



AUDENS

Revista estudiantil d'anàlisi interdisciplinària

Núm. 4

2021

Innovation and capitalism: opportunities for improvement in society and in business

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Abstract: There are many reasons to be worried and become skeptical about the effects the system we are living in is having on humanity and the environment, yet we have accessible contemporary and modern studies on the capitalist system that can give us tools to redefine regulations and concepts with a focus on bettering those crude realities. In order to understand some of the actual core issues and its possible solutions, I will start by presenting Joseph Schumpeter's concept of "capitalism". Then I will bring the concept of "value" in focus from a technological point of view to point out the source of many of the issues. As well, I will talk about how a redefinition of "corporate social responsibility" is necessary for a sustainable society to exist. Finally, by getting some insights on how technological eras or "new paradigms" are formed and destroyed I will encourage a goal oriented and defined action given that we are in a *turning point* where new rules need to be agreed upon.

Keywords: Capitalism, Technology, Democracy, Inequality, Value, Automation, Innovation, Creative destruction, Corporate social responsibility, Technological revolutions.

Resumen: Hay muchas razones para preocuparse y ser escépticos frente los efectos que el sistema en que vivimos está teniendo sobre la humanidad y el medio ambiente. Si más no, tenemos a nuestro alcance estudios modernos y contemporáneos sobre el sistema

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capitalista que nos pueden proporcionar herramientas para redefinir regulaciones y conceptos enfocados a mejorar estas crueles realidades. Con el fin de entender mejor el origen de los problemas actuales y sus posibles soluciones, empezaré presentando el concepto de “capitalismo” de Joseph Schumpeter. Seguidamente pondré el concepto de “valor” en el punto de mira desde una perspectiva tecnológica para poder mostrar el origen de muchos de los problemas. También hablaré de la necesidad de redefinir el concepto de “responsabilidad social corporativa” para que una sociedad sostenible pueda existir. Finalmente, y a través de entender cómo las eras tecnológicas o los “nuevos paradigmas” se crean y se destruyen, animaré a tomar acción de forma planeada y con objetivos claros, ya que nos encontramos en un *punto de retorno* en donde las nuevas reglas han de ser acordadas.

Palabras clave: Capitalismo, Tecnología, Democracia, Valor, Desigualdad, Automatización, Innovación, Destrucción creativa, Responsabilidad social corporativa, Revoluciones tecnológicas.

INTRODUCTION

In many ways, the effects that technological advancements are having on the capitalist system are big enough to make us worried. Principally, we can centre our focus on the effects that automatization is having on productivity and how this increase in productivity does not require an increase in human capital, but rather the opposite. It is easy to foresee that a system, as we know it today, with a much higher unemployment rate would not be beneficial for the consumerist foundations that capitalism embodies. The basic universal income (UBI) has appeared as a counteract tool to the effects that potential customers without a stable income can have on the overall sales; the concept of UBI, although first thought by the English philosopher Thomas More in his book *Utopia* (1516), is lately connected to the Economics Nobel Prize and capitalist supporter Milton Freidman².

² What Milton Fiedman really advocated for in *Capitalism and Freedom* (1962) and later on in *Free to choose* (1980) was a basic income in the form of negative income tax. Negative income tax is a taxation system where earners above a certain adquisitive level pay taxes to the states and earners below a certain adquisitive level would receive money instead.

Nonetheless, that fear of a way too high unemployment rate can be questioned by the results in low unemployment and high wages shown by those countries that nowadays have automated the higher amount of processes in production and services in the world, like South Korea or Singapore (McCarthy, 2020; The Jobs Reset Submit, 2020), making us consider that high unemployment caused by automation is just a transitory face in the transition to the new Industrial Revolution.

Moreover, the selfishly driven business models that rule big corporations with little to no responsibility for society and the environment and the consumer's hunger for "new" and "more", are having a visible impact on our planet³. The number of threats to humanity has grown fiercely over the last seventy years. In the meanwhile, inequality and poverty are dramatically increasing (OECD, 2020; Poverty rate indicator) making many people's existence very miserable. In any case, it appears to be necessary to "redefine" capitalism and the role that corporations play in it, but in order to do so we need, in my opinion, to better understand the behaviour and direction of technology.

The way Joseph Schumpeter defined capitalism⁴ can help us better understand the actual circumstances we are living in and give us guidelines to approach our future challenges with more knowledge. Based on those ideas, technological innovation is a compelling part of the capitalist system since it is the one making perpetual change possible. Furthermore, by redefining an over-stigmatized "capitalism" from a technological perspective could we achieve a constructive way to approach those challenges - which are in great measure shaped by the relationship between capitalism and technological development.

For those in search of constructive ways to approach the current situation, I will put forth Schumpeter's understanding of capitalism and a redefinition of 'value' from Mariana Mazzucato's studies to change the angle with which we are looking at the root of our inequality problems. Furthermore, I will briefly talk about how spreading responsibility to the corporate world could speed up the recovery process that is needed, although it would require introducing some "socialism" in the picture. Finally, I will

³ IPCC (2018) *Summary for Policymakers*.

⁴ [*Capitalism is*] that form of private property economy in which innovations are carried out by means of borrowed money. (Schumpeter, 1939, p. 223)

conclude with a glimpse of the nature of technological revolutions applied to the actual circumstances which will give us *momentum* to move forward.

THE SCHUMPETERIAN PERSPECTIVE: INNOVATION AND CAPITALISM

Capitalism is commonly understood as *an economic, political, and social system in which property, business, and industry are privately owned, directed towards making the greatest possible profits for successful organizations and people*⁵. Strikingly enough, it is common to not mention the evolutionary process inherent to the capitalist model (Schumpeter, 1943; Taylor & Francis, 2003). A constant mutation of the industries is necessary to keep up with the market's competition; this is what Joseph Schumpeter understood as "Creative Destruction".

Among the 20th century economists, Joseph Schumpeter is probably the one who stressed the most on the importance of technology as the force that keeps capitalism dynamic and alive. In Schumpeter's words:

Capitalism, then, is by nature a form or method of economic change and not only never is but never can be stationary. And this evolutionary character of the capitalist process is not merely due to the fact that economic life goes on in a social and natural environment which changes and by its change alters the data of economic action; this fact is important and these changes (wars, revolutions and so on) often condition industrial change, but they are not its prime movers. Nor is this evolutionary character due to a quasi- automatic increase in population and capital or to the vagaries of monetary systems of which exactly the same thing holds true. The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates. (Schumpeter, 2003, p. 82-83)

The system described above is one in which creative destruction is an essential factor for the capitalist process, since "it is what capitalism consists in and what every capitalist concern has got to live in" (Schumpeter, 2003, p. 83). It is by means of technological progress that changes occur and, therefore, the economic system is not static, but a

⁵ Cambridge English Dictionary; *Capitalism*

dynamic one in contrast with the neoclassical economics. Economic progress takes place in a capitalist society when entrepreneurs provide innovations and “these new products and new methods compete with the old products and old methods not on equal terms but a decisive advantage that may mean death to the latter” (Schumpeter, 2003, p. 32).

As mentioned in the introduction, it is in that moment, when innovation takes place, when investors or potential shareholders will step in and contribute to the decision of the future of such innovation or new technology. Therefore, the future of technology is frequently in the hands of investors with foundations in their interest. As Mariana Mazzucato’s study on value creation⁶ states, innovation takes place generally at universities, laboratories or think tanks commonly financed with public funds, but at the last stages of it is when big corporations or private investors, that are willing to take what they call “high risks”, come and fund a technology on their profit, leaving a long term public investment with almost no financial returns; the GPS, the touchscreen and many others are examples of it.

Most of the time, those decisions over new technologies or new methods do not take into consideration the living standards of people or the deeper needs of society, but lone profit. It seems that, if a capitalist society is defined from the perspective of innovation, some filters could be introduced in other steps of the productive process in addition to, for example, the imposition of taxes on the corporate profit which is a consequence of the previous decisions, but not the *decision* itself.

In Mazzucato’s book *The value of everything: Making and taking in the global economy* (2018), she goes one step further and sees the core of the issues in the actual economic system in the process by which economic value is created:

By losing our ability to recognize the difference between value creation and value extraction, we have made it easier for some to call themselves value creators and in the process extract value. Understanding how the stories about value creation are around us everywhere - even though the category itself is not - is a key concern [...] and essential for the future viability of capitalism. (Mazzucato, 2018, p. 270 -271)

Value has become a subjective concept tied to the preferences of the financial agents involved in each situation, thus price has become an indicator of value, so “rather than a

⁶ Mariana Mazzucato (2018), *The value of everything: Making and taking in the global economy*

theory of value determining price, it is the theory of price that determines value” (Mazzucato, 2018, p. 271). Therefore, concepts like “value” should be defined together by public and private agents and communicated to the rest of the population. Moreover, public funded investments should also seek to fulfill long-term projects and count with implementation and advertising plans to society making it troublesome to sell it to private agents or at least being sold at a higher price granting better returns.

BALANCING RESPONSIBILITY THROUGH CORPORATE SOCIAL RESPONSIBILITY

Not only is the way value is defined and created an important issue, but the fact that the vast majority of corporate decisions are taken with only focus in increasing shareholder profit. At that point it is interesting to introduce the business concept of Corporate Social Responsibility or CSR; CSR is commonly understood as the corporate self-regulating capacity in relation to health, safety, ethical, social and environmental issues. During the last years there has been an increase in discussions around the need for corporations to be socially responsible.

Nowadays, some common ways big corporations get wealthier is through speculation of international financial markets or, as we just mentioned, by funding innovations that are almost ready to use. In a similar manner, CSR as we know it today⁷ could not solve any of the big challenges we are facing, therefore, what we are discussing here is, for example, full responsibility over the employees security when taking bigger risks, when adventuring in outsourcing production to developing countries or when getting rid of the company’s waste; in those situations the regulation on corporate responsibilities could be sharper to promote more democracy and reduce exploitation of both humans and environmental resources.

For instance, if every corporation would buckle down to issues that are directly associated with their employees, customers or their surrounding environment they would together cover a good deal of issues now left in the hands of governments and public organizations, and consequently would promote a more democratic working

⁷ Oxfam (2013) Ten biggest food and beverage companies failing millions of people who grow their ingredients.

environment. At the same time, concrete decisions would be taken by agents directly involved in them and, therefore, it would lead to more knowledge-based choices.

In 2006, the well known theoretical economist Michel Porter together with Mark Kramer published an article called *Strategy and Society – the link between competitive advantage and corporate social responsibility* that changed the way economists like Friedrich August von Hayek or Milton Friedman were defining CSR. Hayek and Friedman thought that CSR was a way to deprive corporations of freedom and even Friedman did provocatively affirm in the New York Times that “the social responsibility of business is to enhance its profits”⁸. This affirmation is still in line with the classical point of view of profit maximization, but the ideas presented by Porter and Kramer changed the focus from profit maximization to value creation.

They see CSR as a creation of shared value, which would lead corporations to create business opportunities and competitive advantage by including social and environmental strategies to their plans (Porter and Kramer, 2011, p.77). These social and environmental strategies come from understanding competition and value creation from a deeper point of view. By sharing and investing wealth, the business (or the government or the NGO) will eventually generate more wealth.

Certainly, if your industry is dependent on a limited natural resource, eventually recycling will be needed in order to continue producing, and therefore, a strategic investment in the recycling of those natural resources will be the only way forward for the business. It is almost safe to say that what they call “Circular Economy” is the coming evolution for capitalism.

THE TURNING POINT: TIME FOR OPPORTUNITIES FOR THE CAPITALISM SYSTEM

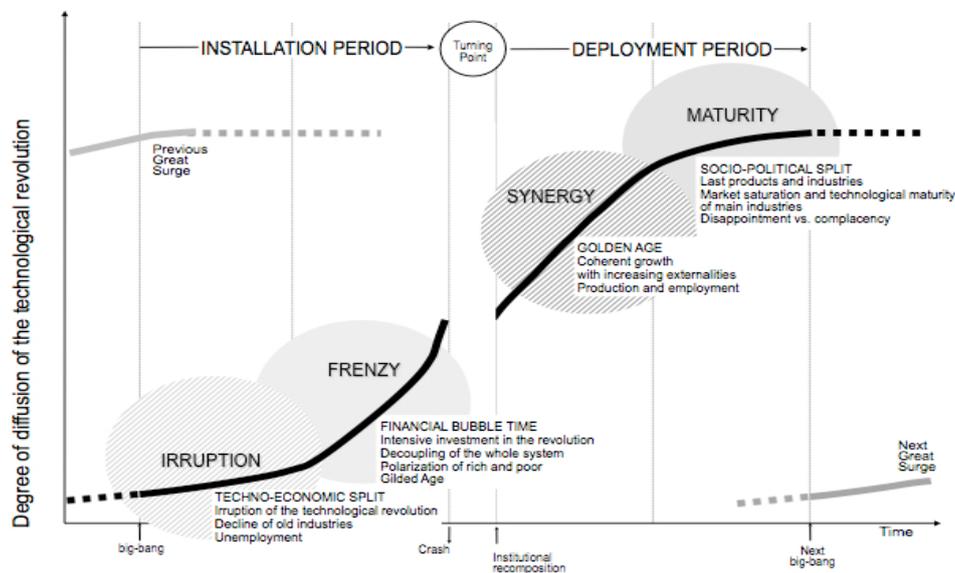
As we have seen, there are ways to tune the actual system without needing to wait for a future collapse, but those ways require an effort though they are not exempt from opportunities and rewards. Furthermore, it is good to know from an spectator point of view *how technological revolutions actually work* and *where are we now?* to be able to

⁸ Milton Friedman. (1970) *The social responsibility of business is to enhance its profits*

understand the importance of the timing of our actions. Carlota Perez⁹, from her broad studies on technological revolutions explains in her book *Technological revolutions and financial capital: The dynamics of bubbles and golden ages* (2002) that when a new “social” paradigm is established it is time for the “creative destruction” to take place and bring about a shift of paradigm; however, this change generally comes with a financial crisis or even a considerable financial crash.

According to Carlota’s analysis we find ourselves in the beginning of the turning point, right in the middle (see the graphic below):

Figure 5.1 Recurring phases of each great surge in the core countries



Source: (Perez, 2002, p.48)

In Perez’s words:

By the time the collapse occurs, the conditions are there for the deployment period to begin, but the system has been operating under fundamental structural tensions that,

⁹ Carlota Perez is a British-Venezuelan researcher, lecturer and international consultant, specialized in the social and economic impact of technical change and in the historically changing conditions for growth, development and competitiveness. She is Honorary Professor at the Institute for Innovation and Public Purpose (IIPP) at University College London, UK and at SPRU, the Science Policy Research Unit at the University of Sussex, UK; Adjunct Professor of Technology and Socio-Economic Development at the Ragnar Nurkse School of Innovation and Governance at TalTech, Estonia.

once the breakdown finally occurs, can only be overcome through institutional recomposition. (Perez, 2002, p. 114)

Certainly, the previous paradigm has proven to be successful and has been accepted in people's minds as the most effective way to go, but the new paradigm needs space for an expansion of markets, to favour economies of scale and fostering a new wave of investment.

Therefore, the agents involved in the financial capital will by all means resist, since the already established ways have been the source of wealth creation and achievements. When a successful behaviour is taken to its extreme it will at the end turn into failure and it is when the previous behaviours start to fail (a financial crisis) that the new regulations and redefinition of the institutional framework will be eventually accepted and adopted (Perez, p. 114-115).

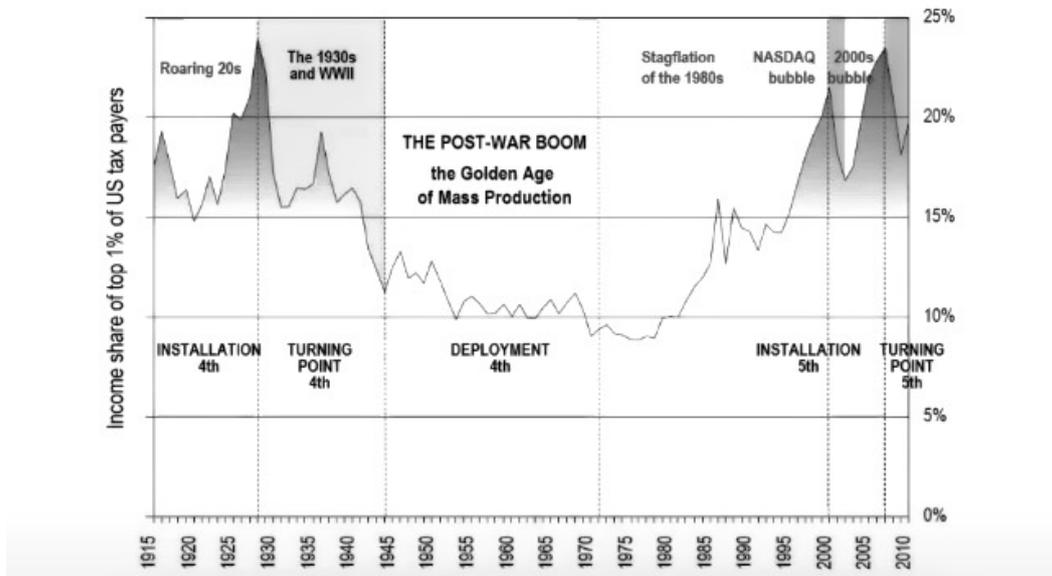
The turning point is a period of reconsidering and redefining the model of growth for the coming decades and the attention is put on the collective wellbeing and the big picture. It is usual to have a prominent intervention of the state introducing new regulations that will be the stepping stone for the implementation of the new technologies and the new ways of production. Once the guidelines are defined the deployment period will start with what Perez calls the "Synergy phase", a period full of hope and enthusiasm where the new paradigm is accepted as the new standard. Generally, society will deposit a lot of work to reconstruct the social situation; in the synergy phase the foundations and infrastructures are set out and the economies of scale and the expansion of markets can take place.

Thus, if we accept this layout of the dynamic of technological revolutions, it goes without saying that we find ourselves in a very crucial and powerful moment where many things can be reconsidered and redefined.

It is in that moment that smarter ways of approaching the current and future challenges can be fought for and established. Certainly, glimpses of the coming paradigm are already visible around us: circular economy and end of single-use products, exponential companies, personalized production, nanotechnology, 3D-printing, urban agriculture, among many others. What is clear is that the new paradigm will be greener,

will have to consume less energy and will make use of the Internet of Things (IoT)¹⁰ to exchange and extract data from the most unexpected places offering us a new world of opportunities for improvement.

Percent of (declared) income earned by top 1% of tax payers (including capital gains) - USA 1915-2010



Source: Perez, 2020 from Piketty and Saez, 2010 (Period indications by CP)

With regards to what was mentioned earlier about employability and automatization in the core countries¹¹, it will most probably not be a real threat. Leaving aside the widespread concern about unemployment connected to automatization of systems and processes, history tells us that on the way to a new paradigm many jobs are destroyed, but at the same time many new ones are created. As we can see in the graph above of capital gains earned by the top 1%, inequality is aggravated right before and during the first half the “Turning point phase”, but eventually, and thanks to the intervention of the institutions, inequality gets reduced and the capital redistributed thanks to the measures for social protection of the weak. As Perez points out, the level of inequality is not technologically determined, but is a socio-political issue. At the outset, new technology will destroy many forms of employment, but together with the intervention of the state

¹⁰ Cambridge English Dictionary; *Internet of things*: objects with computing devices in them that are able to connect to each other and exchange data using the internet: - Cloud applications will be used by billions of devices of all kinds, all connected to the internet of things.- The internet of things might, for example, involve smart bins that can signal when they need to be emptied.

¹¹ Following the world-systems perspective the core countries are the industrialized capitalist countries that control and benefit from the global market.

and a collective change of mindset on how we approach life and employment it is possible to get to full employment again as it is seen in South Korea and Singapore.

CONCLUSION

There is no doubt that something needs to change in order to divert the direction that the world is taking, and understanding better the core of the issues will increase our chances to succeed. Indeed, the capitalist system has some core blocks that define it, but there is plenty of room for rethinking the rules of the game, and its concepts.

From one side, how value is defined and created can have big positive consequences to the financial situation of governments; after all, they are the ones that ultimately take care of the socio-political issues like poverty and inequality and therefore a healthy financial situation is preferred. From the other side, redefining and embracing corporate social responsibility can have an incredible impact on how some of the current social and environmental issues speed up on the recovery process and subsequently can corporations enjoy better future prospects and greater returns. All in all seems like a win-win situation.

Lastly, the fact that we currently find ourselves in a *turning point* where the new methods and regulations need to be agreed upon and established before we move into the “new paradigm” makes it easier to stand up and take action. Altogether said above give us a goal and some pieces for a plan, which both are part of the keystones to improvement.

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