentage of TEA. The TEA is the percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business (GEM, 2020).</p>																																											

²⁷² Moreover, data from the GEM 2016 suggests that the proportion of entrepreneurs out of necessity in Guatemala is larger than in the average LAC country, while the share of entrepreneurs out of opportunity is below the regional average. More recent versions of the GEM.

Entrepreneurship and Innovation

294. Several gender biases can impact female entrepreneurship and slow the growth of women-led businesses. Men have relatively high access to networks of entrepreneurs, with 40 percent of adult males knowing personally other entrepreneurs, a proportion slightly lower than the LAC average (47 percent). However, less than one third of women (28 percent) have access to entrepreneurial networks; ten percentage points below the regional average (Figure 96). Reduced access to entrepreneurial networks could bias downward the odds of success for female entrepreneurs. Another important gender dimension relates to the motivation for starting a business in Guatemala: a smaller share of women than men become entrepreneurs to take advantage of an opportunity to improve their economic situation (Figure 97). Likewise, only one fifth of formal firms in Guatemala are managed by women, significantly below the share observed in comparable countries such as El Salvador or Honduras – close to 30 percent in both cases (Figure 98).

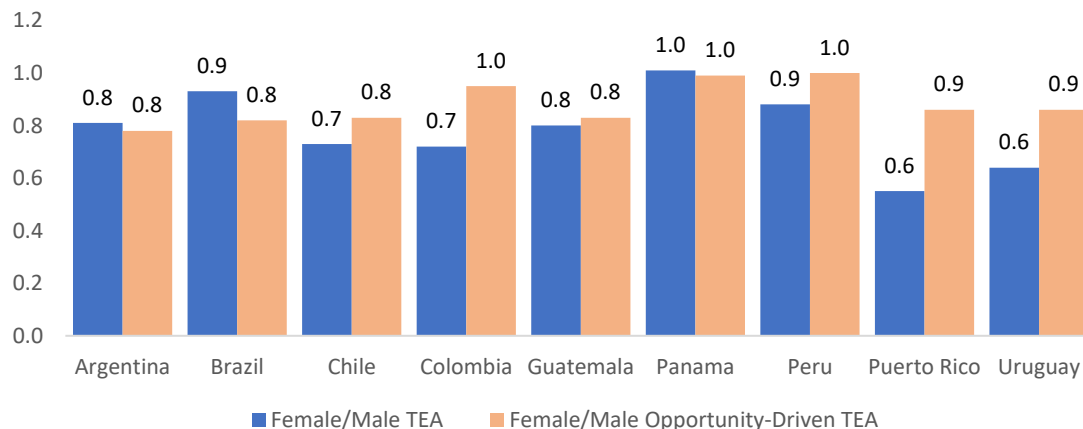
Figure 96. Percentage of adults who personally know entrepreneurs



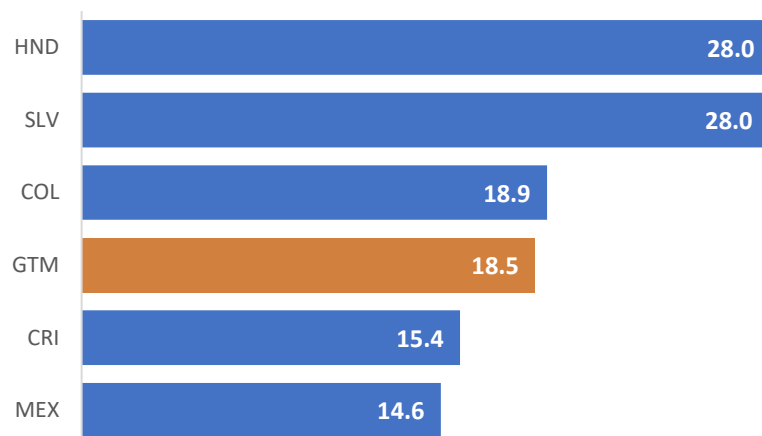
Source: Global Entrepreneurship Monitor (2016).

Note: More recent GEM reports do not include this indicator.

Figure 97. Ratio of female to male entrepreneurship in 2019



Source: Global Entrepreneurship Monitor (2020).

Figure 98. Percentage of firms with a female top manager

Source: WBES various years (Colombia and Guatemala: 2017; Costa Rica and Mexico: 2010; Honduras and El Salvador: 2016).

295. Recent studies identify gender biases in access to and cost of financing, cultural practices and social norms, as well as biases in access to formal education and business skills. Although the limited availability of microdata on the supply and demand conditions of the entrepreneurship ecosystem in Guatemala makes it difficult to identify gender biases, recent studies by (USAID, 2018) and (OXFAM, Value for Women, & Babson College, 2018) point out two main biases and multiple restrictions for female entrepreneurship in the country. These biases are:

- i. Bias in the cost of productive financing. Even though access to financing does not appear to vary depending on gender (see Chapter 3), the cost of such financing does. For example, between 2011 and 2016 the interest rates charged by Guatemalan banks to female entrepreneurs were consistently above the interest charged to their male counterparts (2.4 percentage points higher, on average);
- ii. Cultural practices and social norms. Multiple cultural practices impact women's ability to start and maintain a business (even when the business is profitable). For example, in Guatemala women devote 6.1 hours of their day to uncompensated work — three times more than their male counterparts — time that cannot be dedicated to executing a business idea. Also, even when there are no legal barriers to women owning movable property, men are more likely to be the sole owners of shared property (and more likely to inherit property). This indirectly limits women's access to productive financing, since they have — on average — fewer assets to offer as collateral;
- iii. In addition to these biases, some identified restrictions include previous biases in access to formal education and business skills training (which are amplified in the case of rural communities and indigenous women), limited legal provisions to prevent gender discrimination, lack of information (visibility) of dynamic female ventures, among others.

296. Gender biases limit the dynamism of entrepreneurship ecosystems. Entrepreneurial ecosystems gain dynamism when women are also provided with factors of production and gender biases are removed (OXFAM, Value for Women, & Babson College, 2018). For instance, female led firms in

Entrepreneurship and Innovation

Guatemala offer access to formal training to a greater share of their workers than male-led firms—80 percent vs 50 percent, respectively. In this sense, gender biases may be limiting the dynamism (i.e., rate of entry and exit of companies, innovation and technological adoption, job creation and productivity) of the entrepreneurial ecosystem in Guatemala.

6.3. Local entrepreneurship and innovations ecosystems in Guatemala²⁷³

297. The identification of local entrepreneurship and innovation ecosystems equips policymakers with the information to target interventions in areas with greater potential spillover effects and a higher probability of success.²⁷⁴ A well-functioning ecosystem facilitates the creation and survival of enterprises, as well as their growth into high potential businesses capable of innovating, since they provide capital, workers, technology, funding sources, institutional support, customers, and suppliers to boost firms' productivity and access to markets (World Bank, 2020d). Entrepreneurship and innovation ecosystems require many elements to be successful; identifying and targeting locations and industries with some existing elements can increase the effectiveness of public support policies.

298. Firm-level data was used to identify local entrepreneurship and innovation ecosystems in three strategic industry groups in Guatemala.²⁷⁵ The first group is defined as high-tech entrepreneurship, which includes digital businesses and high-tech manufacturing. These industries tend to have higher labor productivity and be more innovative than the average firm. The second group is tradable services - tourism, financial services, and business processes outsourcing (BPO). Tradable services offer opportunities for high-paid jobs, can be exported and benefit from economies of agglomeration. The third group comprises traditional sectors (agribusiness and light manufacturing), which tend to be relevant for

²⁷³ The analysis in this section is based on work done for the IFC Central America Digital Entrepreneurship Advisory Services Project (#603894), in collaboration with the Finance, Competitiveness and Innovation Global Practice, and it will be part of a forthcoming paper entitled "Local entrepreneurship ecosystems in Central America". The paper is being prepared by Marcio Cruz and Jesica Torres Coronado, with key inputs from Gabriela Montenegro, and overall guidance from the project team leaders, Mayra Alfaro de Morán and Pedro Andres Amo.

²⁷⁴ The fourth strategic axis of MINECO's Draft Innovation Policy represents a step in this direction. This axis contemplates (among other strategic priorities) the creation of a digital platform to improve communications and transactions between the diverse institutions of the productive innovation ecosystem.

²⁷⁵ Firm-level data comes from the SAT's administrative databases. The data includes the 4-digit ISIC identifier for the economic activity, the municipality where the business operates and the age of the business (the date when they first registered with the administrative authority). These records cover 1,673,477 firms during 2018. The database includes firms of multiple sizes. Average (yearly) sales per firm in the database is USD 52,876 and average assets per firm during 2018 is USD 119,652. Yearly figures were converted into USD using the exchange rate for January 31 of 2020. (World Bank, 2020d).

low-skilled jobs, but also could benefit from further digitalization.²⁷⁶ Characteristics of the firms in each group are shown in Table 11.²⁷⁷

Table 11. Characteristics of businesses in the data

Industry	Fraction of total firms	Sales per firm*	Fraction of employment	Sales per worker*	Fraction of women-owned firms
Digital Economy	2%	1.8	5%	2.4	23%
High-tech manufacturing	~0	8.7	4%	9.7	23%
Tourism	11%	0.3	4%	0.3	32%
Financial services	1%	4.8	8%	7.9	34%
BPOs	20%	0.2	7%	0.4	40%
Agribusiness	5%	3.2	19%	4.1	23%
Light manufacturing	2%	2.1	6%	3.3	24%

*/ Sales per firm and sales per worker are relative to the average plant in the data.

**/ The fraction of employment reported is the fraction of total wage bill (as employment per plant is not available) while sales per worker corresponds to the relative wage bill.

Source: World Bank (2020b)

299. Municipalities with significant numbers of firms in sub-sectors within the high-tech entrepreneurship, tradable services and traditional sectors were identified. Statistically significant agglomerations of municipalities with a high density of establishments within each 4-digit sub-sector in the industry were identified. The number of sub-sectors for which a municipality is part of an agglomeration were then counted. The indicator was then sorted into 3 broader measures of diversity: no agglomerations, agglomerations in one sub-sector, agglomerations in more than one sub-sector (e.g., both agriculture and food processing).

300. The potential or quality of local ecosystems was then estimated using measures of business dynamism. Data used to estimate quality included number of young firms (0-3 years), average number of workers per business, average assets per business, and average sales per worker. Municipalities were then sorted into 3 broader measures of quality: no quality agglomerations, agglomerations in one quality indicator, agglomerations in more than one quality indicator. Potential for each ecosystem is then proxied with the quality indicator. High potential ecosystems exhibit agglomerations in more than one quality

²⁷⁶ Digital economy includes manufacturing and repair of computers and telecommunications equipment, retail and wholesale of computers, programming activities, publishing and broadcasting activities, and data processing (Barefoot, Curtis, Jolliff, Nicholson, & Omohundro, 2018). High-tech manufacturing considers chemicals, plastics, pharmaceuticals, manufacturing of electronics and motors, and medical and optical instruments (Wolf & Terrell, 2016). Tourism includes accommodation services, entertainment activities, food preparation services, and air transportation. Financial services combine financial activities, insurance and pension services, and BPOs include call centers, management consulting, and administrative support activities. Agribusiness combines agriculture and food processing. Light manufacturing includes textiles, apparel, leather, wood products, and metal products (Dinh, H., et al., 2012 & Dinh H., 2014).

²⁷⁷ Not all industries are included in this analysis, based on a classification of potential strategic industries (see World Bank, 2020b). These industries include “other manufacturing; retail; other service; and other industries”. These industries represent 60 percent of all the firms in the data and 62 percent of total sales. Likewise, the fraction of employment of the firms in Table 1 may be distorted, as it is an approximation based on total wage bill (as direct data for the number of workers was not available).

Entrepreneurship and Innovation

indicator; maturing ecosystems exhibit agglomerations in one quality indicator; incipient ecosystems exhibit no quality agglomerations. Broad indicators of diversity (multi-sector²⁷⁸, mono-sector) and quality (multi-quality, mono-quality, no quality) are depicted by the shading in the maps in the figures below.

301. Entrepreneurship ecosystems in agribusiness are among the most common in Guatemala. They are spread throughout the country, include incipient, maturing, and high potential ecosystems, and are among the businesses with the greatest share of employment. Sales per business in the industry are 3.2 times the sales of the average business in Guatemala, while the wage bill in the industry is 4.1 times that of other industries in the data. Nearly 80 percent of businesses in this industry operate in geographical agglomerations. In particular, the departments of Guatemala, Escuintla, and Zacapa exhibit high potential agglomerations in agribusinesses, and these agglomerations account for 1.3% of business in the data (Figure 99).

302. Light manufacturing ecosystems accounts for a relatively small fraction of businesses in the data. Firms in this industry are mainly agglomerated in high-potential ecosystems in the department of Guatemala, and to a lesser extent in Escuintla and Sacatepéquez. The average wage bill in the industry is 3.3 times the wage bill of the average business and only about 25 percent of business in the industry are owned by women (Figure 99).

303. Financial services account for a relatively low proportion of businesses in Guatemala, but these businesses stand out for being highly productive and for being agglomerated in high potential ecosystems. Financial services account for 1 percent of businesses in the data and are geographically concentrated in the departments of Guatemala (high potential) and Santa Rosa (maturing). The proxies for productivity for businesses in financial services in the Guatemala are significantly high relative to the average firm. Specifically, firms in the sector generate 4.8 times the average sales per worker and about 8 times the wage bill of the average business in the country (Figure 100).

304. Unlike finance, the other two tradable services ecosystems, BPO and tourism, are rare and have the lowest sales per firm. The business processes outsourcing (BPO) and tourism industries account for nearly one third of the businesses in the data in Guatemala. However, their wage bill stands between 30 and 40 percent of the wage bill for the average business, while sales per business are only 20 to 30 percent of the sales of the average business. Most BPO businesses are agglomerated in the department of Guatemala, while tourism firms are agglomerated in high potential ecosystems in the department of Guatemala and in maturing ecosystems in Sacatepéquez (Figure 100). BPO ecosystems stand out for having the highest proportion of women-owned firms among the strategic industries assessed (40 percent), followed by financial services and tourism.

305. High-tech manufacturing ecosystems have the highest sales and workers per firm in Central America. The proxies for productivity in high-tech manufacturing businesses in Guatemala are higher than for any other strategic industry. Sales per firm in this industry are almost 8 times larger than in the average firm and sales per worker are 9 times larger than in the average firm. Nevertheless, this sector has the fewest firms among the strategic industries. Regarding their location, a significant agglomeration of high-tech manufacturing firms is found in the departments of Escuintla and Guatemala, both high potential ecosystems (Figure 101).

²⁷⁸ Multi-sector refers to agglomerations in more than one sub-sector within the same industry, e.g., agriculture and food processing within agribusiness.

Entrepreneurship and Innovation

306. Digital ecosystems are infrequent but highly productive, dynamic, and resilient. There are a few high potential digital ecosystems concentrated in the department of Guatemala (Figure 101). Sales per worker in this industry double the figure for the average business. In Central America these ecosystems tend to have larger entry and exit rates of firms but also greater resilience than other strategic industries, as proxied by the performance of their revenues after more than 5 years of operation (World Bank, 2020d). Although business in the digital economy tend to be more innovative and progressive, in Guatemala this ecosystem is predominately controlled by men; the fraction of women-owned firms reaches only 23 percent.

307. Identifying local ecosystems with potential is a first step toward designing more cost-effective and targeted entrepreneurship support programs. A summary of the maturing and high potential ecosystems by industry is shown in the table below. High potential ecosystems for most of the strategic industries are concentrated in the department of Guatemala and, to a lesser degree, Escuintla (Table 12).

Figure 99. Traditional sectors entrepreneurship ecosystems in Guatemala

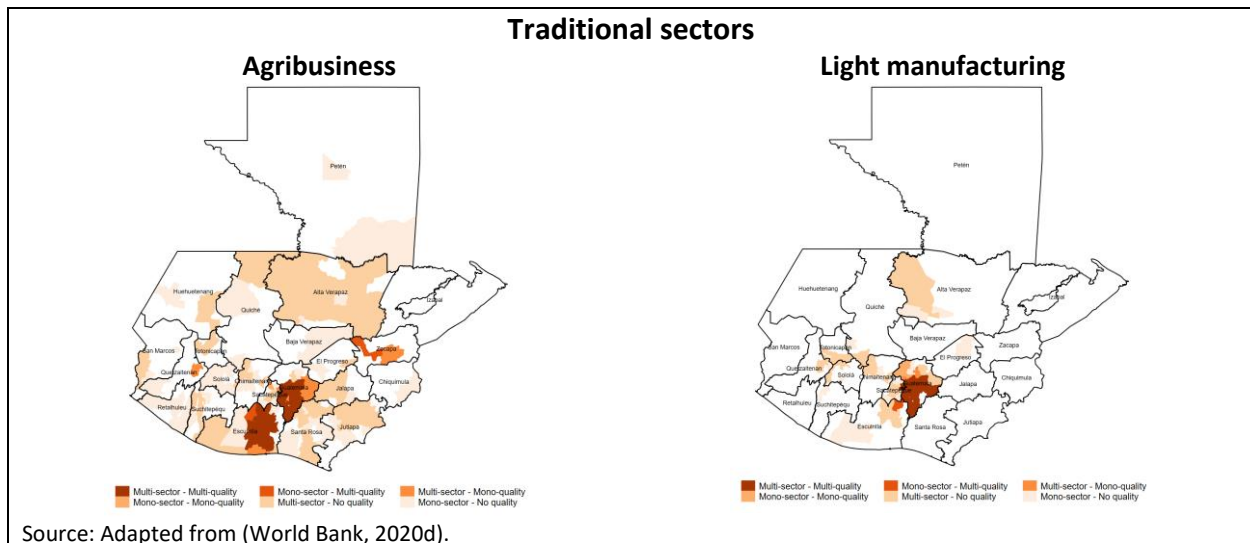


Figure 100. Tradable services ecosystems in Guatemala

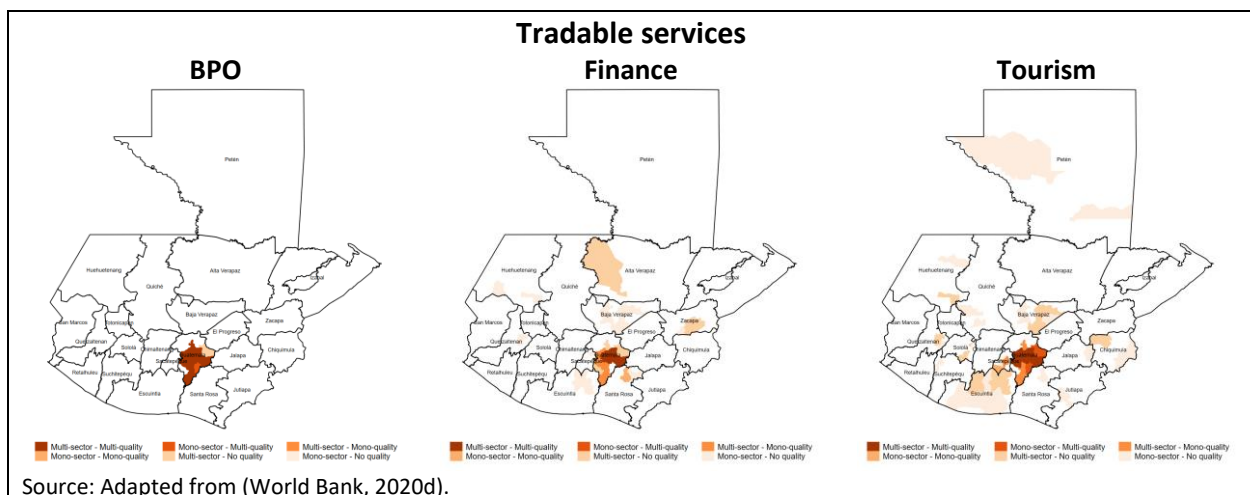


Figure 101. High-tech entrepreneurship ecosystems in Guatemala

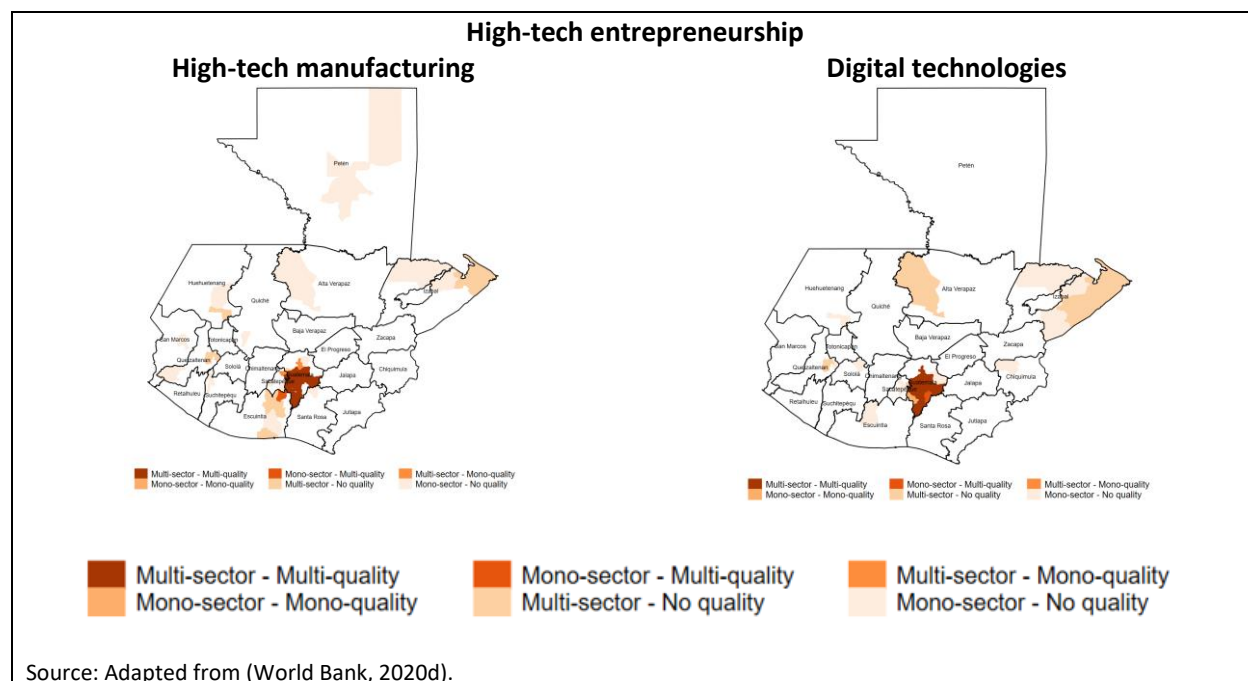


Table 12. Summary of maturing and high potential ecosystems across industries

Industry	Maturing	High Potential
Digital technologies		Guatemala
High-tech manufacturing		Escuintla; Guatemala
Tourism	Sacatepéquez	Guatemala
Financial services	Santa Rosa	Guatemala
BPO		Guatemala
Agribusiness	Quetzaltenango	Escuintla; Guatemala; Zacapa; Guatemala
Light manufacturing		Escuintla; Guatemala; Sacatepequez

Source: Adapted from (World Bank, 2020d).

6.4. Policies for entrepreneurship and innovation in Guatemala²⁷⁹

308. The multidimensionality of the challenges of each national innovation and entrepreneurship system requires a particular mix of public policies. Each country faces various market failures and failures in innovation and entrepreneurship systems that restrict the productivity of companies, as well as their ability to create, absorb, and adapt new technologies and knowledge. National innovation and entrepreneurship policies, therefore, must respond to the binding constraints faced by the country, while thinking about the complementarities and overlaps of the available policy instruments (Cirera, Frías, Hill, & Yanchao, 2020). For example, tax incentives and grants can be an attractive option when companies face appropriation failures, but they do not resolve information asymmetries that could be restricting access to financing for dynamic ventures.²⁸⁰ Following the initial diagnosis of the current innovation and entrepreneurship situation in Guatemala (section 6.2), this section analyzes the supply of government programs and private initiatives for innovation and entrepreneurship. Based on these views, section 6.5 presents some public policy recommendations.

Box 8. Common innovation challenges and potential solutions

Challenge for innovation	Policy instrument	What is it for?
Low overall innovation performance due to limited capabilities	<ul style="list-style-type: none"> ▪ Business advisory services ▪ Technology extension services ▪ National quality infrastructure ▪ Supplier development programs ▪ Clusters / networks ▪ Vouchers 	<ul style="list-style-type: none"> ▪ Capacity building ▪ Improve quality ▪ Compliance with standards ▪ Encourage collaboration between companies
Use of outdated technology / low technology adoption	<ul style="list-style-type: none"> ▪ Business advisory services ▪ Technology extension services ▪ Technology Centers ▪ Loans ▪ Subsidies 	<ul style="list-style-type: none"> ▪ Capacity building ▪ Transfer of capabilities ▪ Access to financing ▪ Appropriation of benefits
Weaknesses in the generation and commercialization of technology	<ul style="list-style-type: none"> ▪ Technology transfer offices ▪ Technology Centers ▪ Technology extension services 	<ul style="list-style-type: none"> ▪ Technology transfer ▪ Capacity building and transfer
Low number of ventures and innovative young companies	<ul style="list-style-type: none"> ▪ Incubators ▪ Accelerators ▪ Capital financing 	<ul style="list-style-type: none"> ▪ Capacity building ▪ Business scaling ▪ Access to financing

²⁷⁹ The analysis in this section is based on the complementary World Bank Group analysis *Guatemala: Diagnostic of the Digital Entrepreneurship Ecosystem* (forthcoming). The document is being drafted by Gabriela Montenegro and has inputs from the forthcoming *Local Entrepreneurship Ecosystems in Central America* report (by Marcio Cruz and Jesica Torres Coronado, with key inputs from Gabriela Montenegro, and overall guidance from the project team leaders, Mayra Alfaro de Morán and Pedro Andres Amo) as well as the Digital Technology Support Survey by the Nextrade Group.

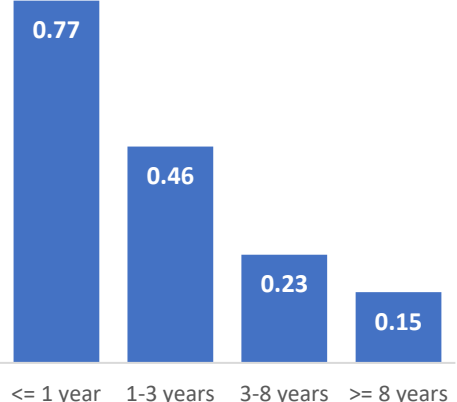
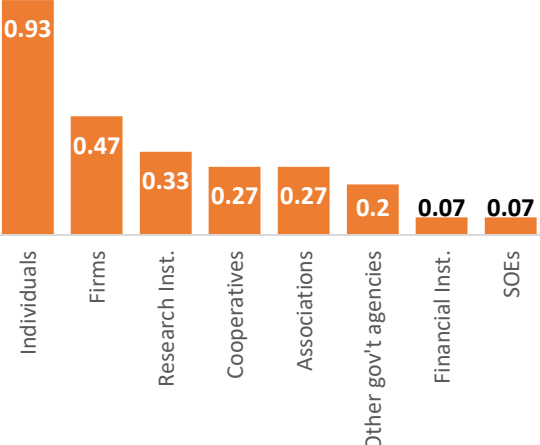
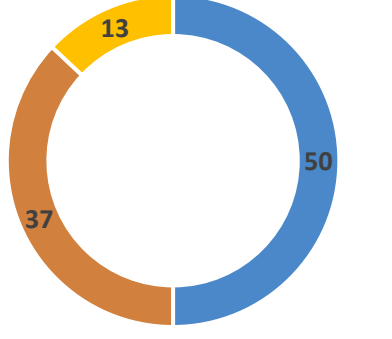
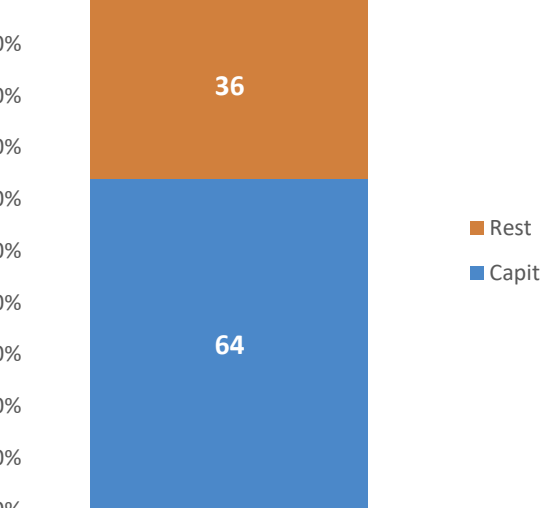
²⁸⁰ Appropriation failures occur when companies invest in innovation, but do not get all the returns from their innovation as new technology is quickly adopted by their competitors.

Low collaboration between companies limits innovation	<ul style="list-style-type: none"> ▪ Clusters / networks ▪ Vouchers ▪ Subsidies ▪ Technology transfer instruments 	<ul style="list-style-type: none"> ▪ Promote collaborative attitude ▪ Incentives for collaboration ▪ Access to financing ▪ Academy-industry links
Sub-optimal investment in R&D	<ul style="list-style-type: none"> ▪ Subsidies ▪ Loans ▪ Tax incentives 	<ul style="list-style-type: none"> ▪ Appropriation of benefits ▪ Access to financing ▪ Reduction of the relative price of innovating
Source: Adapted from Cirera, Frias, Hill & Yanchao (2020)		

309. Government programs and private sector initiatives to support entrepreneurship and innovation in Guatemala were mapped to identify potential gaps and redundancies. Two surveys were implemented between August – September 2020 to collect data from 12 government support programs and 25 intermediary organizations. Data for policy instruments covers programs from the ministries of Economy (MINECO), Agriculture (MAGA) and Education (MINEDUC); the Presidential Secretariats for Social Integration and Science and Technology; the University of San Carlos; the Technical Institute of Training (INTECAP); and BANRURAL. Likewise, supporting organizations surveyed include start-up programs, incubators, accelerators, financial institutions, academic entrepreneurship centers and research centers. A workshop with key actors of the entrepreneurship ecosystem, carried out in October 2020, complemented the surveys (Montenegro, Alfaro de Moran, & Amo, 2021). This workshop allowed the team to form a better understanding of how government support programs and private sector initiatives interact and contribute to a more dynamic entrepreneurship ecosystem in Guatemala.

310. The Government of Guatemala supports entrepreneurship and innovation through multiple programs in several relevant dimensions, including science and technology, human capital development and access to finance. The Ministry of Economy is the leading institution implementing support programs, but also plays a key role in the coordination of policies and programs to improve the entrepreneurship ecosystem in the country. Most programs are focused on firms in early stages of development (i.e., less than 3 years of operation) and the most common type of targeted beneficiary are individual entrepreneurs (Figure 102 and Figure 103). More than half of the programs surveyed have no sector orientation, while the rest target agribusinesses, handcrafts and manufacturing firms (Figure 104). Government programs have also supported firms to overcome liquidity and other constraints imposed by the Covid-19 shock. Still, firm’s access to government programs remains low. According to the most recent Business Pulse Survey, about 28 percent of businesses reported having access to public support in the third quarter of 2020. However, this figure declined substantially on the second half of the year: only 12 percent of firms surveyed between December 2020 and February 2021 reported having access to public support (World Bank, 2021f)

311. Government programs support firms across the country, but there is a geographical concentration of resources in the capital. Government programs are present in all departments, but the geographical concentration of services is notably higher in the Western Highlands and central departments than in the Southern Coast and Eastern Guatemala (Figure 105). This geographical concentration suggests that public support programs may likely be missing some high-potential local entrepreneurial ecosystems (see previous section). In line with the government mandate to attend all languages and ethnicities, government programs serve the country’s diverse ethnicities and language groups, although most services are provided in Spanish.

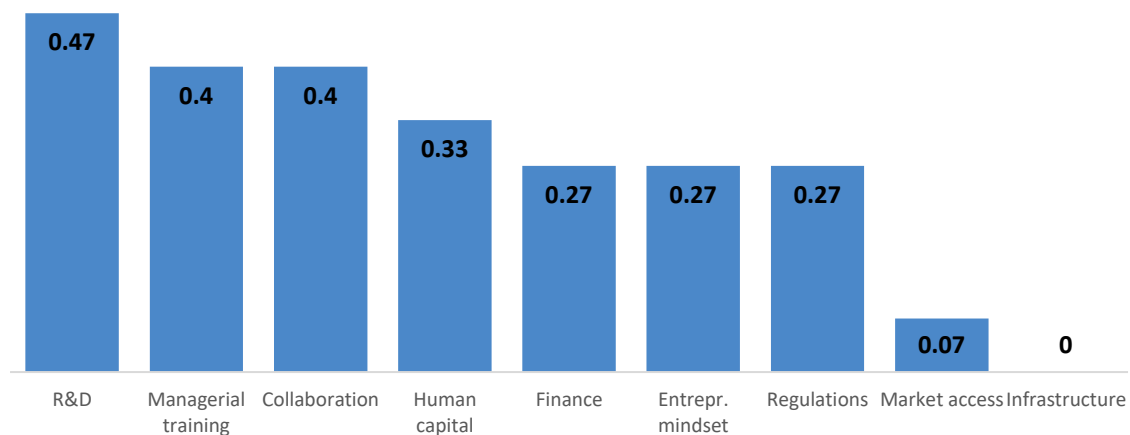
Figure 102. Share of government programs supporting businesses, by stages of business development	Figure 103. Main types of beneficiaries targeted by government programs
 <p>Note: 13 observations</p>	 <p>Note: 15 observations</p>
Figure 104. Main sectors targeted by government programs	Figure 105. Proportion of budget spent in the capital and rest of the country
 <p>Note: 8 observations</p>	 <p>Note: 10 observations</p>
Source: Adapted from (Montenegro, Alfaro de Moran, & Amo, 2021).	

312. Business education for entrepreneurship, collaborative networks and R&D are the most frequent mechanisms of public sector intervention, followed by regulation and financial access mechanisms. More than 70 percent of surveyed programs provide some kind of business education service and 40 percent offer managerial training. Likewise, about half of the programs surveyed provide networking services for entrepreneurs (trade fairs, networking events, associations, digital platforms) and R&D support, indirectly - through financing - or directly carrying out R&D activities, as is the case for the

Entrepreneurship and Innovation

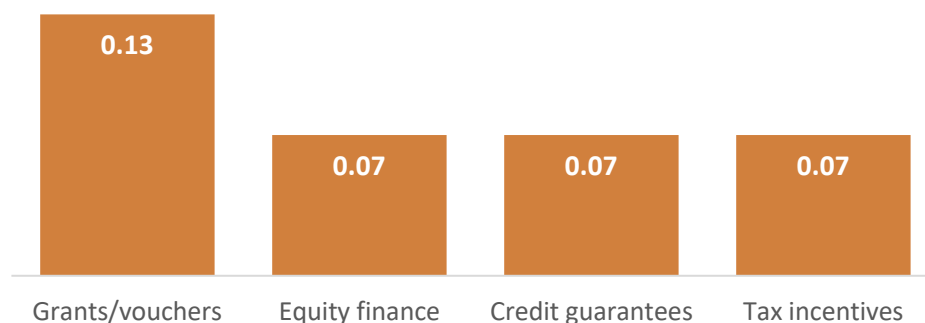
universities and entrepreneurship centers in the sample. Only about a third of the programs surveyed (27 percent) provide direct financial support to their target beneficiaries; usually in the form of grants/vouchers, equity finance and credit guarantees. Other mechanisms such as the use of public procurement to foster innovation, support to increase access to markets or tax incentives are rarely used by public government programs (Figure 107). It is important to note that the effectiveness of government programs aimed at improving the entrepreneurship and innovation ecosystem will be indirectly impacted by efforts to increase firms' access to productive finance and improve the quality of the business regulatory environment. In this sense, the analysis and policy recommendations in this chapter must be understood as complementary to those in chapters 2 and 3.

Figure 106. Main mechanisms used by government programs to promote entrepreneurship and innovation (share of programs)



Note: 15 observations. Each institution selects up to 3 services

Figure 107. Main types of financial support provided by government programs (share of programs).



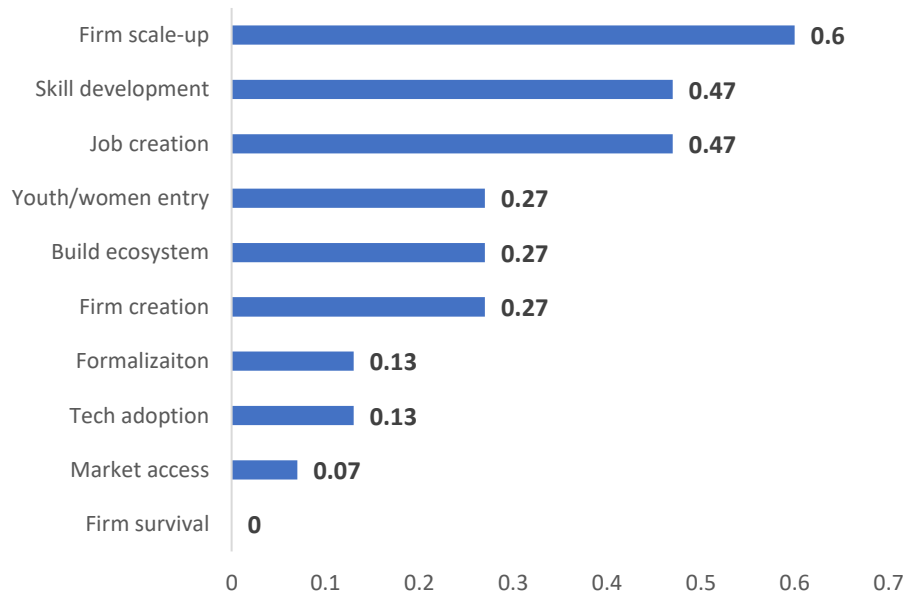
Source: Adapted from (Montenegro, Alfaro de Moran, & Amo, 2021).

313. Government support programs in Guatemala aim mainly at accelerating business development, creating jobs and developing skills. The most common expected outcome of the government programs

Entrepreneurship and Innovation

assessed is to facilitate business scale-up (60 percent of programs).²⁸¹ Likewise, a large proportion of programs focus on job creation and skill development (47 percent of programs). However, just a small number of government programs actively pursue other important outcomes such as supporting women-owned businesses, facilitating business formalization, improving market access and enabling technology adoption. No public sector program is specifically focused on digital technologies or digital transformation (Figure 108).

Figure 108. Main expected outcomes of government support programs (share of programs)

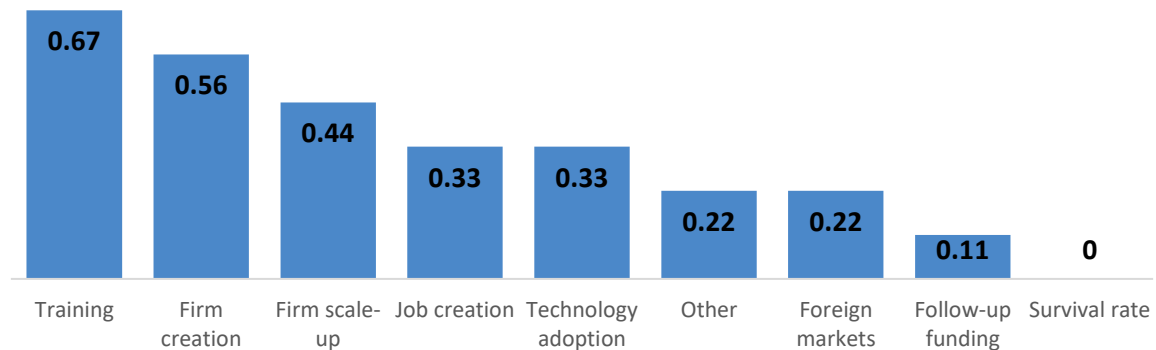


Note: 15 observations.

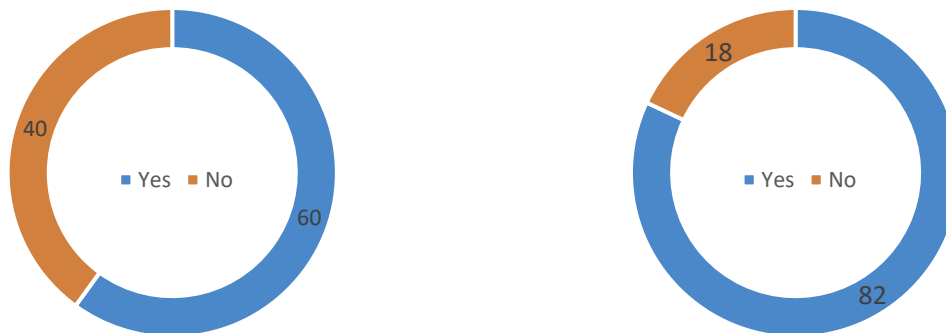
Source: Adapted from (Montenegro, Alfaro de Moran, & Amo, 2021).

314. There is room for improvement in the monitoring and evaluation of government support programs. About 60 percent of the programs assessed have Key Performance Indicators (KPIs) in place to measure their progress. Among the programs that do have KPIs in place, only half review these indicators on a monthly basis. The KPIs employed usually relate to trainings provided, firms created and scaled up, jobs created, and technology adopted (Figure 109). Moreover, only 60 percent of the programs assessed collect feedback from their beneficiaries on a regular basis, although the majority of the programs that do collect feedback use it to adapt their strategies (Figure 110). Only 20 percent of the programs have implemented an impact evaluation.

²⁸¹ Share of programs that identified each selected outcome. Each surveyed program could select more than one expected outcome.

Figure 109. KPIs of assessed programs


Note: 9 observations.

Figure 110. Programs that collect feedback on a regular basis (left) and use it to inform their strategy (right)


Note: 11 observations.

Note: 11 observations.

Source: Adapted from (Montenegro, Alfaro de Moran, & Amo, 2021).

315. There are important gaps and duplications in the government support programs. A few programs, concentrated in MINECO, focus on removing barriers to resource accumulation/allocation by improving access to finance for entrepreneurs. The budgets for these programs appear to be larger than others, with access to finance mechanisms representing roughly half of the total budget for 2019 reported by the surveyed programs.²⁸² Moreover, only MINECO and SENACYT actively seek to promote entrepreneurship and innovation through public procurement, a tool that could also be leveraged by MAGA and MINEDUC. The Draft Innovation Policy being developed by MINECO contemplates the creation of the “Comité de Innovación para la Competitividad de Guatemala” (CINCO); a centralized platform that will facilitate the coordination of policies, programs, and actors of the productive innovation ecosystem. Another possible area of opportunity is the use of tax incentives to promote innovation in firms; currently

²⁸² It is worth noting that not all of the programs surveyed reported their budget (e.g., MAG and MINEDUC programs did not report their budgets for 2019), thus the share of the budget dedicated to improving access to finance is likely to be overrepresented.

Entrepreneurship and Innovation

only SENACYT programs employ this approach.²⁸³ Likewise, few programs actively target disadvantaged communities and focus on women. On the other hand, there appears to be duplication in the promotion of collaborative networks, business education and managerial training. For instance, all of the programs surveyed provide some kind of business education service to their beneficiaries, and most either lead or contribute to business incubation and acceleration. Overall, the programs surveyed support the entrepreneurship ecosystem through demand-side factors (e.g., trainings and business education) and by reducing barriers to accumulation/allocation (e.g., networking and access to finance), but are less focused on supply-side factors (e.g., policy design or the adoption of technologies to improve productive processes). Box provides the example of Colombia’s “ArCo framework”, a good international practice in terms of mapping and articulating public support programs to minimize gaps and duplications.

Box 9. “Articulación para la Competitividad” Program, Colombia

Context. In 2019, the Presidential Council for Competitiveness and Public-Private Management and the National Planning Department carried out a mapping of instruments related to competitiveness, productivity, entrepreneurship and science, technology and innovation. This initial mapping identified 265 active instruments in 23 public entities. Subsequent analyses of these instruments uncovered two substantial challenges in terms of the efficiency and reach of public support programs. On the one hand, an atomization of resources into instruments with little scope, impact, and resources limited the reach of public support. At the same time, a significant duplication of instruments and little communication between public entities undermined the efficiency of the programs, and thus the efficiency of public spending. Based on these findings, and the 2015 “Public Expenditure Analysis in Science, Technology and Innovation” carried out with support of the World Bank, the National Planning Department designed a methodology to identify and define the possibilities for articulating public support programs within each entity and between entities— the “Articulation for Competitiveness” framework (ArCo).

The ArCo framework. “ArCo” seeks to improve the efficiency of the institutional offer of public policy instruments provided by national entities in matters of competitiveness, productivity, entrepreneurship, science, technology and innovation in Colombia. Specifically, ArCo aims to **(i)** improve the functionality, impact and resources of public support instruments; **(ii)** improve the articulation of public support instruments; **(iii)** improve the quality of information that will inform the nation’s investment budget; and **(iv)** make public, by January of each year, the menu of public support programs related to the National System of Competitiveness and Innovation (NSCI). ArCo’s methodology combines elements from public expenditure analysis, ex-ante program evaluation, and user-centered design. ArCo is structured in three main components:

- **Conceptual framework:** defines how to understand and identify challenges for the articulation of public support programs, and proposes a five-step approach to improve articulation (based on end-user needs, objectives of the programs, type of support, and involved public entities).
- **Articulation mechanisms:**
 - (a)** an “Instrument Mapping Form” collects information from public support programs from an end-user perspective, the forms then feed the “Innovamos” portal. Specifically, the forms collect information on: name and type of program, contact information, target users, type of support, main objectives, and information related to the execution of the program;
 - (b)** a “Functionality Test” that assesses the reach and quality of each instrument. The test works as a self-diagnostic tool for public support programs, and comprises 24 indicators in 3 dimensions (design, implementation, and governance).

²⁸³ The Draft Innovation Policy also envisions subsidy programs to support business innovation, as well as collaborative projects between businesses and academia—accompanied by MINECO and other ministries.

- Budget flowcharts: details the activities and times required to implement the "articulation mechanisms" within the budget programming cycle of Colombia's National Budget.

ArCo's offering:

- For policymakers: ArCo provides technical recommendations to key policymakers of the NSCI to optimize the articulation of instruments to promote entrepreneurship, productivity, competitiveness, and innovation—both within and between public entities.
- For the general public: The National Planning Department consolidates information about public support programs for entrepreneurship, productivity, competitiveness, and innovation in a single user-centered web portal (<https://www.innovamos.gov.co/>).

Results (as of 2021). From its 2019 pilot, ArCo has successfully expanded and now covers all the themes of the NSCI, which translates into public support programs in 21 sectors and 78 entities. By 2021 ArCo has applied its functionality test to 80 percent of public support programs related to the NSCI. The "Innovamos" portal has mapped and consolidated information for 614 instruments. Based on the results from the mapping exercise and functionality tests, ArCo has presented 370 recommendations to articulate the NSCI-related instruments and optimize the use of public resources; more than 50 of these recommendations have been implemented. Thanks to ArCo's recommendations, 10 sectors have managed to increase the efficiency in the use of resources (by consolidating redundant programs and redirecting funds); the sectors with the largest efficiency gains are culture, health, social inclusion, and commerce.

Source: Presidential Council for Competitiveness and Public-Private Management and National Planning Department.

316. Fragmented and restricted budgets constrain the capacity of government programs to support the entrepreneurship ecosystem. The government programs that participated in the survey reported a combined budget of USD 8.6 million for 2019 and directly supported 91,483 individuals, firms and cooperatives. Therefore, as a rough estimate, government support to the entrepreneurship ecosystem averaged USD 95 per beneficiary in 2019.²⁸⁴ As a whole, MINECO's programs - which accounted for 60 percent of the total budget reported- reached 8,619 beneficiaries in 2019, providing USD 3,545 per beneficiary.²⁸⁵ However, MINECO's two largest programs only averaged USD 551 per beneficiary.²⁸⁶ Likewise, other programs reported relatively large numbers of beneficiaries but low per capita support. For instance, the Women Economic Empowerment Program reached 78,400 individuals in 2019, averaging USD 24 per capita. Although the total number of beneficiaries is relatively large, low average support per beneficiary suggests that government support programs are not well-positioned to meet the unprecedented firm needs being generated by the COVID-19 crisis.²⁸⁷ In this context, it is important to

²⁸⁴ Not all programs surveyed reported their budgets, which may bias the results of this analysis. Noticeably, MINEDUC and MAG support programs – which reached about 65,000 beneficiaries in 2019- did not report their budgets. To avoid biasing the estimates of budget per beneficiary, these programs were not included in the calculation.

²⁸⁵ Based on information provided by MINEC during the preparation of this report, in 2020 MINEC destined US 1.73 million to promote entrepreneurship and innovation, with 63 percent of all resources coming from FONDEPRO. These funds reached approximately 143 start-ups, 460 firms, and 3,036 individuals.

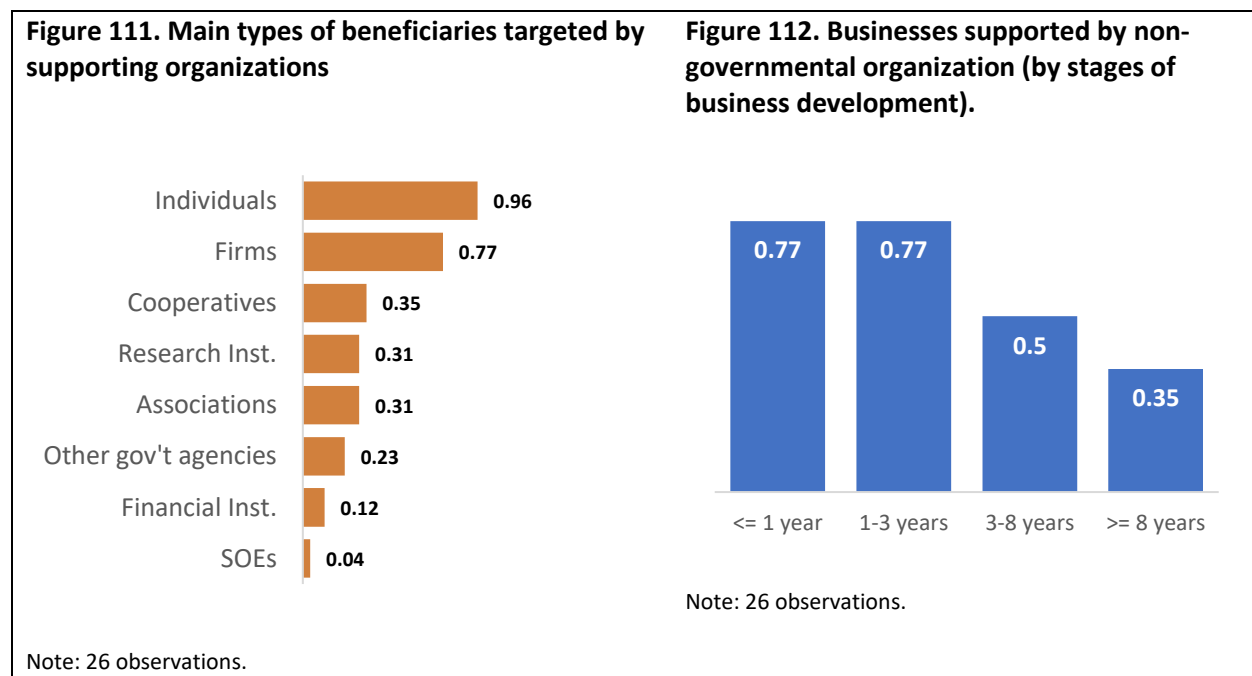
²⁸⁶ These programs are "Promoting Entrepreneurship Culture and Networks" and "Pre-incubation, incubation and acceleration of MSMEs", with a combined budget of USD 4.53 million in 2019 reached 8,500 beneficiaries (98 percent of reported direct beneficiaries for the period).

²⁸⁷ Recently, MINECO requested a budget increase from Congress for entrepreneurship and innovation-related activities and programs. However, given the tight budgetary constraints faced by the Government due to the impacts of COVID-19, the request

Entrepreneurship and Innovation

ensure that public support prioritizes firms with a clear commitment to self-improvement and an intent to grow.²⁸⁸

317. Multiple non-governmental organizations and PPPs support the entrepreneurship ecosystem in Guatemala, but the scale of private sector support initiatives is relatively small. Supporting institutions include research and educational organizations (some of which provide incubation and acceleration services), dedicated incubators and accelerators, advisory services providers, entrepreneurship centers and research centers.²⁸⁹ As in the case of government programs, most supporting organizations focus their services on individual entrepreneurs and businesses in early stages of development, and most programs do not target specific sectors (see Figure 111-Figure 113).²⁹⁰ The total reported budget of these organizations stands at US\$ 4.2 million, about half of the budget reported by government programs. As shown in Figure 114 supporting organizations provided services to 9,756 individuals, 8,043 firms and 4,228 cooperatives in 2019, reaching fewer individuals than public programs (only 6 percent of public programs' beneficiaries) but more firms (240 percent) and cooperatives (107 percent).

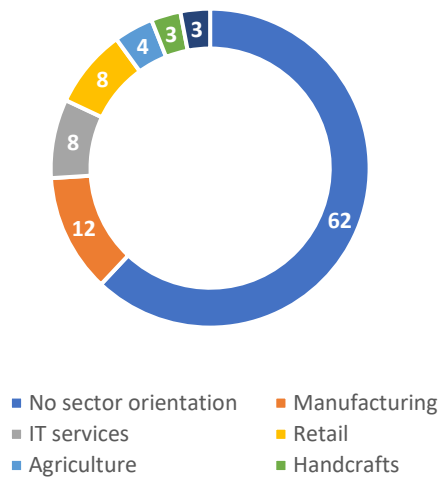


has not been approved. (Based on information provided in technical discussions with MINECO during the preparation of the report).

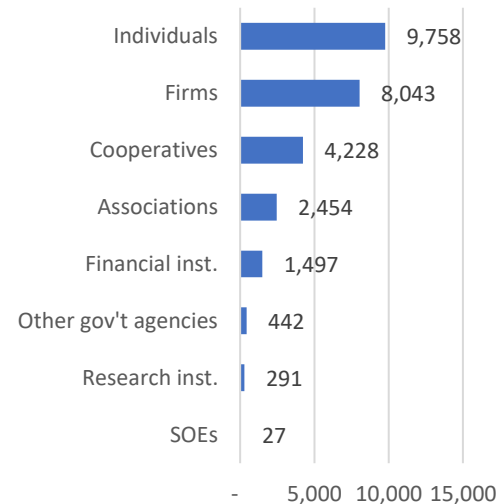
²⁸⁸ Prioritizing firms with strong growth intent does not mean doing nothing for the rest of MSMEs. For instance, general business environment improvements and provision of public goods will remain essential for the development of a dynamic entrepreneurship and innovation ecosystem. Rather, it means providing base services for all firms but filtering out most firms from more substantial support. See (World Bank, 2021h, forthcoming).

²⁸⁹ For a description of the interviewed institutions see (Montenegro, Alfaro de Moran, & Amo, 2021).

²⁹⁰ Among organizations that do target specific sectors, the three more commonly targeted sectors are manufacturing (12 percent), IT services (8 percent) and retail (8 percent).

Figure 113. Main sectors targeted by supporting organizations


Note: 26 observations.

Figure 114. Total beneficiaries by target beneficiaries in 2019, supporting organizations


Note: 48 observations.

Source: Adapted from (Montenegro, Alfaro de Moran, & Amo, 2021).

318. Supporting institutions provide additional services to entrepreneurs, but notable gaps in the supply pillar of the entrepreneurship ecosystem remain. Supporting organizations focus their activities on the demand side of the entrepreneurial ecosystem, mostly providing business education and managerial training. They also foster collaboration and networking activities in the barrier side and contribute to knowledge capital accumulation and access to equipment in the supply side of the ecosystem. As shown in Table 13 and Table 14, half of the programs mapped provide technology adoption services, and about 10 programs support firms through co-working spaces, incubation and acceleration programs. However, few organizations provide support to increase firms' access to finance; only six organizations (24 percent) support businesses through grants, equity finance and loans. Although many of the services provided by non-governmental institutions overlap with government programs' support areas, this is unlikely to be a constraint since total beneficiary numbers for all non-governmental programs are low and demand for government support likely surpasses supply. It is worth noting that five out of the 25 programs mapped implement a holistic approach to entrepreneurship, these programs support access to finance through grants, private equity and credit guarantees, while also providing incubation and scale up services and promoting collaborative networking among their beneficiaries.

Table 13. Main entrepreneurship and innovation services provided by government support programs

Institution	Name of the Program	Access to Finance				Technology Adoption R&D			Business Education	Collaborative networks and markets	Tax incentives	Public procurement	Policy	Focus on Women	Budget 2019 USD
		Grants and Vouchers	Equity finance	Credit guarantees	Loans and credit	Technology Adoption Services	Co-working space, incubators and accelerators	Technology parks, research infrastructure							
BANRURAL	Micro, Small and Medium Enterprise Program														91,969,875
MINECO	Promoting Entrepreneurship Culture and Networks														2,269,780
	Pre-incubación, Incubación y Aceleración de emprendimientos a MIPYMES														2,269,780
	Proyectos de Competitividad, Inversión y Clima de Negocios														425,551
	Programa PROMIPYME														
	Programa MIPYMES Proveedoras del Estado														n/a
	Innovation and Associativity for Handcrafts														n/a
MAG	Strengthening Productivity and Markets														n/a
MINED	Capacity building for Entrepreneurship (Basicos Middle School Level)														n/a
SENACYT	EMPRENDE CTI y TRANSIFIERE CTI														1,454,475
SECObras Sociales	Women Economic Empowerment														1,899,103
USAC	Faculty of Engineering -Entrepreneurship Center for Engineers														16,213
	General Research Center -Reseach and Industrial Development														90,791
	Faculty of Ecomics - Pre-Incubación de Emprendedores, Coaching para emprendedores (in 2021 this initiative was no longer active)														16,213
CONJUVE	Banco Nacional de Oportunidades (this program no longer exists. It was replaced by the "Emprendi2" program, that has similar priorities and reach)														n/a
INTECAP	INTECAP (public - private)														n/a
Municipality of Guatemala	Entpreneurship Center														116,732
Total Budgets of Public Policy Instruments that support the Entrepreneurship Ecosystem (does not include BANRURAL resources)															8,558,636

Table 14. Main entrepreneurship and innovation services provided by supporting organizations, 2019

Organization	Access to Finance				Technology Adoption R&D			Business Education	Collaborative networks and markets	Tax incentives	Public procurement	Policy	Focus on Women	Budget 2019 USD
	Grants and Vouchers	Equity finance	Credit guarantees	Loans and credit	Technology Adoption Services	Co-working space, incubators and accelerators	Technology parks, research infrastructure							
LEGALSA / Startups LEGALSA														\$ 28,015.56
Campus Tecnológico S.A.														\$ 151,311.40
Fundesa														\$ 64,850.84
Red Nacional de Grupos Gestores														\$ 501,028.02
Centro de Estudio y Cooperación Internacional, CECI														\$ 70,000.00
Universidad Rafael Landívar														\$ -
How Fun Studio														\$ -
Progreso X S.A.														\$ 648,508.43
Multiverse														\$ 303,501.95
Technoserve														\$ 131,258.11
Aspen Network of Development Entrepreneurs														\$ 172,774.32
Swisscontact														\$ 311,284.05
Bs Legalis														\$ 2,594.03
Asociación para la inversión, innovación y emprendimiento en Guatemala														\$ 16,861.22
Cámara de Industria de Guatemala														\$ 19,727.63
PRODETUR - CENTRO DE DESARROLLO EMPRESARIAL E INNOVACION, CDEIN														\$ 429,976.65
Walt Whitman American Center														\$ 5,188.07
Fundación Vital Voices														\$ 64,850.84
Centro de Emprendimiento Las Buganvillas														\$ 16.21
Guatetrending														\$ 3,242.54
Asociación Guatemalteca de Exportadores														\$ 46,692.61
Universidad del Valle de Guatemala														\$ 38,910.51
Impacto Empresarial Consultores Asociados														\$ 123,216.60
Centro de Emprendimiento Kirzner														\$ 500,000.00
Heifer International Guatemala														\$ 428,015.56
Banco de los Trabajadores														\$ 194,552.53
Total Budgets Supporting Instruments (Private, NGOs, PPP)														\$ 4,256,377.68

6.5. Entrepreneurship and innovation suggested action plan

319. Innovation and entrepreneurship are critical for firms to adapt (to survive) and take advantage of opportunities in the post-COVID economy. Therefore, the action plan emphasizes support measures that will facilitate firm adaptations, particularly in the short term. The action plan does *not* cover selected areas of the entrepreneurship ecosystem since they are outside the scope of the analysis and/or covered elsewhere. Supply factors such as infrastructure and human capital are not included. Digital infrastructure (e.g. on expanding broadband access) is covered in separate World Bank analytical work for the LAC region. Human capital issues related to the secondary, tertiary, and vocational education systems and their links with the needs of firms and entrepreneurs would merit a separate analysis. Under the barriers pillar, business regulatory environment issues (including digital readiness) are covered in Chapter 2, and broader access to finance issues (beyond specific programs to support innovative entrepreneurs) are covered in Chapter 3.

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
A. Ecosystem governance	<p>Strengthen coordination between entrepreneurship and innovation ecosystem actors. PRIORITY</p> <p>This includes coordination within the government (e.g., MINECO, SENACYT, MINEDUC), as well as with the private sector (innovation and entrepreneurship support industry, financial sector) and academia. If needed, an Innovation and Entrepreneurship Coordination Council could be established. The Council (or equivalent body) should be designed as a mechanism to guide innovation, research and development to the country's productive needs (following the guidelines of a National Innovation Policy). Likewise, the Council should contribute to channeling adequate resources to the highest priorities. For the Council to be successful, strong, high-level political commitment would be needed.²⁹¹ The Council could also review the mix of government support programs with</p>	MINECO with SENACYT, MINEDUC, and others	MT	None; decree if establish Council	None

²⁹¹ See the example of ArCo in Colombia (Box), which is driven by the National Planning Department.

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	<p>respect to scale, effectiveness, and complementarities/ overlaps (with the support of the M&E unit recommended below).²⁹²</p> <p>Consolidate information on support programs, with a focus on the end-user.²⁹³ PRIORITY</p> <p>This could include a website that lists all available support programs across government agencies (and NGOs and the private sector, to the extent possible), with information on eligibility, calls for proposals, etc. In the medium term, considering consolidating support program application processes on a single site. (The “<i>Articulación para la Competitividad</i>” program in Colombia provides a good example.) This platform can be expanded through modules (possibly for the exclusive use of the public sector) in which information on beneficiaries, budgets, objectives, etc., of support programs for entrepreneurship and innovation is consolidated, and allows agile exchange of information between ecosystem actors.</p> <p>Strengthen monitoring and evaluation. A unit in charge of M&E could be established to ensure that all firm support programs have robust M&E mechanisms, as well as impact evaluations for the larger programs (including technical education and trainings provided by INTECAP). M&E results should then be used to adjust programs design. Alternatively, consider strengthening the technical capacities of each program, provide budget for M&E and establish evaluation requirements. Incentives could be needed for robust M&E functions to be implemented, as well as incentives for support programs to be adjusted based on the evaluation results.</p>	<p>MINECO and other ecosystem actors</p> <p>MINECO</p>	<p>ST, MT</p> <p>MT</p>	<p>None</p> <p>None</p>	<p>Small</p> <p>Small</p>

²⁹² MINECO’s Draft Innovation Policy contemplates the creation of a centralized coordination platform (CINCO) to improve the governance of the productive innovation ecosystem. It is worth exploring the possibility that CINCO plays a similar role coordinating actors and public support programs related to the entrepreneurship ecosystem.

²⁹³ MINECO’s Draft Innovation Policy proposes the creation of a similar platform to facilitate transactions and communication between institutions of the productive innovation ecosystem. It is worth exploring the possibility of expanding such platform to relevant actors from the entrepreneurship ecosystem.

Entrepreneurship and Innovation

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	Publicize any new support initiatives aggressively to reach target populations, e.g. crisis-affected firms, priority sectors and value chains, young high-growth potential firms, digital services firms.	MINECO and other agencies	ST	None	None
B. Innovation	Develop and implement a national innovation policy. PRIORITY Guatemala requires an innovation policy that generates a medium and long-term strategic vision for innovation in the country. This document should analyze the binding restrictions for the development, adaptation and implementation of new ideas, technologies and production processes in different segments of the innovation ecosystem. The policy should present a holistic vision of innovation, contemplating basic research, technology development (products and processes), technology adoption, etc. The document should establish a basis for the governance of the innovation ecosystem, guiding the actions of the various actors within the public sector and facilitating coordination amongst them. ²⁹⁴	MINECO	MT	None. As a result of this action, the need for legal changes may arise.	Small
	Identify and finance instruments to support innovation and R&D, based on good international practices, e.g., competitive grants. ²⁹⁵ The instruments may require state and multi-year funding sources (currently non-existent). PRIORITY	MINECO	MT	None	Small or Large
	Study the feasibility and desirability of creating Public Research Organizations (PROs) to develop and transfer industrial technologies. The study should identify the public research and technology transfer model that is most suited to Guatemala's context. It should assess the potential for impactful research and technological diffusion given current levels of human and knowledge capital, firm capabilities, regulatory frameworks, and	MINECO / SENACYT	ST	None	Small

²⁹⁴ As mentioned earlier in this document, MINECO has recently moved in this direction. MINECO is currently formulating the Productive Innovation Policy for the Competitiveness of Guatemala, a document that will serve as the basis for the design and implementation of policies for innovation in the country, with an emphasis on productive innovation.

²⁹⁵ See (Cirera, Frías, Hill, & Yanchao, 2020) for details on possible instruments and when and how to apply them.

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	<p>other variables. Ideally, the study would identify and assess the feasibility of: (i) policy and regulatory changes necessary for PROs to be successful; (ii) financing mechanisms that ensure the sustainability of public research; (iii) communication and coordination mechanisms that would enable the private sector to participate in and take advantage of public research; and (iv) the costs and benefits, or economic efficiency, of PROs vis-à-vis other models for knowledge creation and diffusion (e.g., public-private research consortia, collaboration with international researchers, or private-led models). Guatemala has experience in this field through the Central American Institute for Industrial Research and Technology (ICAITI) between 1995-1998. In this sense, the study can evaluate the technical feasibility, costs, and possible benefits of implementing a model similar to that of ICAITI.</p>				
	<p>Study existing academic research activity to identify marketable knowledge. A first step to understand the possibilities to strengthen the linkages between firms and knowledge providers is to identify marketable knowledge sitting within research institutions. This could be done through a scan of existing research activities to identify those with commercial potential in the present, and those with potential in 3-5 years. Likewise, the study could identify institutions, teams and individuals within the research sector that are most oriented to working with the industry. A first assessment could focus on research related to the sectors that have been prioritized by the government. Based on the 'high-potential' research and technologies identified by this study, follow up studies could assess opportunities, needs, and models to commercialize</p>	MINECO/ SENACYT	ST	None	Small

Entrepreneurship and Innovation

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	research and development activities (and outputs) from local universities. ²⁹⁶				
	Strengthen technology transfer services from universities or research institutes to the firms. This action could entail a thorough diagnostic of legal constraints for technology transfer between universities and local firms, trainings for government officials in the protection and transfer of intellectual assets, and capacity building for technology transfer and licensing offices. ²⁹⁷	MINECO, MINEDUC, universities	MT	None	Small
C. Capacities for entrepreneurship and business development	Large-scale business training to micro and small firms for crisis recovery, adaptation, and digitization, with a focus on female entrepreneurs. PRIORITY Although several existing programs include a training dimension, they appear to lack the scale necessary to serve the large scale of crisis-impacted firms. Training via an online platform could cover resilience, personal initiative, costs and prices, marketing/ e-commerce, and business model transformation and innovation. ²⁹⁸	MINECO and INTECAP	ST	None	Small

²⁹⁶ Technology transfer can be defined as the movement of know-how, skills via people, technical knowledge, methods or technology from one organizational setting to another (World Bank, 2020g). Commercialization of R&D and technology is one of the channels through which technology transfer occurs. Usually, commercialization implies transforming academic R&D into applied industrial processes or products that can be easily adopted by firms. It also implies providing legal security for the inventor (i.e., patent registry) and setting up a marketing strategy for the research product (e.g., licensing, selling the rights of the research, or setting spin-off companies). (Von Zedtwitz & Gassmann, 2002) (Maktabi & Pazhakh, 2010) and (Roberts & Malonet, 1996) provide further detail and international examples of the process of research commercialization.

²⁹⁷ See, for instance, the Technology Transfer Office of CORFO, in Chile.

²⁹⁸ The training could be implemented at a large scale through a combination of online training, group learning, and individual mentoring. It could be provided entirely via smart phone, e.g., on a Facebook platform, to achieve scale at low cost and avoid face-to-face interactions (if needed given COVID-related social distancing). The training is broadly applicable for micro and small firms, and particularly well-suited for female-owned microenterprises. Possible modules include:

- Resilience: Training on crisis response measures and safe reopening.
- Personal initiative: Soft skills training to promote proactive, self-starting, and persistent entrepreneurial behavior.

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	Consider implementing a program to incentivize and/or support domestic MSMEs to adopt international quality standards. Based on global trends for strategic exports, support the adoption of technologies, productive and managerial processes that would allow local producers in strategic industries to upgrade the quality of their products and compete internationally. This program could target (at least in a first phase) industries and activities with high potential for upgrading and GVC repositioning (see Chapter 5).	MINECO / CONAMYPE	MT	None	Small
	Strengthen and expand the offer of technical education and trainings through INTECAP, prioritizing skills and knowledge relevant for upgrading value chain participation in high-potential industries. For instance, technical courses that cover environmentally conscious woods products, identify gaps in the local value chain, and provide theoretical and practical training in key skills (e.g., design of fashion-oriented and sustainable veneers and furniture).	MINECO and INTECAP	MT	None	Small
	Expand technology extension services. Begin by investigating the market for technology in Guatemala, and the existing offer of technology extension services provided by supporting organizations. Understand their degree of effectiveness, scale, and alignment with international good practices, e.g., on managerial skills. Then either improve / scale-up existing services or create a new program.	MINECO with others	ST, MT	None	Depends

-
- Costs and prices: Learn how to calculate costs and fix prices to develop a new model or launch a new business that responds to evolving customers' needs.
 - Marketing / e-commerce: Training around digital marketing skills and social media, as well as selling products online and developing an e-commerce store.
 - Business model transformation and innovation: To respond to new customers' needs and the new reality after COVID-19 (virtual, digital products and services).

Entrepreneurship and Innovation

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
D. Business adaptation and tech adoption	<p>New grant and voucher programs could be developed, for instance:</p> <ul style="list-style-type: none"> • Small grants/vouchers for digitization, e-commerce adoption • Innovation / technology adoption grants to transform production to meet new post-COVID-19 demands. PRIORITY <p>Grant programs could be combined with business advisory services to maximize impact. Grants could target industries and activities with potential for upgrading and GVC repositioning (see Chapter 5). The grants could be linked to performance indicators of the companies, thus helping ensure that public funds finance sustainable and impactful activities.</p>	MINECO	ST/MT	None	Large
	<p>Link local entrepreneurs to the development of digital solutions to improve the efficiency, quality and transparency of services provided by the national and subnational governments (Gov-tech). This can be attained by identifying, consolidating and linking the digital improvement needs of the government (at different levels) with technology laboratories, accelerators, local technology providers, and IT freelance experts. (The focus should be on raising awareness about business opportunities for local providers and creating potential linkages with the government, rather than necessarily relaxing procurement standards.)</p>	MINECO	MT	None	Small
E. Entrepreneurship	<p>Develop a grant program for high potential start-ups, with special attention to female entrepreneurship. PRIORITY</p> <p>Subsidies could be directed to high-potential ventures (e.g., high innovation, productivity, and/or growth potential). Likewise, the subsidies could be tied to a performance measure to be defined by MINECO (e.g., profitability) that points to the sustainability of the enterprises that receive public resources. This would help high-potential entrepreneurs take advantage of post-COVID crisis opportunities and combat Guatemala’s relatively low levels of new firm entry, given that most job creation comes from young firms. Measures could be included to boost female</p>	MINECO / CONAMYPE	MT	None	Small

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	<p>participation to overcome gender gaps (e.g., females tend to have smaller networks, are more likely to be entrepreneurs out of necessity than opportunity, and are less likely to own digital and high-tech firms). To provide support measures for female entrepreneurship, partnerships with supporting organizations offering related services could be investigated. Start-up grants could also target industries and activities with potential for upgrading and GVC repositioning (see Chapter 5)</p>				
	<p>Review existing incubation and acceleration programs to see if there is substantial unserved demand. If so, investigate partnership schemes with the private sector and/or academia to create new programs.</p>	MINECO	ST	None	Depends
	<p>Design and implement periodic surveys to entrepreneurs and established SMEs (demand) and public and private services of the entrepreneurial ecosystem (supply), identifying respondents by gender, urban-rural condition, ethnicity, and other variables related to vulnerable groups in Guatemala. These surveys should be designed to capture differences in trends between entrepreneurs and established businesses according to the gender of the entrepreneur or manager. On the demand side, some of the variables to be measured are productivity, profitability, sales, employment, access to services, access to support programs, technology adoption, innovation in processes, among others. On the supply side, identify the users of government support services, incubators, accelerators, etc.</p>	MINECO	MT	None	Small
	<p>Consider applying hidden bias assessments to public sector entrepreneurship (and innovation) support programs. For example, the design and implementation of randomized control trials could be considered using the “Mystery Client” method (or another method to anonymize entrepreneurs from treatment and control groups), in order to assess biases in access to services for the development of business skills. Similarly, the public sector could promote the use of these instruments by the</p>	MINECO	ST/MT	None	Small

Entrepreneurship and Innovation

Reform	Action	Responsible entity	Timing: ST (<1 year), MT (>1 year)	Required legal change	Fiscal cost (ST): none, small, large
	private sector, particularly among banks, financial cooperatives, and business incubators.				
F. Local ecosystems	Study how to further strengthen local high-potential entrepreneurship and innovation ecosystems , e.g., digital technologies in Guatemala, and high-tech manufacturing in Guatemala and Escuintla. Aside from digital and high-tech manufacturing local ecosystems, traditional ecosystems, such as agroindustry and light manufacturing, with potential for value chain upgrading and repositioning (as identified in Chapter 5) should be assessed. Strengthening local entrepreneurship and innovation ecosystems could involve creating technology centers to offer extension services, laboratories for testing and prototyping, etc. Developing incubators or accelerators in selected municipalities could also be an option.	MINECO	MT	None	Depends
G. Linkages with knowledge providers	Create alliances with local universities to identify and study high-potential industries and products based on Guatemala's current productive capabilities. Identify critical skills and knowledge gaps based on the target (ideal) value chain for prioritized products. These studies could then guide applied research and development efforts (productive innovation) as well as trainings and technical education programs.	MINECO and local universities and think tanks	MT	None	Small
	Consider developing a small voucher program for firms to purchase knowledge services, e.g., tech advisory, mentoring, market research, assistance for patenting or licensing, testing.	MINECO	MT	None	Small
	Consider developing a collaborative grants program for joint R&D projects between firms and research/technology institutes or universities. ²⁹⁹	MINECO	MT	None	Small or large

Note: Potential higher priority reforms, based on feasibility of implementation and likely impact, can be identified by the marker

PRIORITY

²⁹⁹ Recently, MINECO launched a joint R&D pilot project on Meliponini bee's honey. The project integrates governmental organizations, local universities and the international cooperation.

Annex 1. Full list of growth and jobs subjects and report coverage

Subject	Covered in report / rationale for not including
LABOR DEMAND: FIRMS	
Firm capabilities and behavior	
• Innovation	Yes
• Technology adoption	Yes
• Entrepreneurship	Yes
• Exporting	Part of GVC chapter. Export diversification also highlighted in <i>Unleashing C.A.s Growth Potential</i>
• Forward/backward linkages	Yes (FDI chapter)
Enabling environment	
• Investment policy and promotion	Yes
• Access to finance	Yes
• Regulatory environment / institutions	Yes. Corruption not covered directly but highlighted in <i>Unleashing C.A.s Growth Potential</i>
• Standards and quality infrastructure	No. Could be subject for future analysis
• Trade policies	No. Could be subject for future analysis
• Trade facilitation / logistics	Yes
• Central America regional integration	Partially re. trade facilitation. See also <i>Unleashing C.A.s Growth Potential</i> and forthcoming Central America Competitiveness report
• Physical infrastructure (road/air/sea connectivity, ICT, electricity)	A few issues highlighted under trade facilitation in business environment chapter, but largely outside of scope.
• Macro and fiscal stability and sustainability	No, outside of scope
• Crime and security	No. See <i>Unleashing C.A.s Growth Potential</i>
LABOR SUPPLY: WORKERS	
Skills	No. See <i>Jobs Diagnostic</i> and <i>Unleashing C.A.s Growth Potential</i>
Labor participation, including female, youth, rural population, migration	No; see <i>Jobs Diagnostic</i>
Labor market regulations, including hiring, firing, and other regulations; non-wage labor costs	No; see <i>Jobs Diagnostic</i>
Health	No; beyond scope
SECTORAL POLICIES	
• Manufacturing	Some coverage in GVCs chapter
• Tourism	Some coverage in GVCs chapter
• ICT	Digital services highlighted in Innovation chapter. See also forthcoming <i>Digital Dashboard</i> .
• Agriculture	Some coverage in GVCs chapter

Annex 2. Selection of aspirational and structural peers

Structural comparator countries were generated via an automated comparator selection tool which finds similar countries along the following dimensions: GDP per capita, total population, natural resource rents (percent of GDP), Human Capital Index, Economic Complexity index, and industry employment share.

Aspirational countries were selected based on the indication of a GDP/capita at least double the value of Guatemala. It is assumed that for aspirational purposes, the country's benchmarks are economies that are at least twice as rich.

The following list includes the structural, aspirational, and regional comparator countries:

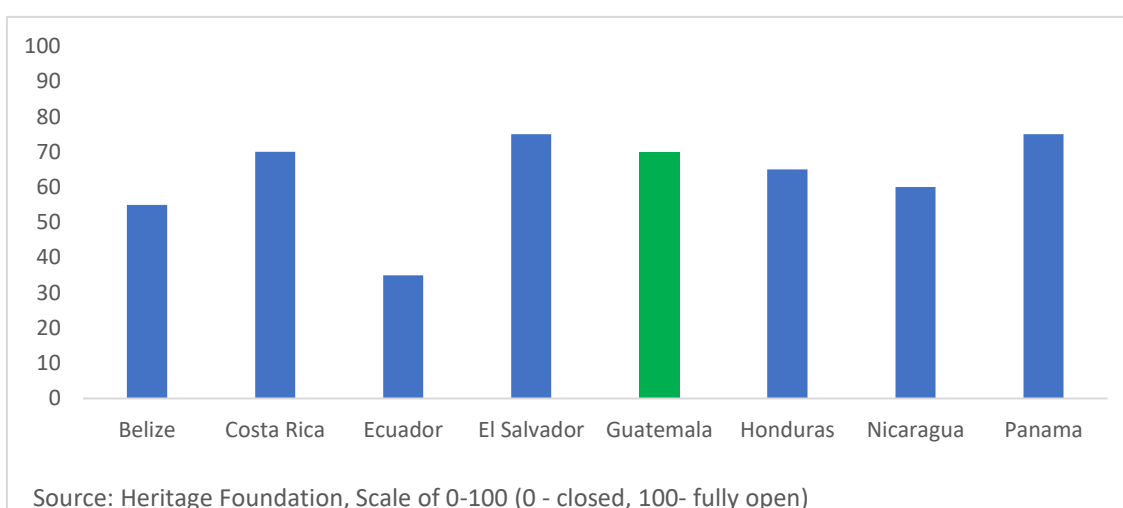
- **Structural peers:** Bolivia, El Salvador, Honduras, Nicaragua, Paraguay and Senegal.
- **Aspirational peers:** Albania, Chile, Jordan, Latvia, Lithuania, Panama and Peru

Annex 3. Key laws and regulations governing investment in Guatemala

Entry and Establishment

Guatemala's legal regime for FDI is open, with a few sector specific restrictions. Guatemala is among the most open economies in Central America (Figure 115). Foreign investors can establish, acquire, and dispose freely of virtually any type of business interest. There is no minimum investment requirement for foreign investors, and there are no equity restrictions or a percentage limitation with respect to acquisition and control of investment. Further, there are no joint venture requirements to invest in the country. As a result, foreign investors may own 100 percent of a domestic enterprise.

Figure 115. Index of Investment Freedom



A few sector-specific entry restrictions aim to protect domestic enterprises. The Constitution of Guatemala (Article 126) provides that exploitation and renewal of forestry resources will be exclusively available to Guatemalan persons, individual or juridical. Under Article 213 of the Commercial Code, certain professional services may only be supplied by professionals with locally recognized academic credentials.³⁰⁰ Previously, foreign investors in the insurance sector could not establish branch offices. In 2010, the Guatemalan Congress approved a new insurance law, which strengthened supervision of the insurance sector and allowed foreign insurance companies to open branches. The Foreign Investment Law removed the foreign equity restrictions in the transportation sector in 2004. Article 19 of the law amended the transportation law to allow 100 percent foreign ownership in domestic airlines and ground-transport companies. Prior to this amendment, foreign investors were only allowed to own 49 percent equity in companies in the transportation sector. Foreign investors in the tourism sector report cumbersome government approval requirements that in some cases are common to domestic investors. Prior approval from the Instituto Guatemalteco de Turismo (INGUAT) is required for investment in tourism sector, including building hotels and marinas and setting-up travel agencies.

There are some limitations on land ownership. The Constitution of Guatemala guarantees the right to own, enjoy and dispose of private property (Article 39). However, there are prohibitions on foreigners to

³⁰⁰ 2019 Investment Climate Statements: Guatemala

Annexes

own land immediately adjacent to rivers, oceans, and international borders.³⁰¹ There are two exceptions to this rule: 1) if the land is in urban areas, and 2) if the land was acquired prior to March 1956. Sale of land by foreigners in the referred exclusions needs to be authorized by the Government.

The Foreign Investment Law prohibits imposing performance requirements on the entry and operation of foreign investment. However, the Labor Code imposes employment restrictions. According to Article 7 of the law, restrictions such as forced technology transfer or domestic employment generation requirements are not allowed. But contrary to this provision, the Labor Code³⁰² requires that a least 90 percent of the total employees be Guatemalan, and these must collectively earn at least 85 percent of the total salaries paid by the employer. While it is not a condition of entry, the requirement is an impediment to operation for foreign investors, especially, given deficiencies in the availability of local skilled workers.

Obtaining work permits for foreigners in Guatemala is cumbersome, costly and time consuming. The legal framework applicable to the entry of expatriate workers discourages the attraction and retention of skills to the Guatemalan economy. Only investors with a minimum investment of USD 50,000 can apply for a temporary residence permit. All other investors must enter the country using a business visa which is valid for 180 days and is renewable once after the expiration of its original duration.

Treatment of Investors

Non-Discrimination

a. National Treatment (NT)

The Foreign Investment Law provides protection against discrimination of investors (Article 3). The law guarantees that foreign investors shall be granted the same treatment as Guatemalan investors in exercising economic activities in the country.

b. Most-Favored Nation Treatment (MFN)

Article 3 of the Foreign Investment Law provides most-favored nation treatment guarantee to investors. The MFN treatment standard means that investments or investors in Guatemala receive the same treatment irrespective of their country of origin or nationality. The MFN standard guarantees a level playing field among all foreign investors. However, certain exceptions apply. The law stipulates that if a foreign investor or his investment receives a certain treatment as a result of the obligations derived from international treaties or agreements then such treatment may not be available to other investors from a non-treaty member country.

Expropriation

Expropriation or nationalization of foreign investment in Guatemala is prohibited, except under exceptional circumstances. The Constitution of Guatemala (Article 39, as noted above) and Article 5 of the FIL allows foreign investors to own, control, use and dispose of private property. They also provide guarantees against expropriation except in exceptional circumstances involving national interest, social interest or social benefit. Article 40 of the Constitution and Article 6 of the FIL provide that expropriation can be carried out only in a non-discriminatory manner, in accordance with due process of the law, upon payment of prior and effective compensation. There have been no expropriations in Guatemala since the 1940s.

³⁰¹ Doing Business in Guatemala, 2019, AmCham

³⁰² Código de Trabajo, Decree 1441

Annexes

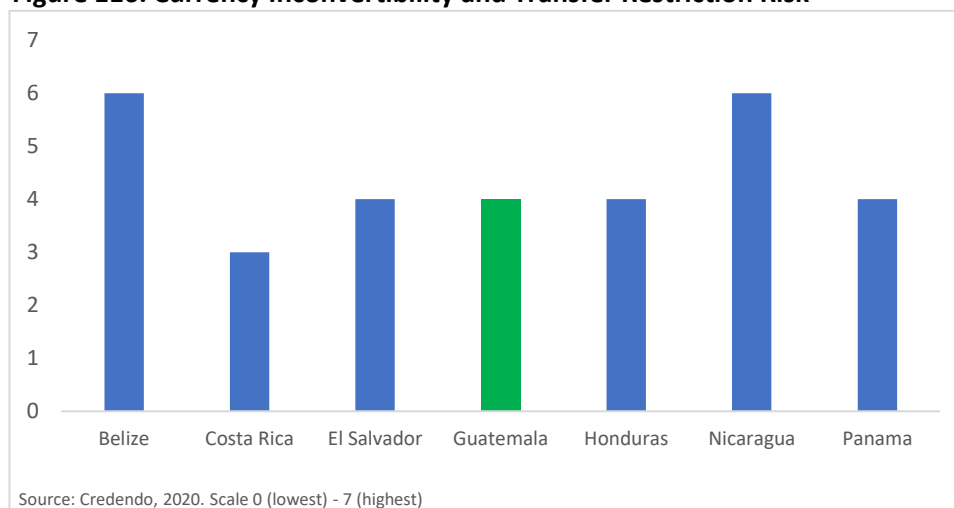
Protection against indirect expropriation in the Foreign Investment Law conforms to internationally recognized good practice. Article 6 of the FIL goes beyond the protection provided in the Constitution and the Expropriation Law by according protection against indirect expropriation. As a result, the FIL extends protection against those measures that may have an effect equivalent to expropriation or are tantamount to expropriation.

Currency Convertibility and Transfer of Funds

There are no restrictions on converting or transferring funds associated with an investment. The “Free Negotiation of Foreign Currency Act” of 2001 provides foreign investors free access to the purchase and sale of available foreign currency, and to the free convertibility of currency. Article 8 of the FIL also guarantees currency convertibility and transfer of funds.

There are no legal constraints or time limitations on transferring payments or other proceeds from an investment. Guatemala poses low to moderate currency inconvertibility and transfer restriction risk (Figure 116). There are no reports regarding any de facto constraints to capital flows or unusual delays to transfer funds abroad. In 2010, to curb the risks of money laundering and terrorism financing, the Government of Guatemala approved a regulation to establish limits for cash transactions of foreign currency. According to this regulation, all transactions over USD 3000 must be supported by a sworn statement of the depositor regarding its legitimacy.³⁰³

Figure 116. Currency Inconvertibility and Transfer Restriction Risk³⁰⁴



Source: Credendo, 2020 www.credendo.com/country-risk

Dispute Resolution

The Foreign Investment Law does not guarantee the option to settle disputes between investors and the state through alternative dispute resolution mechanisms. According to the Article 11 of the FIL, unless agreed to by the parties under an international treaty or agreement, foreign investors do not have the option to submit disputes to international arbitration or other alternative dispute resolution

³⁰³ 2019 Investment Climate Statements: Guatemala, <https://www.state.gov/reports/2019-investment-climate-statements/guatemala/>

³⁰⁴ The information presented in figure 116 on currency and transfer restriction risk has been extracted from Credendo (<https://www.credendo.com/country-risk>), a European credit insurance group that is active in all segments of trade credit and political risk insurance worldwide. The currency inconvertibility and transfer restriction risk refers to the inability to convert and transfer out of the host country any funds related to the investment.

Annexes

mechanisms. In the absence of a specific provision guaranteeing settlement of disputes through alternative dispute resolution mechanisms, investors in Guatemala are forced to make their case against the government either through domestic arbitrations or domestic courts.

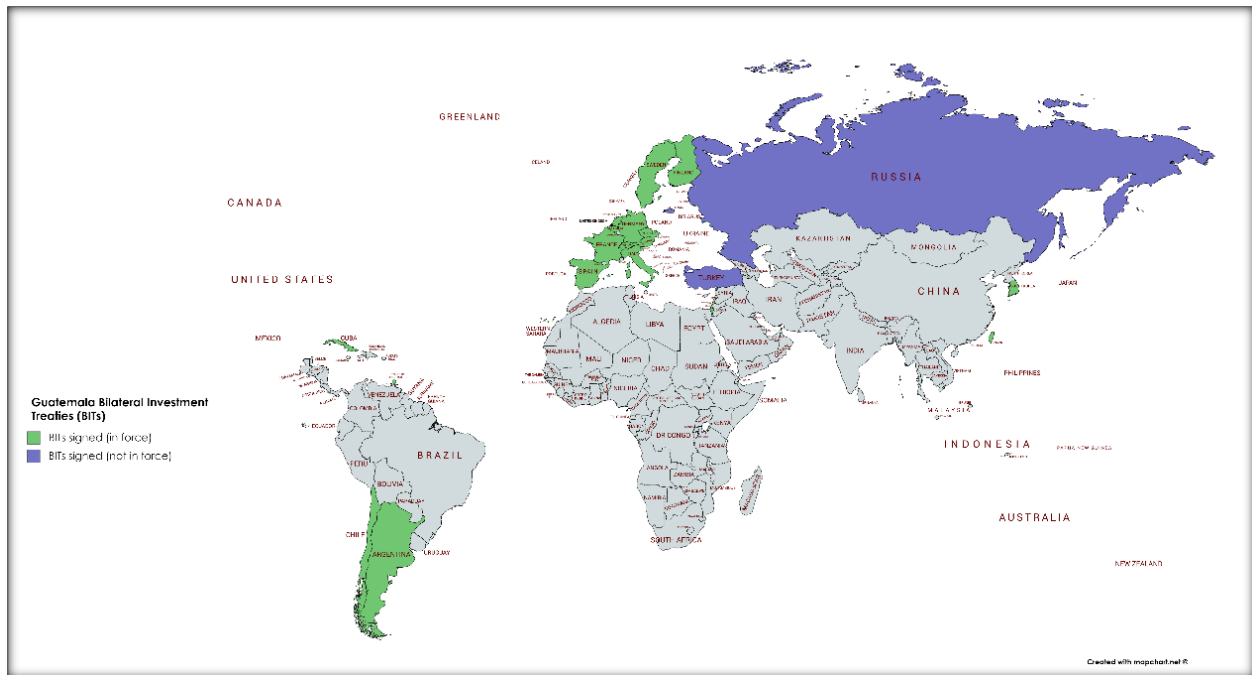
Guatemala is a signatory to multiple international conventions on the settlement of disputes. The most notable ones include: United Nations Convention on the Recognition and Enforcement of Arbitral Awards (New York Convention), the Inter-American Convention on International Commercial Arbitration (Panama Convention), and the Convention on the Settlement of Investment Disputes between States and Nationals of other States (ICSID).

The existing investor-state dispute settlement claims against Guatemala may imply a gap between the de jure protection afforded in the legal framework and the implementation of the laws. Since the FIL does not guarantee access to alternative dispute resolution unless guaranteed under an international investment agreement, all investor-state dispute settlement cases brought against Guatemala have been brought through the international investment agreements the country has signed. An analysis of the pending and concluded cases against Guatemala show that at least two cases have been decided against the state. In multiple cases, the claims arose due to violation of the fair and equitable treatment, and denial of justice which are actions directly attributable to government conduct. The most commonly used instrument was the CAFTA-DR (Dominican Republic-Central America Free Trade Agreement). Annex 4 provides a list of the investor-state disputes against Guatemala.

Guatemala is party to several international investment agreements³⁰⁵ and they form an integral part of Guatemala's investment legal framework. Guatemala, like its peers in the region, has entered into several international investment agreements, including 20 bilateral investment treaties (BITs) and 9 multilateral agreements (Figure 117). Among the 20 BITs, 19 are in force. An analysis of the BITs signed by Guatemala shows the following:

- The BITs differ with respect to the definition of investment and the identification of the nationality of the investor. Some refer to the place of incorporation, others to the principal place of business;
- All BITs guarantee "fair and equitable treatment" of foreign investors, but they differ with respect to the adopted standard;
- All BITs protect investors in case of expropriation both direct and indirect, although the language used across the treaties is somewhat different;
- All BITs guarantee the free transfer of funds, but they do not foresee any temporary exception in case of balance of payment difficulties;
- All BITs contain a simple and general mechanism for the resolution of investor-state disputes;

³⁰⁵ IIAs are basically intended to protect and promote global investment and they consist of four main types; namely: (i) bilateral investment treaties (BITs); (ii) bilateral economic, technical, trade, scientific and investment and other provisions agreements (also known as Investment Promotion and Protection Agreements (IPPAs)); (iii) other investment-related agreements involving more than two states commonly known as multilateral investment treaties (MITs); and (iv) Free Trade Agreements (FTAs) containing investment chapters or provisions.

Figure 117. Guatemala's International Investment Agreements

Guatemala has entered into several trade agreements with key trading partners. The agreement between the United States, the Dominican Republic and several Central American states ("DR-CAFTA") is the largest one. DR-CAFTA encourages investment by providing substantive and procedural protections to investors (Chapter 10). These protections are similar to those in other free trade agreements signed by the US and include national treatment, most-favored nation treatment, minimum standard of treatment in accordance with customary international law (including fair and equitable treatment and full protection and security), and the guarantee of no expropriation without prompt, adequate, and effective compensation. Extensive annexes detail the scope of these protections.

List of key laws governing FDI in Guatemala

Business Stage	Policy & Regulation
General	- Foreign Investment Law of 1998
Business start-up	- Code of Commerce of Guatemala, Decree No. 2-70
Free Trade Zones	- Law of Free Trade Zones (Decree 65-89)
Legal Protection	- Foreign Investment Law of 1998 - IIAs signed and ratified by Guatemala - Expiration Law (Decree 529 of 1948) - Constitution of Guatemala, 1985

Annexes

Corporate / Personal Taxation and incentives	<ul style="list-style-type: none"> - Income Tax Act (Decree No.26-92) - Drawback Industries Law (Decree 29-89) - Incentives law to develop renewable energy project (Decree 52-2003)
Sectoral	<ul style="list-style-type: none"> - Forestry Law (Decree 101-96) - Hydrocarbons law (Decree 109-83) - Infrastructure law (Decree 16-2010)
Foreign Exchange	<ul style="list-style-type: none"> - Ley de Libre Negociación de Divisas (Decreto 94-2000)
Dispute resolution	<ul style="list-style-type: none"> - Arbitration Law No. 67 of 1995 - IIAs signed and ratified by Guatemala - Foreign Investment Law of 1998

Annex 4. Guatemala Investor-State Dispute Settlement Cases

Year of initiation	Parties	Applicable Treaty/Law (instrument)	Summary of Claims	Outcomes of proceedings
2018	Kappes v. Guatemala Daniel W. Kappes and Kappes, Cassidy & Associates v. Republic of Guatemala (ICSID Case No. ARB/18/43)	CAFTA – DR (2004)	Claims arising out of Guatemalan courts' suspension of Exmingua's mining licences for the "El Tambor" project and the company's right to export minerals, related to amparo actions for alleged failure to conduct consultations with local communities. According to the claimants, the Government has also failed to provide Exmingua with access to the "Santa Margarita" mining site, which was blocked by protesters.	Pending
2018	IC Power Asia Development vs Guatemala	Israel – Guatemala BIT	The claims involve back taxes sought by Guatemala following IC Power's investment in two Guatemalan electricity distribution companies, DEOCSA and DEORSA.	Decided in favor of state
2010	TECO v. Guatemala TECO Guatemala Holdings, LLC v. Republic of Guatemala (ICSID Case No. ARB/10/23)	CAFTA – DR (2004)	Claims arising out of Guatemala's electricity regulator decision to set tariffs for the electricity company in which the claimant had investment based on an independently commissioned technical study rather than on a study commissioned by the electricity company, during the process of review and pricing of electricity distribution tariffs for the five-year period 2008-2013.	The first award decided in favor of the investor; and the second award is still pending to resolve the request for annulment by the state
2009	Iberdrola Energía v. Guatemala (I) Iberdrola Energía, S.A. v. Republic of Guatemala (I) (ICSID Case No. ARB/09/5)	Guatemala – Spain BIT (2002)	Claims arising out of Guatemala's electricity regulator decision to set tariffs for the electricity company in which the claimant had investment based on an independently commissioned technical study rather than on a study commissioned by the electricity company, during the process of review and pricing of electricity distribution tariffs for the five-year period 2008-2013.	Decided in favor of state

Annexes

2007	RDV v. Guatemala Railroad Development Corporation (RDC) v. Republic of Guatemala (ICSID Case No. ARB/07/23)	CAFTA – DR (2004)	Claims arising out of a "Lesivo Opinion" issued by Guatemala's Attorney General recommending the State to declare void certain usufruct contract concluded with the investor concerning infrastructure and other rail assets to provide railway services in Guatemala.	Decided in favor of investor
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Annex 5. Key Provisions in Guatemala’s International Investment Agreements

Type of provision	Description Reference
Definition of investment	All bilateral investment treaties (BITs) reviewed have a broad asset-based definition of investment and provide an illustrative list of investments covered. None of the BITs reviewed exclude portfolio investment.
Definition of Investor	All BITs reviewed include a definition specifying “natural person” but only BITs with Cuba and Israel qualify “permanent residents” as investors. BITs with Argentina and Israel specifically excludes dual nationals. All BITs reviewed specify legal entities based on their place of incorporation. However, only 4 BITs (Argentina, Chile, Israel, and Trinidad & Tobago) include “requirement for substantial business activity”. Only 2 BITs (Finland and Netherlands) define ownership and control of legal entities.
National treatment or equal protection (NT)	All BITs of Guatemala provide NT. However, in all BITs reviewed, NT is provided only in the post-establishment phase except the BIT with Finland which provides NT in pre-establishment phase. One of the features of the new generation IIAs is the inclusion of NT obligation that prohibits discrimination of investors/investments that are “in like circumstances”. Only BITs with Trinidad and Tobago have reference to NT in “like circumstances”.
Most-favored nation treatment (MFN)	All BITs reviewed limit MFN obligations only to the post-establishment phase of the investment, i.e. the obligation does not extend to acquisition and/or establishment of investments except the BIT with Finland which provides MFN in the pre-establishment phase. As far as MFN exemptions are concerned, all BITs of Guatemala cover advantages accorded to third country investors by economic integration agreements of various kinds, such as a customs union, economic union, monetary union, free trade agreement, regional integration agreement, etc. Only the BIT with Finland does not cover advantages accorded by either contracting party to investors of a third State by a double taxation agreement or other agreements on a reciprocal basis regarding tax matters. No BITs reviewed expressly state that the MFN provision does not apply to ISDS provisions found in other treaties.
Minimum Standard of Treatment (Fair and Equitable Treatment)	BITs with France, Spain, Czech Republic and Belgium have an FET clause qualified with customary international law or minimum standard of treatment. All other BITs have unqualified FET. BITs with France, Spain, Czech Republic and Belgium include an obligation that includes an indicative or exhaustive list of more specific elements. Examples of such elements may include: denial of justice and flagrant violations of due process; manifestly arbitrary treatment; evident discrimination; manifestly abusive treatment involving continuous, unjustified coercion or harassment; infringement of legitimate expectations.
Expropriation	All BITs of Guatemala cover direct and indirect expropriation. Different formulations for indirect expropriation are used, such as “measures having an effect equivalent to nationalization or expropriation”, measures tantamount to expropriation, and de

	facto expropriation. However, only the BIT with Belgium contains a definition of or criteria for determining whether an indirect expropriation has occurred.
<i>Currency convertibility and transfer</i>	All BITs of Guatemala reviewed include a provision regarding the free transfer of funds relating to investments (covering outward and/or inward transfers). Only BITs with Czech Republic, Israel and Trinidad & Tobago contains an exception that allows the Parties to derogate from the free transfer obligation if confronted with (serious) balance of payments difficulties or a threat thereof.
<i>Dispute Settlement</i>	All BITs reviewed establish a mechanism for the settlement of disputes between covered investors and the host State (arbitration and/or domestic courts of the host State). All BITs allow to submit to ISDS “any dispute arising from /connected to / relating to / concerning an investment” or uses similar broad formulations. All BITs provide express or implied consent to ISDS (arbitration) for investors’ claims arising under the treaty. All BITs except Cuba and Taiwan provide an option to submit an investment dispute to arbitration under the ICSID Convention. In addition, 13 BITs provide an option to submit an investment dispute to arbitration under the UNCITRAL rules.

Annex 6. Investment Competitiveness Benchmarking Methodology

Investment Competitiveness Benchmarking (ICB) results are reported in the form of heatmaps by sector and business activity, using classifications defined by the Financial Times' fDi Markets database. To construct the heatmaps by country, sector, and business activity for a given indicator, first, data on the number of FDI projects by sector and business activity is analyzed. Countries are defined as successful in a sector and activity if they exhibited at least three investment projects from 2011 to 2016. Second, a set of 136 country-level indicators are used to determine a country's range of performance on a given indicator (see Annex 5 for a complete description of the indicators). Heatmaps follow a reverse ordinal scale from 0 (best) to 5 (worst) (Table 15).

Table 15. Description of Heatmap Scores

Score	Color	Description
0	Dark green	Guatemala ranks above the 30th percentile of all countries in the world that have successfully attracted FDI in each sector. The characteristic measured by this indicator would likely be seen by investors as a strength in the country's value proposition for investors in this sector.
1	Light green	Guatemala ranks above the 10th, but below the 30th percentile of all countries in the world that have successfully attracted FDI in each sector. The characteristic measured by this indicator would likely not be a strength, but does not represent a significant obstacle to investment in this sector either as other countries in the world with the same level performance have still been able to attract FDI in the sector.
2	Yellow	Guatemala ranks below the 10th percentile of all countries in the world that have successfully attracted FDI in this sector, but above the 90th percentile of unsuccessful countries that fall below the minimum performance of successful countries on this indicator. The characteristic measured by this indicator may be a weakness by investors in this sector, but even relatively small improvements could address this shortcoming.
3	Light red	Guatemala ranks below the 90th percentile, but above the 70th percentile of unsuccessful countries that fall below the minimum performance of successful countries on this indicator. The characteristic measured by this indicator is likely to be a weakness by investors in this sector, and significant improvements would be needed to address this shortcoming.
4 +	Dark red	Guatemala ranks below the 70th percentile of unsuccessful countries that fall below the minimum performance of successful countries on this indicator. The characteristic measured by this indicator is likely to be a strong weakness by investors in this sector, and very significant improvements would be needed to address this shortcoming.

Annex 7. Investment Competitiveness Benchmarking Sub-Pillar Indicators and Sources

	INDICATOR	SOURCE	
DEMAND	Domestic market size index, 1-7 (best)	World Economic Forum Global Competitiveness Index	
	GDP per capita (current US\$)	World Development Indicators	
	GDP growth (annual %)	World Development Indicators	
	GDP growth - 5Y forecast	IMF WEO	
	Foreign market size index, 1-7 (best)	World Economic Forum Global Competitiveness Index	
	regional GDP per capita (countries within 1000k of capital, current US\$)	World Development Indicators	
	regional GDP growth (countries within 1000k of capital, annual %)	World Development Indicators	
	GDP, PPP (bln current international \$) distance weighted	World Development Indicators	
	Labor force, total	World Development Indicators	
	Labor force participation rate, female (% of female population ages 15+)	modeled ILO estimate	
	Adult literacy rate, population 15+ years, both sexes (%)	World Development Indicators	
	Primary education enrollment, net %	World Economic Forum Global Competitiveness Index	
	Secondary education enrollment, gross %	World Economic Forum Global Competitiveness Index	
	Tertiary education enrollment, gross %	World Economic Forum Global Competitiveness Index	
PRODUCTION FACTORS	Labor and skills	Quality of educational system, 1-7 (best)	WEF: Global Information Technology Report
		Quality of management schools, 1-7 (best)	WEF: Global Information Technology Report
		Quality of math & science education, 1-7 (best)	WEF: Global Information Technology Report
		Extent of staff training, 1-7 (best)	WEF: Global Information Technology Report
		Availability of scientists and engineers, 1-7 (best)	World Economic Forum Global Competitiveness Index
		Country capacity to attract talent, 1-7 (best)	World Economic Forum Global Competitiveness Index
		Country capacity to retain talent, 1-7 (best)	World Economic Forum Global Competitiveness Index
		Ratio of the minimum wage to the average value added per worker	Doing Business
		Pay and productivity, 1-7 (best)	World Economic Forum Global Competitiveness Index
		Annual labor productivity growth (%)	ES PERFORMACE
		Cooperation in labor-employer relations, 1-7 (best)	World Economic Forum Global Competitiveness Index
		Flexibility of wage determination, 1-7 (best)	World Economic Forum Global Competitiveness Index

INPUTS	Geography and natural resources	Hiring and firing practices, 1-7 (best)	World Economic Forum Global Competitiveness Index	
		Redundancy costs, weeks of salary	World Economic Forum Global Competitiveness Index	
		Labor tax and contributions (% of profit)	Doing Business	
		Arable land (% of land area)	World Development Indicators	
		Access to land	World Bank Enterprise Surveys	
		Total internal renewable water resources per capita (m3/inhab/year)	FAO Aquasta	
		Urban population (% of total)	World Development Indicators	
		Population density (people per sq. km of land area)	World Development Indicators	
		Existing capabilities	Manufacturing Value Added per capita	Competitive Industrial Performance Index
	Capital per worker (in 2011US\$)		Penn World Tables	
	Medium- and High-Tech Manufactured Exports share in total manufactured exports		Competitive Industrial Performance Index	
	Production process sophistication, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	State of cluster development, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Local supplier quality, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Local supplier quantity, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Prevalence of foreign ownership, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Availability of latest technologies, 1-7 (best)		WEF: Global Information Technology Report	
	Capacity for innovation, 1-7 (best)		WEF: Global Information Technology Report	
	Business Sophistication		World Economic Forum Global Competitiveness Index	
	Company spending on R&D, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	PCT patents, applications/million pop.		WEF: Global Information Technology Report	
	Firm-level technology absorption, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Percent of firms with an internationally-recognized quality certification		World Bank Enterprise Surveys	
	Percent of firms using technology licensed from foreign companies		World Bank Enterprise Surveys	
	Energy		Electricity production, kWh/capita	WEF: Global Information Technology Report
			Access to electricity (% of population)	World Development Indicators
		Number of electrical outages in a typical month	World Bank Enterprise Surveys	
		Duration of a typical electrical outage (hours)	World Bank Enterprise Surveys	
		Losses due to electrical outages (% of annual sales)	World Bank Enterprise Surveys	
Quality of electricity supply, 1-7 (best)		WEF: Global Competitiveness Index		
Cost (% of income per capita) required to get electricity		Doing Business		

INSTITUTIONS		Procedures (#) required to get electricity	Doing Business	
		Time (days) required to get electricity	Doing Business	
	Transport	Quality of air transport infrastructure, 1-7 (best)	World Economic Forum Global Competitiveness Index	
		Quality of port infrastructure	World Economic Forum Global Competitiveness Index	
		Quality of railroad infrastructure, 1-7 (best)	World Economic Forum Global Competitiveness Index	
		Quality of roads, 1-7 (best)	World Economic Forum Global Competitiveness Index	
		Fixed broadband Internet subscriptions/100 pop	World Economic Forum Global Competitiveness Index	
		Logistics competence	Logistics Performance Index	
		Timeliness of intl shipments	Logistics Performance Index	
		Tracking and tracing of shipments	Logistics Performance Index	
		Finance	Domestic credit provided by financial sector (% of GDP)	World Development Indicators
			Bank nonperforming loans to total gross loans (%)	World Development Indicators
	Commercial bank branches (per 100,000 adults)		World Development Indicators	
	Getting Credit		Doing Business	
	Availability of financial services, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Ease of access to loans, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Financing through local equity market, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Affordability of financial services, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Soundness of banks, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Burden of government regulation, 1-7 (best)		World Economic Forum Global Competitiveness Index	
	Regulatory barriers and taxation	Bureaucracy Quality (L)	ICRG	
		Senior management time spent dealing with the requirements of government regulation (%)	World Bank Enterprise Surveys	
		Cost to start a business (% of income per capita)	Doing Business	
		Cost required to receive a construction permit (% of warehouse value)	Doing Business	
		Cost required to register property (% of property value)	Doing Business	
		Quality of the land administration index (0-30)	Doing Business	
		Time to export: Border compliance (hrs)	Doing Business	
		Time to import: Border compliance (hrs)	Doing Business	
		Profit tax (% of profit)	Doing Business	
		Time to pay taxes (hrs/year)	Doing Business	
Rule of law and	Total tax rate (% of profit)	Doing Business		
	Government effectiveness score (-2.5 to 2.5)	Worldwide Governance Indicators		
	Corruption (F)	ICRG		

	Bribery incidence (percent of firms experiencing at least one bribe payment request)	World Bank Enterprise Surveys
	Bribery depth (% of public transactions where a gift or informal payment was requested)	World Bank Enterprise Surveys
	Law & Order (I)	ICRG
	Reliability of police services, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Commencement of proceedings to resolve insolvency index (0-3)	Doing Business
	Cost to resolve insolvency (% of estate)	Doing Business
	Strength of insolvency framework index (0-16)	Doing Business
	Cost to enforce contracts (% of claim)	Doing Business
	Recovery rate (cents on the dollar)	Doing Business
	Efficiency of legal system in settling disputes, 1-7 (best)	WEF: Global Information Technology Report
	Judicial independence, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Strength of legal credit rights index (0-12)	Doing Business
	Efficiency of legal system in challenging regs, 1-7 (best)	WEF: Global Information Technology Report
	Intellectual property protection, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Strength of investor protection, 0-10 (best)	World Economic Forum Global Competitiveness Index
Market contestability	Anti-monopoly policy	Bertelsmann Transformation Index
	Market-based competition	Bertelsmann Transformation Index
	Private enterprise	Bertelsmann Transformation Index
	Effectiveness of anti-monopoly policy, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Extent of market dominance, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Intensity of local competition, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Prevalence of trade barriers, 1-7 (best)	World Economic Forum Global Competitiveness Index
	Tariff rate, applied, simple mean, all products (%)	World Development Indicators
	Business impact of rules on FDI, 1-7 (best)	World Economic Forum Global Competitiveness Index
	General government final consumption expenditure (% of GDP)	World Development Indicators
Macroeconomic and political stability	Economic Risk Rating	ICRG
	Financial Risk Rating	ICRG
	External debt stocks (% of exports of goods, services and primary income)	World Development Indicators
	General government gross debt (% of GDP)	World Economic Outlook
	Risk for Debt Service	ICRG
	Current account balance (% of GDP)	World Development Indicators
	Total reserves in months of imports	World Development Indicators
	Inflation	WEO

Risk for Inflation	ICRG
Political stability score (-2.5 to 2.5)	Worldwide Governance Indicators
Voice & accountability score (-2.5 to 2.5)	Worldwide Governance Indicators
Political Risk Rating	ICRG
Government Stability (A)	ICRG
Public trust in politicians, 1-7 (best)	World Economic Forum Global Competitiveness Index
Business costs of crime and violence, 1-7 (best)	World Economic Forum Global Competitiveness Index
Ethnic Tensions (J)	ICRG
External Conflict (E)	ICRG
Internal Conflict (D)	ICRG
Military in Politics (G)	ICRG
Religious Tensions (H)	ICRG

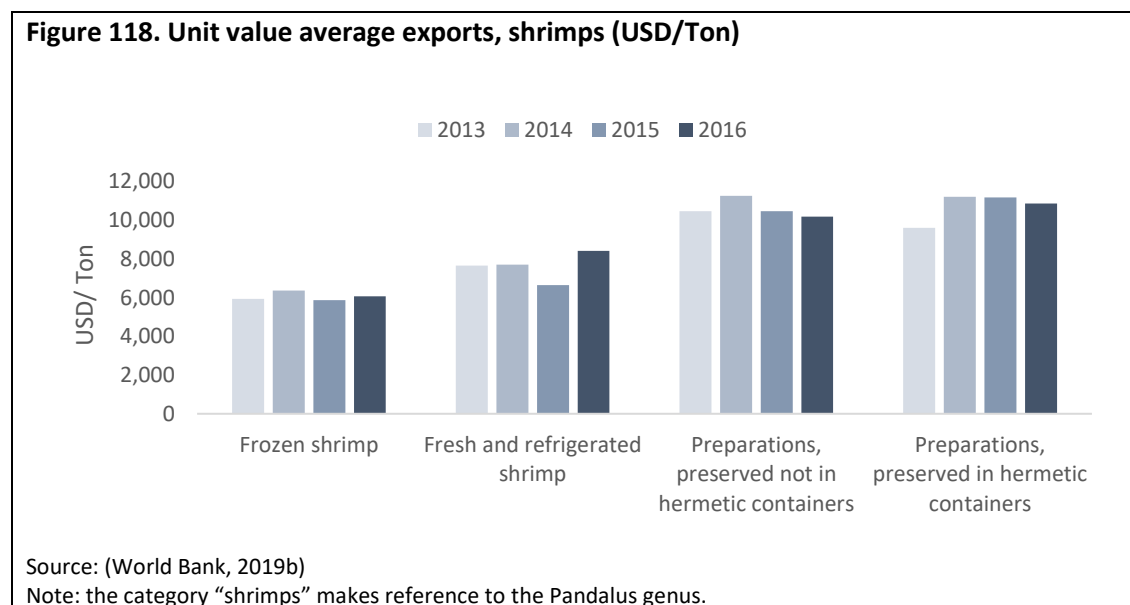
Annex 8. Analysis of the Shrimp and Sustainable Fashion Value Chains in Guatemala

Shrimp

Within seafood products, crustaceans—and especially shrimp—play a key role in Guatemalan exports. In 2017, shrimp exports accounted for 62 percent of total aquaculture exports. This section presents a preliminary analysis on the shrimp value chain in Guatemala, as a complement to the analysis presented in Section 4.2 on seafood products.

Producing and exporting fresh, chilled and frozen shrimp competitively requires, among other things: reliable logistics; complementary business services such as market intelligence; sustainability practices and certifications; and general innovation capabilities. For instance, the packaging for the product should be innovative in terms of branding as well as in terms of nanotechnology and biotechnology solutions to maximize freshness and quality.

Current international trends for shrimp and shrimp products reward sustainability and high-quality of products. With depleting fish and seafood stocks, environmental concerns encourage maximum value creation out of these resources. In the case of fish, this means that consumers value fresh fish more than canned or frozen products and are willing to pay a premium for it. However, this does not seem to be the case in the shrimp value chain. As Figure 118 shows, there are no major differences in the price of fresh, refrigerated, and frozen shrimp (based on data from 2013-2016). In fact, the main price difference between shrimp and shrimp products lies in the preservation and preparation of shrimp products.

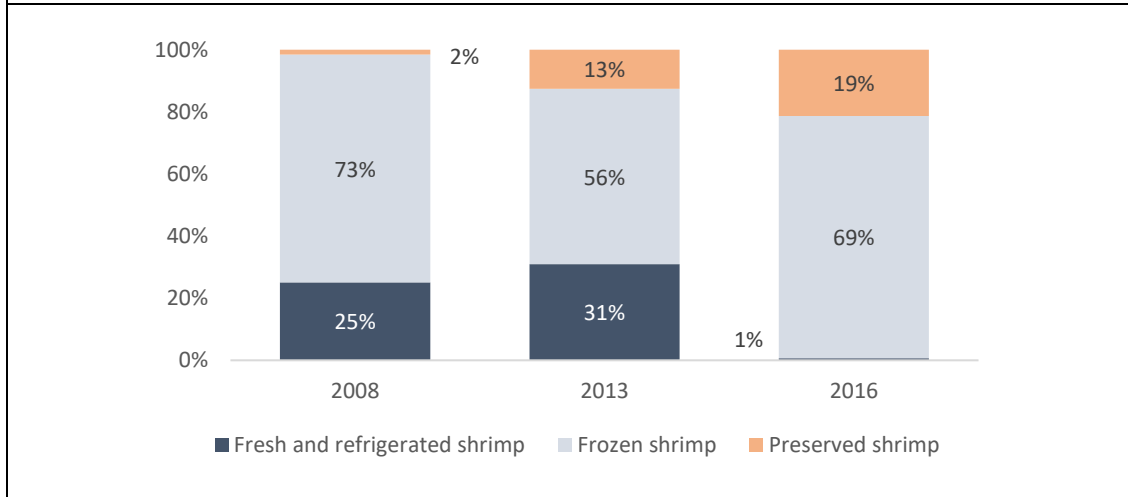


Guatemala’s shrimp exports are predominantly frozen. Exports of fresh shrimp and shrimp products have been relatively small and declining over the last 20 years. After 2014, exports of fresh shrimp declined steeply, from US\$ 16 M to less than US\$ 1 M in 2016. As Figure 119 shows, there has been some change in the composition of shrimp exports toward higher value-added products. In 2008, Guatemala exported

Annexes

less than US\$ 1M of preserved shrimp, by 2016 exports of preserved shrimp had surpassed US\$ 10 M. However, quantities exported are still small relative to other regional exporters and are concentrated in few markets; the United States being the major market for Guatemalan shrimp products.

Figure 119. Exports of frozen (above) and preserved shrimp (below). USD million, current prices



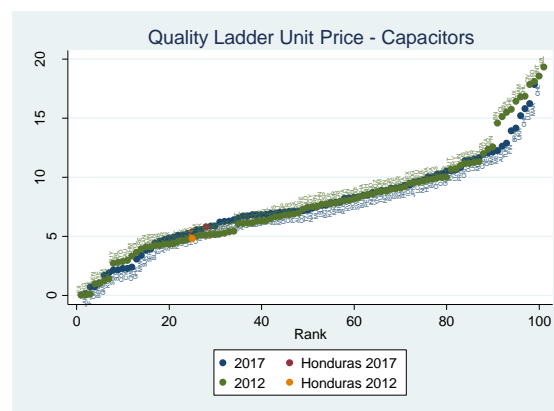
Source: Atlas of Economic Complexity. Center for International Development. Harvard University

Due to data constraints, the sophistication of shrimp product exports in Guatemala couldn't be quantified, but a recent analysis for Honduras (a structural and regional peer) can shed some light on Guatemala's short- and long-term challenges for developing this value chain. As shown in Figure 120 and Figure 121, low general quality of shrimp products, high concentration of exports in few destination markets and low sophistication of destination markets constrain the margins for fresh shrimp and shrimp products in the region, and could be limiting the incentives of local producers to invest in capital goods or capabilities to improve their products.

Figure 120. Number of destination markets for shrimp (Honduras and others)



Figure 121. Quality ladder unit price for shrimp (Honduras and others)



Annexes

Source: (World Bank, 2019b)

Guatemala has an opportunity to reinforce local shrimp value chains to climb the value-added ladder and diversify export markets. Currently, Northern Triangle countries are competing in the calorie-driven strategic segments (A1 and B1) but could reposition in the stockable ready-to-cook, segment, which is driven by convenience (A3), leading to greater margins for shrimp exports (Figure 122). However, this repositioning will require investments in logistic infrastructure, capability accumulation and innovation to improve project design, qualities and safety. For instance, local producers in Guatemala would need to: (a) be able to meet frequently changing European import requirements on quality and safety; (b) improve technical standards, labelling, social and working conditions; (c) invest in voluntary certifications of biological sustainability and implement sophisticated sanitary monitoring and control systems; (d) invest in research on consumer preferences and develop trendy recipes for convenient ready-to-cook formats; and (e) invest in minimizing cold chain deficiencies.

Figure 122. Strategic segments, shrimp and shrimp products

SOLUTION / Final Users	CONSUMER MARKETS			
	Calorie Driven	Nutrition Driven	Convenience Driven	Taste Driven
STOCKABLE	A1	A2	A3 <i>Ready-to-cook segment</i>	A4
FRESH	B1	B2	B3	B4

Source: (World Bank, 2019b)

Fast-response sustainable fashion

This section presents a preliminary analysis of the sustainable fashion value chain as an area of opportunity for Guatemala. This annex serves as a complement to the analysis in Section 4.2. The current trend for “fast fashion”³⁰⁶ among global consumers has put pressure toward reduced response times and more efficient logistics. At the same time, socially-conscious consumers are demanding more stringent social and environmental standards, and in turn this is increasingly becoming a critical factor in their selection of brands and products (Figure 123).

³⁰⁶ Low-cost, mass-produced items that replicate high-fashion trends.

Figure 123. EU/US buyers are ratcheting up compliance requirements


Source: (World Bank, 2019b)

These trends have added more complexity to the “fast response” business model and led to the emergence of new strategic segments within the apparel industry. This is the case of “Sustainable Apparel”, which links companies and consumers to the same ethical values. Under this paradigm, brands aim at creating in a way that considers and minimizes (or compensates for) negative impacts on humanity and the environment. Consumers assign higher values to brands and objects with clear philosophies that are aligned with these values (Table 16).

Table 16. Specific characteristics of the Sustainable Apparel segment within the Quick Response Apparel value chain.

Sustainable Apparel consumer trends	Specific characteristics for the value chain in this segment
Decrease of cotton use and shift to sustainable materials: cotton fibers require large quantities of water, pesticides and herbicides and the wastewaters of the textile industry have also been long recognized as sources of chemical pollutants.	Sustainable processes: The CO ₂ emissions come from energy use, mainly for the dyeing process where heat and water are needed
Adoption of circular economy principles: learning to design for longevity	Packaging: more attractive, sustainable and functional.
Efficient use of water and energy: the textile industry uses six to nine billion liters of water each year just to dye fabrics	Logistics: return-based logistics systems, which would enable the design of routes capable of optimizing the capacity of delivery vehicles both on the way to and from the warehouse.
	Point of sale: QR codes and apps allow consumers to know the product’s sustainability

Source: (World Bank, 2019b)

Annexes

The apparel value chain in Guatemala is not taking full advantage of the opportunities associated with fast and sustainable fashion. Local firms receive or "import" semi-finished goods from foreign contracting companies, and few local companies create their own models. There is little R&D of local fibers and almost no use of these fibers, as the majority of production is based on cotton. Moreover, consumption of water and energy tends to be inefficient. Two main sub-sectors can be identified: domestic production is carried out by SMEs while export-oriented production is carried out by large firms. Both SMEs and larger firms depend on an under-trained workforce with little awareness of (and access to) global sustainable fashion trends. Most garment companies are located in urban areas, which are usually saturated with transit at certain times of the day, a factor that increases transportation costs and reduces the competitiveness of local products.

Currently, Guatemala and the other countries of the Northern Triangle compete in the “forecasted response” and “simple products” strategic segment (A1) and could reposition in the reactive response and complex products strategic segment, which is driven by Sustainable Fashion trends (B2). Moving to this segment could enable some local producers to get greater margins from apparel exports (Figure 124). However, this repositioning will require investments in infrastructure, human capital and innovation capabilities. For instance: (a) adopting and certifying efficient energy and water consumption practices; (b) enhancing fiber quality and fostering the use of new local fiber products such as hemp and cactus; (c) eliminating discharges of hazardous materials; (d) researching, developing and using natural dyes such as walnut shells; (e) developing agile logistics to different points of sale; (f) leveraging social media and using e-commerce tools.

Figure 124. Strategic segments, apparel value chain

SOLUTION/ Final Users	CONSUMER MARKETS	
	FORECASTED RESPONSE	REACTIVE RESPONSE
SIMPLE PRODUCTS	A1 Target-staple items	A2 Fast fashion: Zara model
COMPLEX PRODUCTS	B1 Luxury- lifestyle brands	B2 Sustainable Fashion

Source: (World Bank, 2019b)

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