FUTURE CHALLENGES

 GROWTH OF THE COLLABORATIVE ECONOMY: WHAT CUBA CAN LEARN FROM OTHER IBERO-AMERICAN EXPERIENCES

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• THE CUBAN ECONOMY'S TRANSFORMATION AND THE EU-CUBA POLITICAL DIALOGUE AND COOPERATION AGREEMENT (PDCA)

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1. Introduction

The collaborative economy (CE) is not a new concept: sharing goods and services is as old as humanity. But what accounts for the extraordinary recent expansion of CE platforms? According to Cramer and Krueger (2016) and the OECD (2017), two elements seem to be important in their growth. First, communication technology advances have helped spread internet connections. More specifically, the success of many of these platforms is linked to the permanent use of the mobile internet enabled by smartphones, and to the generalisation of software applications created for them (Shaheen et al., 2017). All this has expanded the population base likely to participate in the CE.

The second element is trust. Secure means of payment, provider identity verification, interaction between users and suppliers, and sharing the opinions of previous consumers are key factors in the CE's success. But as with electronic banking and commerce, the first trust barrier that has to be overcome before using these new and unconventional forms of consumption is seeing the internet as a tool for interaction and exchange. The generalisation of so-called "digital skills" among consumers reduces distrust and, as we shall see, plays an important role in the use of CE platforms.

The two elements discussed above seem to have been key to the spread of the CE, but its rapid growth was undoubtedly also conditioned by two developments. First, digital platforms linked to the consumption of online services and e-commerce spread and were consolidated. In fact, the CE can be considered to be part of this broader digital platform economy. Second, the CE's significant growth coincided with the great recession that began in 2008. It is common for economic crises of this intensity to usher in groundbreaking disruption and innovation, and the success of certain CE projects can be linked to this. Secure means of payment, provider identity verification, interaction between users and suppliers, and sharing the opinions of previous consumers are key factors in the Collaborative Economy's success. But as well as its economic importance, the CE is a controversial subject of analysis. Two books exemplify this: Botsman and Rogers' *What's mine is yours* (2010); and Slee's reply *What's Yours Is Mine: Against the Sharing Economy* (2017). Antagonistic visions of this business model are presented. The first came out when initiatives like Airbnb began their rapid growth. Such activities were presented as a new economic and social model, a kind of overthrow of consumerism that incorporated solidarity or ecological values or the like. Slee's book (2017), on the other hand, was written after the global expansion of many of these platforms and presents the CE as a mere badge that many companies wear to make themselves appear different and attractive. This facade of solidarity and ecological values hides the restoration of old models of deregulated industrial relations.

This chapter covers various aspects of the CE. Firstly, given its novelty and the plurality of visions that have emerged in recent years, particular attention is paid to the definition and delimitation of these activities. Second, the determinants of individuals' use of these platforms are analysed. As it proved impossible to obtain statistical information for Cuba, this analysis was carried out for Spain. Major differences exist between the two societies, but Spain's results may serve to identify the factors that could stimulate and inhibit CE implementation in Cuba. Thirdly, seeking to assist the design of the regulation of these activities in Cuba, the situation of CE platforms is presented in two Latin American countries, Ecuador and Costa Rica, where they arrived earlier. The market structure produced and the initial regulatory steps taken are observed. Fourth, digital passenger transport platforms in Cuba are analysed. Although incipient in their development, a set of competing local platforms have emerged. Finally, a reflection is made on some of the issues public policies should address when promoting and regulating these activities in Cuba in the light of the experiences and analyses presented.

2. Definition and measurement

Finding a single definition to cover all the different activities we encounter under the CE umbrella is a complicated task. First, because the term "collaborative" is deployed as a distinguishing feature in the marketing strategies of numerous enterprises without the need for it to confirm specific characteristics or be backed by any public institution. Second, the characteristic "informality" of the provision of these activities blurs many contractual aspects.

When attempting to measure the weight of the CE in European countries, the European Commission (2018) identified three stakeholders: online platforms that act as intermediaries; consumers and private users; and service providers who share their assets, resources, time or skills. When it comes to classifying an activity as collaborative, it is around the latter group that discrepancies emerge. Where individuals offer their services on an occasional basis, the literature speaks of P2P exchanges (peer-to-peer or pure exchange). This category includes platforms like Blablacar.

In the case of service providers acting within their professional capacity we find ourselves in a grey area: platforms like Uber are in this space.¹

 In the case of Uber, providers are professionals who hold private hire vehicle (PHV) licences and compete directly with taxi services in large cities. Finally, when the service provider is a company, the activity is excluded from this definition and is not therefore included in the measurement.² The difficulty with this characterisation relates to self-employed professionals as CE service providers. In many cases, it is difficult to distinguish these initiatives from traditional ones that also operate through digital platforms.

CE activities can be divided into four groups. Those related to passenger transport and holiday accommodation are the best known, and are the focus of most of the analyses in this chapter. But, although less visible, two other groups of activities appear in this area. On the one hand, there is what is called "collaborative finance", which includes the crowd-funding initiatives expanding in many countries in recent years. Finally, there are professional services activities that compete with companies offering similar services. In this area the difficulties mentioned above with defining CE activities are exacerbated.

The European Commission (2018) study estimated that all these platforms account for around 0.2% of overall GDP and employment in 2017 in the European Union as a whole. The figure for Spain is close to these average figures. Only in a few countries like Estonia is the weight significantly higher (about 1% of GDP and employment). These CE figures may be considered to be particularly conservative, given the restrictive criteria the report applied to the inclusion of activities in the category. Other studies, such as that made by the EY Foundation and the Spanish Association of Digital Economy, give Spain the higher figure for the same year of 1.4% of GDP.³

However, the above figures on the importance of CE in Spain and Europe are a long way from some estimates for countries like China, where growth has been very high in the last decade. According to China's State Information Center, CE activities are estimated to have accounted for 6% of GDP in 2017 and their share is expected to rise to 10% in 2020. While it is likely that these studies use a lax definition of CE, the figures nevertheless confirm the sector's emergence in the country, where initiatives are found in many economic sectors and activities. Buenadicha et al. (2017) discusses the importance of CE in Latin America but, despite noting the growing importance of these platforms, current information does not allow figures to be obtained for either their share of GDP or the overall employment generated in the region.

3. Determinants of the use of the collaborative economy in Spain

In spite of the current importance of the collaborative economy, there is a shortage of empirical work analysing the determinants of its use. The attention received has focused on theoretical works that emphasise the conceptual differences between CE and traditional forms of business and consumption. Belk (2014), Lawson et al. (2016), Milanova and Maas (2017) and Zhang et al. (2019) confirm the enormous spread of CE initiatives since the 2008 crisis, comparing them with the traditional ones. These studies highlight the changes in consumer values and attitudes involved in these forms of shared consumption with respect to what some authors call the "culture of ownership". The term "collaborative" is deployed as a distinguishing feature in the marketing strategies of numerous enterprises without the need for it to confirm specific characteristics.

- **2.** Platforms such as Netflix or Spotify are excluded, for example.
- This divergence in the figures for the same country and year illustrates the difficulties of measuring the CE's share of economic activity.

This paper presents the results of empirical analyses of the determinants of the use of two types of collaborative services – those linked to transport and those associated with accommodation (Table 1) – based on the data from a 2017 INE survey on ICT equipment and use in Spanish households. To be sure, Spanish society has its own characteristics, but identifying factors that stimulate or inhibit the expansion of the CE may serve as a useful reference for Cuba's economy and society, once the differences between the two countries are taken into account.

Determinants of the use of collaborative economy platformsin Spain in 2017*				
	Accommodation	Transport		
Sex (Male = 1)	-12	-15		
Young people (16–30)	13	79		
Adults (31–45)	NO	NO		
Seniors (+61)	-31	NO		
Low income	NO	NO		
Middle income	21	NO		
High income	30	NO		
Secondary education	32	21		
University education	84	48		
Digital skills index (0–10)	20	16		
Trust in the internet	30	NO		

NotE: *These figures correspond to odds ratio values. Assuming no change in the other variables, the interpretation of the odds ratio for each should be taken as an approximation of the changes in the probability of use in the dependent variable. "No" indicates non-statistically significant variables.

Starting with sociodemographic variables, the first thing that stands out is that sex (male = 1) is negative and significant for both types of CE. As such, the estimate suggests that being female increases the likelihood of using these platforms by between 12% and 15%. Regarding age, the most notable thing is that while younger people are much more likely to use transport platforms (79%), the difference is reduced when it comes to accommodation platforms, where they are 13% more likely. For their part, people over 61 years of age are 31% less likely to be platform users than the age group immediately below them, but only in accommodation activities. In this case, it is surprising that advanced age does not influence the use of passenger transport platforms.

Income levels do not show statistical effect on the use of transport platforms. Neither do low incomes reduce the likelihood of using CE accommodation. However, the probability of using accommodation platforms does increase with medium and above all high incomes (21% and 30%, respectively). Finally, the fourth group of sociodemographic variables in this analysis – education level – shows a clear relationship with the use of both types of collaborative services: a high level of education (university and master's degrees) substantially raises the probability of CE use, especially accommodation platforms (84%).⁴

However, the sociodemographic variable with greatest explanatory effect on the use of these platforms is the digital skills index.⁵ An increase of one unit in this index implies a 20% increase in the proba-

A high level of education (university and master's degrees) substantially raises the probability of CE use, especially accommodation platforms.

- As seems logical, the results for level of education are related to those for income group.
- 5. For each individual the index gives a value of between 0 and 10.

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bility that individuals use CE for accommodation and 16% for transport. Compared to individuals with low scores in the index (e.g. 0), those with very high scores (e.g. 10) are 200% and 160% more likely to use CE accommodation and transport services, respectively. Finally, the effect of the variable that measures the degree of trust when using the internet varies according to the type of collaborative service in question. While it has a strikingly significant influence on the probability of using accommodation platforms, it almost vanishes when it comes to transport platforms.

4. Regulation of the collaborative economy in Ecuador⁶

As in other Latin American countries, the CE has grown in Ecuador even as legal gaps in its operation persist. Despite being one of the countries with the smallest number of platforms – just 1% of the Latin American total (IEM, 2016) – it has thus far hosted over a dozen international enterprises: Airbnb, Couchsurfing and Homeaway in the accommodation sector; Uber and Cabify in the passenger transport sector, where they are the clear leaders; and others such as Glovo, OLX, Busuu and Freelancer.

Picker stands out among the CE platforms developed in Ecuador.⁷ Competing in the (mainly food) delivery service market with multinationals such as Uber Eats, Glovo and Rappi, in the space of two years it has reached 50,000 users and 1,200 service providers. Another example is Mutua, which could be defined as the "Uber of and for women", and which connects drivers with passengers. This interesting initiative is a response to many women's demands for greater security when using transport services. Some studies show that 17% of women cite the lack of female drivers as a reason for not using platforms like Uber more frequently, and 40% would prefer a woman driver when travelling alone or at night (World Bank, 2018).

4.1. Regulation: Ecuador vs Spain

In what follows, some of the features of the regulation applied in Ecuador in three areas (transportation, accommodation and crowdfunding) are presented and compared with Spain, where regulation occurred earlier.

Starting with transportation, the two main platforms, Uber and Cabify, may be considered providers of clandestine private hire vehicle (PHV) services in Ecuador. Clandestine because the Ecuadorian legal system requires land transport to be conducted by legal persons with permission for transport operations and not by individuals. However, despite the threat of significant penalties,⁸ the increased demand for this service means the number of drivers (those potentially subject to these penalties) continues to grow. As in other countries, taxi drivers in Ecuador have strongly opposed the legalisation of the activity of these platforms through the Federación Nacional de Operadoras de Transporte en Taxis. As will be discussed later, a national regulation is being prepared that allows platforms to be taxed on income, which would indirectly entail their legalisation.

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- 6. This section was prepared by Roberto F. Erazo Castro.
- See: https://www.eluniverso.com/ noticias/2019/12/04/nota/7634597/ picker-aplicacion-ecuatorianaenvios-que-quiere-competir-uberglovo
- 8. According to art. 386 of the Comprehensive Organic Code, any driver who transports passengers without possessing the corresponding licence will be fined 772 dollars, lose ten points from their driver's licence (of 30 total) and have their vehicle confiscated for a minimum of seven days.

Taxing digital platforms, including Collaborative Economy projects, is a priority concern in many countries, particularly in Latin America. In Spain, this activity has recently been regulated in regions where its presence is significant. However, as the Autonomous Communities and city halls have competence for these activities, notable regulatory variation has resulted. In Barcelona in 2019 an obligation was established to pre-contract this type of service with at least 15 minutes notice. As it hindered their operation, this caused Uber and Cabify to leave. On the other hand, despite protests from taxi drivers the Community of Madrid has not introduced operating restrictions for these platforms, whose user numbers continue to grow.

In terms of CE accommodation platforms, Ecuador developed the Regulation of Accommodation in Real Estate for use in Tourism in 2019 with the aim of protecting tourist safety and reducing informality in these accommodation services. According to the regulations, people wanting to rent their property through these platforms must possess a tourism registration, the single annual operating licence and be subject to the horizontal property regime.

In Spain, as with transport, competences in the accommodation sector are decentralised. In Madrid, both the city council and the Autonomous Community approved new control rules in 2019 for platforms like Airbnb and Homeaway, which limited the accommodation supply and regulated to enable certain quality standards to be maintained.⁹ In the case of Barcelona, the regulations have even permitted substantial fines to be imposed on the platforms themselves for failing to share requested information.

With respect to crowdfunding, Ecuador is preparing a law on entrepreneurship and innovation that seeks to promote such platforms as alternative sources of financing for investment projects. The regulation of this type of financial activity in Spain has a longer history and it was included in Law 5/2015 on the Promotion of Business Financing, which contains a legal framework for collaborative finance platforms.

4.2. Taxation and labour model

Taxing digital platforms, including CE projects, is a priority concern in many countries, particularly in Latin America (ECLAC, 2019). The Ecuadorian government intends to regularise digital platforms like Uber, Cabify, Glovo and Airbnb in exchange for their paying 12% VAT. The proposal to tax digital platform services with VAT was included in the Tax Simplicity and Progressivity Law approved by the National Assembly on December 9th 2019. The consumer would pay the charge when booking by credit or debit card. It is expected to collect approximately \$11 million a year. In Spain, these activities are subject to the same tax regime as other similar service provider activities.

A final but particularly important aspect of the operation of these platforms is the labour model. The International Labour Organization (ILO) identifies the non-regulation of these platforms as the first barrier to a fair employment relationship. Furthermore, as mentioned elsewhere in this chapter, whether service providers are considered to be workers linked with the platforms or independent or self-employed workers is a key part of the employment relationship. The chances of establishing a basic salary,

 See: https://elpais. com/ccaa/2019/04/10/ madrid/1554904148 942149.html maximum working hours and social rights, among other factors that can cause precarious labour situations, depends on this (Eisenmeier, 2018). In Ecuador, the Ministry of Labour has indicated that digital collaborative economy platforms will be included in the labour reform being prepared for 2020. In Spain, a legal debate is ongoing about whether the providers of these services are employees of the platforms or self-employed professionals.

5. The main digital collaborative economy platforms in Costa Rica¹⁰

Since Uber arrived in Costa Rica in 2015, the market for digital collaborative economy mobility platforms has shown great dynamism. A turning point came in 2018 when Beego, founded in France, inDriver, founded in Russia, and Glovo, founded in Spain, began operating in the Costa Rican market.

The development of various national mobility applications also boomed in the country. Initiatives like Dame Ride and WorkRide use digital platforms to provide mobility services in the form of a corporate carpooling scheme. The aim is to provide a mobility alternative to corporate clients, mainly companies, with the aim of promoting shared transport. Unlike the collaborative economy digital platforms analysed in this study, the main characteristic of corporate carpooling is that it works as a private network that allows exclusive use of the application. In other words, a company interested in using the service hires the digital platform's administrators and an agreement is made that determines the conditions of its use.

Other examples include the Costa Rican-owned company Onux set up in January 2019 as a multi-service platform that includes passenger transport and domestic services within its activities. At the end of 2019, DiDi also launched another mobility alternative in the country.

Uber/Uber Eats has replicated its global leadership position at the national level, with around 783,000 user-consumers and 22,000 service providers. Costa Rica is also home to Uber's second-largest centre of excellence, which gives support to service providers in Latin America, and directly employs 750 people (54% of whom are women). On average, about 150,000 user-provider and customer inquiries are processed each month.

Costa Rica is the third largest market for Beego and Glovo. In the former case, Costa Rica is also key to its operational development, as the only country in Latin America in which it has a presence. Its commercial manager for Latin America, says that Beego creates direct and indirect employment, as it contributes to dynamising support services, such as car washes, mechanical assistance and vehicle maintenance centres. The company currently has seven direct employees who provide advice through the platform.

Glovo, on the other hand, reports close to 50,000 active users in Costa Rica and nearly 2 million orders placed by December 2019. The company has 25 direct employees who are in charge of communicating with the "glovers", as the platform's user-providers are known. According to Glovo's representative in Costa Rica,¹¹ the company is in the expansion stage in the country. By 2020 they plan to extend their operations to

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- 10. The authors of this section are Keynor Ruiz Mejías and Luis Miguel Barboza Arias, researchers at the International Center of Economic Policy (CINPE) of the Universidad Nacional in Costa Rica.
- **11.** In an interview for *El Financiero* (September 2019).

other areas within the national territory and incorporate other services, such as Fintech and Dark Kitchens, trends being incorporated by the company in the European market.¹²

Company name	Country of origin	Cities/countries where they operate	Main markets	Direct CR collaborators	Service provi- ders	Active users in CR
Uber	United States	700 cities, 70 countries	United States, Mexico, Brazil	750	22,000	783,000
Beego	France	Europe, Costa Rica	France, Belgium, Costa Rica	7	3,800	133,800
inDriver	Russia	300 cities, 26 countries	Mexico, Colombia, Russia	0	Withheld	Not available
Uber Eats	United States	50 cities, 13 countries	Not available	750	10,000	Not available
Glovo	Spain	270 cities, 26 countries	Argentina, Ecuador, Costa Rica	25	1,000	50,000
Onux	Costa Rica	Costa Rica	Costa Rica	4	18,000	45,000
WorkRide	Costa Rica	Costa Rica	Costa Rica	7	Corporate model	Corporate model
Dame Ride	Costa Rica	Costa Rica	Costa Rica	0	Corporate model	Corporate model

Source: Compiled by the authors.

inDriver began operating in Costa Rica in 2019. Unlike the previous platforms, this company does not have direct employees in the country, as all its activities are carried out from Mexico, including answering queries and communication with user-providers. Although the application originated in Russia, the operations base is in the United States. According to the public relations manager of inDriver for Latin America, the company sees itself as a technology application that relies on connectivity tools to facilitate communication between drivers and passengers. It defines itself as an intermediary company, explaining that the company does not set prices or rates for journeys. Unlike Uber and Beego, which establish the fare charged to the passenger using standardised algorithms, inDriver fares are the result of agreement between drivers and passengers at the time of negotiating the conditions of a requested trip.

Costa Rican-owned Onux has four direct employees. Since it began operating in January 2019, 45,000 users of the platform have been registered, of whom 18,000 are service providers. This company provides multiple services, including home repairs, cleaning, health care and massages, among others, and 5,200 of the user-providers engage exclusively in passenger transport.

- 12. The Fintech consists of cash delivery services, while Dark Kitchens consist of investing in a restaurant's infrastructure and marketing campaigns to provide dishes that are offered only through the platforms.
- **13.** According to a report published in El Financiero (September 2017).

When it comes to accommodation services platforms, it should be noted that Airbnb's arrival in a country with a tourist tradition like Costa Rica contributed significantly to revitalising this type of service. In 2017, approximately 14,000 accommodation options were available in the country,¹³ while between May 2016 and May 2017 a total of 260,000 tourists used Airbnb, 40% of whom were Costa Rican. The average

rental time per property in Costa Rica is estimated to be 23 days per year.

In terms of providers, it is estimated that income per host reached an average of \$2,600 per year. The age group of these providers is another interesting feature. According to some estimates,¹⁴ around 16% of the hosts in Costa Rica in 2019 were over 60 years old, about 2% higher than in 2018. Most of these people are retired and have a basic command of technologies and social networks.

5.1. Reflections on the regulatory framework in Costa Rica

According to those running the digital collaborative economy platforms analysed, Costa Rica has made significant progress in identifying a desirable institutional and regulatory framework for these activities. However, in general terms, all the platforms continue to operate without the support of an institutional and regulatory framework, and even at the limits of legality, given the absence of a definition of whether or not the user-providers are employees of the digital platform companies.

Mobility digital platforms are meanwhile at a crossroads, as Costa Rican legislation has not granted any of the companies (Uber, inDriver, Beego and DiDi) the formal status of a legal commercial activity.

As well a fee, traditional taxi drivers must pay for biannual vehicle inspections and a driving licence, which adds up to \$595 a year. Since January 2019 a project has existed to charge the platforms a registration fee; but the amount has been subject to dispute and no agreement has been reached. However, it is expected that in the coming months credit or debit card issuers will begin collecting the VAT on any trip made in Costa Rica using the transport service platforms, which indirectly gives the activity recognition and a path to legality.

Technological intermediation is producing major changes in labour relations. Largely, this is due to the emergence of the figure of the user-provider, whom the platforms call a "collaborating partner", who is the person providing the service to a user-consumer who requests one of the services offered. Both connect to an application managed by a third party that obtains profits from its use. This situation leaves people who work with any of the collaborative economy platforms in a state of employment uncertainty, because while it is true that they use the platforms, and that the sum charged includes a percentage for the platform, it is not entirely clear whether their employment relationship is that of an independent worker or a dependent worker (employee of the platform). In any case, there is no generalised social security coverage for the workers, and although many providers include coverage for the driver and occupants in the event of an accident in their vehicle insurance, there is no coverage for illness and other social rights are not generated.

The people who provide product delivery services of the Uber Eats type do not necessarily acquire social security or any other insurance. Those travelling by bicycle or motorcycle are therefore especially vulnerable in this work activity – faced with an accident or health problem they would have no form of coverage, meaning not only lost income, but also burdening their families.

 See: https://amprensa.com/2019/11/ en-costa-rica-cada-vezmas-adultosmayores-comparten-su-hogar-a-traves-de-airbnb/

Regarding accommodation services platforms, a bill is under consideration that seeks to regulate the use of non-traditional forms of hosting such as Airbnb. It is important to bear in mind that traditional hoteliers pay 13% VAT, 10% service tax and a percentage tax on their income. The bill would tax Airbnb activities with 13% VAT and an additional 3% for the Costa Rican Tourism Institute. A special contribution (which would function as a commercial patent) would also be made to the corresponding municipality in order to engage in profit-making activity and clear guidelines would be established for complying with the provisions of Law 7600.¹⁵

This analysis of Costa Rica concludes with a reflection that may be generalisable to other Latin American countries that have yet to regulate these activities: digital platforms are here to stay. Almost any service or product that can be brought to a consumer can be managed with a digital platform. Faced with this reality, it is crucial to address the employment situation of the people involved, since it is neither acceptable nor convenient for them to go without protection by the social security systems; especially when it comes to those working in the most vulnerable conditions.

6. Situation of collaborative urban transport platforms in in Cuba¹⁶

As mentioned above, CE development requires clients, providers and platforms to have fluid access to the internet, something that reached Cuba some time later than other countries. Along with increasingly widespread wi-fi access, since December 2018 it has also been possible to connect via mobile data, although the high cost of mobile plans still prevents their generalised use among the Cuban population. These developments are enabling the incipient emergence of some CE initiatives. Although the multinational Airbnb has been operating in Cuba's accommodation field for a few years now, we have preferred to focus this case study on transport platforms. This is because a large group of competing local platforms has recently been emerging in this field in Cuba.

The emergence of a number of digital mobility platforms, especially in Havana, may present a large number of Cubans who have their own vehicle with a way to earn additional income to their main job. At the same time, as the study on developing countries noted (World Bank, 2018), and as the experience of Ecuador's Mutua showed, these platforms can play an important role for a broad group of women who are unlikely to enter the labour market and who need significant time flexibility.

As Table 3 shows, the initiatives seeking to find space for themselves in this market remain in their very early stages. Figures on the use of these platforms do not currently exist, due to this newness. To estimate their importance, the number of downloads of each of their applications has been compared and the downloads made from Google Play, Cubapk and Apklis have been added.

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 Law of Equal Opportunities for People with Disabilities.
This section was prepared by Sandra Madiedo Ruiz.

Table 3. Passenger transport platforms in Cuba				
Startup	Form	Reach	Year	Downloads
Yotellevo	Private	National	2014	N/A
Pickocar	Private	West and Centre	2018	N/A
TaxinHavana	Private	National	-	N/A
Sube	Private	Habana	2019	6,000
Cuber	Private	National	2019	1,000
Bajanda	Private	Habana	2019	7,000
La Nave	Private	Habana	2019	3,000
D'Taxi	Estate	National	2019	12,000

Source: Compiled by the authors.

6.1. Legal framework for the "Cuban Ubers"

As discussed already, in Ecuador, Costa Rica and other Latin American countries the activity of Uber drivers is considered illegal or irregular and heavy fines may be imposed on the drivers identified. As Cuba is one of the few countries in the region where Uber does not operate, the alternatives are 100% Cuban and must fight for legal support for their startups.

As no specific legislation exists for them, that on related activities is applied. In the case of these online platforms, which do not own vehicles and whose activity is to connect customers with providers (Bravo, 2019), various types of licence have appeared. Among those used are the Computer Equipment Operator Licence (LOEC) and Transport Operation Licence (LOT; *Gaceta Oficial*, 2019. no. 85, p. 1,880). In other cases, given the gaps in the legislation, courier and general self-employment licences are being used.

An interesting aspect of regulation is the comparison between taxis with and without digital platforms. Table 4 presents some of the differences between the two types of service.

Table 4. Comparison between traditional taxi services and digital platforms			
Characteristics	Traditional taxis	Platforms	
Transport Operation Licence (LOT)	Regular type	Various alternatives	
Driver–passenger matching process	Street pick-up	On demand, at the point chosen by the customer	
Rate of use	Low/Medium	High	
Fee and methods of payment	Max. price limit according to administration	Algorithm of each platform	
GPS	No	Yes	

Considering the differences between the regulatory and operating conditions of the two types of services, we note that the activity of taxi drivers is more constrained by the conditions of transport licences. Among other things, the setting of maximum prices is mentioned, as well as a daily maximum time for providing the services. Platforms, on the other hand, set a rate that may vary but is around 15% of the price charged for each trip. The price of each trip is set by platforms using an algorithm

that takes into account various factors such as distance, type of car and existing traffic conditions. Given the difficulties of paying by card in Cuba, payment is made in cash for all of them, although some offer the possibility of advance online payment of fares for long journeys to non-residents or visitors to the island.

One of the features platforms like Bajanda and Upload champion are flexible timetables for drivers working using their applications.¹⁷ But this greater flexibility also conceals some of the dangers mentioned in the introduction – and which were observed in Ecuador and Costa Rica – with regard to the working conditions of many service providers on collaborative platforms (Angulo, 2019). This was graphically denounced in a campaign drawing attention to these risks in Chile "My boss is an app and he exploits me" (Bravo, 2019; CEPAL, 2019). Finally, the lack of specific regulation on the security and protection of the users of these services leaves a gap that can produce uncertainty among potential users.

While this section focuses principally on passenger mobility activities, it is worth noting that the main global platform for shared accommodation, Airbnb, has been present in Cuba since 2015. Since then the number of accommodation offers through this platform has grown and exceeded 30,000 in 2018.¹⁸ That this represents about half of the hotel offer on the island gives an idea of the important role this platform plays in meeting the accommodation needs of the almost four million people who visit Cuba annually. It must also be borne in mind that this growth, which is expected to continue, has occurred despite internet access restrictions and hosts' difficulties charging through the platform.¹⁹

6.2. The future of online platforms in Cuba

According to Morales (2019), while calm waters favour large entities, troubled waters give more opportunities to startups. This could describe the expansion of these novel and in part disruptive platforms in Cuba. But when these regulatory gaps are not addressed, the laws end up punishing disruptors that bring benefits to users (Miranda, 2019). One of the platforms operating in Cuba is D-Taxi, which has the backing of the state company TaxisCuba, whose vision is to be the leader in the sector. The starting conditions for this platform are clearly different from its competitors in what remains a new market and the institutional framework must therefore ensure that the conditions are maintained that allow effective competition between them all (Madiedo, 2019).

The next few years will be vital for the development of platforms of this type, both those analysed here, related to passenger transport, and those related to accommodation and other still-underdeveloped areas in Cuba. In the first place, because of the expected growth in wi-fi access and especially mobile access, which will greatly facilitate online interaction. The prices of data plans are expected to fall, which would facilitate use for both visitors and Cuban residents.²⁰ Second, new regulations are in the pipeline that will affect the digital environment, such as the Data Protection Law and the Consumer Protection Law (Castillo, 2019). And thirdly, regulations on telecommunications, information technologies, communication and the use of the radio spectrum are expected

The lack of specific regulation on the security and protection of the users of these services leaves a gap that can produce uncertainty among potential users.

- **17.** See: https://capplatam.com/bajanda-app-cuba-conductores/
- See: https://www.cnet.com/es/noticias/airbnb-32000-viviendas-cuba/
- 19. See: https://www.radiotelevisionmarti.com/a/ cuba-airbnb-y-vacuba-crisis-atrasopagos/142720.html/
- **20.** Recent campaigns by ETECSA (January 2020) show a significant reduction in the prices initially set for mobile internet access.

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to be approved in February 2021.²¹ Hopefully, the country will be able to discuss and evaluate this, as Cuba needs to weigh up and implement a digital agenda that takes in all sectors, including the nascent digital platforms field.

7. Conclusions and final discussion

This work makes a brief overview of what the collaborative economy represents in today's economy and society. The difficulties defining and measuring it stem largely from its informal nature, as figures differ greatly between sources. It is the source both of its virtues and its dangers. Platforms like Airbnb and Blablacar are examples of emerging companies that spread rapidly with low initial investment. But the precarious employment situations of those providing services through some of these platforms embody the threat of deregulated labour relations we believed had been overcome.

An empirical analysis was made of the determinants of the use of these platforms by individuals in Spain, as it was the only case for which adequate information was available. Despite the differences between Spanish and Cuban societies, this information may serve to identify stimulating and inhibiting factors for the spread of the CE in Cuba. The use of CE platforms varies according to the type of service analysed, of course, but factors such as being a woman, a young person or having a high level of education seemed to favour the use of these platforms. CE's expansion is also strongly linked to the spread of digital skills among the potential user population.

That Cuban young people have higher educational levels than many of the surrounding countries favours the growth of the CE in the country. On the other hand, the lack of widespread access to the mobile internet may hold back progress in the coming years both because it reduces the immediate possibilities of using the CE, and because the development of digital skills among much of Cuban society will be delayed. Finally, although it is not explicitly included in the aforementioned study, extending the use of credit cards is an element that would facilitate the operation of these platforms.

The inclusion of the two case studies from Ecuador and Costa Rica (where tourism is a major component of the economy as it is in Cuba) allows us to observe the growth process of these platforms in an initial phase, but also the attempts to regulate to solve the problems raised by this unregulated entry. Although various types of CE services are presented for both countries, the analysis focuses on passenger transport. What lessons can be drawn for Cuba from the experiences of Ecuador and Costa Rica?

First of all, leading international foreign companies like Uber tend also to be leaders in the countries where they establish themselves. Secondly, despite the unquestionable improvement in urban mobility services they produce, the deregulated situation in which they operate in the first years has negative effects. On the one hand, associations of companies that provide similar services protest that these platforms constitute unfair competition. On the other hand, this situation of illegality implies signifiThe lack of widespread access to the mobile internet may hold back progress in the coming years both because it reduces the immediate possibilities of using the CE, and because the development of digital skills among much of Cuban society will be delayed.

 See: https://eltoque. com/107-normas-juridicas-que-seaprobaran-en-cuba-hasta-2028-cronograma-legislativo/

cant lost tax revenues, while at the same time placing the users of these services in a situation of vulnerability. And, finally, the labour relations generated leave service providers in a situation of helplessness and vulnerability that public authorities should not ignore.

Can the CE model aid the development of the Cuban economy and society? Cuba has a long tradition of resource-sharing activities, although they did not previously rely on digital connections. Networks of "private houses" and the shared taxis in Havana are just some wellknown examples. Leaving aside initiatives related to accommodation, where Airbnb operates in a state of near exclusivity, and where statistical information did not allow further analysis, the recent experience in urban transport is of great interest. The emergence of initiatives in this area in a very short time shows the possibilities for CE expansion in Cuba, especially taking into account the serious limitations on internet access that presently exist.

Several factors will determine whether the initial involvement of service providers in this market is maintained when demand for these services rises. The possible entry of Uber or Cabify would play an important role. A balance must be found between efficiency and competition in the markets and empowering local initiatives and service providers' employment rights. Although the participation of international platforms would cause an increase in competition and a foreseeable drop in the prices of urban mobility services, this should not be at the cost of driving out local platforms or increasing job insecurity.

Finally, one general reflection on CE in Cuba: arriving late also has its advantages. Most countries have regulated the conflicts and sometimes undesirable situations caused by the arrival of these digital platforms after the fact. Cuba therefore has the advantage of being able to learn lessons from other settings and to regulate based on past experience. This may slow the growth of new CE services, but it would forestall some of the problems seen in other countries.

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