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Problems of Economics

The Trends Changing the Economies of Latin America

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Abstract—At the turn of the second and third decades of the 21st century, new trends began to form in the economies of Latin America, which had experienced deep crisis shocks. In the future the development of these trends can adjust and strengthen the place and role of the region in the system of world economic relations. One of these trends is the rapid growth of the technology sector based on innovation and digitalization, which is able to ensure the transition of the region to a "new business normal," understanding by this term consistent structural modernization and organic adaptation of the economies of Latin American countries to post-Covid realities. The main actors in this transition to the new economy are Latin American transnational corporations, the so-called multilatinas, and their avant-garde form, technolatinas, which are associated with innovations and high technology. At the same time, it is critically important to achieve a systemic relationship between the economic policy of the state and the business strategy of technologically advanced private companies. An effective public–private partnership seems to be a necessary condition for long-overdue institutional and structural reforms, the purpose of which should be to turn Latin America into a "region of startups" and a space of high-tech ecosystems. This article shows that the strategic task at the stage of a macroeconomic transition is to expand the domestic and foreign markets of the countries of the region for all types of Latin American goods and services, including technological and high-tech. According to the author, the best way to achieve this goal lies in the formation of a triple circulation economy or, in other words, the parallel and balanced development of national and regional markets with the simultaneous activation and diversification of foreign economic relations far beyond Latin America. It goes without saying that it is a long process, and the countries of the region are only at the very beginning of a marked transformation.

Keywords: Latin America, COVID-19, coronacrisis, macroeconomic transit, new growth model, technolatinas, "startup region," public–private partnership, triple circulation economy

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Economic difficulties in the countries of Latin America (or Latin–Caribbean America, LCA) in the second half of the 2010s, analyzed in depth by the expert community [Machinea, 2010; Oliva, 2019; Centeno and Lajous, 2017; Lavut, 2020], resonated with the negative effects of the COVID-19 pandemic exacerbating the observed crisis phenomena. However, as is known, crises not only generate problems, but also provide new opportunities for those who are able to take advantage of them. During the period of the coronacrisis, additional incentives for modernization arose in the LCA and the power bases of progressive forms of entrepreneurial activity that correlate with the requirements of today were strengthened. Of course, the noted trends are developing in an extremely difficult environment. Their ultimate success is by no means guaranteed, and therefore, it is necessary to concentrate and coordinate the modernization efforts of all sections of Latin American society.

UNDERSTANDING THE EFFECTS OF THE CORONA CRISIS

The COVID-19 pandemic made itself felt in Latin American countries at the end of February 2020. The governments of these states had at least two months to prepare in sanitary, social, and economic terms to fight the epidemic. By and large, not everything was done and the region found itself in the epicenter of the coronacrisis [Yakovleva and Yakovlev, 2020].

In the extensive foreign and domestic scientific literature devoted to various aspects of the impact of COVID-19 on the position of the LCA countries, the idea that the pandemic did not drastically change the trends in the economic development of the region so much as accentuate the existing imbalances and accelerate the processes that began to take shape in the sec-

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ond half of 2010, both negative and positive, is a common thread. The latter most often include the chances of a change in the growth model in the context of structural modernization. This approach is especially characteristic of the analytical developments of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC).[1]

Numerous publications of the Commission indicate that the ECLAC staff are definitely engaged in the development of new economic thinking, designed to comprehend the changes taking place in Latin American countries and create a cognitive framework for the regional strategy for reaching a plateau of sustainable and inclusive economic development (agenda 2030) [ECLAC, 2021].

An attempt at a balanced approach, by identifying the opportunities, problems, and contradictions of the current stage of the economic development of the LCA, has marked the fundamental works of Russian authors of recent times. In particular, they have analyzed the achievements and difficulties of using innovations and new technologies in key sectors of the economy of Latin America (mining and manufacturing, the agrarian complex, the service sector) and have explored the multifaceted issues of building an information society [*Opportunities ...,* 2017]. The prospects for the development of the digital economy have been considered [Koval and Andrianova, 2020], as have changes in the position of Latin American countries in the system of world economic relations [*Latin America in the System ...,* 2020].

A typical example of the focus of research on the negative aspects of the Latin American situation is the report of the United Nations Development Program (UNDP) on the situation in the LCA in the midst of the pandemic. The document puts forward the thesis of a "development trap" that Latin American countries have fallen into due to relatively low economic growth rates and a persistent record of social inequality [UNDP, 2021].

The noted point of view is generally shared by many experts who pay attention to the more pronounced slowdown in economic development in Latin America than in other parts of the world and the very deep failure during Covid in 2020: a 7% reduction in regional GDP, while the global indicator was 3.1%, and in developing Asian countries, 0.8%. Leaving aside the catastrophic situation in Venezuela, it should be noted that the most significant economic rollback was simultaneously observed in the group of large and relatively developed states of the region: Peru, Argentina, Mexico, and Colombia (see Table 1).

This circumstance indicates a structural crisis in the Latin American economy, with moral and material depreciation of the growth model based on the predominant exploitation of natural resources by traditional methods. This model turned first into a brake, and then into an obstacle to the further development of the region. This position is held by a large group of researchers, for example, Princeton University professor Jeremy Eidelman. He writes that the LCA is in an "economic impasse" because, since the 1930s, the place of Latin American countries in the system of world economic relations "has never been so uncertain" [Adelman, 2021].

An extremely pessimistic view is shown by a member of the group of retired politicians created in 2007 by Nelson Mandela *The Elders*, former Chilean President Ricardo Lagos, who has regularly commented on international events in recent years. In his opinion, the situation in Latin America is "exceptionally bad" [Fest, 2021].

"The severe socio-economic consequences of the coronavirus pandemic have created a "perfect storm" situation in the region, a combination of external and internal destructive effects," two venerable politicians emphasized in a joint article: former NATO Secretary General Javier Solana and President of the Inter-American Development Bank (IADB), 1988–2005, Enrique Iglesias. The authors recorded the unprecedented acuteness of the crisis in the LCA, but at the same time rejected the "fatal" doom of Latin America to backwardness. They drew attention to such a factor as the provision of the region with almost all types of raw materials, which, subject to the policy of innovation and system modernization, could become a springboard for an economic breakthrough. It is important, according to H. Solana and E. Iglesias, not to miss the available chances [Solana and Iglesias, 2021].

Now let us ask ourselves a "sacramental" question about what is more important in today's Latin America at the stage of emerging from the corona crisis: threats of stagnation, marking time, surrendering one position after another, or the potential and factors of economic growth that can support local producers and national markets and respond to geo-economic challenges?

We have to admit that in the macroeconomic situation that has developed in the context of the pandemic in the LCA countries, there is no shortage of either opportunities or risks. Let us try to take a moderately optimistic position and, not forgetting about the existing threats and difficulties, focus on positive trends and on those forces that are able to untie the tight knots that have literally bound the Latin American economy into a tangle of intractable problems. In this regard, this article, involving new empirical and conceptual material in the circulation of domestic science, is innovative, staging.

[1] CEPAL, La salida de la crisis causada por la pandemia es una oportunidad para transformar el modelo de sarrollo y los sistemas agroalimentarios de América Latina y el Caribe, *Comunicado de Prensa,* Sept. 3 (2021). https://www.cepal.org/es/comunicados/la-salida-la-crisis-causada-la-pandemia-es-oportunidad-transformar-modelo-desarrollo. Cited October 21, 2021.

Table 1. GDP dynamics (changes in %)

Country	2017	2018	2019	2020	2021	2022
The whole world	3.8	3.6	2.8	−3.1	5.9	4.9
Developed states	2.5	2.3	1.7	−4.5	5.2	4.5
Developing countries	4.8	4.6	3.7	−2.1	6.4	5.1
Including						
Asia	6.6	6.4	5.4	−0.8	7.2	6.3
Middle East	2.5	2.2	1.5	−2.8	4.1	4.1
Sub-Saharan Africa	3.0	3.3	3.1	−1.7	3.7	3.8
Latin America	*1.4*	*1.2*	*0.1*	*−7.0*	*6.3*	*3.0*
Argentina	2.8	−2.6	−2.1	−9.9	7.5	2.5
Brazil	1.3	1.8	1.4	−4.1	5.2	1.5
Venezuela	−15.7	−19.6	−35.0	−30.0	−5.0	−3.0
Colombia	1.4	2.6	3.3	−6.0	7.6	3.8
Mexico	2.1	2.2	−0.2	−8.3	6.2	4.0
Peru	2.5	4.0	2.2	−11.0	10.0	4.6
Chile	1.2	3.7	1.0	−5.8	11.0	2.5

Source: International Monetary Fund (2021) *World Economic Outlook: Recovery during the Pandemic. Health Concerns, Supply Disruptions, Price Pressures,* Washington: IMF, pp. 129–134 (forecast for 2021 and 2022).

DIGITAL AND GREEN TECHNOLOGIES: THE NEW BUSINESS NORMAL

The cardinal task facing the Latin American countries is modernization of their economic structures and institutions and implementation of deep systemic reforms. This is the main historical challenge posed to Latin America. Structural modernization attempts have been made by the LCA states more than once, sometimes bringing limited positive results, accelerating the dynamics of economic growth, and facilitating the emergence of new sectors of the economy. But, as a rule, the reforms were not carried through to the end. The next change of political power entailed a rejection of the current course, increased the resonance of economic instability, and “knocked down” the strategic guidelines chosen by business and the state establishment. This has happened repeatedly in Argentina, Brazil, Venezuela, Mexico, Peru, Chile, and other countries, where the weakness of national development institutions derailed even modernization projects that had already been launched [*Latin America is on the way...,* 2013].

Certain shifts in a traditionally inert situation have made themselves felt at the turn of the second and third decades of this century. One gets the impression that, on the one hand, society has accumulated fatigue from the lack of reforms and the lack of modernity (even if not all Latin Americans understand it this way), and on the other hand, the necessary human capital has formed, i.e., the number of trained specialists and businessmen who can become the driving force behind the transformation process. It was in their midst that the conviction was strengthened that the implementation of long overdue (even “overripe”) reforms would clear the remaining economic blockages and open the way to solving numerous specific problems hindering the social development of the LCA states [Yakovlev, 2019].

The pivotal factor was the identification and predominant development of those segments of the Latin American economy that are capable of ensuring its progressive transformation along the path of modernization in the foreseeable future. This, in turn, to a decisive extent depends on the exact “calculation” of the most promising industries, both traditional and new, the products of which will be (or already are) in demand on the national, regional, and world markets as a matter of priority. Examples include the following sectors undergoing a period of modernization:

(1) In the technological sphere, almost total digitalization is observed; new ecosystems are being modeled and existing ones are being developed in Latin America, especially in the area of *deep tech* (deep technologies), including artificial intelligence, biotechnology, clean technologies (*clean tech*), industries at the intersection of medicine and high technology (*Medtech*), etc. In other words, as noted in a study by the International Finance Corporation, “Deep Tech companies are called upon to respond to the most important global challenges” [*Deep Tech...,* 2020].

(2) In the energy sector, the task is to reduce the carbon footprint, speed up the transition to alternative

(renewable) energy sources (RES), and organize the production of "green" hydrogen for domestic consumption and promotion to foreign markets. The pilot project *Haru Oni* for this promising type of fuel has already been launched in Chile, and similar plans are being worked out in Peru, Mexico, and other countries [Vera Ramirez, 2021b].

At the same time, political and business circles believe that the "passion" for the development of renewable energy sources in the context of the global energy crisis should not damage the basic economic interests of the region or deprive local corporate and private consumers of the required volume of energy carriers. In the medium term, it is planned to increase the production of oil and natural gas, in particular, at the Argentinean mega "Dead Cow" (*Vaca Muerta*) shale hydrocarbon field, part of the production of which is expected to be exported to neighboring Brazil.[2] In Brazil itself, the largest energy corporation *Petrobras* adopted for the period 2022–2026 an unprecedented investment program worth over $68 billion, which provides for the development of new oil and gas fields [*Petrobras Acelera...,* 2021]. Thus, the energy transition in Latin America appears to be a multi-vector and long-term phenomenon.

(3) In the mining industry, the intensive use of new business methods is noticeable, with an emphasis on the production of copper and, especially, lithium, which has become a super in-demand commodity in the global market in recent years. In this regard, the high interest of international business in the potential of the so-called lithium triangle (neighboring regions of Argentina, Bolivia, and Chile with huge reserves of this metal) is indicative. The main task is to decarbonize the extractive sector of the economy through the growing use of "green" hydrogen and the most advanced technologies for the extraction and processing of raw materials, which on the horizon of 2030 should make the countries of the region, primarily Chile, "the most competitive globally" in the mining industry [Tinel, 2021].

(4) The process of digitalization is also developing in the agro-industrial complex, the use of the achievements of informatics and bio- and nanotechnologies is expanding, which makes it possible to increase productivity significantly and reduce production costs. All this is accompanied by the approval of progressive precision agriculture practices, covering not only large agricultural holdings, but also thousands of small and medium-sized farms [*Precision Agriculture...,* 2021]. Attention is also drawn to the active promotion of organic products and products of a so-called healthy diet to the international market. This, in particular, is done by the Peruvian company *Alicorp*, exporting its products to the markets of Argentina, Bolivia, Brazil, and Ecuador.[3]

Broad prospects are opening up for Latin American farmers in connection with the growing popularity of alternative meat, a "product of the future," obtained from animal or plant cells. The development of alternative meat has lead to numerous food startups (*foodtech* companies) of the Brazilian type *Fazenda Futuro*, the Argentinean *Tomorrow Foods,* or the Chilean *The Not Company* and *The Live Green Co*. They enter into competition with the leaders in the production of alternative meat products, the American corporations *Impossible Foods* and *Beyond Meat*. The lower cost of their products helps Latin Americans to establish themselves in the world market. As Marcos Leta, the CEO of *Fazenda Futuro* noted, his company sells hamburgers for $4–$5, while *Impossible Foods* and *Beyond Meat* sell a similar product for $8 [Vera Ramirez, 2021a].

(5) "The hottest market" (with an annual increase in turnover of about 25%) is called by experts the distribution of business technologies in Latin America *SaaS* (*Software-as-a-service*), which is a cloud-based software that provides the user with ready-made solutions online extremely quickly. The development of this trend, according to international observers, gives the LCA a chance to become in the foreseeable future a global hub for using the model *SaaS* [Webster, 2020].

All of the above and much more are signs that trends are emerging in the region that are changing its usual economic appearance. According to Craig Dempsey the Managing Director of *Biz Latin Hub Group,* one of the leading consulting and legal companies in the region, it is the rapid growth of the technology sector in Latin America based on digitalization and green energy that can ensure the region's transition to the "new business normal"; this term is understood as a consistent structural modernization and organic adaptation of the economies of Latin American countries to post-COVID world economic realities [Dempsey*,* 2020].

SHIFTS IN THE STRUCTURE OF THE BUSINESS COMMUNITY

For many decades, the face of the Latin American economy was determined by enterprises (in many cases state-owned) engaged in the extractive industries and infrastructure. Against the general background, oil, electricity, and transport companies stood out in particular: in Argentina, *YPF* and *Aerolineas Argentinas*; in Bolivia, *YPFB*; in Brazil, *Petrobras* and *Eletrobras*; in Venezuela, *PDVSA*; in Colombia, *Ecopetrol*; in Mexico, *PEMEX* and *Comision Federal de Electricidad*; in Peru, *Petroperu*; in Chile, *CODELCO*; and in Ecuador, *Petro Ecuador*. Far from denying the import-

[2] Brasil está negociando con Argentina para importar gas de Vaca Muerta, *Diario con Vos*, Aug. 20 (2021). https://diarioconvos.com/2021/08/20/brasil-esta-negociando-con-argentina-para-importar-gas-de-vaca-muerta/. Cited October 17, 2021.

[3] Nuestros negocios, Alicorp, 2021. https://www.alicorp.com.pe/pe/es/. Cited October 22, 2021.

Table 2. Multilatinas with the highest transnationalization indexes*

No.	Company	Country	Industry	Index
1	Mexichem	Mexico	Diversified	95.64
2	CEMEX	Mexico	Cement	95.47
3	Grupo Bimbo	Mexico	food	86.70
4	Grupo ALFA	Mexico	Diversified	86.28
5	America Movil	Mexico	Telecommunications	84.46
6	Vale	Brazil	Mining	84.44
7	LATAM	Chile/Brazil	Air transportation	82.96
8	AJE Group	Peru	Food	78.63
9	JBS	Brazil	Food	78.35
10	Arcos Dorados	Argentina	Catering	78.09
11	Tenaris	Argentina	Metallurgy	77.65
12	Gruma	Mexico	Food	75.66
13	Nemark	Mexico	Automotive	73.81
14	COPA Airlines	Panama	Air transportation	71.90
15	SIGMA	Mexico	Food	71.56
16	Ternium	Argentina	Metallurgy	71.09
17	Globant	Argentina	Technologies	69.66
18	AMBEV	Brazil	Food	69.37
19	Gerdau	Brazil	Metallurgy	69.17
20	Empresas COPEC	Chile	Diversified	69.16
21	Avianca Holdings	Colombia/El Salvador	Air transportation	68.49
22	SQM	Chile	Mining	68.38
23	ALPEK	Mexico	Petrochemistry	67.98
24	Vina Concha and Toro	Chile	Winemaking	67.40
25	ISA	Colombia	Power industry	66.37

* The transnationalization index is calculated as the average of the share of foreign sales, the share of employees abroad, and the share of foreign assets in their total volume.

Source: Ranking multilatinas 2019, *América Economia,* 2019. https://www.americaeconomia.com/negocios-industrias/multilatinas/estos-son-los-resultados-del-ranking-multilatinas-2019. Cited October 23, 2021.

ant role that state-owned companies played at some point in the economic history of Latin America and the strengthening of national sovereignty, one cannot but admit that their activities were often characterized by poor management, pervasive corruption, and low international competitiveness [Guajardo Soto, 2013]. Hence, we see the waves of privatization of public sector enterprises that have swept through most countries of the region and the increase in the share of private companies in the economy, which have demonstrated efficiency and better adaptability to stringent market requirements.

These qualities of the private sector acquired exceptional value at the turn of the era, at the end of the second and beginning of the third decades of this century. During this period, an unprecedentedly significant mission in the process of modernizing the economic structures of the leading states of the LCA fell to the lot of Latin American transnational corporations, multilatinas, many of which are distinguished by a very high degree of business transnationalization (see Table 2), and the avant-garde so-called technolatinas associated with innovation and advanced technologies [Yakovlev*,* 2021].

It is technolatinas, as a rule, private enterprises that have grown from start-ups, that have vigorously mastered the most advanced business areas: e-commerce, big data, cloud technologies, software development and widespread use, innovatively saturated medical technologies, including telemedicine, fintech, transport and logistics (including last mile logistics), strategic consulting, digital marketing, collaborative consumption, etc. In a number of cases, the technolatinas have pushed the traditional giants of Latin American business aside and taken the top places in the "table of ranks." Thus, in September 2021, the Argentinean *Mercado Libre* working in the field of e-commerce and fintech become the biggest company in the region in terms of capitalization ($90 billion).[4]

[4] Mercado Libre volvió a ser la empresa más valiosa de América Latina, *El Cronista* (Buenos Aires), Sept. 21 (2021).

A special study of the IADB emphasized that the technolatinas that developed on the basis of start-ups "have come of age" and have now created a network of business ecosystems in the region that decisively determines the main path for the development of the Latin American economy based on innovation [Pena, 2021, p. 4].

Symbolic was the appearance in Latin America (primarily in Brazil and Argentina) of technolatinas unicorns, startups with a stock exchange value of over $1 billion. There were 28 such companies at the beginning of the 2020s, and their number will no doubt grow. This, in particular, is indicated by the dynamics of the total market capitalization of unicorns: $19 billion in 2018 and $106 billion in August 2021 [Vasconcellos, 2021].

Of course, not all technolatinas are unicorns. For smaller tech companies, experts use the names of other animals, both mythological and real. In particular, technolatinas with a capitalization of $100 million to $1 billion are called centaurs, and those from $10 to $100 million are called little ponies. There are also technolatina zebras and camels, which differ not so much in size as in growth strategies. If the mantra of unicorns is "growth at any cost," then the main goal of camel companies is to "ensure their survival" in the face of intense competition. This is particularly true, because desert ships (camels) have a wealth of experience in terms of survival in extreme conditions.

Attention is drawn to the dynamic growth in the number of technolatinas with a capitalization of six million dollars or more. Now there are more than 1000 of them in the region. The rapid increase in the total value of the assets of such companies is also impressive. Special studies have shown that, in the second decade of the twenty-first century, the capitalization of this technolatinas segment increased by more than 30 (!) times and exceeded $220 billion. By the end of the third decade, this figure is projected to increase by an order of magnitude to reach $2 trillion [Park, 2021].

Thus, the "technolatinas zoo" will be constantly replenished and can become a decisive factor in the development of the regional economy, provided, of course, that this trend is purposefully supported by the state and a favorable external business environment.

No less important is another trend, the technological reequipment and digitalization of "old" corporations, primarily multi-nationals, engaged in the metallurgical, construction, mining, food and flavoring, and other traditional industries. The adaptation of this part of the Latin American corporate sector to modern business conditions is an indispensable condition for the systemic modernization of the regional economy.

NEW FUNDING MECHANISMS

The implementation of the course towards economic modernization is unthinkable without powerful financing of both technological, innovatively sharpened companies and numerous micro, small, and medium-sized enterprises that form the main production fabric in the LCA states, as well as lending to the widest possible strata of consumers of goods and services. In essence, we are talking about creating a financially inclusive society in the most economically advanced countries, which implies a radical facilitation of access to business and consumer loans, which is an indispensable condition for the growth of the domestic market.

In general, Latin America is still critically behind the developed regions of the world in terms of developing its own monetary and payment system. Until the beginning of the third decade of the twenty-first century, on the order of 85% of all payments in Central America and Mexico were made in cash. In Mexico, only 37% of the population over 15 had bank accounts.[5] In other states of the LCA, the situation is similar, if not worse. There is no need to prove that this state of affairs keeps Latin American business "on a short financial leash" and hinders its progressive and sustainable development.

The brake on economic growth in the region has traditionally been the practical impossibility for the majority of citizens, as well as millions of micro, small, and medium-sized entrepreneurs, to obtain loans on acceptable terms. This, in particular, is explained by the acute shortage of lenders (banks and financial companies), the lack of reliable structured information about potential borrowers, and the latter's lack of a verifiable credit history.

A way to overcome the existing credit barrier can be found through the widespread use of digital technologies, primarily *big data* technologies for searching and processing huge arrays of unstructured information, which allows processing millions of pieces of data in a matter of moments and identifying potentially solvent customers. In a number of LCA countries, such mechanisms have already been established and are working successfully. A typical example is the Argentine platform *Mercado Credito* (part of the Mercado Libre Corporation), which has a client base of about 450000 borrowers and has provided millions of loans at affordable interest rates.[6]

A certain optimism is inspired by the dynamically growing number of Latin American companies in the *fintech* industry, which demonstrate relatively high efficiency. Their production costs are 80% lower than the average for commercial banks, which allows them to reduce significantly the cost of loans and contrib-

[5] Strange, A. and Hafemeister, M., El Boom Fintech en America Latina, *A16z*, 2021. https://a16z.com/2021/04/20/el-boom-fintech-en-america-latina/. Cited July 14, 2021.

[6] Mercado Credito: Una solución de financiamiento inteligente," *Expansion,* Sept. 20 (2021). https://expansion.mx/economia/2021/09/30/mercado-credito-una-solucion-de-financiamiento-inteligente. Cited October 16, 2021.

utes to the growth in popularity of *fintech* technolatinas with borrowers. “Latin America has great potential for financial growth,” emphasizes Pierpaolo Barbieri, founder of the Argentine company *Ualá*, which has confidently mastered the local credit market and seeks to expand its activities to almost the entire region [*Fintech Argentina…,* 2021].

Even against the backdrop of a relatively large number of economically aggressive and financially successful Latin American *fintech* companies, the Brazilian *Nubank* stands out as the largest digital bank in the region, with about 40 million customers in Brazil, Mexico, and Colombia as of mid-2021, and it is ready to conquer new promising markets [Calderón de Burgos, 2021].

Founded in Sao Paulo (Brazil) in 2013 by Colombian Stanford University graduate David Vélez, Brazilian Cristina Junqueira, and American Edward Wyble, the fintech start-up *Nubank* with a debt capital of $2 million began to operate as an international credit card operator and online bank, providing services (opening digital accounts, insurance, loans, investment funds management, etc.) to millions of customers who were previously effectively excluded from the strictly monopolized and extremely bureaucratic banking system in Brazil. “David Veles,” the pages of *Forbes* magazine noted, “set a goal to do away with the ‘fat’ fees and disgusting service of large Brazilian banks. The operation was crowned with success that surpassed his wildest dreams” [Kauflin et al., 2021].

In December 9, 2021, *Nubank* completed the procedure for entering the New York Stock Exchange through an IPO, an initial public offering of its ordinary (voting) shares. With a starting price of $9 per share, the stock market capitalization of *Nubank* amounted to $41.5 billion, which made it the most “expensive” bank in Latin America. But even this indicator was not the limit: by the end of the first day of trading, the share price rose to $10.5, and capitalization increased to $50 billion.[7]

Definitely a success, *Nubank*, which transcended national and regional borders and was reinforced by the high activity of other, more modest in size, Latin American *fintech*-companies and online banks, is an important new trend, indicating positive shifts in the LCA economy.

However, something else is also obvious: the financial resources of Latin American states may be enough to support local businesses and revive domestic consumer demand, but they are completely insufficient for large-scale modernization of the regional economy in line with global trends in the formation of a new world economic order. This requires large investments and loans from international and national development banks, as well as multilateral financial institutions. But these are the financing institutions that, as a rule, are inclined to support either governments or enterprises, including state-owned ones, engaged in traditional sectors of the economy. Meanwhile, the power demand of today is priority funding for innovative start-ups and technology companies [Kholodkov, 2017].

Venture capital funds and private investors, who are ready to risk capital in the hope of “guessing” at business projects with explosive growth potential, currently play a pivotal role in solving this strategic task. Contrary to a lot of skeptics, international and local venture capital investors have made a big bet on Latin America, describing it as “a region of numerous promising start-ups” and “a territory of opportunities for highly profitable investments.” “LCA countries,” wrote Marina Pasquali, a financial analyst for the German company *Statista*, “are experiencing a golden age of venture capital” [Pasquali, 2020].

Statistical data recording the positive dynamics of financial support for Latin American startups confirm this optimistic assessment. If in the period 2009–2020 (over 12 years) in the region, there were 2800 venture capital financing agreements for a total of $16 billion, in 2021 alone there were 772 such transactions, and the total volume of investments in technology companies reached $14.8 billion [McCarthy, 2021].

The maximum activity in the Latin American market was shown by large investment funds such as the Argentinean *KASZEK*, the Brazilian *Monashees* and *Canary*, and the American *QED Investors* and *Valor Capital* group. In 2021 only one fund, *KASZEK,* invested about $500 million in the development of 23 Latin American startups, or three times more than a year earlier. Commenting on such facts, international observers emphasized that by the beginning of 2022 global venture funds “had brought a lot of New Year gifts to Latin America” [Fleischmann, 2021].

A landmark event for Latin America was the creation by the Japanese conglomerate *Soft Bank Group* in March 2019 of a venture investment fund (*SoftBank Latin America Fund*) with an impressive $5 billion in targeted funding for technology start-ups and other companies in the new digital economy in the countries of the region: Argentina, Brazil, Colombia, Mexico, Chile, and Ecuador.[8] In a relatively short period of time (from mid-2019 to early July 2021) and in the extreme conditions of the coronavirus pandemic, the *SoftBank Latin America Fund* invested $3.5 billion in 48 technology companies, including 15 unicorn startups, which significantly increased their capitalization (see Table 3). For example, in October 2021

[7] Veras Mota, C. Cómo Nubank se convirtió en el banco más valioso de América Latina sin generar ganancias, *BBC News, Mundo*, Dec. 10 (2021). https://www.bbc.com/mundo/noticias-59616586. Cited January 11, 2022.

[8] Soft Bank Group Corp. announces launch of new $5 billon technology growth fund for Latin America, SoftBank Press Releases (2019). https://group.softbank/en/news/press/20190307_0. Cited November 12, 2021.

Table 3. Unicorn startups of LCA with investment participation of SoftBank (million dollars)

No.	Startup	Industry	Country	Capitalization
1	Rappi	Electronic commerce	Colombia	5250
2	Quinto Andar	Real estate	Brazil	5100
3	Banco Inter	Fintech	Brazil	4850
4	Vtex	Electronic commerce	Brazil	4182
5	Kavak	Car trade	Mexico	4000
6	Loft	Real estate	Brazil	2900
7	Uala	Fintech	Argentina	2450
8	Gympass	Leisure	Brazil	2200
9	Clip	Fintech	Mexico	2000
10	Loggi	Logistics	Brazil	2000
11	Afya	Education	Brazil	1979
12	Creditas	Fintech	Brazil	1750
13	99 app	Logistics	Brazil	1000
14	MadeiraMadeira	Electronic commerce	Brazil	1000
15	Unico	Digital identity	Brazil	1000

Source: Park, S. (2021) SoftBank mantiene su apetito por América Latina, *América Economía,* Sept. 22. https://www.americaeconomia.com/finanzas/softbank-mantiene-su-apetito-por-america-latina. Cited October 27, 2021.

Soft Bank additionally acquired about 4.5 million shares of the Brazilian *fintech*-company *Banco Inter*, bringing its share in its capital to 15% and strengthening the international financial position of this large digital bank [*Softbank increases…,* 2021].

In mid-September 2021, the management of *Soft Bank Group* announced the expansion of its activities in Latin America and established a second technology regional investment fund (*SoftBank Latin America Fund II*) with a capital of $3 billion. Commenting on the decision, the charismatic head of the Japanese conglomerate, Masayoshi San, called Latin America a “critical economic region” that provides numerous opportunities for establishing modern types of business in priority technology industries.[9]

SHAPING THE TRIPLE CIRCULATION ECONOMY

The key group of strategic tasks at the stage of macroeconomic transition is the expansion of domestic and foreign markets of the LCA countries for all types of Latin American goods and services, including technological and high-tech ones. The best way to achieve this goal is seen in the formation of a triple circulation economy, parallel and balanced development of national and regional markets with the simultaneous activation and diversification of foreign economic relations far beyond the geographical boundaries of Latin America.

We emphasize that such a formulation of the question is by no means trivial, but is dictated by the realities of the new regional and global situation, prompted by the imperatives and opportunities of the current moment.

Why now? The fact is that, in the history of the vast majority of the LCA countries, macroeconomic policy has never been structurally balanced. It has always been skewed in one way or another: in some cases (in fact, the entire 19th century and a significant part of the 20th), the emphasis was on foreign trade with Europe and the United States: export of raw materials and agricultural products and import of manufactured goods. At the same time, national production for the domestic market frankly stagnated, and economic relations between the Latin American states themselves were close to zero. At the next stage, starting from the 1960s, the focus of attention shifted towards the development of regional integration, which was often accompanied by increased protectionism against nonregional partners. In subsequent years, in a number of countries there was a virtual “closure” of economies in the interests of uncompetitive local businesses and stimulated domestic consumption, in which numerous populist regimes were especially successful. In the 1990s, a new period of external liberalization began, interrupted by the financial and economic upheavals of the early 21st century, which were accompanied by further restrictions on free trade and a crisis of integration processes [Bulmer-Thomas, 2014].

[9] Soft Bank Group Corp. announces initial commitment of US$3 Billion to launch SoftBank Latin America Fund II bringing total commitment to the region to US$8 billon, SoftBank Press Releases, 2021. https://group.softbank/en/news/press/20210914. Cited October 27, 2021.

In our opinion (this can be considered a research hypothesis), only at the present time, due to the ongoing national, regional, and global transformations, is it possible to raise the question of the possibility of implementing a triple circulation macroeconomic strategy in the LCA countries.

We begin our analysis with the problem of expanding national consumer markets. Its solution lies in two planes: raising the living standards and purchasing power of most of the population (this issue is outside the scope of our study) and cardinally facilitating the access of the bulk of individuals and legal entities to credit resources, as mentioned above.

In addition, the national dimension of the triple circulation economy involves giving a new, maximally pragmatic character to the system of public–private partnership. In this case, the emphasis is on the development of the Latin American market. *Govtech* (*government technologies*) is the use in the state activities of the LCA countries of digital technologies and innovative solutions provided by private companies, mainly start-ups. It is precisely such solutions, experts say, that can give government bodies the necessary flexibility and efficiency, eliminate the technological gap, and overcome the structural weaknesses of the public sector.[10]

The exceptional importance of digital competencies for the state and the importance of interaction with private high-tech businesses were fully manifested during the corona crisis. At that time, the public demand for innovations particularly increased, and the emerging public–private partnership in the field of *GovTech* allowed the countries of Latin America to somewhat ease the blows of the pandemic and more easily adapt to new and in many ways extreme conditions.

Speaking specifically, *Govtech*-initiatives (in essence, assistance from private technology businesses to government bodies) have expanded the ability of citizens during the pandemic to receive prompt and complete information and have helped to improve the level of medical services provided, to optimize transport, and to regulate the supply of food and essentials to the population. As IADB experts noted, the region has developed *Govtech*-ecosystems that have engulfed even small towns and remote areas that previously did not attract the attention of the authorities. Such activities, in particular, were carried out by the Mexican *Govtech*-company *OS City*, the Argentine *Munidigital*, the Venezuelan *Vikua,* and many others [Suanzes et al., 2021].

At the regional level, the strategic goal of the triple circulation economy is to "pull" the region into a single economic and business space, consistently strengthening trade, manufacturing, financial, scientific, technological, and corporate connectivity. The stumbling block on this path is the long-term stalling of integration processes in the LCA, which is based not only on objective economic difficulties (similar export structure, historical attachment to the markets of powerful extra-regional states, etc.), but also on sharp political contradictions between different groups of Latin American countries that are difficult to overcome [Yakovlev, 2017].

As if confirming this thesis, the attempt to revive the integration processes in the region at the VI Summit of CELAC (the Community of Latin American and Caribbean States) ended in failure (*Comunidad de Estados Latinoamericanos y Caribeños—CELAC*) in Mexico City on September 18, 2021. Amphitryon of the meeting, Mexican President Andres Manuel López Obrador, on the one hand, called on his colleagues to move towards the creation of a "Latin American European Union," and on the other hand, to put political–ideological issues and not trade and economic goals at the forefront, while including a fair amount of criticism of the United States. This approach, quite understandably, aroused the support of Venezuela, Cuba, and Nicaragua, but did not meet with the understanding of most other CELAC member countries. As a result, the summit accentuated the political division of the LCA and did not bring the Latin American states closer to the urgently needed restart of regional economic integration [Raphael, 2021].

This example once again pointed to the extreme complexity of ensuring the economic cohesion of the countries of Latin America, conjugating their national efforts on the basis of interstate rapprochement and interaction. Meanwhile, Latin American cohesion and conjugation are organic principles, meaning that without effective regional cooperation, the LCA countries will not be able to solve the problems of modernization and increase their weight in the emerging post-crisis world order.

Such an understanding exists in the region and helps to overcome serious difficulties. This is happening as part of the unification of Argentina, Brazil, Paraguay, and Uruguay in MERCOSUR, which celebrated its 30th anniversary in 2021. Over the years, the largest integration grouping of South American countries has not managed to do everything as it was originally planned. MERCOSUR went through a series of crises, and sharp disagreements flared up between its participants. But, despite all the obstacles, MERCOSUR continues to hold a prominent place on the global trade and economic map and remains (due to the total production potential) an attractive economic partner for countries in various regions of the world. Life itself pushes its participants to maintain and deepen cooperation. It is significant that, after several years of a decline in trade in 2021, mutual exports of Argentina and Brazil increased by more

[10] El auge de las "govtech": En qué están Colombia y America Latina, *Portafolio,* Oct. 24 (2021). https://www.portafolio.co/innovacion/govtech-que-es-y-en-que-esta-colombia-y-america-latina-557695. Cited October 29, 2021.

Table 4. Trade turnover of LCA with its main partners (billion dollars)

Year	Total		United States		European Union-27		China	
	Volume	Share in %	Volume	Share in %	Volume	Share in %	Volume	Share in %
2001	606	100.0	359	59.2	87	14.6	16	2.6
2010	1757	100.0	617	35.1	208	11.8	193	11.0
2019	2103	100.0	796	37.9	226	10.8	321	16.7
2020	1843	100.0	693	37.6	193	10.5	305	16.6

Source: ITC, TradeMap, Trade statistics for international business development. https://www.trademap.org/Bilateral_TS.aspx?nvpm=1%7c%7c15%7c%7c42%7cTOTAL%7c%7c%7c2%7c1%7c1%7c1%7c2%7c1%7c1%7c1%7c%7c1. Cited October 29, 2021.

than 50%, and the main role in the growth of trade was played by the multilingual relations of the two countries [*En 2021, las exportaciones...,* 2022].

Apparently (and this is another research hypothesis), in modern conditions, technolatinas, aimed at the development of cross-border business (primarily in the region itself) and not constrained by political preferences, can become a supporting structure of integration processes in the region. A paradigm example is the already mentioned company *Mercado Libre* (it is often called the Latin American version *Alibaba*), managing e-commerce platforms in 18 LCA countries and not going to stop there [Ruiz, 2020].

In the field of the global economy and trade, the key to the success of Latin American business is the conquest of dynamically growing Asian markets and a more conscious and decisive turn of Latin America towards the Pacific Asia. Of course, this should not lead to ignoring ties with the United States, Europe, and countries of other regions, but the logic of development suggests that the emphasis should be on the Asian direction. The process, as they say, has begun, as evidenced by the outpacing growth of LCA trade with China in comparison with other major partners, like the United States and the European Union-27 (see Table 4).

As can be seen, in the period 2001–2020, the turnover of trade of Latin American countries with China increased 19 times, while the same indicator for the European Union was 2.2 times, and for the United States, 1.9 times. At the same time, we note that the growth of trade with the United States was almost entirely due to Mexico, with which Washington is economically closely connected as part of North American integration [Yakovlev, 2018]. As for the US trade turnover with other Latin American states, it either grew extremely slowly or generally marked time. As a result, for a number of countries in the region, primarily Brazil, Argentina, Peru, and Chile, China has become the main trading partner and major investor.

In the context of the formation of the triple circulation economy, it can be stated that the Sino–Latin American trade and economic rapprochement reflects the new realities of the world economy, and therefore is becoming sustainable and long-term. Given the existing difficulties in relations with the United States and the European Union, the LCA countries are objectively interested in further expanding business ties with China, which requires building up synergistic efforts by the state and the Latin American business community in China and, more broadly, in the Asia–Pacific direction.

It is possible that cooperation will follow the path of building a Digital Silk Road in Latin America, by building a Pacific superport in Peru to intensify Chinese–Latin American trade, and it is possible that companies from China, Brazil, and Chile will lay fiber-optic cables across the Atlantic and Pacific oceans. These and other megaprojects are being actively discussed and, if implemented, will complement and update existing cooperation programs [*Brasil se une,* 2021].

In recent years, there has been an increased demand on the world markets for LCA products, including raw materials and foodstuffs, as well as technological products, which already today account for 40% of Latin American exports. In 2021, according to ECLAC, the region's merchandise exports increased by 25% in response to the needs of the global economy [CEPAL, 2021, p. 19]. Due to a number of objective factors, it can be assumed that this trend will become sustainable and will give enterprises of the LCA countries a chance to increase production and sales of their products. Thus, the global market is one of the drivers of economic growth in Latin America.

A relatively new phenomenon, closely related to the activity of multilatinas, is the formation of the Latin American economy of the second track, i.e., foreign investment and industrial expansion of corporations from the LCA countries. Examples of such business expansion are multiplying markedly, covering a range of industries (mainly related to the provision of services and food production) in Latin America and other parts of the world.

For example, *Kavak,* a leading Mexican used car company has invested $480 million in Brazil to make the South American giant the main platform for its global business. In August 2021, the Chilean holding

CMPC announced plans to invest $530 million in its Brazilian pulp operations. *Hortifrut,* a Chilean company engaged in the food sector, acquired *Atlantic Blue,* a Spanish firm, for $280 million, thanks to which it entered the markets of Europe and North Africa. *JBS,* a Brazilian world leader in the meat industry, firmly established itself in the Australian market with the purchase of two local assets in 2021, the pork producer *Rivalea* ($135 million) and the *Huon* company ($314 million), specializing in salmon breeding [*Gigante brasileño...,* 2021].

Such facts indicate that the Latin American economy of the second track is acquiring real, tangible outlines and organically complements and consolidates the process of formation of the triple circulation economy in Latin America.

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A panoramic view of the issues put at the center of the macroeconomic analysis is in part foresight, building an image of the future of Latin America at the stage of overcoming the corona crisis shock, and allows us to formulate several conclusions that do not, however, claim to be the ultimate truth.

First, in Latin American society, the hormone of modernization is being produced and the material prerequisites for the transition of the economies of the LCA countries to a new quality are being formed. A central role in this process can be played by digitalization, the use of advanced methods for processing a huge array of disparate data and converting them into an information product for making more accurate and efficient government and corporate decisions, in particular in the key credit and financial area.

Second, there is an attempt in the region to achieve a systemic relationship between the economic policy of the state and the business strategy of technologically advanced Latin American companies, technolatinas. A growing number of business and political representatives believe that effective public–private partnerships are a sine qua non for institutional and structural reforms aimed at transforming the LCA into a "startup region" and a space of high-tech ecosystems.

Third, the foreign economic portfolio is being filled with additional elements: new areas of trade and investment relations, nontraditional high-tech goods and services for Latin American countries, modern forms of joint transnational business, and international activity of technolatinas.

In the regional context, the cardinal task remains relevant, which is to take off the brakes and ensure the progressive development of integration processes, to give them new drive. To do this, it is necessary to strengthen the foundations of multilateral cooperation, expand the contour of inter–Latin American trade and economic cooperation, and fill it with innovative content. At the global level, the main imperative is to tighten the "junction points" of Latin American economic systems with the world economy and to achieve a diffusion effect in the region of rapid growth of China and other Asian countries.

In other words, the implementation of the concept of triple circulation, which aims to combine three economic tracks into a single growth strategy, i.e., the expansion of the domestic market, the tightening of the fabric of regional integration, and the global intensification and diversification of foreign economic relations, is gaining priority.

The positive trends noted in this article are the sprouts of a new economic system, but still only sprouts that need careful and long-term cultivation, primarily from the state. With this in the countries of Latin America there were and still are serious problems. Often, the executive branch, largely "infected with bacilli" of right and left populism, sacrifices the economic expediency of a strategic plan to political considerations and opportunistic calculations. Here is a time bomb laid in the foundation of the beginning process of changing the economic design of the region. However, this is a topic for another article.

CONFLICT OF INTEREST

The author declares that he has no conflicts of interest.

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