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Financial Sector and Economic Recovery in Peru. Global View.

Gonzales Guerrero Ivan Reynaldo* - Torres Trujillo Raúl**

*Universidad Nacional Mayor de San Marcos, Universidad de Lima.

**Universidad Nacional Mayor de San Marcos

Abstract

This paper reviews the situation of the global financial system and of Latin America, to then propose some measures that facilitate the economic recovery of our current depressed situation. We are interested in LATAM, but in the actual world, so globalized, it's not possible to do this without analyzing the global system. For this reason, we have had as support the International Monetary Fund reports on the global financial system and the reports of CEPAL on Latin America. The issue of our interest is the role of the financial system, specially of the bank, on five spaces or themes: the transition out of Covid-19, the digitalization of the system, principally the crypto currencies, the policies to avoid the negative effects of the climate change, the search of equity and the necessary development of knowledge. We close with some recommendations.

Keywords: Financial sector, banking, climate change, financial inclusion.

Introduction

The evolution of production and demand constitute the so-called Real Sector of the economy, which is, or should be, adequately accompanied by the financial sector. Adequately means, without excess of financing that originates inflationary pressures and without shortages that produce difficulties in exchanges.

In the current crisis, the IMF has delivered, in its report corresponding to October of this year, on the stability of the global financial system, an interpretation of the situation, characterizing it as one of Three Transitions: the exit of Covid-19, the difficulties produced by climate change and the advent of cryptocurrencies. He calls it the three C's.

We consider it important to add two other fundamental challenges: the search for greater equity within and between countries; and the promotion and assimilation of the accelerated technical change occurring on a global scale.

Greater equity means promoting rural development and reducing informality in developing countries, especially in our own. What the Financial Sector can do is known as Financial Inclusion.
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The body of this research consists of the five topics noted above, as well as a general interpretation and recommendations for the country.

General Outlook

The world we knew until before 2019 will definitely not return, and with it the financial sector, especially banking, will have to say goodbye forever to its old model of doing business, giving way to a more agile and flexible (lighter) banking, which will allow it to adapt more easily to the new reality and at the same time be profitable. Digitalization is one of the answers to this situation with innovations in the sector such as cloud banking, Bank as a Service (BaaS), Payment as a Service (PaaS), Open Banking, cryptocurrencies, Sustainable Banking, all of which were already being worked on before Covid 19, the pandemic has served as an accelerator so that not only financial institutions have decided to advance the massification of these tools, but also the customers who, needing them, or forced to demand them, have intensified not only their access but also their use. For what has been said, we assure that the way of satisfying the financial needs of the consumers of the sector has also changed and the industry must adapt to it, and those who do not do so will disappear from the market.

The financial sector, in spite of the establishment of Bretton Woods, has been characterized by quite volatile cycles derived some of them by large-scale financial crises, among them we could mention the Asian crisis, the great financial crisis, and the current covid 19 crisis, all of them having the same causes summarized mainly in speculation and deregulation; regarding the latter, King, K. (2020) mentions that the partial implementation of Basel II and III has left and continues to leave spaces for the application of regulatory arbitrage by many banks, thus promoting the global movement of financial flows of dubious origin altering the normal performance of economies in the world. While it is true that digitalization and technological innovations bring greater dynamism to the sector and benefit consumers, the bad practices mentioned above could also take advantage of these same technological facilities, so the establishment of much more severe and efficient regulatory measures should go hand in hand with this evolution in order to minimize the occurrence of crises or at least minimize their impact.

There are many variables to be studied regarding what is being developed and will continue to be developed in the sector, in this research we will address some of the points mentioned, focusing mainly on the impact produced by Covid 19, by cryptocurrencies, which are no longer a possibility but a reality that is here to stay and whose influence as a substitute for traditional investment funds has already begun to be felt in the various stock exchanges around the world, with the aggravating factor that they are not yet formally regulated.

Finally, we will review how much or little progress has been made in climate change efforts, but we will mainly analyze the role that financial institutions have been adopting in this regard, stopping to explain the concept of Sustainable Banking and its importance for the achievement of the objectives of the Kyoto Treaty and the Sustainable Development Goals (SDGs).

It is very important the work being done for the implementation of a new regulatory framework that allows to intensify controls towards the new ways of banking in the world, the emergence of cryptocurrencies, Meta worlds, Fintech, and the future massification of Open Banking with API's that in many cases only their creators understand, are open doors to the formation of new snowballs or bubbles that could burst before the authorities can realize that they even existed.

The world, technology, consumer habits change too fast, but it seems that the global financial regulation system marches at a different speed, for example, until the 2008 financial crisis, the world was still managed with regulatory standards developed after the Tequila crisis (Cuadra, 2015), likewise Basel III has not yet been fully implemented and we are already facing a new change of global proportions due to Covid 19. The world is advancing, technology is advancing, the global financial sector is advancing, but global regulatory systems are not advancing at the same speed.

In line with the above, it would remain to ask ourselves where the financial system is currently heading, precisely banking, and we could outline countless answers to this question, but we will focus on two trends that are currently prevailing: digitization and sustainability.
In line to this, Cosentino (2017), indicates that:

> Bank branches were never a place that customers wanted to visit. People value their time and in them they feel they waste it unnecessarily. The hierarchical relationships proposed by banks to their customers are materialized in the branches: “The bank commands and people must obey if they want to get what it is asking for”.

In other circumstances we could affirm the preceding statements as very severe, but the trend of consumption of financial products and services seems to prove them right, for example, one of the largest banks in the world, Bank of America in the U.S., has reduced by 23% the number of its subsidiaries in a period of 5 years, another world-class institution such as HSBC did the same in the United Kingdom in two years, has reduced by 23% the number of its subsidiaries in a period of 5 years, another world-class institution such as HSBC did the same in the UK in two years, and locally both Banco Interbank and BCP, two of the largest financial institutions in the country and that together with BBVA and Scotiabank concentrate more than 50% of the physical channels in the country have been reducing, by the end of 2020, by 43%, migrating its omnichannel strategy with a main focus on digital.

It is important that institutions are currently questioning the viability of the financial branch as an element of value creation, that beyond the need for relationships in key products such as fundraising, the importance of its existence for access to other types of financial products and services, mainly placement, given the progress and growing use of digital channels, are really dispensable.

The Imf's 3c's: Covid-19, Crypto, Climate Change

The International Monetary Fund, IMF, publishes, twice a year, in April and October, a report called: Global Financial Stability Report. It is the obligatory reference document on the subject, accompanying its report on production and the so-called real sector, with the same frequency: World Economic Outlook. We refer to the first of the above.

We begin with the definition of the concept of Financial Stability that gives meaning to the name of the semiannual global financial reports and in general to the activity of LA central banks. We take the definition established by Schinasi, Garry J. (IMF Oct. 2004) in an article entitled, precisely, Defining Financial Stability:

> A definition consistent with this broad view is as follows:

> A financial system is in a range of stability whenever it is capable of facilitating (rather than impeding) the performance of an economy, and of dissipating financial imbalances that arise endogenously or as a result of significant adverse and unanticipated events.
> The meanings of several phrases need to be explained. (Schinasi, 2004 p. 8).

In the profoundly globalized world in which we live, in which Latin America, LA, plays a subordinate role to the large developed countries and to the blocs that have been formed mainly for economic and security interests, global trends have a direct impact on LA. In this sense, knowledge of global trends is a prerequisite for understanding trends in LA. This explains the ample presence of IMF reports in this report, recognizing in passing that IMF products are of excellent quality.

We took the IMF annual reports for the last three years: pre-pandemic 2019, critical year 2020 and exit from the pandemic 2021. We only present the most general appreciations and the comments of the report authors, as the IMF proposals are presented in an earlier report, by a group of three people, in which the informants participated.

In 2019 the concern was how to support growth and take care that the large abundance of existing financing does not encourage very risky decisions.

The report focuses on exposing the dangers to growth from financial sector vulnerabilities, which seemed to deepen with the large amount of existing liquidity. An almost normal year, since the problems were settling in the financial sector and not in the real sector.

CEPAL 2019 Economic Survey of Latin America and the Caribbean is subtitled: The new global financial context: effects and transmission mechanisms in the region.

The main concern in LA, according to this report, was how to prevent the easy financing promoted since the 2008-2009 crisis to reactivate the economy from generating inflationary pressures. Coinciding with the IMF's interpretation.

In 2020, the IMF report is dedicated to the general crisis caused by the COVID-19 pandemic. The opening paragraph summarizes well the situation around October of that year:

> The COVID-19 pandemic has triggered a global economic crisis of unprecedented magnitude. The World Economic Outlook forecasts a sharp global economic contraction for 2020. Despite the expected rebound in growth in 2021, the level of global output is anticipated to remain below precrisis levels for several years. The swift, aggressive, and broad economic policy response has contained the immediate damage, providing a bridge

> to recovery. Central banks have eased monetary policy across the globe, with a nearly $7.5 trillion balance sheet expansion to date in G10 countries, and with about 20 emerging market central banks deploying asset purchases for the first time. The post-2008 regulatory framework has been put to the test for the first time, and has been proven largely successful, as the global banking system entered the crisis with relatively high capital and liquidity buffers. In addition, a fiscal policy response of $12 trillion globally has provided substantial support to households and firms (IMF 2020 p, ix).

The paragraph is perfectly applicable to LA, as are the changes needed. Already the concerns of increasing 2019 growth without inflation were behind us. The challenge then was how to deal with the big drop in output, how to support households and businesses, and how to prepare for a slow recovery?

Unlike normal years' reports, in this IMF report the summary is huge, with a large number of recommendations, differentiating countries by classes of problems.

The reports are excellent and should be discussed every six months in conjunction with the annual and interim reports of the World Bank and PNUD.

CEPAL 2020 Economic Survey of Latin America and the Caribbean has as its subtitle: Main determinants of fiscal and monetary policies in the post-pandemic era of COVID-19. There is total coincidence with the IMF's global report.

In 2021, the recent report, dated October of this year, revisits the relative normality in which we find ourselves, as it is dedicated not only to the recovery from the pandemic, but is focused on three very important transitions: the exit from the pandemic, the advent of cryptocurrencies and the advancing effects of climate change, each dealt with in one chapter, out of the three that make up the report.
As is common, the first paragraph of the Preface summarizes the contents of the document very well:

> As the world continues to navigate the exit from the global pandemic, an accelerating trend of digitalization and the existential threat from climate change pose both opportunities and challenges ahead. These 3Cs—COVID-19, Crypto, and Climate—offer opportunities for sustaining the ongoing recovery; facilitating more efficient, accessible, and inclusive financial service provision; and greening the economy. But they also require a global concerted effort to counter risks and vulnerabilities, which if left unchecked, could put

> growth at risk in the medium term or test the resilience of the global financial system. (IMF 2021, p. ix)

Concerns are no longer fixed in the short term, but the global financial system is re-evaluated in general terms and also in the medium and long term.

CEPAL 2021 Economic Survey of Latin America and the Caribbean has as its subtitle: Labor Dynamics and Employment Policies for a Sustainable and Inclusive Recovery Beyond the COVID-19 Crisis. Coinciding with the IMF report that the recovery of production is the most important issue of the present.

In a more concise summary, the situation and trends of the world financial system and LA are uncertain and it is not possible to put together a global vision because the peculiarities of the countries and regions are very diverse, regarding their capacities to face the pandemic, to recover productive activities without generating inflation and to initiate a new period of stability and growth. This diversity is repeated within Latin America.

The presence of digitalization is expressed in a very visible way in the advent of digital currencies or cryptocurrencies. It is not clear who is issuing them or who is buying them, but they are growing faster than expected, with no acceptable regulation.

Regarding climate change, the IMF report calls for greater attention to the necessary financing to face the problems derived from its presence, transforming economies to a form of organization and operation that they call Green Economies.

In our country, the Stock Exchange has been promoting financing of this nature, mainly with the so-called Green Bonds. COFIDE is also doing it with a similar program, since 2019 and has already had the first results through bank financing.

In line with the above, we could ask ourselves where the financial system is currently heading, precisely the banking system, and we could outline countless answers to this question, but we believe that the two trends that are currently prevailing are digitalization and the search for sustainability.

Greater Equity (Financial Inclusion, Rural Development Plus Informality)

It is very important to highlight the great lessons that the pandemic and the financial crisis have been leaving us, but mainly the structural weaknesses that they have revealed, among which are precisely the strong inequality gaps in many aspects, including the financial, proof of this was the distribution of economic aid vouchers to the most vulnerable people, the same that should reach the beneficiaries as soon as possible, but in many cases these funds reached their destination up to six months after the beginning of their distribution so that in many cases it no longer fulfills its real purpose, And this is mainly due to the low level of financial inclusion (FI) in our country, which according to the World Bank in its Global Findex 2017 report, we have a level of 43% which compared to other countries in the world such as African countries, is very low, since according to the same report, they are at a level of 47% and even lower if we compare with Chile who show a level of 97% FI in the dimension of access, and it is precisely the latter that we will proceed to detail.

Financial Inclusion, defined as the access and use of quality financial services by all segments of the population (BCRP, 2021) contemplates in its definition and measurement three dimensions that every country must develop in order to meet its FI objectives:

- Access: Access points and infrastructure, and supply of quality services within reach of the population.
- Use: Frequency and intensity with which the user employs financial services.
- Quality: Those financial services whose characteristics meet users' needs.

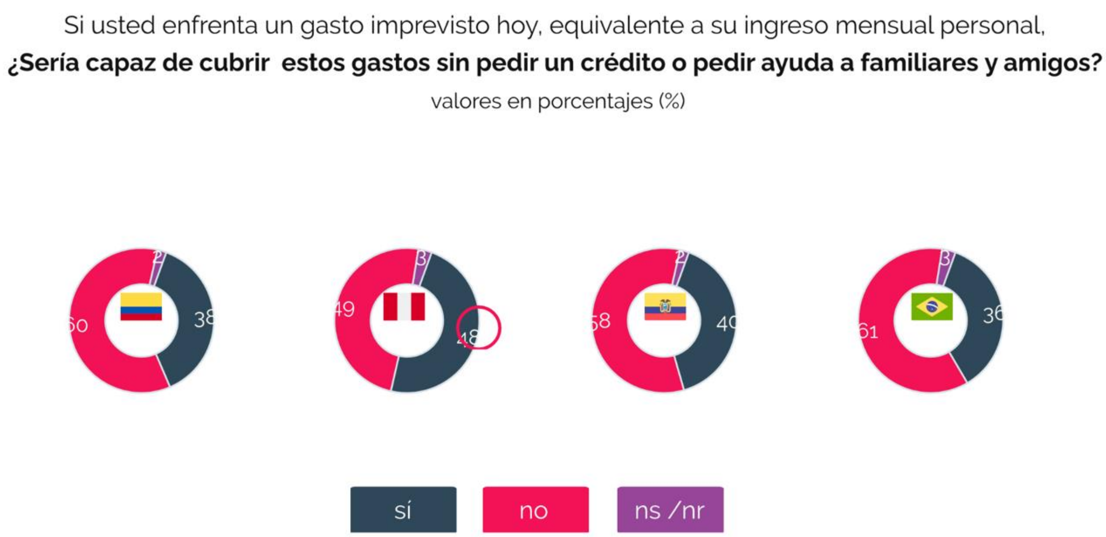
Among these dimensions we must highlight the sub dimension of education, since it is not enough for people to have access to products, but it is also necessary for them to understand how to use them and take full advantage of their benefits. Additionally, according to the academic article published by the Pontificia Universidad Católica de Carlos Zamalloa, people tend to feel more comfortable with a financial product if it is explained to them in a clear and simple manner. And here is born a second major problem of inequality concerning the education gaps in our country, where according to INEI the illiteracy level as of 2018 is 5.6%, being this 3.4% in the urban area and 14.5% in the rural area, the correlation with the level of financial education is direct since the definition of the concept of interest rate, in the urban area, this is answered correctly by 61% of the population, but in the rural area only 14% were able to define it correctly.

The importance of financial education is based mainly on the fact that if the population knows how to manage financial products, they will be able to make better decisions, which will not only allow them to take better advantage of savings and investment opportunities, but their level of default risk will be reduced, resulting in lower financial costs, and government economic policy actions will have better results.

A study of Financial Capabilities (CAF) of the Development Bank for Latin America to 2020, showed that 61% of the people do not save and those who do, privilege mainly informal methods, ranging from "joints" to the safeguarding of their money in their own homes, what we know as "under the mattress".

The same study shows us the capacity of financial resilience, defined as the capacity to cover unforeseen expenses, showing that 48% of the population is not able to do so, 34% in urban areas and 71% in rural areas. This also leaves us behind in the region when compared to countries such as Colombia, which has a financial resilience level of 38%.

Figure 1.1 Financial Resilience

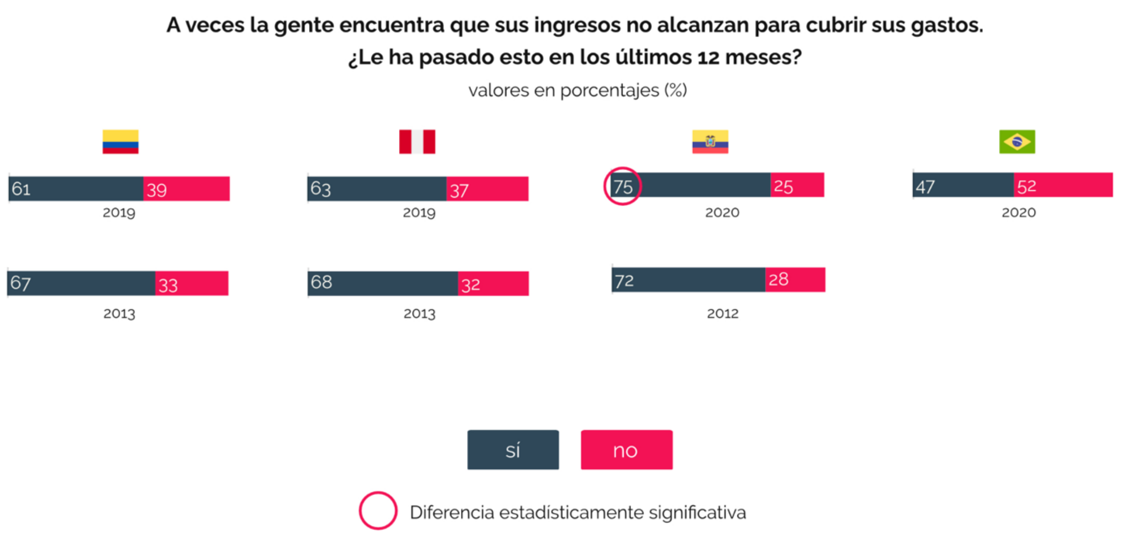


Note. From World Bank 2020

Another very important indicator in the measurement of FI is the one related to the Pension Plan, as it gives an idea of the level of knowledge and planning of the population's future income in order to be able to assume the expenses in their old age. In this case, the same WB CAF study indicates that only 25% of Peruvians feel secure with their retirement plans, a very low level compared to 31% of Ecuadorians, 32% of Colombians and 34% of Brazilians, on the other hand, in Brazil only 7% are not in the pension system, which in Ecuador occurs with 23%, with 9% in Colombia and Peru with 22%, figures that leave us with a very clear message, not only in terms of financial education and informality, but also in terms of the trust and level of credibility of the population towards a system that should normally provide them with security, since it promises them a financial solution for a peaceful survival when they are older adults, but something is failing in its message and/or application, since it is notoriously not achieving its objective.

Finally, it is important to observe the indicator of difficulties that the population has to make ends meet, since it could be explained in several ways, one of which is once again the level of financial education, which as we indicated above, our country is one of the most neglected in the region and in the world. According to the WB, 63% of Peruvians in 2019 had problems to cover their expenses until the end of the month, lower compared to 2013, but higher if we compare with Colombia and Brazil with 61% and 47% respectively.

Figure 1.2 Monthly Family Budget Problems



Note. From World Bank 2020

With regard to the informality of individuals and MSEs, we can recognize problems associated with our reality that are immediately obvious, such as low productivity, which leads to a lack of competitiveness that makes them very vulnerable in the market; we also observe the limited managerial capacities that, together with the problem of competitiveness, would explain one of the reasons why access to financing is very complicated due to the high risk that these variables, when quantified in a credit evaluation, result in a high financial cost. The question now is why, in the face of so many difficulties, microentrepreneurs continue to bet on an activity that not only demands a great deal of effort, but in many cases informality, added to the lack of entrepreneurial skills, creates inevitable levels of inefficiency, making them unprofitable.

According to COMEX (2020), SUNAT records a level of informality in MSEs of 84%, a constant figure over the last ten years that has definitely increased as a result of the current economic and health crisis.

According to Ynzunza, Izar (2021), the motivations that differentiate each economic agent that decides to undertake in this segment play a very important role, since the direct direction between motivations, competencies and business performance has been demonstrated. According to COMEX (2020), in its report "MSEs in 2019", cites some results of the National Household Survey (ENAHO 2019) regarding the motivations of microentrepreneurs to undertake, showing that 48.8% of MSEs were created by an economic need, 23.9% by increasing family income and 17.7% by the desire to be economically independent; The analysis and identification of these motivations are very important because it allows us to understand what drives microentrepreneurs to start their businesses, in most cases from informality, with some successful results, also identifying the creation of ad hoc development environments (Fenton and Barry, 2014) created by themselves to promote the momentum of their businesses, and it is at this point where the importance of state intervention becomes crucial, Since they discover business success from their informal position, it makes them question the need to formalize because they achieved, according to their perception, the business success without the help of the State, and their contribution to the growth of the economy is not minor, according to INEI (2019) the turnover of the MyPe represent 19% of our GDP, a figure that despite the current situation has increased, mainly from the informality.

Technological Change (Cti, Knowledge Bonds)

In the social theories of various fields, especially economics, there is a consensus that knowledge is the main factor in the transformations of societies, especially economic growth. This high consensus has been transferred to international development agencies and public administrations worldwide. Likewise, all development proposals emphasize the urgency of sustainability, and there is also consensus that this requires greater knowledge of existing ecological and productive systems. In addition to the above, there is also the need for greater knowledge in medicine and public health, as evidenced by the COVID-19 pandemic.

To the search for knowledge not everyday, but backed by current science and technology is known as Scientific Research and Technological Development, to which is added a very important related activity, Business Innovation, This phrase is summarized in CTI, in Spanish. See for example IDB (2017), called precisely, translating into Spanish, Ciencia, Tecnología e Innovación.

Scientific Research has to do with the advancement of knowledge in the natural, formal, social and artificial sciences. In the natural sciences are physics, chemistry, biology and related sciences; mathematics and logic in the second, the various social sciences, including economics in the third and computer science, management and others in the so-called artificial sciences, because they have been created by man and not by nature. The natural field of practice of Scientific Research are the laboratories and similar of the universities and of governmental and private organizations dedicated to this task. The achievements of physics with the Theory of Relativity and quantum theory at the beginning of the 20th century are an example.

Technological Development occurs mainly in universities and engineering research centers, related to the application of basic knowledge to the production and consumption of products and processes. A great example is the application of quantum physics to computers. Its diversity is enormous. They usually have a level of development that cannot go directly to mass production, but requires conditioning to the real conditions of production and markets, which occurs in the following process.

Technological innovation, the introduction of new products and processes, occurs mainly in companies. This activity has been recognized since ancient times as fundamental, and there are laws to protect, through patents, the rights of those who achieve the advances, the so-called inventors. The advent of electric vehicles belongs to this area.

In the first and second fields there is a strong presence of the characteristics of public goods. Basic knowledge, as well as technological knowledge, is for general diffusion, there are no patents for them. For this reason, all the states of the world support them with special budgets and working conditions. National Academies of Sciences and Colleges of Engineers have existed formally all over the world since the Scientific Revolution, around 1650 (Galileo-Newton). In the last 50 years, the National Councils of Science, Technology and Innovation, CONCYTEC in our country, have become generalized as specialized bodies in public administrations.

The latter entities have been applying a wide range of instruments of promotion, from direct subsidies to researchers to the financing of laboratories, including the classic study and research grants. If they have not achieved greater development, it has not been due to a lack of resources, but rather to organizational problems in the universities and the quality of the results, but in recent years there has been a notable improvement.

Support for business innovation has been more difficult. First, because most national companies do not have long-term policies, seeking quick profits, rejecting the uncertainty that characterizes innovative activities. Second, because the business-university relationship is very weak, with distrust on both sides, making it difficult to reach agreements for joint work. Third, because the initiative for special loans for these activities has always been with the State, with its administrative peculiarities, which surprise and scare away entrepreneurial businessmen.

Therefore, we propose the opening of a new type of financing, which can begin as an extension of the Green Bonds used at international level, which we call Knowledge Bonds. We have not found direct antecedents on this instrument, but we have found a close proposal from the IDB, called Thematic Bonds, IDB Invest (2020) Thematic Bonds, which opens the possibility of special financing related to the Sustainable Development Goals of the United Nations.

In this proposal, the financing initiative would come from innovative companies, obtained through private banks with the support of COFIDE. Financing would be supervised by a Committee of Experts that would operate in COFIDE and would be made up of leading researchers in the field, not necessarily all nationals, delegates from the intermediary bank and the company itself. The benefits would be variable according to the novelty, i.e., risk of the venture, the involvement of universities and other companies. There may be special conditions, more favorable, when the companies or universities involved are from the provinces or the venture has a very high risk. The agreements would be in strict correspondence to the most demanding contractual conditions, for example, the companies and universities involved must commit to guarantee the quantitative and quality fulfillment of the goals. A percentage, around 60%, would be "non-refundable" if the project is not successful, and recoverable, under favorable conditions, if the project is successful.

The experience accumulated with the issuance of Green Bonds would serve as a guide for the implementation of this proposal. What is fundamental is that the initiative is returned to the company and the universities, using the backing capacity of the State and bringing the company closer to the university.

Regulation: Digitalization, Cloud Innovations and Open Banking

The regulation of the financial sector in Peru is in charge of the Superintendence of Banking, Insurance and Pension Fund Administrators, as far as indirect intermediation is concerned, and the SMV as far as direct intermediation is concerned, both institutions are responsible for overseeing the normal performance of the different companies that make up the financial system of our country under Law No. 26702, General Law of the Financial System and the Insurance System and Organic Law of the Superintendence of Banking and Insurance. The Central Reserve Bank of Peru is also a regulator of the financial system, being the autonomous authority of the country's Monetary Policy, it is in charge not only of the authorization process for the organization of a financial institution, but also the regulation of the money supply offered through them, the quality of banknotes and their authenticity, among other functions mainly related to the national currency, without neglecting some supervisory measures on foreign currency through the NCB. See, for example, Mayorga (2012).

On the global side, there are international organizations in charge of overseeing regulatory agreements that revolve around meeting objectives such as the control of speculation, information transparency, the fight against money laundering and financing of terrorism (PLAFT), control of provisions and standards of equity safeguards and levels of indebtedness among the organizations of their member countries, Among these institutions we can mention the International Monetary Fund (IMF), the World Bank (WB), the Inter-American Development Bank (IDB), the Basel Bank for International Settlements (BIS), the G7, whose regulatory functions refer to the Bretton Woods agreements, but the IMF is the most binding and influential of all the institutions mentioned. We can cite a few of these rules that strengthen this linkage

- Free mobility of capital
- Prohibition of multiple exchange rates (agreed)
- Prohibition of the gold standard
- Supervision of monetary and regulatory policies
- Financial support to member countries (credits)
- Regulatory capacity, although not binding, its monetary policy recommendations are "voluntarily" applied by member countries as it guarantees greater backing or support for a better risk rating in the face of future requests for financing.

It is important to point out that compliance with the above-mentioned measures has helped to somehow order the interaction of the different agents of the global financial system, but it is also important to point out that to date these measures have done very little to mitigate the occurrence of financial crises since the establishment of Bretton Woods (1944), To date, the world has continued to suffer financial defaults of global dimensions, and this is due to the fact that the efforts to close the gaps left by recommendations such as Basel II have not yet been closed, and even Basel III has not yet been implemented and we are already facing another major global crisis as a result of the current pandemic.

The world we knew before 2019 will definitely not return, and with it the sector will have to say goodbye forever to its old model of doing business, giving way to a more agile and flexible (lighter) banking, which will allow it to adapt more easily to the new reality and be profitable at the same time. Digitalization is one of the answers to this situation and, in line with this, the following are some of the trends in commercial and retail banking predicted for 2022 by the best experts in financial services globally:

a) Approach to Flexible Cloud Computing

Cloud adoption is going to be defined by a better end-to-end technical approach (looking at different cloud modalities, whether private, public, hybrid, virtual or community as a whole) for banks to leverage its benefits in an integrated way, efficiently, economically and most importantly securely adding services for both traditional and digital channels.

According to Daniel Newman, Forbes contributor, "the sudden and widespread disruptions caused by the coronavirus have highlighted the value of having as agile and adaptable a cloud infrastructure as possible, especially as companies around the world accelerate investments to enable faster change in times of uncertainty and disruption" (Stefanini, 2021).

b) Banking as a Service, BaaS

The BaaS platform model is a look into the future in the present tense, given that Fintech is already a reality in our society, the implementation of a regulated infrastructure will allow banks to not only share and capitalize on data, but also collaboratively create solutions financial services oriented to shared targets but with the same financial needs, thus creating efficiencies in the use of resources, thus motivating cost reduction and a better final price to the customer.

c) Payment system as a service

Payment as a Service, PaaS. The pandemic, although it is true that brought much grief in the world, also brought with it new strategies in many aspects, and payment channels were no exception, during the quarantine entrepreneurs had to design new means of payment, and were the digital platforms of financial institutions the ideal solutions for these purposes, so much so that if for a traditional business, In the pre-pandemic period, the digital channel represented 20% of sales and the traditional channel 80%, in many cases, and thanks to digital payment platforms, this relationship was reversed, which has meant not only a solution to a crisis situation, but a great opportunity to reactivate businesses, leverage the sustainability of their growth and thus contribute to the revival of the economy.

d) Open Banking as a revenue opportunity

Open Banking, which is more widely known and used in Europe than in our region, allows the information of the financial system's clients to be shared and guarded by all the institutions that make it up, allowing greater dynamism in the design, evaluation and placement of financial solutions to the different profiles of current and potential clients.

According to Juniper Research (Stefanini, 2021), the number of open banking users is expected to increase in size to over 40 million users by 2021.

Recommendations

a) For 2022 and 2023, the main economic policy challenge is to achieve a balance between the financing of companies, in order to keep them active in a context of a severe reduction in demand, and the speed of productive recovery, so as not to generate inflationary pressures.

b) To achieve this, close coordination between the Ministry of Economy and Finance, SBS, SMV, and the Central Reserve Bank is necessary.

c) Investment in the national health system must continue until it reaches full real territorial coverage and rapid response capacity to possible future mutations of the Covid-19 virus and others that may appear.

d) The State, business and organized civil society must intervene in a compatible manner in the process of digitalization of the economy and society, actively participating in the production of global and specific regulations for our country.

e) The existing Financial Inclusion program should be greatly enhanced, reviewing the effectiveness in the application of the current National Financial Inclusion Policy (PNIF), assigning the achievement of this indicator as a State goal to a government entity, also taking into account the needs of family production, especially high Andean, and informality.

f) Efforts to combat the effects of climate change must be intensified in all activities. The reports of the United Nations International Panel of specialists have already warned of the magnitude and depth of the damage if rapid and substantive action is not taken.

g) For all the issues raised: recovery of production, improvement of the national health system, special attention to poor family production and regulation of the digitalization of the economy, especially banking, efforts to counteract the negative effects of climate change, knowledge in its various expressions is required to be at the same level as those of the world, otherwise it is not even possible to buy medicines well or design a basic efficient regulation of the digital economy.

h) It is very important to intensify efforts at all levels of the State and private sector regarding regulatory frameworks, but not only under the traditional systems and protocols, which by the way have not been very effective in the world, but mainly in the digital area, with the pandemic the world has taken a giant leap with respect to its growth projections towards virtuality, It is enough to see the enormous influence of cryptocurrencies in the world, which have not only impacted the corporate world but also the relations at government level, which have not yet standardized their position regarding them, and international institutions such as the IMF, WB and others have not been regulating or providing solid recommendations in this regard. International financial crises have almost all the same recipes, the ingredients do not change, only the manufacturer or the technology that produces them change, if we do not intensify our efforts to bring the regulatory framework in line with the advance of virtuality, we will once again have a bubble that grows but without control.

Conclusions

The exit from Covid-19, still presents itself as a challenge to be met where the recovery of the real sector depends today more than ever on the leverage of the financial sector, the same which in turn depends on the implementation of effective and decisive measures of Financial Inclusion where a revision of the PNIF (Financial Inclusion Policy) is urgent insofar as the penetration of digitalization in the system is already a reality intensified by the changes in consumption and sales habits that COVID 19 introduced in our society.

Cryptocurrencies are already a reality that regulators must address more decisively and publicly, before the snowball effect again confronts us with a new financial crisis on a global scale (a cryptocrisis).

The negative effects of global warming are already being felt on the planet and very few results have been produced by the various international agreements of political nature, therefore it is essential the decisive intervention of the financial system, as the main supplier of the capital factor, in order to reward, through its various mechanisms such as Green Bonds (CER), risk assessment indices, among others, to eco-friendly companies.

The development of knowledge under the current strategies is inefficient and a change is urgently needed that integrates the linkage of the Academy, Business and State, with proven strategies such as the Thematic Bonds and/or focused execution of Green Bonds for the financing of development in scientific research.

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The Authors

- **Ivan Reynaldo Gonzales Guerrero** has been a professor at several private universities in Lima, Peru, and is currently a professor at the University of Lima. He obtained his bachelor's degree and professional degree in economics at UNMSM in Lima, Peru and a master's degree in business administration (MBA) at UPC in Lima, Peru. He has dedicated his professional career to the financial sector where he has held various management positions and is currently a doctoral candidate in economics at the Universidad Nacional Mayor de San Marcos.

- **Raúl Torres Trujillo** has been a professor and senior public official in several universities and institutions respectively in Lima, Peru. He obtained his bachelor's and professional degree in economics from UNMSM in Lima, Peru and a master's degree in economics from Williams College in the USA. He is currently a doctoral candidate in economics at the Universidad Nacional Mayor de San Marcos.