INVESTMENT AND ENTREPRENEURSHIP FOR SUSTAINABLE DEVELOPMENT

Opinion Articles
The best scientific evidence indicates that current growth patterns – intensive in the emission of greenhouse gases and predatory on natural resources – may generate potentially catastrophic consequences for life on the planet. Changing current patterns of production and consumption is, therefore, a pressing concern. In particular, due to complex processes, such as those shaped by climate change, turning points leading to irreversible trends become evident. Now then, these transformations in production and consumption patterns must occur in such a way that they foster the objectives set for social and economic development.

The Economic Commission for Latin America and the Caribbean (ECLAC) has argued that the objectives for sustainable development present a path for public policy in the region (ECLAC, 2016, 2017). This is due to three factors. The first deals with the transformation of the production matrix. The commodities boom of the past decade led countries with a greater provision of natural resources toward a re-primarisation of their exports and leaning to greater dependency on natural resources as a means of obtaining greater incomes through exports and taxation. This conspired against the diversification of production. Sustainable development specifically requires the opposite to occur. The desired shift in patterns of production and consumption imply a structural transformation of significant proportions encompassing many, diverse sectors – energy, intelligent cities, transport infrastructure, less energy-intensive production processes, protection of water and forests, among others. Shifting towards a trend calling for low-carbon production processes is a great opportunity to promote diversification and incorporate new sectors and capabilities.

During the last decade, this has not occurred in Latin America and the Caribbean (LAC). In fact, a decrease in the participation of renewable energies has been registered in the overall energy supply for the region (see chart 1).

Chart 1 – A trend which must be reverted: renewable proportion of energy supply (in percentage of total energy supply)

Despite the decline outlined in the previous chart, there are positive signals: European investment in renewable energies in LAC has proven to constitute an upward trend, as seen in chart 2, in which these should take on a greater proportion within the energy matrix in the future.
Chart 2 – Destination of direct foreign investment announced by European companies in LAC

Source: ECLAC based on FinancialTimes, fDi Markets

The second factor deals with technology. Technological progress, and revolution, which have been gaining momentum, must be harnessed in order to favour of sustainability. It is not enough to simply import cleaner technologies. Its successful implementation depends upon incremental improvements and local innovations that correspond to the specific conditions in the region. Environmental technologies, in order to be effective, must evolve in accordance to their physical environment and acknowledge the Latin American context. For this reason, sustainable development is not possible without making efforts to invest greater sums in education, training, dissemination of technology and research and development (R&D), than currently observed. Chart 3 shows region lagging in this regard. R&D expenditures as a percentage of GDP show an upward trend in Asian countries, whereas these are flat in LAC. Brazil is an exception in that it has directed greater resources toward R&D tasks as compared to the rest of the region. Despite these efforts, Brazil still continues to lose ground to Asian economies. The agenda for sustainable development must consider the technological domain as one of its highest priorities.

Chart 3 – Expenditures on R&D as a percentage of GDP, countries and regions


Classical development theory has underscored the importance of the “big push”, at first, in order to achieve self-sustainable growth. This growth is comprised by a series of articulated investments that generate complementarities among diverse sectors and that hold, and reinforce, the growth of production, productivity and employment in every sector. The magnitude and diversity of these transformations demands that sustainable development make a qualitative leap of such magnitude. Efforts must converge in accordance to the disparity between growth and the emission of greenhouse gases. This is what the ECLAC calls the “big environmental push”, whereby new technologies and changes in the production matrix are combined in order to generate a low-carbon growth trend (ECLAC, 2016; ECLAC-EU-LAC, 2016).

The third factor refers to the social dimension of sustainable development. The social pillar must reinforce previous routes of development within its new style. On the one hand, the social pillar is necessary in order to increase output. Policies for social protection, employment, and the expansion of universal coverage for healthcare and education enhance capacity building. Also, innovation and learning are essential in a knowledge-based economy. On the other hand, the negative effects of the environmental pollution, or those of external events caused by climate change often tend to affect the poorest and most vulnerable part of the population. Thus, these variables produce cross-cutting links throughout society, which create possibilities.
for new modalities for social pacts. Exploring these complementarities among the three pillars of sustainable development and building the partnerships required by a new economic policy, shall aid in overcoming the “locking effect” and the inertia (within economic and political power) associated to the current style of development in the region.

The forthcoming tasks are both complex as urgent. There remains a matter regarding institutional building in LAC. The lack of institutional building makes it difficult to implement sustainable development policies. At the same time, within the international domain, the fostering of multilateral cooperation agreements, among which are the Paris Accords and agreements for the financing of development, more than ever, represent strategic objectives than in the past. Both Europe and LAC has clearly reaffirmed their will to cooperate in order to attain them.

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The European Union, Latin America and the Caribbean have long enjoyed good relations and a natural partnership, linked by strong historical, cultural and economic ties. With many countries in the region transitioning to higher incomes – thanks to positive growth rates, stability, and increasing poverty reduction – our economic relations have intensified even further in recent years. Europe is now the region’s first investor and second-largest trade partner.

In many ways, the 2030 Agenda for Sustainable Development agreed by world leaders in 2015 shifted our collective mindset, to move beyond traditional development assistance and emphasise our collective responsibility to ensure sustainable global prosperity. Delivering this high level of ambition, means working better together with all sections of society, including the private sector, in order to ensure a more inclusive economy and more equitable growth for all.

This is precisely the kind of relationship the European Union has been building with the 33 countries of the Latin American and Caribbean region – and the European Commission’s department for international cooperation and development has actively supported these efforts. Over the last 30 years the EU has helped to improve the overall business environment, boost the private sector, and ultimately create more and better jobs for the people of these regions. This includes improving transparency, good governance and the rule of law, increasing access to credit, and purchasing power, and better integrating regional economies into world markets. We have been targeting small and medium enterprises (SMEs) in particular, who are at the heart of local job creation.

At the continental level, AL-INVEST is one of our flagship programmes launched in the 1990s to support the internationalisation of Latin American SMEs. The fourth edition of AL-INVEST ended in 2013, having supported almost 60,000 SMEs in 18 Latin American countries, which generated over EUR 85 million of new exports in Cuba, Central America and Mexico alone.

As Alberto Soto Clausen of Doré Turrones in Costa Rica said: “what AL-INVEST has done for us is open our minds to a much more competitive approach, where innovation is at the core of the expansion of our companies.”

Since its creation, AL-INVEST has evolved along with changes in the Latin American economy and in line with our new approach to international cooperation. The latest phase – “AL-INVEST 5.0” – focuses on increasing the competitiveness and productivity of SMEs in Latin America. It is a great example of strengthened partnerships both within the region and with Europe, and of the cooperation between and within the public and private sectors.

The current consortium is led by a chamber of commerce from Santa Cruz, Bolivia, in cooperation with other bilateral chambers from Europe and Latin America, and international development financing institutions. A group of Latin American and European business organisations provide technical expertise and management support to the projects, helping other busi-
nesses to develop. In parallel, we have partnered with the United Nations Economic Commission for Latin America and the Caribbean (UN-ECLAC) in another project to ensure that the countries in the region adopt and implement public policies which help SMEs to grow.

Given the economic improvement and the growth of multinationals – the so-called “translatinhas” – more and more Latin American companies are also now investing in Europe. However, according to the UN there is still a long way to go to better integrate European, Latin American and Caribbean value chains. Our Latin American Investment Facility and the Caribbean Investment Facility have an essential role to play in terms of de-risking and facilitating investment in SMEs, by blending credit from international finance institutions and development banks with EU grants.

Of course, an equal and mutually beneficial partnership also means helping European SMEs to access Latin American and Caribbean markets. The pilot European and Latin American Business Services and Innovation programme (ELAN) aims to increase and diversify the EU’s economic presence in a number of Latin American countries. “ELANbiz” provides up-to-date and comprehensive information to European SMEs on doing business in Latin America through a virtual platform. And “ELANnetwork” aims to facilitate joint technology-based solutions and business opportunities between Europe and Latin America. The ELAN model has proved to be an efficient and mutually beneficial way to do business, and something we can replicate in other parts of the world.

These are just some of the practical ways in which the European Union has been helping to promote investment and entrepreneurship for sustainable development in Latin America and the Caribbean. The association agreements agreed between the EU and Cariforum, Central America, Chile, Colombia, Ecuador, Mexico and Peru, and under negotiation with Mercosur, are an innovative way to create stronger bases for longer term partnerships. They may open the door to more strategic and comprehensive cooperation, encompassing wider social, political and economic relations.

The next step will be to incorporate all of our instruments and means of support into a comprehensive European strategy for investment and entrepreneurship in Latin America and the Caribbean. In this way, we look forward to deepening and enhancing our relations even further for the benefit of citizens in Europe and Latin America and the Caribbean alike.
Latin America has made considerable progress over the last twenty years, both economically and in the fight against poverty. Although some of the gains made were certainly due to a favourable external environment, one cannot deny that the region has made major advances in terms of public policy, especially in the macroeconomic and social spheres. Today the international scene is less favourable, which has been reflected in a slowdown in the region and in poverty reduction coming to a standstill. This implies that the countries of Latin America will need to make greater efforts internally to increase their growth potential.

In this context, the region must consolidate a process of reforms of a microeconomic nature, aimed at increasing productivity and transforming it so as to enable the adding of value based on the natural resources that are present, and making it possible to discover new sectors, both those associated with raw materials and those where competitive advantages may be exploited.

This long-term reform agenda contains various elements, including closing gaps in infrastructure, improving the quality of education at every level, and encouraging the creation and consolidation of a business environment promoting entrepreneurship and innovation. These actions will help lay the foundations to attract more and better Foreign Direct Investment (FDI), which, together with appropriate public policy, will be the source of financial resources, technology and the training of human capital.

Latin America needs to make greater efforts in the area of innovation, research and development. The region invests very little in the development of new technologies and there are major problems of coordination between the public bodies responsible in the areas of science and knowledge, the academic sector and business. It is therefore of key importance to design and implement public policies which will enable greater links to be established between the institutions of higher education, the private sector, and the State organisations responsible for research and development. In this regard, it is essential to promote the design and implementation of new financial mechanisms to serve these activities.

Promoting innovation is necessary in order to develop products and services with greater added value and to move to sectors of greater productive sophistication. Latin America must increase the level and effectiveness of its spending on research and development (R+D), which is low when compared to developed countries and even to some emerging countries. In addition, the region must carry out the reforms necessary to construct and promote the environment of entrepreneurship needed in order to reap direct benefit and acquire the positive external factors generated by the process of innovation. To this end, the three fundamental pillars for an environment of entrepreneurship are the promotion of innovation, policies to encourage entrepreneurship, and financing at every stage of a project.

To boost innovation in Latin America greater investment is needed from the private sector and public policies of support need to
be optimised by governments. To this end, policy interventions should be directed at incentivising private investment. One major means of support that the public sector can provide is via the simplification of the legal framework both for the creation of businesses and for closing them down, because of the dynamic nature of business ventures. Similarly, the government can provide finance in the early stages of new businesses, when it is more difficult to access private finance due to market failures. Another public policy that can be useful is the introduction of aspects of the culture of entrepreneurship into the education system of the region, especially at secondary level, which will provide young people with knowledge and tools that may lead to them deciding to start their own business.

Consolidation of the environment of entrepreneurship is very important in order to transform production. For Latin America to be able to make the most of its full potential and natural advantages, it needs to reinforce its systems of innovation, research and development. This will also help the region to be better prepared to attract quality FDI.

Latin America is now a much more competitive, sophisticated and developed market than it was in the 1990s, and consumers are more demanding in terms of the quality they expect from products and services. European businesses have understood this reality and have evolved along with the region, demonstrating their ability to adapt to political, economic and social change. This is the main competitive advantage they have in making the most of the various investment opportunities which are now emerging.

These opportunities are evident, as seen not only in the growing middle class, a product of the reduction in levels of poverty and destitution, but also in the major plans drawn up at governmental level to develop regional infrastructure. There are excellent opportunities in various areas, such as agribusiness, technology, natural resources, light industry, services, energy and logistics.
"We have entered the “glocal” era, when the impact of global challenges is felt firstly at local level. Our economies are experiencing profound changes and although we cannot reverse this process, we can help our regions to acquire the appropriate tools for solid, sustainable growth; this is the objective of smart specialisation". With these words, the European Commissioner for Regional Policy, Corina Cretu, outlined the function of regional innovation and the measures adopted by the European Commission for future years.

One of these measures is to give better support to inter-regional cooperation in terms of innovation and smart specialisation. Since 2014, when the Regional Strategies for Smart Specialisation were drawn up (also known as RIS3), the EU regions have identified concrete niches of innovation to focus their institutional and investment efforts on. In this context, inter-regional cooperation would appear to be a fundamental element guaranteeing the success of the specialisations as it allows for the processes of inter-regional training, interaction between businesses and therefore the joint development of projects and businesses with a view to facilitating regional economic growth. We are currently supporting this measure from the Joint Research Centre of the European Commission (JRC) through the launching of pilot activities of inter-regional cooperation with 21 consortiums of joint specialisations involving over 80 European regions.

These inter-regional dynamics also allow us to envisage the possibility of developing collaborative activities with countries outside of the EU. Indeed, the rapid evolution and acceptance of the concept of smart specialisation in the EU has given rise to similar processes in countries and regions of Latin America aimed at improving and/or exploring actions for regional empowerment in the area of innovation. The study ‘Innovation and regional specialisation in Latin America’ analyses in depth the trends and processes involved in adapting smart specialisation in Mexico, Colombia, Peru, Chile, Brazil and Argentina and shows the importance of providing follow-up and structured support for this vision of transcontinental cooperation.

Since the JRC we have also collaborated with some initiatives and projects related to the adaptation and evolution of the concept of smart specialisation not only in Latin America but also in other parts of the world (e.g. Australia and Canada). As a representative example of the case of Latin America, we have recently published the study Smart specialisation in the EU and Chile, challenges and opportunities in which we identify a methodology of constructive dialogue between the decision makers and administrators of regional innovation policies from EU regions and from Chile. These collaborations, analyses and results enable us to both identify evidence to improve public policy in the EU and also to incorporate, analyse and learn from the experiences of third countries of their adaptation of the concept of smart specialisation.

2 Known by the acronym of its name in English, Joint Research Centre

3 See further details on the thematic platforms of intelligent specialisation http://s3platform.jrc.ec.europa.eu/s3-thematic-platforms

4 Available at: http://s3platform.jrc.ec.europa.eu/-/innovation-and-regional-specialisation-in-latin-america?inheritRedirect=true

SMEs represent an important part of the economic network in both Europe and Latin America and the Caribbean. SMEs have an important role in the creation of jobs and in the generation of economic value that makes them indispensable for development and inclusion processes. Its strengthening as well as its increasing activity outside domestic markets, has received more and more attention from governments, agencies as well as from national and international organisations. Therefore, it is not a surprise that all companies involved in the dialogue between the European Union and Latin America and the Caribbean are considered important links of bi-regional relations intending to enter the «other» region’s markets.

In this context, the studies published by the Centre for Studies and Research Latin America Europe (CERALE) had the objective of identifying the main barriers to leave domestic markets and/or the ones that have a geographic proximity. At the same time, a consistent effort has been made to explore how European leaders view certain Latin American markets as well as the perception of Latin American leaders of nine countries about the common European market.

It is important to note that the internationalisation strategies that prevailed until recent times and that were reflected in the contributions of the Uppsala School – e.g. stepwise internationalisation through activities on geographically closer and more familiar markets and then gradually concentrating on markets further away and less familiar – has been called into question lately by new companies that, together with the help of the information and communication technologies as well as social networks and alliances, have organised global levels of production and commercialisation.

Furthermore, a wide range of interviews was conducted with managers of SMEs on both regions. These interviews have shown the inherent difficulties of the internationalisation process that still exist nowadays. This contribution focuses on companies and entrepreneurs in Latin America.

Latin American SMEs are at an early stage of the internationalisation process: this is demonstrated by the fact that their preferred modalities of business are export, whereas foreign direct investment or strategic partnerships are less practiced. These tendencies are even more evident when comparing them to European SMEs that are active in Latin America often operating through a commercial or industrial presence in situ.

Looking at manager profiles as an important element for an entrepreneur trying to conquer external markets, it was shown that the less a Latin American and/or Caribbean entrepreneur is exposed to an international environment – professionally or personally (e.g. academic or professional exchange, language practice) – the higher is the fear of facing difficulties when operating outside domestic markets. In fact, the language barrier remains one of the most frequently mentioned factors for inhibitions to leave domestic markets. Note that the importance given to this obstacle varies between countries and business sectors. For example, Mexico has a large number of English-speaking SMEs. The challenge of growing far away from home and even more in the European market

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managers in the export sector in order to become better integrated into the North-American market; and especially in sectors such as IT, business services, tourism and creative industries where there are managers with advanced English skills as well as with knowledge of a third language.

Like their European counterparts, the SMEs analysed practice an internationalisation whose main determinant is the search for new markets and clients. In fact, there are only a few that internationalise in order to reduce production costs since, as indicated above, the ones producing abroad are not in the majority and their access to raw materials or to technology is mainly organised through imports.

How do the analysed Latin American SMEs perceive the European market? More than half consider the European market to be difficult, either because they are not familiar with it or because they have entered the market and found it to be challenging regarding the quality, geographic distance as well as the difference in norms. This assessment turns out less severe for SMEs managers in the IT sector, creative industries and tourism, the same that show higher levels of studies, higher international experience and English language skills. It is also noteworthy that the USA market appears to be more accessible. As one would expect from a country that is committed to free trade, the US market is very familiar to Mexican and Costa Rican SMEs. The plurality on the European market (regarding the variety of habits, languages and norms) is comparable with the relative homogeneity on the US market that appears to be more approachable for Latin American SMEs.

Furthermore, the same local environment (e.g. Latin American) is often perceived as an obstacle for conquering external markets: inflation, fluctuating exchange rates, and in sum economic imbalances tending to weigh in on the competitiveness of products or services and therefore hinder its export.

And what does the report say about the cultural proximity that many Europeans – originary from Latin Europe – outline as a facilitating element for their expansion plans in Latin America? It is worth highlighting that, regarding this point, a perception asymmetry exists: European entrepreneurs consider the region’s market as culturally familiar and easier to understand than Asian markets whereas Latin American managers do not find it necessary to outline the historical proximity between the two regions. Rather, they point out to be more familiar with the U.S.- American market.

Latin American and Caribbean SMEs have a limited knowledge upon Europe and its business prism and the same lack of knowledge generates baseless fears about conducting business in Europe. At the same time, the SMEs that successfully operate in the European market consider its activities both challenging and enriching. In order to be adequately prepared to conquer external markets, there is a need to strengthen competences and skills of entrepreneurs as well as to boost the competitiveness of their respective products and services.

To sum up, we can point out several possible ways to encourage the participation of Latin American SMEs in external markets and, more precisely, in the European market. Regarding the economic actors, it would be beneficial to support (future) managers in opening up to the international environment encouraging experience to be acquired abroad and, especially for the younger, to incentivise studies and internships in other countries for the development of linguistic and transcultural competences. Concerning the markets, it deems necessary to make every effort to inform about external markets and, more particularly, about the European market – including its diversity and challenges – and the multiple opportunities for entrepreneurs that are prepared and eager to enter.

These proposals for improvement, supported by adequate public policies – e.g. the ones that are specific and sustained – help to increase the presence of Latin American SMEs in Europe contributing simultaneously to the successful integration in the international market and to strengthen the bi-regional partnership.

1 Espacios de diálogo y cooperación productiva: el rol de las PyMEs, EU-LAC & CEPAL, 2015

3 Argentina, Brasil, Chile, Colombia, Costa Rica, Ecuador, México, Perú y Uruguay.

4 Cf. La internacionalización de las PyMEs latinoamericanas y su proyección en Europa, EU-LAC 2017 (https://eulacfoundation.org/es/documentos/la-internacionalizaci%C3%B3n-de-las-py-mes-latinoamericanas-y-su-proyecci%C3%B3n-en-europa)

5 Cf. La Unión Europea y América Latina y el Caribe ante la nueva coyuntura económica y social, CEPAL, 2015
Small and medium-size enterprises (SMEs) are crucial actors in the generation of wealth and employment and at the same time in the promotion of economic development and social equality. With the objective of highlighting the importance of this particular business segment and to promote its development, the first Observatory for Small and Medium-sized Industries (SMI) was founded in Argentina in 1996 with the aim to produce statistical data about the structure and performance of companies in this area. Over the years, and as a result of the important findings brought forward by the SMI Observatory, the institutional model was defined and formally established as an independent non-profit organisation: the SME Observatory Foundation (FOP, by its initials in Spanish).

The FOP’s mission is to promote the importance of the small and medium enterprises in the promotion of cultural enhancement within society, applied microeconomic research and public policies for the support of productive development. Its institutional configuration also exemplified an alternative model for technical cooperation between universities and the productive sector; consisting of an instrument for the understanding between different fields and different interests: public organisations and private institutions; business associations, governmental organisations and academia, united in the common aim to produce “data to take action”. In this context, the produced data by FOP constitutes the main input for the research conducted and the output of the research is used as input to design connection programmes and technological linkages between academia and companies in order to strengthen the expansion and updating of undergraduate and postgraduate academic programmes tailored to the demands of the productive sector, and above all, to come up with public policies oriented towards local development.

Furthermore, the objective of this socially innovative cooperation, since its methodology for the production of information brings together and activates local leaders – researchers, government officials, entrepreneurs and business associations – to participate in its production meaning that the users of this information participate collectively in the whole production process, while at the same time the FOP ensures compliance with strict methodological standards to guarantee the quality of the data provided.

As a result of this complex process, a public good of great social interest is generated: unpublished, systematised and comparable data about the productive fabric segment that generates around 60% of the GDP and more than 40% of jobs in the case of Argentina. The FOP’s methodological design, and the public character of the information generated has allowed researchers to identify structural problems representing real obstacles for the development of the segment, such as increasing difficulties for SMEs to attract qualified human resources.

As to the basis of the studies enabling an examination of the current situation, FOP has developed a series of programmes and proposals promoting this “data to take action” and also facilitating the finding of solutions for the aforementioned obsta-
cles. This is the case of the programme for the Connection of Career Technical Education together with Argentinian SMEs that FOP has recently launched as part of the implementation of a pilot project in the Corrientes province in the northwest of the country.

This programme combines the systemisation of various international experiences oriented towards promoting the insertion of qualified workers in smaller-sized companies – especially analysing the cases of Germany and Italy – and other specific information on giving the possibility to adapt experiences made to local resources and requirements.

Within the framework of the SMEs Observatory for the Corrientes Province, the FOP, together with the Provincial Government, launched a working plan which, through maps of the economic geography created by the Observatory, allows demands for qualified human resources to be linked with the supply of technical experts in each micro-territory. A way to strengthen the connection between academia and the productive sector is through the implementation of vocational training and internships for students of Technical Schools, Institutes of Higher Education and Centres of Vocational Training in the international job market.

After further development of this idea, that is part of the curriculum but is only on very few occasions conducted externally as set by educational establishments, evaluations and prospective studies will be conducted allowing an estimation of how a greater availability of qualified human resources would have a positive impact on the competitiveness of companies in the region. This precedent will allow to replicate the programme in Argentina, giving priority to more vulnerable territories where the shortage of skilled labour is even more pertinent.

From the perspective of territorial development, this programme intervenes directly in the creation of local connections between companies and educational institutions located in the same region, contribute to attract human resources and persuade them to stay permanently.
The labour world is experiencing profound changes, which has major implications for the economy, social cohesion and the multilateral system. The financial crisis that erupted five years has left a legacy of unemployment and insecurity. There are now 200 million unemployed people in the world, that is, 30 million more than before the crisis. In addition, another 30 million people have been forced out of the labour market because of the depression or scarcity of jobs. Europe has been hit particularly hard by this situation. In Latin America and the Caribbean, a high percentage of jobs are of a casual nature. However, developments in technology are producing a change in the world of work that goes beyond the financial crisis.

Digitalisation and employment

The digitalisation of the economy exerts additional pressure on employment. Automated processes reduce the demand for work, both in industry and in service sectors such as banking, logistics and activities not requiring human interaction.

New sources of employment are also emerging, such as in new technology, as well as in sectors that benefit from increased productivity. This includes personal care, education, health, culture and leisure as well as all kinds of activities with high potential demand which require human presence.

Nevertheless, the net impact of the process of job creation and destruction is uncertain. Moreover, new employment opportunities require professional and geographical mobility on the part of workers, a process that can prove traumas.

Changes are affecting the very nature of work itself. Until recently, the majority of workers in Europe could expect a stable job with a permanent work contract with a company. This situation is changing. Increasing numbers of workers are working for several different companies, on short-term contracts or even without any dependent relationship. Therefore, freelance, seasonal or self-employed work is on the increase.

In Latin America and the Caribbean, the trend towards salaried work in “modern” sectors (export industry, service businesses in urban areas) which had been observed has now halted. Meanwhile, in rural areas, agriculture and small services continue to function with casual work not involving contracts. This results in work conditions becoming less secure in some groups. However, the change in the labour patterns represents autonomy compared to the relationship of contractual dependency characterising the traditional, hierarchic company.

The consequences of these changes are enormous. Firstly, because they generate major insecurities and inequalities. Technological changes bring major benefits to one sector and losses to another.

Secondly, these changes are eroding the social contract. Young people cannot find jobs that match with their qualifications. Job insecurity causes a feeling of instability and feeds into all sorts of populism, such as mistrust of globalisation. The multilateral system has become weakened. One proof of this is the difficulty in reaching trade agreements at
the World Trade Organization (WTO) and the resurgence of protectionist arguments.

Mismatch of existing policies

The impact of technological transformation depends on the ability of institutions and existing policies to adapt. The current framework is no longer appropriate.

The education system was designed for needs which have now evolved. Demand for some jobs requiring qualifications has reduced. On the other hand, work in the areas of innovation, relations, and technology is generating many jobs. The labour market, in Latin America and the Caribbean as well as in Europe, is therefore experiencing a polarisation.

Work institutions also do not appear to have adjusted to the new situation. Employment legislation tends to protect full-time salaried work, performed in one single company. It does not adequately cover freelance workers who depend on outsourcing processes, salaried workers with zero hours contracts or on-call work, among other things.

Collective negotiation, an essential pillar in the organisation of the labour market and distribution of the benefits of growth is coming up against the challenge of extending its representation into sectors that are far from the traditional union bases.

Social protection is similarly facing major challenges. Its function is to provide cover for the main contingencies all people may face (illness, retirement, unemployment, disability, etc.). The transformation of the relationship with work makes it difficult to identify certain risks (who is responsible for accidents at work which happen in the last link of the production chain?). Moreover, for some groups - such as freelancers, workers with zero hour’s contracts, or people with career breaks - the social protection is insufficient.

To sum up, economic and social policies must adapt to a world of work undergoing profound changes. If they do not, societies will continue down the road to fragmentation on which they have already embarked. The solution involves re-establishing the institutional framework, maintaining the values of economic progress and social justice.
Comparing experiences in the introduction of renewable energy and drawing meaningful lessons, either from Latin American and Caribbean (LAC) countries to the EU or the other way around, is not straightforward. For instance, feed-in-tariffs were a successful instrument for the introduction of renewable energy sources in Germany, but not so much in Brazil. Dedicated auctions for wind power were successful instruments in Brazil, but not so much in Argentina. The same auctions were used in Brazil to introduce solar PV with limited success.

Most research efforts have focused on the analysis of different mechanisms to enhance renewable projects’ revenue streams (feed-in-tariffs, auctions, etc.) However, in order to understand the whole picture, special attention needs to be paid to the financing challenges that the investment in these new technologies faces. That is especially true in developing countries (as Latin American and Caribbean countries), where financial markets are severely constrained. From a broad standpoint, we may identify three basic pillars of the financial problem:

- Public instruments to facilitate the entry of private capital in renewable energy projects;
- Institutions that help to coordinate public measures to attract private capital to renewable energy projects (especially development banks);
- Interaction between flows of capital and flows of technology (e.g. companies may provide financing in order to export technology.

In order to compare international experiences, let me consider the following three steps:

Step 1 – Identify the market failure we are seeking to address

One of the main observations comparing LAC and EU countries is that identification of required measures to develop RES varies from LAC countries to the EU. The initial market failure identified by the EU was the inefficiency in private R&D efforts. To that end, measures based on equity provision to aid in the R&D efforts were implemented.

Complementing incomplete capital markets is also a commonly identified market failure. Risk mitigation can be achieved through several channels, which can be grouped under two broad headers: mitigating the risks of available financing instruments and mitigating the risks associated with projects’ revenue streams.

Acting on revenue streams may limit significantly the amount of available choices for the electricity market design. We have seen that, in LAC regions, the objective of placing RES projects closer to infrastructure projects have implied increasing considerably the amount of regulation of electricity markets (e.g. implementing forward contracts or even PPAs). On the other hand, the EU choice of relying on more competitive electricity markets requires the existence of a more efficient access to capital sources.
Step 2 – Identify available options

The basic idea is identifying the elements of a project in order to point at several relevant risks that should be overcome to facilitate investment in RES. In any case, one needs to identify the risks associated with RES projects, taking into account that not all RES project share always the same characteristics from an investor’s point of view.

So far, we observe in LAC countries a preference for mitigating as much as possible risks related to revenue streams in order to get as much competition as possible from different capital sources. In contrast, the EU prefer to leave a less regulated market in order to benefit from competition among different suppliers, even if the diversity of capital sources was limited (not necessarily the volume associated with those sources).

Step 3 – Include effects on technological development

Decisions made so far need to be reviewed as, with the introduction of distributed energy resources, the hypothesis that RES projects are subject to low technological risk may become less realistic. In fact, Yieldcos can be viewed as an instrument to separate riskier activities in RES projects in a project finance environment. Hence, market environments that impose the development of RES under the same framework of more traditional infrastructure projects may create undesired constraints.

Moreover, manufacturers of solar panels are increasing their participation in LAC markets. This may be viewed as a consequence of low risks associated with their revenue stream: as signing a PPA gives them the possibility to find financing sources, they see the opportunity to introduce their technology in LAC countries. At the same time, this mitigated risk implies that investors are not facing technological risk, even if it does exist. So perhaps the LAC market design is hiding a technological risk in the sense that such risk is ultimately absorbed by consumers.

Concluding remarks

The considerable need of investment in the coming years will likely require attracting private capital to renewable energy projects. But, given the variety of investment conditions across countries (including different characteristics of financial markets) there are no silver bullets. The above three-step framework allows the comparison of international experiences and hence the identification of relevant lessons. One crucial dimension is the consideration of complex relations between mechanisms to facilitate financing of renewable projects and technological development.
In a world threatened by climate change, Latin American countries are among the most vulnerable ones. According to the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report, Latin America’s and the Caribbean climate is already changing. The report identifies a set of climate-related risks for the region: water availability, flooding, and landslides; declines in food production and quality; spread of diseases; and increasing rates of species extinctions.

Climate change poses challenges to growth and development in Latin America. However, the region has also a unique position in addressing the climate challenge due to its many mitigation options, namely in the renewable energy field. These could also offer new economic and social opportunities for Latin American countries. Nevertheless, the region lacks technological and financial capacity to develop its green energy potential. As a result, this is a key area for European investments and building partnerships between the EU and LAC countries.

Cooperation between the two blocs would be promising not only for promoting a sustainable development path in Latin America, but also for tackling climate change.

Potential research projects and investments for the short and medium terms

In the renewable energy domain, concrete projects and investments for cooperation between the two blocs, both institutional and private, include:

- Improving the management of solar and wind energy sources in Latin American electrical grids: some European countries’ growing expertise in managing the integration of intermittent energy sources in electrical grids could be a basis for cooperation regarding how to incorporate a greater share of solar and wind energy into Latin American grids.

- Reducing the efficiency loss of solar photovoltaic panels in Latin America: research and development projects on how to reduce the efficiency loss of those panels in countries where the average temperatures are much higher than in Europe – as in the case of the Latin American nations – are needed, because the current technologies were developed considering their implementation in colder countries.

- Developing wind power turbines appropriate to Latin America’s wind patterns: wind power turbines developed and implemented in European countries are more suitable to European wind patterns, which are more intermittent and violent; since wind patterns in Latin America tend to be more constant, technological improvements are needed.

- Combining Concentrated Solar Power (CSP) plants with biomass production: some European countries are interested in developing CSP plants; in Brazil and other Latin American countries, the sunniest places are located in semi-arid regions abundant in biomass, hence it would be possible to invest in a hybrid solution, combining CSP and biomass.
Developing bioenergy production with carbon capture and storage (BECCS): scenarios consistent with the goal of the Paris Climate Agreement (‘well below 2 °C’) are only possible to achieve with negative carbon emissions, and BECCS has already been included in several IPCC mitigation scenarios; many Latin American countries have a unique potential in terms of bioenergy production (for instance, Brazil has an exceptional expertise in ethanol distilleries), and some European countries are already conducting advanced research in carbon capture and storage (CCS).

The Amazon and the Fourth Industrial Revolution: a long-term project

Looking to the future, there is an interesting and very recent idea about how to explore the potential of the Amazon rainforest. In 2016, one of Brazil’s best-known climate scientists, Professor Carlos Nobre, and some of his colleagues, published an article in the scientific journal Proceedings of the National Academy of Sciences of the United States, in which they presented a novel sustainable development paradigm for the Amazon. In the authors’ words, it would be possible to develop ‘a high-tech innovation approach that considers the Amazon as a global public good of biological assets that can enable the creation of innovative high-value products, services and platforms through combining advanced digital, biological, and material technologies of the Fourth Industrial Revolution in progress’.

Essentially, the Amazon’s vast biomimetic resources may lead us to revolutionary developments. Combined with innovative technologies, the Amazonian flora and fauna can be the starting point for important scientific advances in areas such as pharmacology, cosmetics, nutraceuticals or even energy generation and storage. In fact, the Amazon may hold the best answers and solutions to create disruptive technologies that will be essential for developing zero or negative emissions energy sources.

The implementation of this new development paradigm will naturally require a previous substantial improvement in the quality of governance in the Amazon, reaching zero deforestation and fighting effectively biopiracy practices. Unfortunately, since 2014 the quality of governance in the Amazon has declined dramatically: deforestation increased nearly 60% between 2014 and 2016. However, the Brazilian Academy of Sciences is interested in developing these ideas. It would be worthwhile for both the EU and the Amazonian countries to cooperate in research projects on the potential of exploring the Amazon with the revolutionary technologies of the Fourth Industrial Revolution. This cooperation should initially be carried out between the EU and Brazil, and then include other Amazonian countries through the Amazon Cooperation Treaty Organization (ACTO): the candidates in the region could be Peru, Ecuador and Colombia, among others.

This may be the basis for promising innovations in the future, not only for the energy sector but also for many other fields, projects and technological development.
EU-LAC Foundation’s Activities

Arica y Parinacota, Cultural Landscape of America
Book presentation in Hamburg with the support of the EU-LAC Foundation.

Long Night of the Consulates 2017
The EU-LAC Foundation participated for the fifth consecutive year in this event

Cooperation agreement
The Foundation formalises partnership with the Italo-Latin American Institute (IILA).
The Caribbean in the strategic partnership EU-CELAC

The EU-LAC Foundation organised an interdisciplinary Conference in collaboration with IdA.

[...]

Conference and talk by the Ambassador of the Eastern Republic of Uruguay to Germany

The Foundation supported the presentation of the H.E. Alberto Guani about the Italo-Uruguayan migration

[...]

Seminar-Presentation of ELANBiz Market Study

The EU-LAC Foundation supports a series of activities dedicated to the promotion of the Baltic States

[...]

Reflection Forum 2017

Representatives from the EU-LAC Foundation Members, academics and practitioners gathered for a dynamic dialogue in Madrid about productivity

[...]
Panel: What is the role of Culture in relations between the EU and LAC?

The Foundation in cooperation with OEI, EU-LAC Focus and the Ibero-American Institute of Berlin organised a panel about bi-regional cultural relations.

Institutional and regulatory foundations for the establishment of the European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation

Book Presentation in Madrid in cooperation with the FLACSO Spain project, the University of Salamanca and the Spanish Government.

Lateinamerika Herbst and Emigrants Seminar Opening ceremony

The Foundation organised the inauguration of the Lateinamerika Herbst Festival & Seminar "Forging Bonds with Emigrants: Challenges for Europe, Latin America and the Caribbean" with the support of the Senate of the City of Hamburg and the German Institute of Global and Area Studies (GIGA).

Seminar: Forging Bonds with Emigrants: Challenges for Europe, Latin America and the Caribbean

The EU-LAC Foundation organised a Seminar on Emigrant Policies in collaboration with GIGA Institute of Global and Area Studies and CAF Development Bank of Latin America
EU-CELAC Economic Forum- Channels for a joint future

The Foundation supported the Forum organised by Bruegel in Brussels in order to promote the analysis of the new geopolitical scenario and its effects on the EU, Latin America and the Caribbean trade, migration, and technological channels.

[...]
Social innovation has been incorporated with the latest developments and trends both at the policy and grassroots levels. Social innovation is characterised by a wide range of definitions and understandings, although the main idea is the creation of new solutions in tackling social issues. Accordingly, the purpose of this thesis is to examine how the implementation of social innovation is currently boosted by the Information and Communication Technology (ICT) to address some of the principal challenges at the local development. Internet, social media and modern technologies such as mobile phones have currently contributed to quick changes on people’s communication and interaction. This thesis will discuss the principal theories related to social innovation and steps on implementing this concept. This discussion will be developed drawing upon the case study of the Mexican’s social participation rate to explore how the implementation of a digital platform can contribute to increase the degree of social participation of all stakeholders to address some of the key socio-economic challenges at the local level. The thesis will explain how the development of a digital platform can help to encourage collaborative action from the local citizens, businesses actors (especially Small-Medium Enterprises (SMEs), Non-Governmental Organisations (NGOs) and the local government/ institutions, to alleviate the social challenges. This thesis proposes SOCAnet, an online platform to encourage – in particular way - millennials’ social participation, to undertake charities and volunteering activities. This thesis argues how the development of SOCAnet platform can become not only an economic and social opportunity for potential investors and stakeholders, but also offers the chance for promoting a sustainable project with socio-innovative impact.

[...]
The selection of the Young Researcher project is done through a call published on the EU-LAC Foundation social networks and website.
Publications

EU-LAC FOUNDATION

EU-LAC Foundation. (2017)
Vademecum on EU- Cooperation Programmes with LAC. EU-LAC
EU-LAC Foundation, Hamburg.

EU-LAC Foundation, CERALE, Institut des Amériques (2017)
The Internationalisation of Latin American SMEs and their Projection in Europe. EU-LAC Foundation, Hamburg.
EU-LAC Foundation, Hamburg.

Food Security in the European Union, Latin American and the Caribbean: The Cases of Cuba and Spain
EU-LAC Foundation, Hamburg.

Institutional and regulatory foundations for the establishment of the European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation
EU-LAC Foundation, FLACSO Spain and University of Salamanca.
Events of the Foundation

18th September- 21st December
Lateinamerika Herbst Festival
Hamburg, Germany

20th November
Conference “Peace Agreements, Post-Conflict Society, and Irregular Migration in El Salvador” with the Foreign Affairs Ministry of El Salvador, Hugo Martínez
Hamburg, Germany

24th November
International Colloquium: Which kind of universities does the 21st century need? From the student reform of Cordoba (1918) to the Guadalajara proposal (2017)
Guadalajara, Mexico

2nd December
Exhibition- tour Pure Gold- Upcycled designs from Latin America
Hamburg, Germany