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e-formalization - country case study

e-formalization: The Colombian experience

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Background

In Colombia informality is a structural problem. Firms informality affects productivity growth excluding firms from financial markets, and reduces tax collection and social security contributions. In the labour market, informality leaves a large proportion of workers out of social security benefits, making them more vulnerable to shocks. Labour and firm informality are strongly related. Jobs are informal in informal firms. They do not contribute to social security for their employees which in turns affect their level of productivity. In the following paragraphs this note describes labour informality in Colombia and then links it to firm informality.

Figure 1 in the Annex shows that in Colombia labour informality is a structural problem, with small variations along the last decade, and affects more contributions to the pension system. According to official data from DANE[2], approximately 50% of workers are not affiliated and hence are not contributing to the compulsory health system, and although informality in the pension system; i.e. percentage of workers that are not contributing has decreased from an average of 70% between 2007 and 2013, in the quarter June-August 2021 63% of workers are not contributing, with a large risk to fall into poverty, if they are not now, when older.[3]

It is important to notice that coverage in the health system is also supplied through a subsidized system, and the combination of a contributory and a subsidized health system attain a coverage of above 95% of the Colombian population. However, in the pension system a combination of a contributory system in which only 1 out of 4 old people have a pension (i.e. 25% of coverage) and a non-contributory program with an additional 25% of coverage leaves half of the older population and their dependents without income, exposed to poverty and economic shocks.

2 DANE is the Colombian National Statistics Department.

3 A worker can be affiliated to the pension system even if she is not contributing. Informality in the pension system is the percentage of workers that are not contributing. In the health system, a worker that is not contributing is by definition not affiliated to the compulsory system since he is affiliated to the subsidized system. That is why not being affiliated and not contributing are equivalent to measure informality in the health system.

Compared to Latin-American countries, labour informality in Colombia is similar to the region average, and above countries such as Uruguay, Chile and Costa Rica (see Figure 2). Almost 2 out of 3 workers are informal (62,1%). Colombian labour informality is comparable to Ecuador and below Central American countries, Bolivia, Haiti, Paraguay and Peru.

There is a strong correlation between informality and the size of economic units. As Table 1 shows, the highest proportion of informal workers are in small economic units (except in El Salvador, where it is below 50%). Variation between the two years reported over the period 2000-2019 per country shows that concentration of informal employment in small firms increased (except in El Salvador, Chile and Paraguay). Colombia is in the second position, with a concentration of workers in informal employment in small economic units (that increased from 73.5% in 2004 to 92,6% in 2018), after Argentina (94,4%).

Figure 3 shows the relationship between small firms and the labour market in Colombia. According to DANE data there are 20,6 million workers, of which 9,1 million are own account workers (44% of total workers). Among them, 4,9 million own account workers own a small economic unit (54% of own account workers). In addition, there are 700.000 employers, of which 500.000 are employers in a small economic unit (71% of employers). In total there are 5,4 million small firms in Colombia.

As stated by the literature[4] firm´s informality is a multidimensional process. Colombian government adopted this view and for the design of firm´s formalization policies defined four dimensions with different procedures: (i) entry (e.g. registration at the Chamber of Commerce and Tax Identification); (ii) input (land use and social security procedures); (iii) product (health certifications); and (iv) tax (declaration and payment of taxes).[5]

For small firms table 2 reports different indicators of two of these four dimensions: entry (or regulation for starting a business: registration and tax ID), and input, in particular labour regulations (i.e. contributions to social security). This data confirms large informality in small firms. The lowest informality rate is related to tax regulation: close to 25% of small firms are registered in the tax system. On the other extreme, only 5% of small firms contributes for insurance against occupational hazard of their workers, and 87,6% of small firms do not contribute to health and pension systems of their workers.

These indicators of informality are significant since 97% of 7,1 million firms in Colombia has between 1 and 3 workers. Although information to measure firm informality for the total number of firms is scarce, recent estimates report 81% of informality in 2019 (Misión de empleo, 2021).

In Colombia several policies have been implemented to address informality, at both labour and firm levels. This note is focused on e-formality policies and how technologies enhance the impact of public policies that aim to reduce informality.[6]

4 For ILO (2021) “In order to measure informality among economic units, it is necessary to determine 1) to what extent economic units are registered with the relevant agencies at the national level, and 2) to what extent they comply with the regulations that apply to them (e.g. on business, tax, social, labour issues). For Doing Business, a Business Regulation Comparison of the World Bank, includes regulation for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. See also ILO (2021a).

5 See DNP (2019). It is the policy document, called Conpes Document, that designed firms formalization policies. Conpes is the acronym of the Economic and Social Policy National Council, in which the President and the whole cabinet participate in the design and implementation of public policies. The National Planning Department (DNP) is the technical secretariat of the Council, and is in charge of writing policy documents, named Conpes Documents.

6 According to Chacaltana et-al. (2018) seminal paper, e-formality refers to policies that governments are promoting through the application of new technologies to simplify and facilitate the transition from the informal to the formal economy.

2

Policy context

Digital transformation

E-formalization policies are part of a broader policy of e-government and digital government. At the beginning of this century, in the year 2000, the Conpes Document 3072 designed the Connectivity Agenda[7] aiming to massify the use of Information and Communication Technologies (ICT) in the public sector. Starting with this initial initiative, legislation evolved towards spreading the use of technology in the public sector in order to enhance service delivery to the citizens.

Table 3 presents main Conpes Documents, Law and decrees. It is important to notice that one of the laws (1151/2007) is the National Development Plan, a policy document that each new administration must present and discuss with the Congress at the beginning of its term describing the main policies that are going to be accomplished as well as the public budget to finance these policies. Including the use of ICT in the plan shows the importance of this policy for the Colombian government.

During the first decade of the century, between 2000 and 2010, several advances were implemented. First, institutional organization. The Ministry of Information and Communications Technologies (MINTIC) oversees the strategy and the coordination for policy implementation, and all public institutions must follow the guidelines designed by this Ministry.[8] Second, massification of e-government became one of the principles of the ICT policy.[9] Third, the government created the National System of Citizens Service

7 See DNP (2000). Conpes Document 3072.

8 See Decree 1151/2008.

9 See ICT Law (Law 1341/ 2009).

in order to improve online services. [10] [11] [12] E-formalization policies are designed and operate under this framework of e-government.

In 2010, advancing at the same pace of the technological revolution, the connectivity agenda was transformed into an e-government program and was classified as of strategic importance.13 This new classification accelerated the advances of e-government and in general of the use of technology. The National Development Plan 2010-2014 (Law 1450/2011) included e-government as one of the programs to enhance democracy through good governance, and, in particular, the use of technology to offer good and agile services to the population. In addition, it created a program called "Vive Digital" to expand internet coverage in all Colombian regions. This program continued as a strategic program in the following development plan for the period 2014-2018 (Law 1753 / 2015).

The following development plan, for the 2018-2022 administration, moved from e-government to digital government. This evolution is based on the shift from an efficiency-oriented approach to a more open, collaborative and innovative government that improves service delivery (OCDE, 2019). This development plan is designed through different pacts and among the 13 cross-cutting pacts one is digital transformation. This pact is based on two lines of work, one aiming for universal access of ICT -following "Vive Digital"- and the other aiming for the digital transformation in which public administration, productive sector and territories make intelligent use of data and technologies. In this second line the plan includes a target of 34 high-impact procedures digitally transformed. One of the procedures is the Virtual One stop shop (Ventanilla Unica Empresarial, or VUE), an e-formalization tool that is described below.

As a result of e-government and digital government policies, Colombia ranks third in the Digital Government Index of the OECD measured in 2019.14 South Korea, UK and Colombia are in the first three positions and are the only three countries with an index higher than 0,7. The report states that these countries, as well as Denmark, Japan and Canada have built long term foundations and strategies as basis for digital transformation.

Main e-formalization initiatives

The development plan 2018-2022 includes formalization policies and in particular firms e-formalization in the second global pact for entrepreneurship, "Formalization and Productivity". One objective of this pact is to reduce unnecessary paperwork and regulations and to improve the quality of new regulations to ensure a business environment conducive to formal entrepreneurship and the strengthening of free competition.

Although an explicit link between e-government and e-formalization can be identified in this development plan, the use of technology for formalization purposes has been implemented since the beginning of this century, almost parallelly to the Connectivity Agenda of 2000. For example, for labour formalization an electronic payment system was implemented in 2004 to integrate social security contributions and pay it electronically (Planilla Integrada de Liquidación de Aporte -PILA), and the electronic affiliation to health system was created in 2015 and then complemented with pensions and other social security

10 Decree 2623/ 2009.

11 See DNP, 2010, page 4.

12 E-government can be found in www.gov.co

13 See DNP (2010). Conpes Document 3650.

14 This Index is divided in six dimensions (i) Digital by design (3rd position), (ii) Data driven public sector (5th position), (iii) Government as a platform (5th position), (iv) Open by default (11th position), (v) user driven (2nd position), and (vi) Proactiveness (1st position). See OECD (2020).

programs (Sistema de Afiliación Transaccional – SAT). Hence, e-formalization has been implicitly linked to e-government with the same objective: improve government service delivery.

Other forms of e-formalization related to the tax system has been implemented independently and parallelly. Several tax procedures from the National Taxes and Customs Department (DIAN) has been digitalized, and the interoperability to facilitate registration, updating and cancellation of the tax ID (Registro Unico Tributario – RUT) was regulated in 2019.[15]

For firms e-formalization, in 2018 a Virtual One stop shop platform was created (Ventanilla Unica Empresarial - VUE). This platform is part of a broader firm formalization policy designed in the 2019 Conpes document 3956, aiming to promote higher levels of business formality. As stated above, the policy defined formalization as a multidimensional and gradual process, encompassing entry, taxation, inputs and production dimensiones. In order to address this phenomenon comprehensively, an inter-institutional policy was proposed around three main strategic lines: (i) reducing the regulatory burden on formal companies; (ii) supporting companies to promote their development and formalization; and (iii) strengthening the activities of Inspection, Surveillance and Control (IVC).[16]

Table 4 reports 5 e-formalization tools, 2 related to labour informality, and, in particular, to social security contributions (PILA and SAT), and 3 related to firm informality, one related to the multidimensional process of formalization (VUE) and 2 related to the tax system: E-receipt and Simplified Taxation Regime (Régimen Simple de Tributación – RST). The table reports also the date of creation.

These tools have been advancing parallelly and at different speed. The first Labour e-formalization tool, PILA, initiated in 2004, parallelly with the Government Connectivity Agenda. It is now fully operating. SAT, the second labour formalization policy, began in 2015 and although e-enrolment to the health system is operating, pension enrolment will be fully operating in 2022. Compared to labour e-formalization tools, firms e-formalization tools are more recent. VUE, RST and e-receipt have been developed independently and parallelly, and some dimensions of VUE, for example Tax ID, were developed first by the DIAN and then incorporated to the VUE.

According to DNP (2019) one of the main objectives is the integration of labour and firm formalization procedures through e-tools.[17] In addition, workers and firms situations are dynamic and can be in different states that change formalization conditions over time. For example, in labour relations, a worker can at some point in time fall into unemployed, and under this new situation change from the contributory -formal- health system to the subsidized health system. In that case, it is a transition from formal employment to unemployment or probably to informal employment. At the same time, a firm can hire a worker that previously was informal. Formalization e-tools must include transaction platforms to register these changes.[18] In the following sections this note describes the objective, the design, and the advances of each of the e-formalization tools listed in Table 4.

15 Decree 2106/2019 with the objective of reducing paperwork.

16 See DNP, 2019.

17 See also DNP (2010).

18 Transaction patforms are platforms that facilitate transactions between different actors.

PILA

An integrated spreadsheet for settlement and payment of social security contributions named PILA (Planilla Integrada de Liquidación de Aportes) was created in 2004,[19] as an electronic system to calculate and pay contributions to social security (health, pensions and occupational hazard insurance) and payroll parafiscal payments (i.e. payments to the National Apprenticeship Service -SENA[20]-, Family Welfare Colombian Institute -ICBF[21]- and Family Compensation Funds -Cajas de Compensación Familiar[22]-) for both firms and independent workers.

Before the creation of PILA, each payment was done independently and manually, in different banks depending on the health and pension funds where the worker was enrolled. These procedures generated time costs and inefficiencies. In addition, it was not possible to track social security enrolment of each worker, and since each contribution was independent, a worker could contribute partially to social security; e.g. contribute to the health system since this service could be needed immediately, and not contributing to the pensions system, in which benefits are received in the long run. PILA integrates the calculation and payment of all social security contributions and electronic payment saves time and help to detect non-compliance.

PILA is a platform coordinated and regulated by the Ministry of Health through decrees and resolutions, and is operated by private sector "Information Operators" using two complementary mechanisms: an integrated spreadsheet and an assisted spreadsheet in which firms can obtain personal assistance via a phone call or a chat. PILA is a transaction platform since it registers all labour transitions for each employer.

When the firm is registered in PILA, any non-compliance can be sanctioned.[23] This was more difficult before PILA due to the absence of electronic records. Today, the principal causes of sanctions that can be detected in PILA are: (i) default or omission; (ii) inaccuracy in the declared and paid value; and (iii) not reporting information or reporting after the deadline (Law 1819/2016). In addition, data generated through PILA is anonymous and is administrated by the Ministry of Health.

PILA is also being used as a complement of other policies to promote labour and firm formalization. For example, to receive tax and additional incentives of labour formalization introduced in Law 1429/2010, or Formalization Law, or in the program recently launched by the Ministry of Labour to generate new formal employment, firms and their workers must be enrolled in PILA.

According to UGPP (2021) data 11.9 million workers (i.e. 57% of workers) contributed to the social security system in June 2021; 82,4% are employees and 17,6% independent workers. The transaction characteristic of PILA helps to identify a large rotation between formality and informality: 1,5 million workers entered or exited the labour market in that month. This figure corresponds to 12% of the total number of workers that contributed. Labour rotation is also important between months. The number of workers that contributed between February and June 2021 varied by 3%; i.e. 340.000 workers.

19 Decree 3667/2004.

20 SENA – Servicio Nacional de Aprendizaje- is the public institution in charge of technical and technological education.

21 ICBF – Instituto Colombiano de Bienestar Familiar- is the public institution in charge of prevention and protection of early childhood, childhood and adolescence.

22 Cajas de Compensation Familiar are private non-profit organizations that receive parafiscal funds to pay family subsidies and other programs for workers.

23 Decree 1465/2005.

SAT

The Transactional Affiliation System (SAT or Sistema de Afiliación Transaccional) was created in 2015.[24] It was created as an electronic platform that includes all the procedures to affiliate to the health system and register changes in the affiliation. Its scope was expanded in 2018[25] to include occupational risk insurance, and in 2019[26] to include the pension system and Family Compensation Funds.

Today, in a web portal called My Social Security (www.miseguridadsocial.gov.co) several services are offered to citizens, employers and providers of the health and occupational risk systems. Citizens can enrol to the health system, switch to another Health Promotion Entity (EPS – Entidades Promotoras de Salud), move between the contributory and the subsidized health subsystems depending on his labour situation, include or exclude beneficiaries (e.g. spouse and children), and make enquiries about affiliation to the health system, the pension system and the occupational risk system.

Employers can register, select the provider of occupational risk insurance, and report new labour relationships, among others. Finally, Health Promotion Entities (EPS), Health Service Provider Institutions (IPS, Instituciones Prestadoras de Salud) and Occupational Risk Administrators (ARL- Administradoras de Riesgos Laborales) can, among other things, report hospitalizations, and the National Superintendence of Health can register EPS involved in any kind of investigation.

It is important to note that enrolment to the health system and to the occupational risk administrators are operating, and the goal is that enrolment to the pension system and to the family compensation funds will be operating in the first quarter of 2022.

Another important issue in this e-formalization tool is coordination. For SAT both ministries, health and labour are working co-ordinately. Health Ministry is the leader and in charge of enrolment to health system and to occupational risk administrators and Labour Ministry is in charge of including the pension system and Family Compensation Funds.

Mi Seguridad Social webpage reports that until November 26 of 2021 4,8 million citizens are registered.

24 Decree 2353/2015.

25 Decree 2058/2018.

26 Decree 1818/2019.

Box 1: A private firm for e-formalization

To solve the complexity and the time-cost of enrolment to social security, private initiatives, independent of government policies, have been implemented. In particular, to address paperwork of labour formalization including workers' enrolment to health and pension systems, occupational hazard insurance, and Family Compensation Funds. Symplifica, a private firm, was created to facilitate these processes focused specifically on domestic workers hired by households, with a gender approach. It is a service provider and labour intermediation is not included.

Before the pandemic in Colombia there were over two million domestic workers, of which 78% are women (DANE, 2020). And to hire a domestic worker, a household must offer the domestic worker to choose between several pension funds, health and risk occupational hazard insurance companies, and do the paperwork for each one of these companies, among other things (such as writing and signing a formal labour contract).[27]

To solve the complexity of social security affiliations of domestic workers, the company offers to the households that hire a domestic worker to do the enrolment paperwork among others (monthly payment of salary and social security contributions, settlement of contract), with a fee payed by the household employer. All services are online. So far it has completed 14,000 formal contracts, mostly in Bogotá, and is looking to expand into the country's main cities.

Four issues important to highlight are the following. First, this type of service implies also a cultural change, since domestic workers have generally worked informally. Second, the employer of a domestic worker is not a firm, it is a household that is not familiar with the complexity of the enrolment and in some cases does not know the normativity to comply for a formal job. Third, the gender approach covers women that otherwise would not be covered by the social security system due to the complexities of enrolment and contributions payment. Fourth, if enrolment is less time-consuming this type of initiatives might be less necessary. However, many households may prefer using this type of services even paying a fee.

E-receipt

The spectrum of e-formalization policies includes improving detection and sanctions of informality and reducing the risk of avoiding formal policies such as tax payment.28 Under these lines, Colombia implemented an "e-receipt" initiative in 2021.

27 Each worker can choose one of the at least 12 Health Promotion Entities, one of the 5 pension funds, and the employer must choose one of the 9 Occupational Risk Administrators, and in some cities one of 2 Family Compensation Funds. The most important Health Promotion Entities in the contributory health system are Aliansalud, Comfenalco Valle, Compensar, EPS Sura, Famisanar, Nueva EPS, Salud Total, SOS, EPS Sanitas, Medimas, Coomeva, Suramericana. Pensions funds are Colpensiones, Porvenir, Protección, Colfondos and Skandia. Occupational Risk Administrators are Bolivar, Aurora, Suramericana, Equidad Vida, Mafpre, Positiva, Colpatria, Alfa, and Colmena. There exit also at least one Family Compensation Fund in each one of the 32 Colombian departments, and in Bogotá, Medellín, Cali and Barranquilla there are at least two.

28 See Collin (2021).

E-receipt was legally viable since 1995.[29] Ten years later, in 2005,[30] receipts could be issued using any existing technology, and in 2007 a decree defined regulations and procedures of e-receipt as a policy of the National Tax and Custom Department (DIAN).[31] In 2012, 758 firms were issuing e-receipts.[32]

Conpes Document 3786 of 2013 identified that Value Added Tax (VAT) evasion was around 25%. Therefore, the policy target is the massification of e-receipt to strengthen the capacities of the tax and customs administration, in particular control and management of risk of evasion, avoidance and smuggling of taxes. Reduction and optimization of times and costs associated with the invoicing of those obliged to invoice, including SMEs and exporters and importers is an additional objective.

Implementation of e-receipt policy began in 2013, and took 9 years to attain an important number of firms issuing e-receipt in 2021. Following best practices of other Latin American countries such as Chile and Mexico, in 2016 the Colombian government decided mandatory e-receipt since January 1st 2019 for all firms.[33] In that year DIAN designed an implementation calendar per economic activity (2 groups -principal and secondary economic activity - and 22 sub-groups).[34] DIAN was in charge of the implementation with a project divided in two principal objectives: (i) the technological platform for e-receipt, and (ii) strategy of massification.

DIAN data (June 2021) reports that 621.688 firms (i.e. 47% of formal firms) are issuing e-receipts, a number more than double than the initial target that was approximately 300.000 firms. It is planned that by the beginning of 2021 all SMEs and large firms will be issuing e-receipt. As a hypothesis, the pandemic accelerated the implementation of e-receipt. However, since the policy is recently operating its impact on tax collection cannot be measured yet. However, evaluations in similar countries show that e-receipt increases VAT collection. For 2015 and 2016 VAT collection was between 18% and 24% higher in firms that issued e-receipt compared to the ones that were not issuing e-receipt in Ecuador. In Mexico this comparison was 2,2%, 3,2% and 7,1% higher in 2011, 2012 and 2013 respectively.

A satisfaction survey implemented by DIAN shows that for the firms that are issuing e-receipts the effect of the policy is satisfactory. Although it is a compulsory policy, more than half of the firms identifies positive effects on productivity (e.g. reduction in time and costs, in transaction costs and in accounting processes) and environmental benefits (not printing invoices on paper). Interestingly, although DIAN is offering a free of charge software to issue e-receipts, only 20% of SME tested this software, compared to 25% of big firms.

Simplified Tax Regime (SIMPLE) and Tax ID

A combination of a formalization policy and an e-formalization policy is the simple tax regime and the issuance of the taxpayer registration number ate the DIAN.

In 2018[35] a Unified Tax was created under a Simplified Tax Regime – SIMPLE. This tax regime is optional and individuals and firms that meet the requirements indicated by law may belong. This initiative replaced the

29 Law 223/1995.

30 Law 962/2005.

31 Decree 1929/2007.

32 See DNP (2013).

33 Law 1819, December 2016.

34 DIAN resolution 000020, March 26/2019. Each group and subgroup are defined using ISIC classification.

35 Law 1943/2018, modified by Law 2010/2019.

mono-tax launched in 2016[36] which did not have the expected results in terms of coverage in part due to the absence of a communication strategy. SIMPLE unifies payment of income, consumption and industry and commerce taxes, through an annual declaration, and any sole proprietorship company or a firm with income inferior to 100.000 Taxable Value Unit (a TVU in 2021 was COP 36.000 or USD $ 9) can enrol in this tax regime. They must pay in addition social security and parafiscal contributions, which are not included in SIMPLE. This tax regime includes different tax rates, depending on the sector (minimarkets, hair salon, retail, technical and mechanical services, food and beverage, etc.) and on income ranges[37].

Enrolling to the SIMPLE Regime is online, and getting the tax ID (RUT – Registro Unico Tributario - RUT) can be done online too. These are two e-formality policies. Both processes, SIMPLE and tax ID were designed independently and online and then connected. In concordance with e-formalization, any firm in the SIMPLE regime must issue e-receipts.

In sum, SIMPLE is a new tax regime that simplifies tax procedures for small firms and that uses online platforms, and hence can be considered an e-formalization policy. In the last 3 years, 36.339 firms have enrolled in the SIMPLE regimen, 50% of natural persons and 50% of legal persons. Time trend shows that 44% of these firms enrolled in 2020, and 31% until June 2021. 48% (17.000 firms) are new enrolled in the tax system.

VUE

To address the multidimensionality of firm informality, the Virtual One Stop shop (VUE - Ventanilla Unica Empresarial) was created in 2018 as an online platform that groups several procedures to promote firm formalization. VUE is designed to tackle four dimensions of business informality: (i) entry (registration at the Chamber of Commerce), (ii) input (land use and social security affiliation and payments), (iii) product (such as sanitary certificates) and (iv) tax (such as declaration and payment of taxes).

Given its multidimensional nature, the institutional organisation for the functioning of VUE requires coordination between several public and private entities and at the national and territorial levels. MINTIC provides the technological guidelines related to the macro-strategy of e-government, and the Ministry of Commerce, Industry and Tourism (MINCIT) is in charge of coordinating VUE. The operation is in the private sector through the Chambers of Commerce and the Association of Chambers of Commerce-Confecámaras. Several additional institutions participate. For input formality, Ministries of Health and Labour play a role in enrolment and payment of social security. For tax formality DIAN is responsible for tax identification. In addition, VUE platform allows the payment of the Department[38] registration tax that depends on the departments tax administration. For product formality, Invima[39] provides services related to compliance with sanitary standards. Finally, at the territorial level, mayors' offices play a role in VUE identifying whether the company is located in the right land use. Other institutions that play a strategic role in the development of this initiative are the Office of the President of the Republic and the National Planning Department (DNP).

Institutionally, there exist a National Competitiveness and Innovation System, created to coordinate and guide public policies. As part of this system, the Technical Committee for Firm´s Formalization

36 Law 1819/2016. It was different to SIMPLE since it included, for example, contribution to social security, and in particular to the matching contribution scheme for pension called Periodical Economic Benefits (BEPS).

37 Ranges are below 6.000 VTU, above 6.000 and below 15.000 VTU, above 15.000 and below 30.000 VTU, above 30.000 and 100.000 VTU.

38 Colombia is divided in 32 Administrative Departments.

39 Invima is the national institute for drug and food surveillance in charge of approving health certificates.

monitors the policy of firms´ formalization, and in particular the evolution of VUE. The mandate to this Committee is to monitor and make recommendations for the design, implementation and evaluation of programs, strategies and public actions that promote business formalization through the articulation and coordination of national entities and the joint work of the private sector. In this Committee DNP participates as the technical secretariat. Other institutions that participate are MINCIT, MinTrabajo, MinSalud, the Presidency, and private sector entities: The National Business Association (ANDI), the Private Competitiveness Council and the Association of Micro, Small and Medium Enterprises (ACOPI).

VUE results can be classified in three different dimensions: (i) number of formal firms created using the e-formalization platform, (ii) geographical coverage, and (iii) service coverage. First, 105.000 firms have been created using VUE since its implementation in 2018 and until August 2021. This creation increased from 15.6% in the period 2018-2020 to 23% in 2021, despite the fact that due to the pandemic the number of firms created decreased in 2020 and 2021. Second, VUE is operating in 11 out of the 57 Chambers of Commerce, and by the end of 2021 it will he operating in 26 more, and 20 more by 2022 to achieve full coverage.[40] Third, among the four dimensions of firm formalization, entry and tax are fully operating and the implementation of input and product dimensions are in progress and will be operating in 2022.

40 VUE is operating in the Commerce Chambers of the following cities: Bogotá, where it was initiated in 2018; since 2019 in Armenia, Manizalez, Pereira, y Valledupar; and Santa Marta, Ibagué, Puerto Asis, Honda, Barranquilla y Medellín since 2020.

3

General Assessment

For a general assessment, a broad view of e-formalization includes the following three dimensions: (i) digital economy, (ii) e-government strategies, and (iii) comprehensive policy approaches to formalization (Kring and Leung, 2021). The group of e-formalization policies in Colombia comply with these three dimensions. First, e-formalization policies have been a building-up group of policies that began at the beginning of this century. Digital government began with the Connectivity Agenda in 2000 and e-formalization policies for the labour market with PILA in 2004. The evolution of this group of policies includes e-government strategies focused on citizens delivery of services. After two decades of evolution, the most recent e-formalization tool is VUE, a platform for firms e-formalization that combines labour and firm´s formalization procedures, including. VUE can be classified as an e-formalization tool with a comprehensive approach.

Second, as an example of a comprehensive approach to formalization is the SIMPLE tax regime. It is a combination between formalization incentives based on a simplified tax regime for SME and the use of e-formalization tools. Another example of the use of technology with a more comprehensive view to enhance labour market performance and generate formal jobs is the recent policy designed to incentive young employment to face the increase in young unemployment generated by the pandemic crisis. This policy, launched in 2021[41] offers a monetary payroll subsidy (25% of minimum wage) for new young employment. The information in PILA is the base to verify that it is in fact new employment, and the application process to obtain the incentive and monetary transactions are implemented through the financial sector technology. This program has generated between September and December 2021 more than 77.000 young employments in more than 6.400 firms. Although it is not specifically an

41 Decree 688 / 2021.

e-formalization policy, it includes elements of e-formalization since the firm must pay social security of its worker in PILA, and the new young employments are formal.

Seen as a building-up group the coordination between e-formalization policies and digital government has evolved positively. Although this coordination was note clearly identified since the beginning of the century e-formalization tools have been converging towards a unified coordination along with changes in technology and advances in e-government and digital government policies. A recent example is the Technical Committee for Firm´s Formalization that monitors VUE with the participation of several actors from public and private sectors. Among these, the participation of the Association of SME (Acopi), as a representative of policy beneficiaries is important to highlight, since it can play two roles. On one side, collect experiences and requirements from SME to improve the policy, and on the other, disseminate the policy to the beneficiaries.

Another important characteristic of the evolution of e-formalization policies is that in several cases they have been developed separately -e.g. digital tax policies such as the online registration of firms- and then grouped in online platforms such as VUE. The whole process has taken two decades, with non-significant fiscal costs, and as a learning-by-doing process in which coordination lessons between several actors have been important.

▶ 4

Conclusions and Recommendations

During the last two decades e-formalization policies have been implemented in Colombia as part of a broader digital government strategy, aiming to simplify procedures to improve citizen services and to reduce transaction costs. Implementation of these policies has taken time, have been advancing at different speeds and until now they have achieved the expected results in terms of coverage.

All these policies are first legally designed through laws and decrees, and then implemented as transactional platforms. Related to labour e-formalization policies, contributions to social security can be done online, and enrolment is in progress. For firm´s formalization, given its multidimensional nature, a group of institutions, public and private, national and local, are constantly coordinating and a committee is monitoring the development of firm formalization that is based in part in an e-formalization platform, VUE. Additional e-formalization policies include the use of technology by the tax administration.

Three important lessons are (i) communication, (ii) simplicity of information, and (iii) scale. Although for some of these policies perception surveys show that beneficiaries received information, in some cases this information is not simple or clear. In addition, although coverage goals have been achieved, it is low compared to the total number of firms or workers. For firm´s formalization one important step is communication: spread the platform VUE for the massification of its use. In addition, communication is complemented with training and with a cultural change in public entities towards a more effective citizen service.

From Interviews with beneficiaries three additional lessons can be extracted: (i) policies of e-formalization are well received, but informality has additional barriers that should be addressed, (ii) it is important to divulgate more these policies, since they are not well known, and (iii) the participation of beneficiaries in committees to monitor the policies is important to validate and adjust the initiatives.

For the first lesson, regulation and costs of formality are additional barriers that may hinder formalization even if e-formalization tools reduce costs, and formalization should be understood in a broader view, including additional elements of decent work, such as a labour contract, among others. In this sense, social dialogue can play a crucial role. Related to the second lesson, beneficiaries, associations and labour unions do not have a complete knowledge of e-formalization tools, how to use them, their importance and their results. Strong communication and training campaigns can help to enlarge e-formalization tools use. An example of the third lesson is the Committee that monitors VUE, in which associations of beneficiaries participate. Finally, e-formalization and in general formalization tools and policies should be understood not only to solve a social problem, but also a to enhance competitiveness and productivity.

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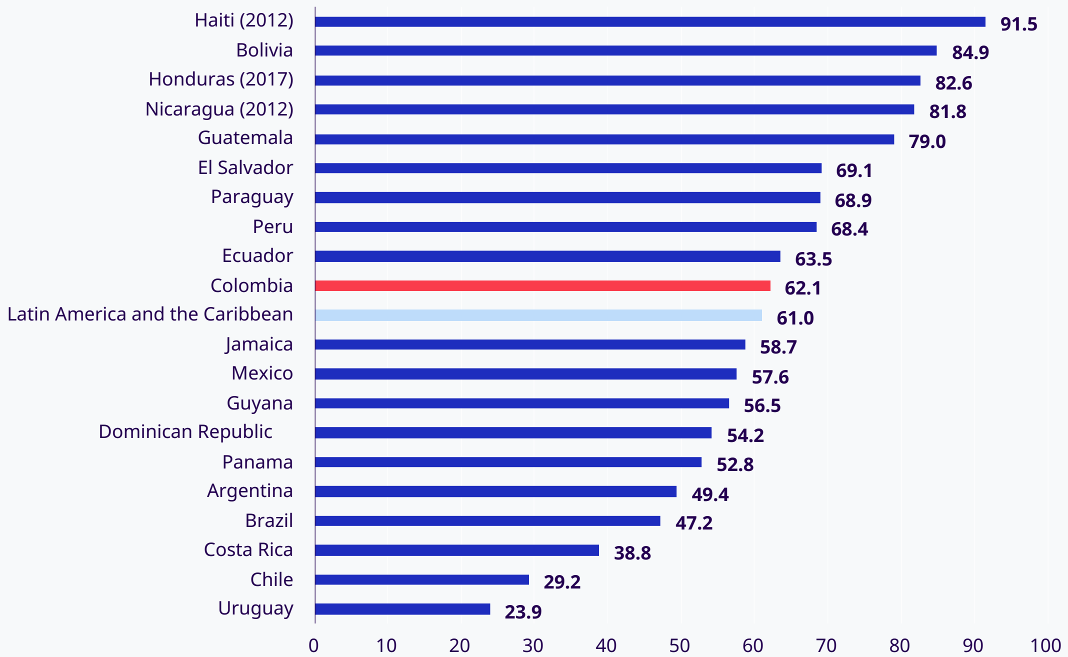
Appendices

Figure 1: Health and Pension Informality
(% of worker that do not contribute by quarters, 2007-2021)*

Source: National Statistics Department (DANE)

***Data for 2nd and 3rd quarters of 2020 are not available due to the change of the Household Survey collection operation because of the COVID-19 pandemic. Includes employees and independent workers.**

Figure 2: Labour Informality
(% of workers, 2019 or earlier available)



Source: ILO database

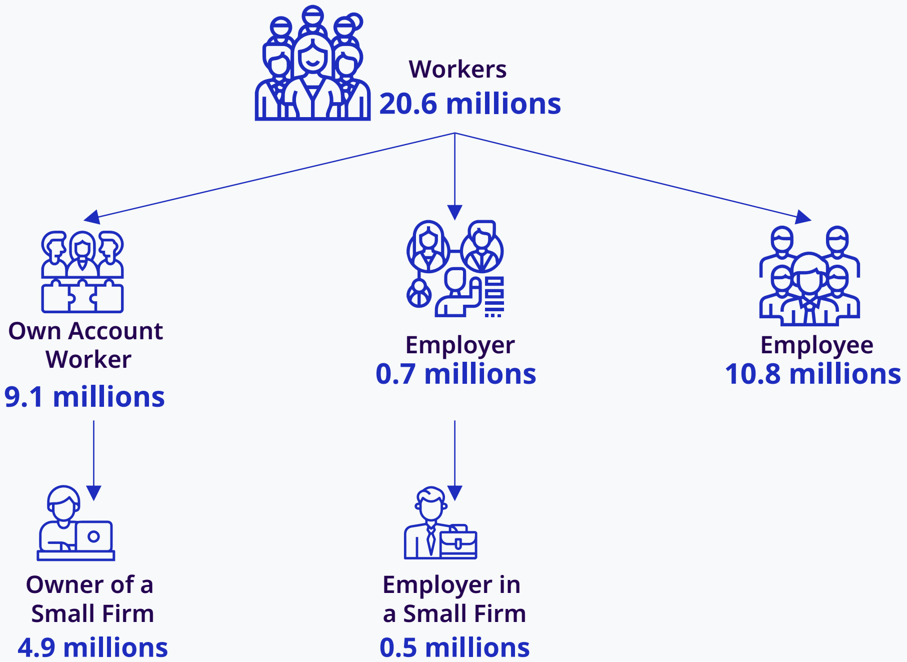
▶Table 1: Labour Informality by Firm Size*

	Year	Small	Medium	Large
Argentina	2004	74,0	17,7	8,3
	2018	94,4	1,5	4,2
Brazil	2009	74,3	6,5	19,2
	2018	86,6	10	3,4
Colombia	2004	73,5	17,7	8,8
	2018	92,6	4,8	2,6
Costa Rica	2010	80,8	10,6	8,6
	2019	88,9	5,1	6,0
Chile	2000	79,9	12,4	7,7
	2017	74,7	12,7	12,6
El Salvador	2015	47,8	31,6	20,6
	2018	45,7	33,6	20,8
Honduras	2014	80,6	7,2	12,2
	2019	85,2	2,2	12,6
Mexico	2000	46,4	33,3	20,3
	2018	81,6	13,2	5,2
Paraguay	2002	84,3	12,9	2,9
	2018	79,7	12,8	7,5
Peru	2010	88,6	2,5	8,9
	2019	88,6	2,1	9,3
Uruguay	2000	67,6	21,8	10,6
	2018	90,2	8,1	1,7

Source: OECD data

***Small firms employ less than 50 workers, medium between 50 and 249, and large 250 or more**

Figure 3: Labour Market and Small Economic Units
(2021, 2nd quarter)



Source: Small Firms Survey, 2021 Second Quarter, DANE

▶**Table 2: Informality in small firms** (% of small economic units, January-October 2019)

Registration (%)	
Yes	12.1
No	87.9
Tax ID (%)	
Yes	24.4
No	75.6

Social Security Contributions (%)	
Health and pension	7.8
Health	4.3
Pension	0.4
None	87.6
Occupational hazard contributions (%)	
Total	100
Yes	5.3
None	94.7

Source: DANE

▶**Table 3: E-government legislation 200-2010**

Conpes/Law/Decree	Year	Objective
Conpes Document 3072	2000	Connectivity Agenda. Use of ICT
Decree 127	2001	Presidential program for ICT use
Decree 3107	2003	MINTIC as leader of the program
Law 1151	2007	National Development Plan. Use of ITC as part of citizens services.
Decree 1151	2008	All public entities must follow guidelines of MINTIC for the use of ICT
Decree 2623	2009	Creation of the National System for Citizens Services
Law 1341	2009	Law ICT. Use of ICT to fulfil the functions of public entities
Conpes Document 3650	2010	Strategic importance of e-government strategy

▶**Table 4: E-formalization tools** (and year of creation)

Labour	Firm
PILA (2004)	VUE (2018)
SAT (2015)	E-receipt (2020)
	RST (2018)

International
Labour
Organization