Assessment and recommendations

Start-up Latin America 2016 presents an overview of policies to support start-ups in Chile, Colombia, Mexico and Peru. This overview presents the main results and recommendations from the study. Even though there is an unfavourable macroeconomic climate and there are still innovation gaps between Latin America and more advanced countries, start-ups are revealing a different, more dynamic side to the region. Since 2010, the concept of start-ups has attracted growing attention from the media, investors and policy makers in Latin America, and countries have implemented various programmes to support start-ups. These policies to promote start-ups have evolved rapidly, and in the space of just six years, their design, focus and structure have changed significantly, showing initial results and revealing a change in people’s perceptions of the region as a place for entrepreneurship and innovation.
Start-ups are now a reality in Latin America, though they are still in their infancy.

The global heartland of disruptive start-ups is still California, which was home to nine of the 20 highest market value start-ups in 2016, including Uber, Airbnb and Pinterest (Fortune, 2016), but today, many countries worldwide have a growing entrepreneurial culture. Latin America is also on board. Governments, the private sector and universities have begun to support the creation of start-ups, and they are increasingly aware of the potential of these enterprises to transform the economies of the region.

Although Latin America has made little progress in boosting its innovation systems, start-ups reveal a different, more dynamic side to the region. Latin American countries continue to invest little in science, technology and innovation. Investment in research and development (R&D) grew from 0.63% of GDP in 2009 to 0.74% in 2014, a small increase that leaves the region’s countries trailing far behind the OECD countries, which invest around 2.3% of GDP in R&D (in 2014). Latin American countries have increased their use of information and communication technologies (ICTs) over the last decade, but there remains a large gap with the OECD countries (ECLAC, 2013). Connections are slow in most of Latin America. The average broadband download speed was 7.3 Mbps in 2014, compared with an average of 32.2 Mbps among OECD countries. Only Brazil, Chile, Mexico and Uruguay had speeds that were faster than the regional average (ECLAC, 2015).

At the time of the first review of Latin America’s experience in promoting start-ups, their founding and growth appeared as something distant to the culture of the countries of the region (OECD, 2013). Today, the perception is different, with start-ups emerging and growing in Latin America. Venture capital is also growing, with investments having doubled between 2011 and 2015 (LAVCA, 2016). But what, exactly, is a start-up? And what is the profile of Latin American start-ups? Exhaustive, comparable data measuring the dynamic and impact of Latin American start-ups are still missing. There are no official databases on them, and the myriad of ways that countries use to define start-ups makes it difficult to measure them.

The implementation of programmes to promote start-ups is generating new information about them. For instance, thanks to data from the Production Development Corporation (CORFO), we know that Chile has 1 unicorn, 4 centaurs and 31 little ponies, and thanks to the Mexican Association of PE & VC Funds (AMEXCAP), we know that Mexico has 1 centaur and 26 little ponies. These figures are similar to those found in economies like Singapore, which has 2 unicorns, 12 centaurs and 27 little ponies among its 1 000 start-ups (CORFO, 2015). Countries are also generating information by monitoring programmes. For instance, the implementation of Start-Up Chile between 2010 and 2015 revealed that 80% of the beneficiaries were male, 75% were non-Chilean (mainly from the United States, Argentina, India and Brazil), and the survival rate of businesses was higher among Chileans (55%) than among foreigners (less than 50%).

Online platforms are also generating data about start-ups in the region. According to AngelList – a database that investors often use to find basic information about start-ups before making investment decisions – Brazil has the largest number of start-ups in Latin America, followed by Mexico. Mexico has the most even distribution of start-ups across the country, with 32% located in Mexico City, 10% in Guadalajara and 8% in Monterrey. Chile is at the other end of the spectrum, with 80% of start-ups registered in the capital, Santiago (Figure 0.1).
Start-ups do not flourish in a vacuum; they need markets, institutions and networks in order to emerge and expand.

There is a broad consensus that new, innovative enterprises play a vital role in determining how dynamic a country’s innovation will be. Start-ups reinvigorate the business community, increase competition for innovation, introduce new products, services and business models, create new markets and offer innovative solutions to emerging problems. Their creation and expansion depend on several factors: a solid scientific base, a business-friendly environment, and a financial sector willing to make medium-term investments in high-risk projects, among others.
Why should governments support the founding of start-ups, and how can they do so? Many countries have shown that national and local governments, in partnership with the private sector, can play a major role in setting the right environment for innovative entrepreneurship. Public policies can support start-ups both directly and indirectly. Indirect measures are essential because they shape the socio-economic environment in which start-uppers operate. They include policies related to science, technology and innovation, education, production development and physical and digital infrastructure. Direct policies to support start-ups reduce the main barriers that hinder the founding and growth of start-ups. Such policies also benefit intermediary institutions, universities and stakeholders in the financial system (Table 0.1).

<table>
<thead>
<tr>
<th>Gap</th>
<th>Policy action</th>
<th>Types of programmes/actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funding gap</td>
<td>Closing funding gaps</td>
<td>Seed-capital programmes and borrowing for start-ups, as well as incentives for the financial sector to work with start-ups, such as the promotion of venture capital, angel investors, etc. In recent years, countries have also introduced actions to support crowdfunding.</td>
</tr>
<tr>
<td>Information asymmetry</td>
<td>Facilitating linkages and providing services</td>
<td>Support services for start-uppers. In recent years, platforms, mentoring networks and collaborative workspaces have grown in number. They operate alongside traditional intermediary institutions like incubators and accelerators. New platforms to facilitate linkages between large firms and start-ups have also emerged.</td>
</tr>
<tr>
<td>Absence of demand</td>
<td>Creating markets</td>
<td>The inclusion of start-ups in public procurement programmes and initiatives that challenge start-ups to provide innovative solutions.</td>
</tr>
<tr>
<td>Little tradition for business and innovation</td>
<td>Transforming mindsets</td>
<td>Actions to raise awareness about start-ups (including prizes and events).</td>
</tr>
<tr>
<td>Legal and administrative barriers</td>
<td>Reforming legal frameworks</td>
<td>Legal and administrative reforms to suit the needs of start-ups, such as easier procedures for starting and winding up a business.</td>
</tr>
</tbody>
</table>

Source: Authors’ work.

There is no single, optimal formula for promoting start-ups. Each ecosystem develops its own focus based on the country’s features, development vision, and science, technology and production system. Instruments for start-ups vary according to the gap they serve to close, be it funding, information, demand, culture or the regulatory framework, and according to the development stage of businesses (seed, start-up, growth and expansion) (Figure 0.2). Recently, countries tend to combine financing and services in new programmes that offer integrated support to simplify the policy mix and respond better to the needs of start-ups.
Since 2010, start-up promotion has been an important part of Latin American countries’ production-development and innovation strategies.

Since 2010, several countries in Latin America have introduced programmes to support start-ups, including Argentina, Brazil, Chile, Colombia, Mexico, Panama, Peru and Uruguay (OECD, 2013, 2015). Unlike more traditional policies to support innovation and competitiveness, these programmes have evolved rapidly. In the space of a few years, they have taken on a different design, focus and structure. Results are beginning to emerge, especially regarding people’s perceptions of the region and its image as a place for innovative entrepreneurship.

Each country adopts a different approach (Figure 0.3):

**Chile**, since it launched Start-Up Chile in 2010, has moved from a pilot phase of pro-startup programmes to a more structured policy linked to its national production-transformation strategy. Chile has reformed the policy based on the results of the
monitoring and evaluation it conducted, and the country now prioritises retaining more
talent and businesses in the country. Chile also promotes the creation of start-ups in
the regions outside Santiago and supports the founding of firms that offer innovative
solutions to social problems in one of the country’s strategic sectors (smart mining, the
food industry and engineering, for instance). The country is aiming to close the early-
stage funding gap; it has modernised services to entrepreneurs through more flexible
mechanisms tailored to the needs of start-uppers, such as collaborative workspaces
and mentoring networks and it has simplified the regulations for starting a business
(a new law allows people to start a business in a single day). Private investment at the
expansion stage and angel investors are still weak links in the financing chain in Chile.

**Colombia** has joined the wave of interest for start-ups in the region, and in 2012 it set
up iNNpulsa Colombia to promote entrepreneurship. Today, Colombia is reforming the
programme by introducing a voucher scheme to give new businesses access to financing
and services managed by accredited intermediary organisations. Colombia is seeking to
encourage financial institutions to invest in start-ups at all stages of their development
and is promoting the strengthening of the business culture in the country. A distinctive
feature in Colombia is the development of start-ups in cities; Bogotá and Medellín have
seen rapid growth in start-up numbers and they are aiming to become start-up hubs by
promoting the founding of start-ups through public-private partnerships.

**Mexico** is the country that has made the most progress in promoting start-ups
between 2012 and 2016. The creation of the National Institute of Entrepreneurship
(INADEM) in 2013 strengthened the institutional framework for start-ups. Meanwhile,
the reintroduction of seed capital has closed the early-stage funding gap, thus achieving
one of the challenges identified in the 2013 review (OECD, 2013). Mexico has also
improved the financial inclusion of start-ups. Venture capital has taken off in the
country, which now has the second most active industry in Latin America, behind Brazil
(LAVCA, 2016). Mexico has reformed regulations to make it easier to start a business,
the Express Companies Act being a notable example. It has also modernised services
for entrepreneurs by launching mentoring networks and collective workspaces. Finally,
Mexico has invested in promoting an entrepreneurial culture in the country and creating
an image of Mexico as a place for entrepreneurship with a global impact.

**Peru** introduced the Start Up Perú programme in 2012. Since then, it has improved
the programme design and it has increased the budget for start-ups, which now receive
resources from the innovation fund. The Start Up Perú programme has been expanded,
and today it includes seed capital and support for angel-investor networks. Peru also
promotes the founding of start-ups based on scientific research through a competition
organised by the National Science and Technology Council (CONCYTEC). Universities
and the private sector are actively promoting the founding of start-ups in Peru, and
the national development bank COFIDE has just made promoting start-ups one of its
strategic lines of action. COFIDE is looking to promote venture capital and the financial
inclusion of new enterprises.
### Figure 0.3 Policy mix for start-up promotion in Chile, Colombia, Mexico and Peru, 2016

<table>
<thead>
<tr>
<th>Category</th>
<th>Instrument</th>
<th>Chile</th>
<th>Colombia</th>
<th>Mexico</th>
<th>Peru</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Financing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seed capital</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Crowdfunding</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Angel investors</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Venture capital</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Prizes</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Integrated support</td>
<td>Integrated public/private programmes (financing and services)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Support services and business training</strong></td>
<td>Incubators</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Accelerators</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Next-generation incubators and accelerators (coworking)</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Mentoring networks</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Support for developing commercial loans for startups</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Technology transfer and university spin-offs</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Business and financial training</td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Demand-oriented support &amp; market creation</strong></td>
<td>Public procurement and other</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Promoting a business culture</strong></td>
<td>Raising awareness about the innovative business culture</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td><strong>Regulatory framework</strong></td>
<td>Legal framework for starting, expanding and closing businesses</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Tax incentives and special taxes</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Special visas for start-ups</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

Note: This table is not meant to present an international classification. It is based on qualitative information gathered in the country case studies in Chapters 3 to 6 of this report. The goal is to summarise visually the variety of tools to support start-ups and how developed they are in the countries in the region.

Source: Based on Chapters 3, 4, 5 and 6 of this document.

There are five areas in which all four countries have made progress:

1. **They have strengthened the institutional framework for supporting start-ups**, especially Mexico, which created INADEM in 2013, and Chile, which has made policies to support start-ups part of its national production-development strategy and has opened a division within CORFO devoted to start-ups. The region has also reformed its development banks, with start-ups becoming priorities for Bancóldex in Colombia, NAFINSA in Mexico and COFIDE in Peru. In Chile and Mexico, pro-startup policies have shifted from an experimental phase to a consolidation in their national strategies. To institutionalise these policies in such a way, they need to find ways to create synergies between these bottom-up pro-startup schemes and the more selective nature of production-development policies so that they can increase their impact in priority areas, like the automotive sector in Mexico and smart mining in Chile.

2. **The countries have prioritised social and regional inclusion in their pro-startup policies** and have introduced measures to enable start-ups to develop in regions beyond the capital city. These measures aim to place start-ups in a better position to transform regional economies, taking into account the specific features of...
production ecosystems and societies in the regions. Mexico has the largest variety of ecosystems outside the capital city, followed by Colombia; Chile is the country that most needs to increase opportunities for founding start-ups in the regions.

3. **The countries recognise that it is important to invest in transforming mindsets and promoting a culture of entrepreneurship.** Transforming ideas into a business is still not very common in the region. Risk aversion is high in Latin American societies, and relatively few people see entrepreneurs as key contributors to national development. Legal incentives, tax breaks and services for entrepreneurs are all important, but so too are measures to create an entrepreneurial culture, since they change people's mindsets. Start-Up Chile's media impact has helped to make Chile a talking point around the world and has inspired young people to become entrepreneurs. In Mexico, meanwhile, the launch of INADEM has raised awareness of the crucial role that entrepreneurship plays in the country’s development, inspiring the Mexican youth and the diaspora to create new firms.

4. **The countries have modernised support instruments,** become more aware that instruments need to take all stages of start-up development into account (seed, start-up, growth and expansion), and introduced next-generation instruments that are more flexible and in keeping with global trends. All four countries have introduced new pro-startup schemes that are more modern, more comprehensive and better suited to the needs of start-uppers. Collaborative workspaces are one example. The countries have also reformed instruments to streamline new forms of financing, such as crowdfunding. In the area of pro-startup measures, because governments have worked together with entrepreneurs and the private sector, they have reformed instruments and improved practices more quickly than in other policy areas. The new policy mix consists mainly of integrated services that combine access to infrastructure, finance, services and access to contacts and networks. In addition, policy makers have worked in partnership with the private sector and with research and technology institutes, which has improved policy effectiveness and ensured that these policies properly address the needs of start-ups.

5. **The countries have streamlined procedures and reformed legislation** to make it easier to create and expand businesses. Chile and Mexico have passed legislation enabling people to start a business in a single day, but in the four countries, procedures are still complex and tax incentives for new, highly innovative businesses are still insufficient.

---

**To consolidate the progress made, increase the impact of pro-startup policies and strengthen start-up ecosystems in the region, it is important for countries to:**

Map start-ups and improve the definition of start-ups as beneficiaries of public policy. Start-ups are a recent phenomenon in Latin America, and the countries in the region still lack comparable data. For instance, there is no single definition of what constitutes a start-up, even though each country has been adjusting the criteria it uses to determine which enterprises are eligible to benefit from start-up programmes. Chile and Mexico, for instance, use performance-based definitions (growth potential) and target different instruments to different stages of development (“emerging” for start-ups less than two years old and “expansion” for those that are older). They also take into account the firms’ innovation intensity, target market (local vs. global) and capacity to meet the specific needs of the areas where they are located. It is important for countries to improve official company registries and use the broad scope of such records to...
generate data on the performance of start-ups. Countries could obtain additional data on the nature and behaviour of start-ups that import and export goods by combining the information in official company registries with the statistical records of customs agencies. Further information is also being generated as countries improve their public programmes to promote start-ups and as the platform economy grows. Countries could use these new data to map out the profile of start-uppers in the region, quantifying the impact of aspects such as gender, age, training and the environment on the emergence and expansion of start-ups. This information can improve indirect pro-startup policies such as those related to education, training, science and technology.

Monitor policy implementation, measure impact and use the results of assessments to improve policies. If countries monitor the implementation of programmes and conduct impact assessments at a reasonably early stage, they will be able to learn how to design and implement the best policies more quickly and ensure that they use resources efficiently. Monitoring and assessment are particularly important for start-up programmes, since countries often experiment new forms of support in response to the changing needs of the environment. Chile is the country in the region that has best monitored and assessed the impact of policies at an early stage. Since it introduced Start-Up Chile in 2010, it has reviewed the results of its implementation on two occasions. The analyses showed, for example, that the instruments need to include conditions to prevent too much support going to the capital city (Santiago), since this was hindering linkages between start-ups and the country’s productive sectors, such as mining and agriculture. Assessments of policies to promote start-ups could also explore to what extent they change the organisational structures of the traditional institutions that promote production development and innovation. Programmes to support start-ups might also be modernising and invigorating traditional systems by introducing new ways of planning, managing and implementing public policies and by requiring changes to the profiles of the people in charge: pro-startup programmes need to be fast and flexible, and cannot be run using the same approach that is used for traditional entrepreneurship programmes.

Simplify and consolidate support programmes and bring them more in line with the needs of the target population. Although initial experimentation with different programmes and mechanisms are helping to determine what works best in each context, if there are too many instruments, they are not effective for defining a policy that is easy for entrepreneurs to use. Programmes can have a greater impact if they are integrated and incorporate both services and financing for entrepreneurs and they offer incentives to accompany start-uppers at the various stages of a company’s development.

Find ways to create synergies between measures to promote start-ups and production-development strategies. While it is important to preserve the specific characteristics and the bottom-up approach of programmes to promote start-ups, it is also important to find mechanisms to ensure that support for start-ups contributes to driving innovation in key national industries, such as intelligent mining in Chile and the automotive sector in Mexico. Countries need to identify industries in which it would be beneficial to coordinate actions to promote start-ups with national production-development strategies. This was one of the reasons why Chile decided to include regional location among the conditionalities of its programmes to promote start-ups.

Include performance-based conditionalities and create exit mechanisms. Incentives work best when there are clear performance conditions. Start-Up Chile, for instance, made it compulsory for beneficiaries to set up business in Chile, having seen that, without this condition, few businesses had their base in the country. Almost all
countries in the region now only support incubators that can prove that they are able to incubate businesses with the potential to grow and expand. Some countries, like Mexico and Peru, introduced conditions to ensure that companies generate new businesses and innovations in key national industries, while Chile made gender inclusion mandatory. Measures to support the venture-capital industry are much more effective when exit timeframes and conditions for the support are clearly established beforehand.

**Act in the short term, but plan for the medium and long term.** Seldom do start-ups become so successful that they scale up. When they do succeed, however, they do so very quickly, and the system needs to be ready to meet the needs of these emerging enterprises. Measures to promote the founding of start-ups should take into account what start-ups might need in the future if they become successful in order to get the necessary mechanisms up and running in terms of financing and regulation. For example, if a country wants to support biotech start-ups, it needs to analyse legislation on clinical trials and other factors that might not be ready for companies to operate using global standards. The European Union, for instance, has a strategy for creating a barrier-free, single digital market for purchases and sales throughout Europe, which enables companies to take full advantage of the opportunities furnished by the digital economy.

**Facilitate productive investment.** There is still a conservative approach to productive investment in the region, though the situation has improved in recent years, with venture capital growing. Commercial banks, development banks and investment funds could boost the region’s entrepreneurial ecosystems. The region still needs to channel more private capital towards productive investment, but for this to happen, countries will need to reform legislation to foster private investment, while investors will need to change their mindsets.

**Building partnerships with the private sector.** Large companies are stepping up their investment in founding start-ups to increase opportunities to innovate by drawing on the talent of young people and learning more about consumer preferences. In 2010, only 1% of large companies had corporate venture capital shares, but by 2016 this figure had risen to 44% (Boston Consulting Group, 2016). Furthermore, large companies are expanding their action areas, and increasingly they are providing seed capital, incubation and mentoring as part of their open-innovation strategies. Meanwhile, the growing importance of start-ups has led to the creation of private associations that are giving voice to the needs and visions of entrepreneurs in the region. These associations reveal the needs of new entrepreneurs in real time. One such organisation is the Association of Latin American Entrepreneurs (ASELA), which was formed in 2013 as part of the Pacific Alliance. ASEL A brings together the entrepreneur associations of Chile, Colombia, Mexico, Peru and Argentina and encourages those countries to share experiences and introduce reforms, such as the laws introduced in Chile and Mexico to enable people to start a business in a single day. By building partnerships with the private sector, countries can create opportunities to raise the impact of public policies.

**Increase regional co-operation.** Regional co-operation would enable Latin American countries to learn from each other and share good practices more quickly. It would also open up regional markets and facilitate the emergence of enterprises operating region-wide. The community that supports start-ups in Latin America is young, and it already meets together and co-ordinates more often than traditional areas of innovation or industrial policy. Countries could speed up learning processes and create good practices by improving the structure of these spaces for dialogue and by introducing peer review. Regional co-operation could also help to close funding gaps and attract larger levels of investment, which would respond to the challenges that the countries face in terms of
finance. In this sense, regional funds like the Pacific Alliance initiatives to promote start-ups and entrepreneurship are important, and countries should do more to encourage such initiatives.

**Recognise and assess the specificities of each context.** Many lessons can be drawn from the experiences of others in promoting start-ups, and identifying best practices is crucial to improve policies. However, in addition to looking outside, countries also need to carefully analyse their own system and its specific features. Instruments that are successful in one country or region might not be suitable for another. Entrepreneurship is a process that involves experimenting, so standardising support instruments can be counterproductive.

**Progress in education, innovation and production development and a more widespread entrepreneurial culture will also lead to better and more start-ups.**

For start-ups to flourish in Latin America, the innovation and production systems need to become denser, private investors must begin to back start-ups, and countries need to strengthen their science and technology capabilities and close the gap in the digital economy. Start-ups do not operate in a vacuum and successful enterprises aspire to operate in the global market. Efforts are therefore needed to ensure that the production system and the science and technology system match the potential of innovative Latin American entrepreneurs.

Start-ups will not be the ultimate solution for development in the region, but creating a startup-friendly environment, channelling public investment (especially in the early stages) and private investment (especially at the expansion stage) towards start-ups, and creating flexible, modern services for entrepreneurs are essential parts of the transformation strategies of Latin American countries. Policies to promote start-ups do not so much need huge budgets as they need smart planning and a flexible design. They also require simple, rapid instruments, as well as partnerships with the private sector, universities and technology centres.

The current climate for the region is marked by sluggish growth and the depletion of traditional sources of growth, with low commodity prices and low external demand, which in recent years has been driven mainly by the People's Republic of China. Diversifying production and joining the new digital economy are therefore important objectives for the countries of the region. If Latin American countries can achieve these objectives, they will be able to make the necessary strides towards more inclusive, long-term growth to meet the growing demands of their societies, especially young people. It is therefore important and urgent to capitalise on these experiences in promoting start-ups, to strengthen the instruments and programmes that work, and to reform those that are not producing the desired results.
References


ECLAC (2015), La nueva revolución digital: de la Internet del consumo a la Internet de la producción, Economic Commission for Latin America and the Caribbean, United Nations, Santiago, Chile.

ECLAC (2013), Entre mitos y realidades. TIC, políticas públicas y desarrollo productivo en América Latina, Economic Commission for Latin America and the Caribbean, United Nations, Santiago, Chile.


Online resource:
