

Caso de RSC 3.0 para ganar-ganar en la auténtica economía de bienestar personal: divisas digitales como herramienta para mejorar la renta del personal, el respeto ambiental y el bienestar general

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Resumen. Este es un artículo prospectivo de Economía Política y Economía Digital, aplicado a Economía Laboral, bajo el enfoque de la Economía Institucional y Cultural, además de Economía Austriaca. El artículo analiza la transición digital de la economía de bienestar estatal a la auténtica economía de bienestar personal, y las posibilidades de la gestión de felicidad, como parte de los requisitos del proceso de convergencia de Horizonte 2030. La atención se ha puesto en las divisas digitales, como ejemplo de tecnovación en la renta del personal y la gestión de motivacional, la protección ambiental y una buena práctica de RSC 3.0, en organizaciones saludables orientadas al bienestar de las personas, su motivación y sostenibilidad. Este estudio explica cómo funciona una práctica de ganar-ganar, con un caso real de una empresa española, con beneficios para todos los interesados, el medioambiente, y otras compañías y las siguientes generaciones.

Palabras clave: Responsabilidad Social Corporativa (RSC); Tecnovación; Divisas digitales; Economía de auténtico bienestar personal; Renta del personal; Respeto ambiental; Gestión de felicidad.

Claves Econlit: D24; D31; I31; J3; K0; L2; M14; O15; O33; Z1.

[en] A win-win case of CSR 3.0 for wellbeing economics: digital currencies as a tool to improve the personnel income, the environmental respect & the general wellness

Abstract. This is a critical paper (based in knowledge review with a constructivist proposal), under the Institutional Economics (including Austrian Economics), which analyzes the digital transition (from the welfare state economy to the authentic welfare or wellbeing economics) and the happiness management possibilities (as a part of the requirement for the global convergence process of Horizon 2030). Attention is focused on the digital currencies, as an example of technovation for personnel income and motivation management, environmental protection and a good practice of CSR 3.0 (in organizations oriented towards people wellness & happiness with sustainability). The paper explains how it works this win-win practice, with a real case of a Spanish cooperative company, with benefits for the whole stakeholders, the environment, other companies and the next generations.

Keywords: Corporate Social Responsibility (CSR); Technovation; Digital currencies; Wellbeing economics; Personnel income; Environmental respect; Happiness management.

Summary. 1. Introduction: digital transition & business culture transformation v. the resistance. 2. Cryptocurrencies v. digital currencies: what they are, how they operate and what are their implications in digital economy. 3. Use of digital currencies to improve employees' compensation & motivation. 4. Articulation of the CSR 3.0 case: advantages of the social digital business currencies (SDBC). 5. Discussion and conclusions. 6. References.

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1. Introduction: digital transition & business culture transformation v. the resistance

This critical paper (to review knowledge and to make a constructivist proposal), it studies the digital transition (from the *welfare state economy*-WSE to the authentic welfare or *wellbeing economics*, as the new stage of digital economy), and its improvement of a model based in entrepreneurship, talent and happiness

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management (according to the global convergence process of Horizon 2030), with attention to the resistance arguments. The attention is focused on the digital currency, as an example of technovation for personnel income and motivation in labour relations (e.g. gamification), and as a good practice of *CSR 3.0* (in enterprises oriented towards people wellness & happiness). Unlike previous studies of contextualization, here we deal with a specific situation and its impact on business practices. Then, after an initial balance of globalization and its changes (with its troubles and challenges to reach the *knowledge society*, Sánchez-Bayón, 2016), attending the main economic-business transformations (Andreu & Sánchez-Bayón, 2019. Sánchez-Bayón & Trincado, 2020), it has continued with an introduction to the current stage of *post-globalization* (as a transitory period of global convergence, from the *value crisis of 2008* to *Horizon 2030*, Valero & Sánchez-Bayón, 2018). Also, the *4th. industrial & technological revolution* and the digital economy (included, *gig phase, wellbeing economics*, etc., Sánchez-Bayón, 2019a & b, 2020a, b & c). Even a range of innovation trends (in business culture, occupational wellbeing and organizational health & wellness), it has been traced (González & Sánchez-Bayón, 2019. Sánchez-Bayón & Trincado, 2020). In this way, it is now in a position to progress more further offering a sample of business practice, thanks to *social digital business currencies* (SDBC –beyond the current social currencies-); they are useful as a refutation to the proposals of academic *mainstream* (under WSE model) and the *new-luddite* militants (opposed to technological advances because they are considered a violation of working conditions, destroying jobs and increasing social disparity, Bailey, 1998. Sale, 1996). Current and previous luddites (see table 1), they are wrong, since the disappearance of jobs in one sector leads to the appearance of new kind of labour relations in emerging sectors; the same ones being more suitable for human inventiveness (Sánchez-Bayón, 2020c). For example, a tenant farmer with no limit of hours and with a subsistence production to become an industrial worker with shifts and an steady salary (2° industrial rev.), going through being an office clerk with fixed hours and income that allows savings (3° industrial rev.), even professionals with financial and schedule freedom (4° industrial rev.). Actually, the relationship between technological advances and labour wellbeing is not proportionally inverse, but exponentially convergent. The more technological advances take place, the more global wealth increases (both in terms of income and benefits to be enjoyed); and the greater convergence takes place in the planetary standard of living, thus increasing the wellbeing of humanity and its life expectancy. Those are two of the major components of the measurement of the global happiness index. In addition, both were announced by Bentham and Malthus in the 19th century, and they were the inspiration to measure the development in 1960s by the *Organization of Economic Cooperation and Development-OECD*, and in 2010s by the *United Nations-UN* (Rojas, 2014. Sánchez-Bayón, 2020a & b. VV.AA.a, 2012. VV.AA.b, 2020). Such a phenomenon, by which artificial intelligence has to overcome and replace the human being in tedious tasks -doing it even better- is called *singularity* (Kurzweil, 2005), and its point of no return is predicted for 2030 (coinciding with the rest of planetary convergence plans, such as *Global Compact-UN, Future of work-International Labour Organization-ILO, Green Deal-European Union-EU*, etc.). As evidence we find the reports of specialized international organizations, such as the World Bank or the International Monetary Fund, as well as the indexes evolution such as the Gini-OECD coefficient (which is decreasing as the Lorenz curve flattens worldwide) or the human development index-UN (that is being improving yearly, see table 1).

Table. 1. Comparison relating industrial and technological revolutions

Revolutions	Features	Macro and social indexes
1st Rev. (1790-1870, Atlantic Europe)	coal and steam engine; it goes from the countryside to urban workshops (highlighting the textile sector); civil service leasing contracts (for agreed days and benefits); estates and unions slow their progress	Less than 1,200 million people, with a world GDP per capita of less than \$ 1,000.
2nd Rev. (1880-1950, in Europe and the Anglo-Saxon world)	oil, electricity and assembly line, it goes from workshops to factories (highlighting the automobile sector); proper employment contracts (under a protective legal regime); its advance slows down (with accelerations and recessions) wars and state interventions.	At the beginning of the 20 c. the World population was of 2,000 million people approx., with a GDP per capita over 1,000 \$
3°Rev. (1960-2008, in the West –especially Asian tigers)	computing and robotization, plus nuclear and renewable energy; It goes from factories to centralized techno-bureaucratic headquarters and offshored production and sales modules, plus the emergence of <i>malls</i> or shopping centers, with a diversity of labor relations and employability (civil and commercial contracts, labor, civil servants, etc.). State interventions continue to alter their progress (this is WSE's golden age).	At the turn of the millennium, the worldwide population was over 6,000 million inhabitants and its GDP per capita was close to \$ 10,000

4th Rev. (2008-2030, planetarium)	internet, programming (especially, <i>block-chain</i> since 2009) and mobiles (<i>smartphone</i> as an office), it is the era of social networks, <i>apps & everywhere commerce-ewc</i> or virtual continuous marketing, giving the return of the professional (<i>knowmads v. freeriders</i>), who can be a commission agent, biller, affiliate, etc. (New formulas for the regulation of mixed labor relations emerge, eg. <i>click-pay, flexecurity, part-time jobs mix</i>). It is also the period of the emergence of <i>smart-contracts & DAO</i> (smart contracts, like codes in the cloud, whose parts are artificial intelligence, which operate from the Stock Market to driving with no driver).	We are currently more than 7,400 million population on the planet, with a per capita GDP of more than \$ 13,500.
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Source: (Sánchez-Bayón, 2019a & 2020b)

Technological development provokes an outward shift in the production possibility frontier, which it describes the quantity of output that can be produced for a given amount of inputs. If we consider only one factor of production (labour) with 2 industries X and Y, production in both sectors will behave with diminishing returns.

Production functions for the 2 goods are $x = (L_x)^{1/2}$ and $y = (L_y)^{1/2}$ where $L(x,y)$ represents the level of efficiency in terms of labour assigned to each sector (hours of labour by a technological parameter A_i):

$$L_x = A_x L_x \quad L_y = A_y L_y$$

Investment in technology (enhancing of A) causes an outward shift in the PPF. Increases of A increases the marginal productivity of labour favoring the economy to produce (and consume, increasing personal income and general wellbeing) more given a fixed quantity of inputs. IT (information technology) and internet has effects that go ahead than work productivity. Fourth industrial revolution and its advances take place at a intense pace.

In this framework of global improvement, universalized since globalization, a risk exists as the *Easterlin paradox*, if only attention is paid to production and not to people's happiness (Easterlin, 1974. Easterlin et al, 2010). This alarm was useful for the States part of the OECD, which after the great crisis of the 70s (and its stagflation), led to the reformulation of the Business Schools of the Anglo-Saxon and Nordic countries (Sánchez-Bayón & Trincado, 2021. Sánchez-Bayón et al, 2020). Currently, after globalization, the collection of all revolutions (see table 1), they have spread worldwide, taking place in a concentrated manner, allowing the accelerated growth of the long World region of *the Trans-Pacific Area* (Pacific, Oceania and Southeast Asia), which by H2030 it will have surpassed the *Atlantic World* (origin of the aforementioned revolutions). Now, for this increase to become wellbeing, it requires a reinvestment of the wealth generated in infrastructure and education services, health, transport, housing, etc. What is more a profound change in business culture is needed, so that organizations stop being exclusively results-oriented and no longer treat their workers as mere human resources (interchangeable pieces of a mechanical system), thus beginning to pay attention to talent and motivation of employees and their organizational wellbeing (Sánchez-Bayón, 2019a & 2020b). This has been the deficit of the corporate production model of the *Asian tigers* (e.g. Japan, South Korea, Singapore, Taiwan, Hong-Kong), which carried out their revolutions after 2° World War, putting themselves at the level of the most developed countries (OECD), but running out of its model for not advancing to the stage of wellbeing economics in digital economy (e.g. alienation-life in the South Korean chaebol model, death of work due to *karoshi* -excess work- or *karojisatsu* -suicide by working conditions- in Japanese corporations. Frank, 2014. Amagasa et al, 2005).

The first stage of the digital economy has been the *gig phase* or bowling phase (Sánchez-Bayón, 2019b & 2020b), which includes:

- a) the collaborative and circular economy-CCE (it is based on social networks and platforms, recycling shared goods and services, e.g. AirBnB, Uber, Wallapop);
- b) the autonomous economy-AE (it is based on *big-data, internet of things-IoT, artificial intelligence-IA, augmented reality/AR-virtual reality/VR-mixed reality/MR*, etc., articulated through 5G, *block-chain, smart-contracts* and DAOs, e.g. funds of investment in autonomous car fleet, *fintech*);
- c) the orange economy-OE (it is based on talent and creativity applied to experience and entertainment, eg. gastronomy, tourism, video games, festivals).

With post-globalization, there is implementing around the World a collaborative intelligence network (e.g. *Global Compact-UN, Wellbeing Economics Alliance-World Economic Forum/WEF*) to share experiences and good practices that allow progress towards the next stage of the digital economy, such as the

authentic welfare economy or *wellbeing economics*. This new stage includes expressions like entrepreneurship, talent & happiness management (Cubeiro, 2012. Frey, 2018. Sánchez-Bayón, 2020a & b). Other expression of the wellbeing economics, it is the *corporate social responsibility 3.0* (CSR 3.0). In this case, it pays attention to the social-business digital currencies (SBDC), as a resource to improve the remuneration of employees and, at the same time, to care the environmental and other social benefits. Therefore, previously, what is understood and how digital currencies operate will be clarified, as well as its contribution to the promotion of CSR 3.0 (which is typical of companies oriented towards people: the development of talent and happiness), in addition to illuminating about the hypothetical initially raised paradox.

The methodology applied in this paper is the usual of the new Institutional Economics (with historical and comparative techniques), mixed with some elements by Austrian Economics and Global Economics & Cross-Cultural Economics-GE&CCM (with qualitative techniques, promoted with the new hermeneutic turn by the Sweet-water Schools of Economics and B-Schools, Sánchez-Bayón, 2020 & 2021). About the sources applied, they are secondary sources, because for this paper, the authors used the information from the international institutions (e.g. *Global Compact*-UN, *Wellbeing Economics Alliance*-WEF), in contrast with global firms reports and rankings (e.g. *Top 100-Great Place To Work*/GPTW).

2. Cryptocurrencies v. digital currencies: what they are, how they operate and what are their implications in digital economy

Cryptocurrencies, or better said (for this study) digital currencies, they are autonomous, virtual and decentralized pecuniary units, which can be exchanged as a payment instrument for means of a system or *network* of electronic operations that does not require financial intermediaries (since all participants are public officials or notaries, Bagus, 2010. Conley, 2017). Distributed ledger technology (DLT) refers to a database of which there are multiple identical copies distributed among several participants and which are updated in a synchronized manner by consensus of the parties, and cryptoassets is the best known application (Romero Ugarte, 2018). On the other hand, a blockchain is a digital, public ledger that records online transactions. Blockchain is the core technology for cryptocurrencies like bitcoin (Ibáñez Jiménez, 2018a y b). The cited features are summarized in their digital condition, as they are carried out through an electronic procedure (such as a transfer or card payment). As for its origin and development, find the synopsis of the following table.

Table. 2. Development of digital currencies

stages	milestones and features	relevant cases
Background (1988)	<i>Denationalization of money</i> (advertisement of non-national currencies, Hayek, 1976). Cover of <i>The Economist</i> (predicting the appearance of a currency that would displace national ones).	Reference baskets of currencies are introduced, which will give way to cases such as the ECU (antecedent of the euro and with which it could be operated via stock exchange interconnection systems).
1998	The word cryptocurrency is introduced and consolidated	Appearance of the Wei Dai B-Money system
2008/2009	The first paper on Bitcoin is published	Satoshi Nakamoto spreads Bitcoin and his first operation takes place on metzdowd.com
May 22, 2010	First real transaction with Bitcoin	Some pizzas were paid with Bitcoins
December 2017	Price of derivatives contracts on Bitcoin	Futures on Bitcoin are traded in CME and CBOE

Source: own elaboration



Figure. 1. Evolution of the price of Bitcoin (own creation)

This sort of instruments were conceptualized and developed to be used as traditional currencies, as conventional currencies to acquire goods and services, with the difference that they avoid entering into commissions from financial intermediaries and under a novel technology called *blockchain* (Ibañez, 2018). This paper offers a basic explanation about digital currencies, just to connect with CSR 3.0 practices. The topic of financial assets linked with *Distributed Ledger Technology*-DLT or blockchain, it is pretty complex and in continuous development: it is necessary to attend the proposals of global standardizations, in terminology and concepts by *International Standardization Organization*, as ISO/TC 307 (and others proposals by *International Telecommunication Union*-ITU, *International Electrotechnical Committee*-IEC, etc.); in topics by IEEE (2020); for national relevant standards (e.g. UNE, Alastria). Also, it is convenience to distinguish between close notions: payment tokens, virtual currencies, digital assets, etc., in accordance with fintech supervisors (e.g. ESMA-EU, CNMV-Spain). In this way (a basic explanation), it is possible to say that the digital currencies can be related more to a commodity or financial asset than to a foreign currency, since many traders acquire digital currencies seeking to generate a return (capital gain) derived from their price, they are more used for speculation than to be a means of payment in commercial transactions. There is a lot of financial literature on the intention of users when they exchange their domestic currencies for digital ones (VV.AA., 2019). There are empirical studies (Glaser et al, 2014) that, mainly users or investors with little information or academic preparation are not interested in an alternative transaction system, what they want is to participate in cryptocurrencies as an investment vehicle. The question of the usefulness of digital currencies as an exchange practice (which has aroused the interest of regulators) is their immense volatility, which leads to think that it is used as a speculative investment. In 2012, the *European Central Bank*-ECB said that Bitcoin should be considered a high risk system for its participants from a financial perspective. It was even hinted at its similarity to a Ponzi scheme (ECB, 2012). China, in 2013, announced a ban on Bitcoin as a currency for financial institutions (Ruwitch & Sweeney, 2013). If this was the case at the beginning of the boom in digital currencies (and other crypto assets), one can imagine the current protectionism of Central Banks before the implementation of payment systems such as *Google pay* and its G currency, or before Facebook's *Libra* (as it comes happening since 2018) -it will be understood why it is interesting to keep the suffix “crypto”, as a connotation, when it is actually due to the encryption code-. The European Parliament and Council outlined a draft with the prospect of becoming law and laying the foundations for joint legislation in the European Union. This is the draft of the European Regulation on crypto asset markets (MiCA, acronym for markets in crypto assets) (COM 2020 593) that will entail a total variation in the European legislative landscape by which Directive (EU) 2019/1937 is modified. The present regulation will regulate the market for crypto assets that are currently outside the financial regulatory perimeter of the EU. Thus, for example, security tokens (cryptographic tokens but linked or linked to financial assets) or CBDCs (central bank digital currency or crypto assets issued by central banks) would not be included within the MiCA. That is, the digital assets regulated by MiCA are: those called utility tokens (permission granted by the issuer to digitally access an application, that is, the underlying right is a specific use), token references to assets (serves as a means of exchange and its characteristic is that it seeks stability as it is referenced to other currencies) and e-money tokens (they serve as a medium of exchange and are characterized by being denominated in units of a fiat currency). What is called with the term tokenize is to represent a right (personal or real, or on a tangible or intangible good) in a distributed registry (blockchain) private for legal purposes and public for technological purposes, these representations materializing in unit accounting entries called tokens (Maldonado, 2019).

As for the so-called crypto assets, they are a set of crypto currencies together with other forms of goods and services which use cryptography (blockchain technology) for their operation. These crypto assets include cryptocurrencies and tokens. *Tokens* are a unit value issued by a private entity. William Mougayar defined it as a unit of value that an organization creates to govern its business model and give more power to its users

to interact with its products, while facilitating the distribution and distribution of benefits among all its shareholders (Mougavar, 2016). Tokens have different uses and utilities in the blockchain (internal unit of account, intermediating transactions between buyers and sellers in the internal markets of the platform, or granting rights to token holders) but, regardless of their use, the tokens have been revealed as an effective method for technology start-ups to raise capital at the earliest stage of their business cycle. Instead of making capital increases or trying to convince Venture Capital funds (venture capital), blockchain companies are frequently financed through ICOs: *initial coin offering*. Tokens are offered at auction and used to fund the projects. In 2016, 250 million dollars were raised with this financing methodology for SMEs. (Conley, 2017). The development of tokens, both as currencies and financial assets, respond to a compliance framework; however, there are issues such as capital increases through ICOs that are still not legally well defined (at least in Spain). If the tokens are currencies, ICOs must comply with know-your-customer legislation and anti-money laundering rules. If it is a financial asset, they will be subject to the legislation of the regulators (e.g. SEC, CNMV).

Whether *crypto-tokens* or crypto assets are currencies, financial assets, or a different and new asset, it also affects how they should be analyzed from an economic point of view. Although there is a theoretical body of knowledge with strong academic foundations in monetary and financial economics, how the theory should be applied to crypto assets and ICOs is still beginning to be explored. There is hardly any quantitative research on the estimation of cryptocurrencies/assets for potential investors, how start-ups should structure ICOs, etc. As has already been mentioned, the technology under which cryptocurrencies work is called blockchain, or chain of blocks. This blockchain removes all intermediaries through complete decentralization.

So that it can be understood in a better way, a chain of blocks is like a record book which is the blocks themselves that are connected and encrypted, like a distributed and secure database. In order for the blockchain to function properly, the information must be verified by several users, and in each block there are a large number of transactions. As more and more transactions are completed, the block reaches the point where it no longer supports more and there it must be validated and sealed, this is what users do when mining. What is mining?.

Mining describes how blocks are generated within the blockchain. The chain contains blocks with information and transactions. In order for transactions to flow, we need confirmation from the miners. The so-called miners compete among themselves in order to have the right to create a new block in the chain (Zheng et al, 2017). It is a P2P (peer to peer) network, miners compete with each other. The first to create a valid block and seal it receives cryptocurrencies.

A very important aspect that we want to highlight is the high level of security of the system. The blockchain is unbreakable against a possible modification of the account book and the theft of Bitcoins turns unfeasible (Berentsen, 2018). The miners collect pending transactions (of Bitcoins for example), verify the legitimacy and chain it into what they call a “candidate for a block” in order to win new issues of the cryptocurrency if they convince the rest of the participants of the network or chain to add their candidate to the blockchain block. Access is usually free (in Bitcoin), you do not need authorization to become a miner, just download the software and the most recent copy of the chain. In practice, however, there are few and huge miners that produce most of the new blocks accepted in the chain due to the high competitiveness that allows profitability thanks to the economies of scale at the hardware and electricity level.

The European Central Bank (ECB) is actually considering the creation of a digital euro, under the consideration of what is usually called a Central Bank Digital Currency (CBDC). According to the Bank for International Settlements (BIS), it would be a “digital form of central bank money that is different from balances in traditional reserve or settlement accounts”. ECB is being cautious and has not begun the preliminary tests for the implementation and the technology on which is based. The main difference between CBDCs and other cryptos are the way they are issued (ECB is the only institution that can issue €) and monetary mass (states has no limits, Bitcoin 21.000.000). It must be borne in mind that cryptos are not backed by a legal entity.

Regulation is extremely important, digital currencies can significantly reduce tax revenues for nations and is a serious danger to the banking sector (as has been recognized by the Bank of America), mainly in the current scenario of low interest rates and growth in developed countries. For instance, John Cryan, former Chairman of Deutsche Bank, warned about the possibility of traditional banknotes and coins disappearing in ten years due to their inefficiency. Cryptos and Blockchain increase the uncertainty in the financial autonomy of national economies, as recently recognized by Margarita Delgado, Deputy Governor of the Bank of Spain, speaking of Libra as a serious danger for monetary policy (see below). Proof of this are, for example, the recent reactions of the ECB, the IMF and the Fed regarding Facebook's Libra cryptocurrency, which shows concern regarding the financial system due to digital assets created by technology multinationals with strong penetration power in the monetary use of the population. The concerns relate to the protection of customer data, protection against money laundering or potential abuse of a leading position. Basically, there is a *trade-off* between cost reduction, speed of financial transactions and the menace of international financial volatility due to credit risk due to lack of support from a public institution.

The European Banking Authority defined 70 risks, divided into several categories based on who or what is threatened by them (Lansky, 2018). Today's payment systems are one of the groups. Obviously, the traditional banking system is fading, its business model is outdated due to new technologies and cryptocurrencies mean a radical change in transactions and business models. It is certain that digital assets have risks, but we cannot forget that currently around 2 billion people do not have access to the banking system. New technologies allow them to participate in the international economy and lift them out of poverty. Peer-to-peer currency networks are becoming increasingly common, making centralized control of funding difficult and posing a serious threat to the financial industry.

If they want to survive, large banks must digitize and provide real-time services such as those offered by cryptocurrencies and are already investing in research and development of Blockchain technology. Institutions that adapt will survive, the rest will die.

3. Use of digital currencies to improve employees' compensation & motivation

The advantages of digital currencies as a medium of exchange in the financial and monetary system are, first of all, *in relation to the cost of transactions*. The technology provides high cost efficiency in international transactions to digital currencies compared to traditional instruments. According to Enciso (2018), cryptocurrencies are a contribution to the economic development of countries because it becomes an alternative stock exchange with costs that reach a 50% reduction in relation to the traditional stock market.

The CEO of Andreessen-Horowitz Venture Capital Manager, Marc Andreessen, he said about Bitcoin: it introduces value into the system, transfers the value, the receiver obtains the value, no need for authorization and in many cases, free of commissions. The last advantage is of high importance. Bitcoin is the first internet payment system where transactions can be made with little or no fees. Traditional transaction systems charge commissions of 2/3% and this is in developed countries. In many other countries, modern payment systems do not exist or fees are much higher (Andreessen, 2014).

Second, one of the main advantages refers to their *decentralized nature*, that is, they are not controlled or administered by any government or public administration. Decentralization lies in the open nature of the code of its protocol, which means that the programming code is freely available to access and redistribute it. Nature of the system is based on the so-called collaborative economy, because any collaborator (with hardware provision) can process transactions on the Blockchain and obtain remuneration for it (what we have previously called mining). The reason for this simile is because, as in a mineral mine, the *commodity* decreases as it is exploited, the bitcoin algorithm is designed so that in 2,140 all Bitcoins are taken for granted.

That open technology provides the third advantage for collaborators, its infallibility (Lakowski-Daguerre & Desmedt, 2015): since any attempt to manipulate transactions results in a computer block incompatible with the previous and the next. For this reason, cryptography supporters call these systems "trust-less", because it means the substitution of a computer code in the trust of the public collateral of the traditional currency. Dozen authors portray Blockchain as the "reliable protocol" and Blockchain makes the network more than the internet of information, the internet of money. The birth of this technology stems from the loss of confidence in businesses and other institutions after the 2008 financial crisis (as indicated by the Edelman Confidence Barometer).

The fourth advantage for economic agents submits to transactions privacy, their anonymous nature. The right to privacy and anonymity arouses enormous interest in economic and commercial transactions and the world in general. There are plenty of examples of the monitoring of public government entities to prevent criminal and terrorist activities and of marketing companies to profile different users. We consider useful to clarify the distinction between privacy and anonymity in the context of financial transactions (Gallardo et al, 2019). Anonymity refers to the lack of knowledge towards the actor or actors who take part in it. Privacy submits to whether the product and quantity of the transaction are unknown, but not its actors. In relation to cryptocurrencies, transactions are anonymous, identities are not registered, but each transaction is registered in a electronic book of public nature. The anonymous nature alters the regulatory capacity in the financial field and therefore is used for the payment of criminal transactions. The fifth application with which the payment system is improved is because with cryptocurrencies all transactions are carried out from person to person, there are no intermediaries. It is a "peer to peer" (P2P) system. In addition, with which we enter the sixth advantage, the faster transactions in relation to fiat currencies. This project for the technological advancement of means of payment would be in line with technological development, economic globalization and the necessary agility of transactions today, and would be a rational evolution of the monetary concept in our days.

Therefore, the rise of electronic commerce and the financial crisis gradually led to the introduction as a means of payment, the idea born in 1998 by Wei Dai in the "cypherpunks" email list, where he proposed the idea of a new type of money used by cryptography to control its creation and transactions (see table below).

4. Articulation of the CSR 3.0 case: advantages of the social digital business currencies (SDBC)

Consider the development of digital currencies, then how do they relate to the wellbeing economics (including the talent and happiness management), and how can they serve as a case for CSR 3.0? To respond, allow yourself a brief clarification on the future of CSR and its three stages, to then give an account of examples of CSR 3.0, and finally record the advantages and benefits of SDBC in this regard. The world consecration of CSR (beyond the business sphere, reaching all types of corporations, including NGOs or the public sector) took place with UN convergent initiatives (e.g. the *millennium agenda* of General Secretariat, the *future of the work* of ILO), harmonizing all this with the *global compact* (announced by K. Annan in his speech on January 31, 1999 in Davos, during the *World Economic Forum meeting*, and formally constituted on July 26, 2000). Since then, minimum global standards have been set in relationships between people, communities and the environment. In addition, a network of local support networks has been established to deepen, broaden and disseminate this commitment. This has made it possible to generate a collaborative intelligence that has given rise to new concurrent and reinforcing initiatives (e.g. the wellbeing economics alliance by WEF, the surveys and good practices of GPTW). In accordance with this collection, it is possible to establish the following evolutionary categories of CSR (in the transition towards the happiness and talent economy model):

- a) CSR 1.0: characteristic of incipient organizations only oriented to results and in which the hygienic measures of the workers are hardly taken care of (e.g. working risks prevention, adequate wages and payment of overtime). As such, CSR is understood in a marketing way (out-door advertising) so it is outsourced to consultants or is directly replicated by others, but does not correspond to its own business culture. It is detected by his pretentious speech, his abuse of barbarisms (linguistic loans), and commitments that are difficult to verify (e.g. reducing the carbon footprint, helping a remote town).
- b) CSR 2.0: visible in consolidated organizations, in terms of their market share, but who wish to make improvement changes, going beyond hygienic measures and initiate the promotion of motivational measures (those that stimulate workers to improve and increase their productivity and your commitment). Their CSR accounts for *compliance* local (e.g. equality plans, ethical codes, recycling programs), is supported by international quality certifications (such as those of ISO standards), and they begin to participate in global transformation forums (e.g. *Global Compact-UN.*). In this way, one begins to become aware of the importance of corporate culture, so that it can be lived and participated in a sustained way, with verifiable impacts and shared with others.
- c) CSR 3.0: mature organizations are produced, not by seniority, but by focus, since they are companies prepared for the new corporate culture, oriented towards people and their motivation. Its CSR is local and easily measurable and verifiable, as it is based on measures that affect its social and natural environment. Thus, CSR ceases to be something from outside doors (as a mere attempt to improve the business brand, or diligent and transparent regulatory compliance), becoming something from inside (thought by and for employees, together with their families: a culture to feel part of and celebrate).

Temporarily speaking, CSR 1.0 dominated until the 2000s (although it survives in those incipient organizations - regardless of their seniority, as it is a matter of aptitude and attitude towards the economy of happiness and talent); Since the 2000s, thanks to international organizations and transnational forums, CSR 2.0 has been promoted. For its part, CSR 3.0 is the result of the creative destruction of the 2008 crisis of values, as the companies that survived and improved were due to their orientation towards talented employees and their involvement in the new corporate culture, based on a mission, vision and values with which to identify and give the best of each one.

As required by CSR 3.0 in its succinctness, just consider the following example, which already links to SDBC. In the Basque Country (in Spain), on March 5, 2019, the cooperative corporation *Fagor Industrial* (household appliances manufacturer), it signed an agreement with Orbea (another cooperative in bicycle sector), by which a digital-bonus of 200 euros was offered to workers for the acquisition of sports equipment and went to work without a car. In this way, Fagor achieved the following positive results from CSR 3.0: a) it looked after the wellbeing and health of its employees, when they came to work by bicycle; b) it cared for the environment, by reducing emissions with the reduction of cars at work; c) it improved the natural and social environment, since as new parking spaces were not required (even some of the existing ones could be dispensed with), a larger green recreational area was available; d) increased rest space for employees and the venue for business meetings, as well as with the families of employees, etc. And all this at no cost, only increasing profits: there was no need to spend on an extension of the car park, or on future places for holding meetings; the share of health insurance was reduced; it was not even necessary to pay the 200 euros of bonus, as it was part of the discount agreement with Orbea, which thus manages to increase its sales and release stock. So simply, Fagor had created own digital-money for RSC 3.0 practice. These practices are

very common in other sectors, like the insurance companies, which count the steps taken each day through an app on their mobile, which translates into discounts on fees and gifts.

Thus, corrected and increased, more and more companies create their own social currency, being granted for good coexistence practices and production results, being valid for the company cafeteria and surrounding businesses, or for the purchase of reduction of working hours, or any other consideration for flexibility of work (this is not only done by the leading companies of *the GAFAM model -Google, Amazon, Facebook & Apple-* but also those that have gone through a process of conversion, Kodak type, even good part of the companies ranked by GPTW).

The practice of rewarding virtual tokens for environmentally friendly behavior is called “eco-friendly activities”. It is recalled that CSR also affects public sector organizations, since more and more municipalities reward their fellow citizens with social currencies for their good practices: for example, Viladecans (a town close to Barcelona), it was returned to the neighbors part of the energy savings achieved in local currency (Vilawatt) to be spent in local shops (Viladecans, 2020). This has also been done in other places, such as Brussels and its Eco Iris, and other cases that arise later (when dealing with the paradox of social currencies).

Therefore, the resource of digital social currencies is something on the rise (despite its prediction in 1976 by Hayek or in 1988 by *The Economist*), present in all types of organizations, which reports benefits not only to direct collaborators (being possible higher and better remuneration, as their purchasing power always increases, without the risk of higher tax pressure or inflation), but, as a matter of CSR 3.0, it also results in the care of environmental and social context, looking for the common good and financial liberty (Bagus, 2009 & 2010. Trincado, 2005).

5. Discussion and conclusions

At the beginning of this paper, the exposition of a sample of business practice was assumed that could serve as a refutation of the proposals by academic *mainstream* (in WSE) and the *new-luddite* activists (contrary to technological advances), who consider that there is an inversely proportional relationship between technology and labour relations wellbeing. They oppose technological advances because they believe that they violate working conditions, leaving people without work and increasing social inequalities. However, it turns out that the relationship between technological advances (such as digital currencies) and work wellbeing (by increasing remuneration, but from motivation, by undertaking from gamification to achieve it and the commitment to help with CSR) is not proportionally inverse (dismantling the fallacy that the more machinery and programming, the less work available to people), but is exponentially convergent (the more technological advances are produced, the more suitable work is for human beings, since they can dedicate themselves to exploit your personal talent).

The real paradox (if not directly a discursive contradiction in the form of ideological cognitive dissonance), it occurs with the double standard: local social currencies are beneficial if promoted by the Public sector (as they are a small complement to national money); however, they become suspicious (of lack of transparency -with accusations of money laundering, including pyramid scam, see below BCE), if they appear in electronic format and, even more, if they are the result of private initiative. The collaborative intelligence shared in international forums such as the *Global Compact-UN* or *Wellbeing Economics Alliance-WEF*, it proves the opposite: unlike the WSE, which is based on the redistribution of scarcity, on the other hand, the digital economy is based on the constant and diverse generation of abundance, thanks to creativity, talent and entrepreneurship (a question developed in other publications).

It turns out that regarding the use of alternative local currencies or social currencies (Cortés, 2008. Corrons, 2017), if it is carried out by local entities of the public sector (such as the case of *Bristol Pound* in Bristol, *SoNantes* in Nantes or the most recent, in 2018, *Citizen Economic Resource-REC* in Barcelona), is considered an example of a social and solidarity economy –even, *money with values* (Corrons, 2017)-, despite the fact that companies are conditioned to participate for their operation. However, the appreciation varies (becoming speculative) if it is an initiative of the companies themselves (in Spain, since the Rumasa case in 1983, companies were prevented from having their own banks, something that facilitated their own financing). Faced with such prejudice, one of the most successful antecedents to date should be mentioned, as is the case of *Wir* (short for *Wirtschaftsring*, which means economic circle), the currency of the *Wir Cooperative Bank* in Switzerland (since 1934, under the postulates of the economist Gesell on free money). This system has helped finance almost 100,000 Swiss SMEs (reaching an accumulated value of operations close to 1.5 trillion euros), proving very useful especially in periods of crisis (when there has been a lack of liquidity, such as the crisis in 2008). The so-called social currencies, in the 2000s, cases such as the French *Sol-Violette* or the German *Chiemgauer* (each one existing in multiple municipalities, with more than half a thousand of participating companies and with operations worth several million euros per year). In Spain, after the financial crisis of 2008, there have been cases of social currencies now only electronic (via mobile

app), such as *Real de Vila Real* in the Valencian Community. However, reluctance increases due to transferring social currencies to electronic support and their employability in the digital economy (as happened with the Mexican *Túmin*, created by professors Castro and López from the Intercultural Veracruzana University, who were charged with violation of the peso and the impulse of illegal currency).

In short, as leading companies in digital transformation and in the implementation of the talent and happiness management model for wellbeing economics (such as those ranked by GPTW) have been proving, the resource of DSBC, it has the benefit of CSR 3.0 practices (helping companies, collaborators, communities and the environment), but it has many more possibilities, which will soon be discovered after the great lockdown and work stoppage by COVID-19 crisis and its associated economic depression (as already seen after the 2008 stock crisis, with Bitcoin and the subsequent boom in digital currencies, given the lack of liquidity and financing, the loss of purchasing power and incentives, etc.).

Finally, keep in mind that in the last half century alone, there have been almost 150 *bank crashes*, more than 200 monetary, and 75 sovereign debt crisis. This means that a World average of a failure of the traditional monetary system (of national currency) is fulfilled every month and a half (shortening the terms in this period of depression just started). If to this is added the aggravation of the debt crisis at the beginning of the 2019 recession and the post-COVID-19 depression (Bagus et al, 2020. Sánchez-Bayón, 2020c), it is obvious that the use of alternative instruments that favor the financing of companies is indispensable (introducing new fluidity), the remuneration of collaborators (including, if necessary, their hiring via alternative billing), etc. At bottom line, digital socio-business currencies balance seems quite positive, taking into account that it is something incipient and whose possibilities will start to emerge in the cycle of economic depression that is opening after the COVID-19 crisis (as will already happened with blockchain and Bitcoin after the 2008 stock crisis).

In the wellbeing economics, institutions like the digital currencies are a useful tool to get more micro-economics results: to improve the personnel incomes, to motivate the collaborators, etc. In macro-economics perspective: the separation of State-bank relations or a contribution for the current Green deal (with zero cost). And in meta-economics: the gamifications in organizations, the financial liberty for the human beings, and the recovery of the economy goal (not the GDP growth, just the satisfaction or happiness of the citizens).

6. References

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