Financialisation in Big Tech Companies: Shareholders, Capital and Labour

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ABSTRACT

This paper discusses the financialisation in five Big Tech companies: Apple, Amazon, Facebook, Google and Microsoft. The analysis is supported by five indicators of financialisation: 1) shareholding composition, 2) mergers and acquisitions, 3) payment of dividends to shareholders and share repurchases, 4) compensations to executives, and 5) employees' salaries. Multiple documents and reports support the in deep content and longitudinal analysis. Results reveal that these companies are controlled by large passive investment funds, banks and other financial organisations. The acquisitions are in great volume, concentrating even more the ownership. Moreover, it was found that a large number of dividends and compensations was paid during the observed period. In contrast, the results denote precarious jobs to the workers and low salaries. This study explores the financialisation of modern capitalistic enterprises, providing intriguing analysis for the debate about the monopoly of Big Techs in the contemporary economy.

Keywords: Financialisation; Big Techs; Economic Sociology and Finance.

JEL: G32; G34; J33

1. Introduction

The financialisation of the economy, companies, and society is a multidimensional process, according to Van der Zwan (2014). It would be both a new accumulation regime and the rise and predominance of principles to maximise shareholder value, and even the financialisation of personal life through the incorporation of daily practices specific to financial institutions into people's daily lives (Van der Zwan, 2014; Krippner, 2012; Fligstein, 1990). An example of this is life insurance, which despite being disapproved in its early days for dealing with death expectation and monetising life,

it is nowadays normally accepted and practiced. Other authors believe in the growing importance of the financial sector in the economy (Davis and Kim, 2015; Carruthers and Kim, 2011; Davis, 2008; Palley, 2008; Epstein, 2002).

For Thomson and Dutta (2015), financialisation includes the development of financial instruments, such as securitisation, derivative contracts, foreign exchange markets through the so-called carry trade, investment banks, shadow banking, growing financial assets, unprecedented expansion of the average daily value traded by the financial markets compared to the daily trading of goods and services, etc. (Thomson and Dutta, 2015, p.11). For others, on the other hand, we would be facing an economic phenomenon that resembles marketisation (Godechot, 2015), whereby actors capture key assets of economic production for their own benefit, thus increasing economic inequality between social strata (Piketty, 2014; Kristal, 2013; Volscho and N. Kelly, 2012).

The decision power in a corporation is fundamental to study financialisation, as it enables to decide the destiny of profit sharing and investments. For Bebchuk and Fried (2004), power is fully associated with the decisions made by and in favour of the CEOs, and their high gains are, according to the authors, the “smoking gun” or the unequivocal proof that the high compensation paid to managers is linked to power within the organisation. In their study of payment and performance, the North American authors discuss the relationship between the executives’ internal power, the dispersion of shareholders as a support point for the accumulation of internal power and the degree of independence that the Boards acquire, all for the interest of the great shareholders and senior executives (Bebchuk and Fried, 2004, pp. 21-30). The issue of dispersion / concentration of shareholders also gives importance to the debate on financialisation, because it exposes that few large shareholders hold significant shares under their control and gather considerable decision-making power, while the majority of shareholders,

dispersed in thousands of small investors, has little or no influence on the companies' decision-making processes.

The term financialisation seems to be an attempt to conceptualise an abstract economic phenomenon, which has been occurring for almost forty years and is certainly still full of gaps. In this regard, this paper aims to understand how financialisation happens in five Big Tech companies. As there is a lack of works in the literature employing these perspectives to study the monopoly of such Big Techs, this work also proposes the debate about the interaction between monopoly, financialisation and Big Techs. In order to deepen the study on this issue, we explore: 1) shareholding composition, 2) mergers & acquisitions, 3) payment of dividends to shareholders and share repurchases, 4) compensations to executives, and 5) employees' salaries. When proposing this, this paper contributes to the rich agenda about how monopoly continues to impact economic and market dynamics.

2. Financialisation: the Marxist and regulation theory approaches

Regarding the intellectual origins of financialisation, Lapavitsas (2013) argue that "the concept of financialisation is closely associated with Marxist political economy (...) First, it hints at an epochal change of capitalism (...) Second, it suggests systemic, or aggregate, transformation of economy and society (…) Third, (…) it carries a whiff of disapproval by tacitly suggesting a problematic relationship between finance and the rest of economy" (Lapavitsas, 2013, p.794).

Davis and Kim (2015) state that "Marxist theorists argued that advanced industrial capitalism has a natural tendency toward stagnation because the absence of a wealth redistribution mechanism prevents market demands from keeping up with the increased

production capacity of oligopolistic corporations. As the dwindling income of the general population could not afford the growing supply of industrial production, the rentier class increasingly turned to financial activities to maintain the existing rate of wealth accumulation" (Davis and Kim 2015, p.206).

Rescuing the classic formula of the capitalist production process described by Marx in the first book of *Capital* (1983), M-C-M´–that is, money that buys commodity to transform it through labour, which is in turn sold to make more money–we see that in the financialisation process there seems to be the prevalence of the formula M-M´–which refers to money that generates more money without having to go through the production sphere (without producing anything), future bonds and promises, and "without direct counterpart in productive capital", as we will see more ahead with Guttmann (1999).

Chesnais (1996) studied the globalisation of capital and concluded that "for large groups in the manufacturing or services sector, the close intermingling of the productive and financial dimensions of the globalisation of capital today represents an element inherent to their daily functioning" (Chesnais, 1996, p.275). Industrial groups are predominantly industrial financial groups, as they have diversified towards finance at the same time that globalisation has forced them to accentuate their function as financial centres (Chesnais, *idem*). Thus, they can be considered active agents of financial globalisation, as asserted by the author in his classic book from 1996. In this book, Chesnais (1996) debates the interpenetration between industry and finance, a process that characterised the beginning of the 19th century, also exposed in Hilferding's text (1985), which discussed the "merger" between industrial capital and banking capital, resulting in financial capital (Chesnais, 1996, p.290).

Serfati (1999) studied the participation of industrial groups in the financialisation of the economy, defining group as a holding company that centralises the assets, "qualified

as ‘productive’ and ‘financial’ and that are profit generators”. He hypothesises that “the cleavages between these two forms of valuation, often considered to be ‘polar’, are now less clearly demarcated than is thought” (Serfati, 1999, p.142).

Guttmann (1999) states that in Book III of Capital, Marx already made the distinction between two forms of financial capital: “medium or long-term loans, with interest, and what he (Marx) calls ‘fictitious capital’ (...) this would cover credits involving future cash commitments (bonds), the value of which is determined solely by the capitalisation of the expected return, without a direct counterpart in productive capital” (Guttmann, 1999, p.77).

The Marxist and regulation theory approaches, whose diagnoses are broader and more complex than we have summarised here, help us understand the concept of financialisation as a global economic process of growth of the financial pole of the economy, concentrating ownership and wealth on one side, and poorness and hardship on the other side. Additionally, we can think of its relationship with the world of real production to have eroded by a “capital accumulation model” that prioritises the maximisation of shareholder value above anything, using the production sphere just as a means to always obtain greater profits, consequently strengthening the financial pole of the economy.

3. Financialisation: Economic Sociology and conceptions of control

“Economic sociologists understand financialisation as resulting from the confluence of diverse factors, including macroeconomic conditions, regulatory changes, and technological advances” (Davis and Kim 2015, p.206). Fligstein (2001) states that financialisation consists of a change in the concept of corporate control, in which

shareholders specialise in maximising return based on the increase in the value of the companies' shares. This process marks the transition from the financial concept of corporate control to the concept of maximising shareholder value (MSV), where the company is not only used as an asset to be the subject of mergers and acquisitions, but also as a means "to value the share price through payment of dividends, share repurchases and valuation on the stock exchanges" (Fligstein, 2001, p.149).

This movement began with the failure of managers to value the corporation only through mergers and acquisitions, which did not immediately allow desirable returns, meanwhile maintained the diversification and the current model of vertical integration in large corporations. With the advent of guidance aimed at maximising shareholder value, there was a tendency to divest in sectors that were considered unprofitable in order to focus on core business and raise the share price of companies in the financial markets (Fligstein, 2001, p .148).

For Fligstein, the conception of control of MSV is also a financial conception, but with criticisms of what is considered a failure to increase the share price. He quotes Davis and Thompson (1994), who consider the development of the concept of MSV as a kind of social movement, consistent with the political-cultural approach. In addition to this view, there are also approaches to financial economics, which consider this change in corporate control as an efficient reallocation of assets (a mainstream point of view), as well as sociological approaches, which reckon the growing dominance of banks and financial institutions over companies–a factor of vulnerability of companies and financial manipulations. Fligstein highlights that the role of the state is also fundamental for the creation of this new financial reorganisation, as happened in the USA with the relaxation policies of the antitrust laws and the tax cut laws in the administration of Ronald Reagan

(1981-1989), which produced the legal and political conditions that led to the financial reorganisation of firms (Fligstein, 2001, p.150).

Looking at the current situation, we can conclude that Fligstein's propositions are correct since the role of the state in financialisation remains decisive. The recent corporate tax reduction laws, passed at the USA Congress on the initiative of the Donald Trump administration, have greatly favoured large financial groups, such as Berkshire Hathaway (one of the biggest investors of the FAANGs), which had a book value of US$ 65 billion in 2017, of which US$ 36 billion came from operating activities and US$ 29 billion was "courtesy of Donald Trump's tax cut" (Alpher, 2018).

In summary, financialisation is an economic process that presents several theoretical perspectives and indicators that we seek to discuss so as to expand the knowledge on the topic, contributing to this important point on the research agenda of Economic Sociology and Political Economy.

4. Methodology

This research work consists of an interpretative approach and seeks to follow the scheme of analysis of the assumptions about the nature of social science, described by Burrell and Morgan in the book entitled *Sociological Paradigms and Organisational Analysis* (1979, p.3). They developed a framework for the organisational analysis that presents the subjective-objective dimension. In contrast, in this work we propose an anti-positivist epistemology dimension, taking into consideration a more subjectivist point of view and opposed to an empirical cold analysis, leaving room for a deeper, historical, political, contextual and multidisciplinary approach.

It is a quantitative and qualitative, multi-case research (Yin, 2001) about how financialisation occurs in the five largest technological companies in the world. It is exploratory in order to assess the situation of these companies through indicators. The indicators of financialisation have been recently developed by several authors, including Froud et al. (2006), Fligstein (2001), Lazonick and O'Sullivan (2000) and Erturk (2015). Herein, we have tried to unify some categories of analysis into measurable indicators, such as shareholding composition, mergers and acquisitions, payment of compensations, dividends and salaries, in order to better understand the actual relationship between capital and labour in society in the twenty-first century. Data collection was conducted employing multiple data of the companies, including annual reports and documents and news from economic websites, such as *nasdaq.com, payscale.com, glassdoor.com, bloomberg.com, morningstar.com* and *statista.com* among others, which provided us further data about the companies.

The results were presented and discussed through content and document analysis (Bardin, 1977) in an attempt to understand the secondary documents, seeking to interpret them despite the format in which they are found–usually in reports or specialized documents–thus aiming to find the sense of a document (Campos, 2004), which generally escapes the understanding of the wider public. The results obtained, combined with the systematic confrontation with the material and the inferences reached, "can serve other analyses based on new theoretical dimensions or different techniques" (Franco, 2008). Therefore, we intend to interpret the documents of these companies that can explain how their current financialisation process occurs.

5. Results

This session discusses the 1) shareholding composition, 2) mergers & acquisitions, 3) payment of dividends to shareholders and share repurchases, 4) compensations to executives, and 5) employees' salaries.

5.1 Major shareholders are large financial groups

One of the aspects that led to the emergence of the liberalised and deregulated finance regime was the "entry of relatively new, but particularly powerful agents, of money capital or concentrated money capital, which were pension funds and investment funds, that gave rise to the notion of 'institutional investors'" (Farnetti, 1999, p.183).

These funds have become the most decisive private institutions in the context of globalised finance, according to Farnetti, who studied the role of Anglo-Saxon pension funds and collective investments. For him, other categories of institutional investors were added to the pension funds, "such as insurance companies and the various collective investment funds, which considerably increased the supply of capital in search of net investments" (Farnetti, 1999, p.188).

The companies under analysis have in common the fact that their largest shareholders are the same financial groups. In several studies on financialisation of the automotive sector, Carmo et.al. (2019, 2020) analysed the largest automakers worldwide and found in them (especially in the North American enterprises, such as Ford and GM) the largest shareholders–billionaire passive investment funds and banks–being these same groups also the largest shareholders in the Big Tech companies under study. Vanguard Group, BlackRock Inc. and State Street Corp, known as "The Big Three" (Fichtner et al., 2017), and Berkshire Hathaway, Fidelity Resources and Price T. Rowe among others are

considered the largest shareholders in both the automakers and the Big Tech companies, as observed in Table 1.

Table 1. Major shareholders

Apple	3,620 Institutional Holders 9,758,468,914 Total Shares Held		30 September 2020
Investor	Shares Held	%	Amounts in thousands of US$
VANGUARD GROUP INC.	1,280,669,129	13.12	175,951,132
BLACKROCK INC.	1,069,771,045	10.96	146,975,844
BERKSHIRE HATHAWAY	944,295,554	9.67	129,736,766
STATE STREET CORP	672,444,836	6.89	92,387,196
FMR LLC	346,699,497	3.55	47,633,044
Total (5 Major)	4,313,880,061	44.19	592,683,982

Source: https://www.nasdaq.com/market-activity/stocks/aapl/institutional-holdings

Amazon	3,528 Institutional Holders 283,225,198 Total Shares Held		30 September 2020
Investor	Shares Held	%	Amounts in thousands of US$
VANGUARD GROUP INC	32,783,886	11.5	109,203,124
BLACKROCK INC.	27,661,214	9.76	92,139,504
STATE STREET CORP	16,344,982	5.77	54,445,135
FMR LLC	15,880,342	5.60	52,897,419
PRICE T ROWE ASSOCIATES INC /MD/	15,700,902	5.54	52,299,705
Total (5 Major)	108,371,326	32.63	360,984,887

Source: https://www.nasdaq.com/market-activity/stocks/amzn/institutional-holdings

Facebook	3,012 Institutional Holders 1,850,812,533 Total Shares Held		30 September 2020
Investor	Shares Held	%	Amounts in thousands of US$
VANGUARD GROUP INC	185,310,879	10.01	49,383,496
BLACKROCK INC.	158,351,360	8.55	42,199,054
FMR LLC	123,993,034	6.69	33,042,904
PRICE T ROWE ASSOCIATES INC /MD/	100,826,037	5.44	26,869,131
STATE STREET CORP	95,518,219	5.16	25,454,650
Total (5 Major)	663,999,529	35.85	176,949,235

Source: https://www.nasdaq.com/market-activity/stocks/fb/institutional-holdings

Google	3,073 Institutional Holders 229,110,514 Total Shares Held		30 September 2020
Investor	Shares Held	%	Amounts in thousands of US$
VANGUARD GROUP INC	23,117,687	10.86	47,475,176
BLACKROCK INC.	20,386,855	8.89	41,867,057
FMR LLC	12,612,173	5.50	25,900,737
STATE STREET CORP	11,732,025	5.12	24,093,239
PRICE T ROWE ASSOCIATES INC /MD/	6,736,734	2.94	13,834,759
Total (5 Major)	74,585,474	33.31	153,170,968

Source: https://www.nasdaq.com/market-activity/stocks/googl/institutional-holdings

Microsoft	3,762 Institutional Holders 5,235,011,723 Total Shares Held		30 September 2020
Investor	Shares Held	%	Amounts in thousands of US$
VANGUARD GROUP INC	622,689,597	11.89	150,697,109
BLACKROCK INC.	516,065,148	9.85	124,892,926
STATE STREET CORP	309,004,107	5.90	74,782,084
FMR LLC	236,747,226	4.52	57,295,196
PRICE T ROWE ASSOCIATES INC /MD/	180,419,808	3.44	43,663,398
Total (5 Major)	1,864,925,886	35.6	451,330,713

Source: https://www.nasdaq.com/market-activity/stocks/msft/institutional-holdings

As we can see in Table 1, the largest shareholders of the five Big Techs here analysed are the gigantic US investment funds, which hold enormous amounts of shares and decision-making power. Only the five largest shareholders brought together 44.19% of the shares held by institutional investors in Apple, 32.63% in Amazon, 35.85% in Facebook, 33.31% in Google and 35.6% in Microsoft. These groups accounted for less than 0.2% of the nearly 4,000 institutional investors and gathered more than US$ 1.7 trillion in these five Big Techs on 30 September 2020.

This shows the degree of concentration of shares in the hands of very few financial groups that practically dominate the shareholding composition in an equity dispersion framework, where the supposed shareholding democracy is perverted by huge groups that have at their disposal trillions of dollars in assets under management, strongly concentrating corporate property and the maximisation of shareholder value.

5.2 Mergers & acquisitions

Mergers and acquisitions of companies are an old phenomenon in industrial capitalism, and it is not exactly about financialisation itself. Since the beginning of the 20th century, companies have merged, concentrating the market more on fewer companies and buying others, thus acting towards vertical integration. In the case of company acquisitions, even though the time of vertical integration with the emphasis on core business has apparently passed, the fact is that the practice of acquiring companies that are competing or complementary to the business has been occurring on a recurring basis in the largest corporations. The traditional argument is that acquisitions serve to increase synergy among market participants and to optimize resource allocation. As a result, there is a growing concentration of property in a few hands (see Table 2).

Table 2**.** Acquisitions of companies by the Big Techs

Corporation	Number of companies purchased	Period	Amount in billions of US$
Google	245	1998-2020	28.7+
Microsoft	235	1987-2020	50.1+
Apple	123	1988-2020	n/a
Facebook	89	2007-2020	22.8+
Amazon	88	1999-2020	21.6+
Total of 5	780	1987-2020	123.2+

Source: www.crunchbase.com.

Google has acquired 245 organizations; their most recent acquisition was Neverware on 15 December 2020. Microsoft has acquired 235 organizations, and their most recent acquisition was Smash.gg on 2 December 2020. Apple has acquired 123 organizations, being Vilynx their last acquisition on 27 October 2020 for US$ 50 million. Facebook has acquired 89 organizations, having last acquired Kustomer on 30 November 2020 for US$ 1 billion. Finally, Amazon has acquired 88 organizations, and their most recent acquisition was Selz on 16 February 2021. (Crunchbase, 2021). In total, they all have acquired 780 companies in the last thirty years, spending more than US$ 120 billion. Only the values disclosed reach US$ 123 billion, as shown in Table 2.

In the sector of information and communication technology companies, the phenomenon of acquisitions occurs intensely. Currently, "Google and Apple are the pillars of the mobile ecosystem and have been very active in acquiring companies in recent years" (Yang et.al., 2018, p.15). Company acquisitions strengthen the financialisation process (and it is an outcome of this process), as they concentrate ownership and decision-making power in fewer hands, as well as dividends that will be paid and shares that will be repurchased in smaller decision circles.

The growth of monopolies, oligopolies and large corporations is one of the outcomes of the financialisation process, and the acquisitions of companies are increasingly more important to deliver more dividends, share repurchases and dominate the market share, constantly generating more profits. These companies are in an oligopolistic situation in each sector. Apple divides position in the smartphone market worldwide with just four main competitors: Samsung, Huawei, Xiaomi and Vivo; only the five companies represented 71% of the market share in 2020 (IDC, 2021). Google had 85% of market share on January 2021 (Johnson, 2021). Facebook had 71.92% in February 2021 in an ecosystem of social media comprised of six companies (Statcounter, 2021).

Amazon had 47% of the market share in the USA in 2020 (Sabanoglu, 2020). And Microsoft Windows is the "dominating desktop operating system (OS) worldwide as of December 2020, with a share of 76.56 per cent" (Liu, 2021). In summary, we can see that these five largest technology companies in the world have a strong predominance in their markets and try to increase their share constantly, being the acquisitions fundamental to their economic success. As a result, the property is even more concentrated.

5.3 Payment of dividends to shareholders and share repurchases

The payment of dividends to shareholders is one of the most important indicators that reveal the most striking characteristic of current capitalism: making production a mere means of generating wealth and distributing it to shareholders. While some advocate that there would be a tendency to end the payment of dividends to shareholders in large corporations (Fama and French, 2001), this is not what we see in the current literature and in the numbers and empirical data (Lazonick, 2011, 2012, 2013). Large annual dividends are being increasingly paid to shareholders, whether in cash or in share repurchases. In this last case, the company may repurchase shares from itself, causing a rise in stock prices as a result of a large buying movement. In Table 3 we can observe this phenomenon in more detail in the case of Apple.

Table 3. Payment of dividends to shareholders and stock repurchases - Apple

	2012	2013	2014	2015	2016	2017	2018	2019	2020

Payment of dividends in billions of US$	2.488	10.564	11.126	11.561	12.150	12.769	13.712	14.119	14.081
Share repurchases in billions of US$	1.296	25.351	44.316	36.618	33.219	31.594	70.796	78.010	75.560
Totals In billions of US$	3.784	35.915	55.442	48.179	45.369	45.306	84.915	92.129	89.641

Source: https://ycharts.com/companies/AAPL/stock_buyback; https://www.macrotrends.net/stocks/charts/AAPL/apple/total-common-preferred-stock-dividends-paid

After the death of Steve Jobs in 2011, Apple began to pay billionaire dividends to shareholders and repurchase shares with even more billionaire values, as seen in the exponential evolution of disbursements in the last nine years. These are truly stratospheric values, which confirm our perception that in these large companies the maximisation of shareholder value is very present. In just nine years Apple has spent in dividends and share repurchases the sum of US$ 500.680 billion, as shown in Table 3.

In the case of Amazon, we have an exception: Amazon does not pay dividends or practice share repurchases.

Table 4. Payment of dividends to shareholders and stock repurchases - Amazon

	2015	2016	2017	2018	2019	2020
Payment of dividends in billions of US$	0	0	0	0	0	0
Share repurchases in billions of US$	0	0	0	0	0	0
Totals in billions of US$	0	0	0	0	0	0

Source: https://www.nasdaq.com/market-activity/stocks/amzn/revenue-eps;

“Amazon said in its 2018 annual report filing that although it can, it chose not to repurchase any of its shares during 2018. The e-commerce giant is cleared to spend up to US$ 5 billion to repurchase shares, but hasn't bought back any stock since it spent US$ 960 million worth in 2012. In addition, Amazon still has never paid a dividend” (Kilgore,

2019). This situation deserves more research in the sense that the strategies of Amazon are not coincident (at least until now) with the goals of maximising shareholder value in the short term; however, in the long-term perspective the company may perfectly begin to pay dividends and practice share repurchases. Only the future will tell us.

For Facebook, there is an intermediate situation since the company has not been paying dividends, but started a process of sharing repurchases described in Table 5. We can observe that in 2018 Facebook had expenditures of US$ 12.8 billion in share repurchases, a significant amount that reveals the company strategy of raising the prices of shares artificially, like all companies that proceed in this way.

Table 5. Payment of dividends to shareholders and stock repurchases - Facebook

	2015	2016	2017	2018	2019	2020
Payment of dividend in billions of US$	0	0	0	0	0	0
Share repurchases in billions of US$	0	0	1.976	12.879	4.212	6.272
Totals in billions of US$	0	0	1.976	12.879	4.212	6.272

Sources: https://www.nasdaq.com/market-activity/stocks/fb/financials; https://ycharts.com/companies/FB/stock_buyback

The almighty and controversial company run by Mark Zuckerberg has several problems in the courts and with governments, not only in the US but also in Europe. The leakage of user data, the company's relationship with election campaigns, and the foreign exchange evasion and tax evasion are some of the illicit actions that would have been committed by the Californian technology company. In March 2016, it maintained more than US$ 1.8 billion of its US$ 15.8 billion reserve in offshores in an attempt to evade taxes in the United States (Srnicek, 2016, p.17).

In the same intermediate way, Google also does not pay dividends to shareholders even though it is practising share repurchases at a fast pace.

Table 6. Payment of dividends to shareholders and stock repurchases - Google

	2015	2016	2017	2018	2019	2020
Payment of dividends in billions of US$	0	0	0	0	0	0
Share repurchases in billions of US$	1.780	3.693	4.846	9.075	18.396	31.149
Totals in billions of US$	1.780	3.693	4.846	9.075	18.396	31.149

Source: https://abc.xyz/investor/pdf/20171231_alphabet_10K.pdf, pp. 21, 22 and 49.
https://www.sec.gov/Archives/edgar/data/1652044/000165204420000008/goog10-k2019.htm
https://ycharts.com/companies/GOOG/stock_buyback

In fact, we can note in Table 6 that the Google's pace of growth of share repurchases is almost exponential (from US$ 1.7 billion in 2015 to US$ 3.6 bi in 2016, US$ 4.8 bi in 2017, US$ 9.075 bi in 2018, US$ 18.3 bi in 2019 and US$ 31.149 bi in 2020), multiplying by eighteen the volume of share repurchases in just five years–which we know that it is an artificial way to raise the prices of shares. "Share repurchases increase the value of the remaining shares because there is now less common stock outstanding and company earnings are split among fewer shares" (Ycharts, 2021). In other words, more money to fewer people.

Similarly to Apple, Microsoft Corporation is fully committed to maximising shareholder value. In the last six years, the company paid US$ 74.3 billion in dividends and US$ 97.6 billion in share repurchases, totalling the sum of US$ 171.9 billion (see Table 7).

Table 7. Payment of dividends to shareholders and stock repurchases - Microsoft

	2015	2016	2017	2018	2019	2020
Payment of dividends	9.882	11.006	11.845	12.699	13.811	15.137

in billions of US$						
Share repurchases in billions of US$	17.212	14.791	7.509	15.234	18.261	24.599
Totals in billions of US$	27.094	25.797	19.354	27.933	32.072	39.736

Source: https://ycharts.com/companies/MSFT/stock_buyback; https://www.macrotrends.net/stocks/charts/MSFT/microsoft/total-common-preferred-stock-dividends-paid

According to Joanna Partridge, dividends paid in 2019 reached a growth of US$ 1.43 trillion worldwide in comparison with 2018. “From a low base in 2009 after the financial crisis, dividends have grown strongly over the past decade. In that time, payouts have almost doubled, with investors receiving US$ 694 billion more in dividends in 2019 than 10 years previously. Technology dividends, a notable bright spot, have quadrupled since 2009” (Partridge, 2020).

Holly Ellyatt declares that “global dividends fell sharply in 2020 due to the coronavirus pandemic, with dividends declining 12.2% in 2020 to US$1.26 trillion. (…) However, dividend payouts were resilient in the U.S., rising 2.6% on a headline basis in 2020” (Ellyatt, 2021). Even in pandemic times, the power of financial markets is remarkable and the maximisation of shareholder value through the payment of dividends and share repurchases are at full throttle.

5.4 Compensations to executives

This financialisation indicator that will be now studied refers to the payment of compensations to executives. Bebchuk and Fried (2004) assert that the payment of millionaire compensations to the main executives is not associated with performance, but rather with the internal power that managers acquire. Although there is a slight

correspondence with the performance itself, in general there is no direct relationship between payment and performance. In addition, the payment of millionaire compensations to executives through stock options aims to increase the price of shares on stock exchanges, a mechanism that helps to increase the company's market capitalisation. It also helps in the concentration of income since most of the executive compensations do not suffer the incidence of income tax, being these only charged a small part of the managers' earnings.

The compensations paid to executives are in the basis of million dollars each year, according to Table 8. Note the sum earned by Sundar Pichai, Google's CEO, in 2015 and 2016 (US$ 100 million and US$ 199 million, respectively).

Table 8. Compensations to executives – millions of US$ annually

Total compensations to the main executives in millions of US$	2015	2016	2017	2018	2019
Timothy D. Cook Apple's CEO	10.2	8.7 145*	12.8	15.6	11.5
Luca Maestri Apple's Senior Vice-President CFO	25.3	22.8	24.1	26.5	25.2
Jeffrey Bezos Amazon's CEO	1.6	1.6	1.6	1.6	1.6
Jeffrey Blackburn Amazon's Senior Vice-President	n/a	22.1	0.178	10.3	57.7
Mark Zuckerberg Facebook's CEO	5.03	6.01	9.10	22.5	23.4
Sheryl K. Sandberg Facebook's COO	18.6	24.5	25.1	23.7	27.1
Sundar Pichai Google's CEO	100.6	199.7	1.3	1.8	n/a

Ruth M. Porat Google's Senior Vice-President CFO	31.0	39.0	0.688	47.2	n/a
Satya Nadella Microsoft's CEO	n/a	17.6	20.0	25.8	42.9
Amy E. Hood Microsoft's Executive Vice-President CFO	n/a	10.3	11.5	14.9	20.2

Sources: www.morningstar.com;
*Total Compensations to CEO Tim Cook in 2016, according to Meisler et al. (2017).

The total executive compensations comprise payment in money, stock options, bonuses, and other types of remuneration. The most of the compensation nowadays are paid in stock options, another trend of the financialisation process, which also makes the executive shareholder–someone who will be more than just the manager of the business–obscuring the separation that existed between ownership and control. According to this idea, the large existing publicly trade organisations would strive for the separation between ownership and control, so that "the agents of the most important decisions are not the same agents who have a significant share of value to lose due to the effects of their decisions" (Fama and Jensen, 1983). Currently, we can see that the opposite is occurring, that is, the financialisation process promotes a blurring line between agents and owners, each day more recurrent, and enriches a layer of millionaire executives, also contributing to rising the economic inequality in the whole society.

5.5 Employees' salaries

One of the characteristics of the financialisation process is that the financial hubs of the business (shareholders and executives) are benefited, while the productive pole (workers, jobs, factories, and other physical assets) are harmed (Wartzman, 2017). Shimizu (2014, 2015) studied the issue of wages in Japanese automakers and concluded

that a progressive dismantling of labour and remuneration relations was underway. Ohnoism, which became known for its ability to reward workers and groups of workers in Toyota's plants, was giving way to the establishment of more individualistic criteria, making work precarious and devalued.

Carmo et al. (2019) demonstrated that the average wage of workers at Ford and GM was below the average level of American workers for all ethnic groups. Herein, based on the data we obtained from the Big Techs we can place their salaries at an equally low level, in most cases lower than the average of all American workers' wages, which was US$ 65.712 in 2019 (US Census Bureau, 2020). It is important to highlight that for the numerous starting workers from the bottom line the salaries are well below the national average, as we can see at Table 9.

Table 9. Lowest starting salary in the Big Techs - 2019

Corporation	Professional	Annual salary in US$
Amazon	Cashier	15,825 (2018)
Amazon	Computer Technician	20,439 (2018)
Amazon	Assistant Customer Service Manager	25,301 (2018)
Apple	Mc Specialist	28,000
Apple	Specialist	36,000
Apple	Mac Genius	42,000
Google	Nanny	19,000
Google	Computer Technician	25,836
Google	Marketing Executive	35,000
Microsoft	Sales Associate	19,354
Microsoft	Sales Consultant	20,441
Microsoft	Support Technician (IT)	32,000
Facebook	Customer Service Representative	28,168
Facebook	IT Specialist	32,706
Facebook	Customer Service Specialist	34,815

Sources: www.payscale.com and www.glassdoor.com

All starting salaries shown in Table 9 are lower than the average salary prevailing in the USA. It is true that afterwards there is an increase in the salary for each function. Nevertheless, what we aim to highlight here is that these sectors are billionaire, and in the case of Amazon, which in 2018 paid the initial US$ 15,000 to cashiers, this salary is not consistent with the company's economic size. The same is true for Apple, which increased the hourly wages paid from US$ 9 in 2018 to US$ 14 in 2020 for Mc Specialists, a professional with a starting salary of US$ 28,000, well below the average for all North American ethnic groups (US$ 65,000 in 2019). Furthermore, when workers' wages are compared with the total compensation paid to CEOs, the difference can reach thousands of times, as shown in Table 10.

Table 10. Ratio of times between compensation to CEO / lowest starting salary - 2019*

Corporation	Professional	Times
Amazon	Cashier	101
Amazon	Computer Technician	78
Amazon	Assistant Customer Service Manager	63
Apple	Mc Specialist	410
Apple	Specialist	319
Apple	Mac Genius	273
Google	Nanny	10570
Google	Computer Technician	7729
Google	Marketing Executive	5705
Microsoft	Sales Associate	2216
Microsoft	Sales Consultant	2098
Microsoft	Support Technician (IT)	1340
Facebook	Customer Service Representative	830
Facebook	IT Specialist	715
Facebook	Customer Service Specialist	672

Source: authors. *The comparison between the lowest starting salary and CEO compensations of Google took into account the year 2016, when the CEO Sundar Pichai earned US$ 199.7 million.

In this table we can see a difference of thousands of times the ratio between the CEO's earnings and the employees' average salaries. This ratio has been increasing with impressive speed, going from just "20 times in 1965 to 303 times in 2015" (Webber, 2018, p.145). However, even greater differences can be found in Big Tech companies, according to Table 10, where it is possible to see the concrete growth of economic inequality in real numbers–much bigger than 303 times in 2015–as stated by David Webber. A difference of 10,000 times between the CEO's earnings in one year and the salary of a Nanny, for instance, can be observed in the case of Google. However, if we assume that this was an isolated fact since the CEO of Google Sundar Pichai did not earn so much in the following years, we see that in the case of Microsoft, where a more regular amount of compensations is paid to the CEO, the differences between the starting salaries and the CEO's compensations were from 1,340 to 2,216 times. These numbers confirm the suspicious that financialisation is strongly responsible for the growth of inequality between the strata of salaries and income, as demonstrated throughout this article.

6. Discussions

The aim of this article was to analyse the financialisation process in the five largest Big Tech companies. We used some categories of analysis to materialise the abstract economic concept of financialisation. Shareholding composition, mergers and acquisitions, payment of dividends and share repurchases, compensations to executives and employees' salaries were some of the indicators found in the literature on financialisation, which were used in our analysis. Our conclusions were as follows:

1) We have seen that increasingly large groups of institutional investors, holding trillions of dollars in assets under management, are present in the stock rights of large technology companies. Few large groups gather considerable amounts of financial resources and enormous decision-making power in several sectors of the economy, as previously indicated by some studies (Chesnais, 1996, 1999; Fichtner et.al., 2017; 2020; Carmo et.al., 2019, 2020).
2) The acquisitions of companies are constant, both in the number of companies acquired and in the values of the acquisitions. The five Big Techs analysed here acquired at least 780 companies in the last three decades, concentrating property and wealth in a few hands and increasing economic inequality, as emphasized by Davis (2008).
3) The payment of dividends to shareholders and share repurchases are increasing every day, with billions of dollars annually spent both to meet shareholders' requirements and to artificially raise share prices, and companies repurchasing their own shares. This has been a growing trend in the stock markets nowadays, which is in accordance with the results presented by Lazonick (2011).
4) Compensation payments to executives have increased exponentially in recent years, with millionaire amounts of money being paid in cash, bonuses and stock options, being the latter the most preferred way of rewarding executives, gradually making them smaller partners in the business and consequently blurring the line between ownership and control. The compensation to executives is a question of power, more linked to the relationships inside the company than performance, as also mentioned by Bebchuk and Fried (2004).
5) The starting salaries paid to employees are all below the average salary for all North American ethnic groups, with salaries lower than those practiced in fast

food chains, for example, which are in the range of the proposed US minimum wage of US$ 15 per hour. When compared to the compensations paid to executives, in particular the CEO, we see a difference of thousands of times between the earnings of the greatest leader and the salaries of the least paid workers, as suggested by a previous study from Piketty (2014) and Webber (2018).

This condition increases inequality between the income brackets, promoting increased privileges for a few, and tougher and more difficult conditions for most workers and their families. This has been the general result of the financialisation process, indicating that the highest valuations in the world are under intense financial strategies, as inferred by Thomson and Dutta (2015) and Fligstein (1990). The financial business models reflect the rise of the corporate power of the so-called Big Techs, concentrating power and ownership and consequently promoting poor work practices and precarious work.

7. Final remarks

We may state that financialisation is a conscious process carried out by companies and managers, who could certainly adopt a different approach and act differently. The study reveals the dynamics of the contemporary capitalism and the rise of the Big Techs within the global economy. The financialisation of the Big Tech companies reinforce the capital monopoly of and market concentration, whose possible consequences include the unequal income distribution, the reduction of real wages and the promotion of precarious work.

If fewer dividends and less compensation were paid, as well as fewer share repurchases were carried out each year religiously, there could certainly be better wages, more jobs and fewer factory closures (as is occurring in the automotive sector). This could be decisive at this time (when people are experiencing a dramatic lack of work and the economy is not including more people in its mechanism) to overcome historical problems still unresolved, such as hunger, misery and the deprivations of a time that seemed to be left behind.

Therefore, this article studies the monopoly of the Big Tech companies, especially the interaction between monopoly, financialisation and Big Techs. We hope to have added to this process and that our reflections and findings can contribute to public policies that make our world economically better and more sustainable for all.

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