

Large US digital firms: new systemic players in international finance?

Paul-Adrien Hyppolite and Antoine Michon

Ingénieurs du corps des Mines

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Abstract :

As a result of their unprecedented commercial success, large US-based technology firms have, over the past two decades, built up huge cash reserves, which are comparable to those of the world's largest bond funds. In this article, we will show that this situation is the result of ultra-conservative management of their capital, which contrasts with their image of cutting-edge innovators. Barring a major policy shift, this hoarding could well continue, depriving the global economy of productive capital and sustaining the decline in risk-free rates.

While the US tech giants are lauded for their product launches and vilified for their grip on our daily lives, their widespread use of our personal data and the low taxes they pay, the question of their growing influence in international finance is little debated. Due to their unprecedented commercial success, these companies have accumulated huge cash reserves in their treasuries over the last twenty years, which, given their size and allocation, raise issues.

How can this hoarding phenomenon be explained? How are these funds managed by Big Tech? Should this accumulation of liquidity be seen as temporary or sustainable? In other words: have the large tech firms and others really become the new giants of international finance?

Exceptional hoarding fuelled by extraordinary profits

The new technology industry is characterized by an extreme concentration of cash in a small number of companies, primarily in the US. The cash holdings of the ten richest US tech companies¹ reached \$782 billion by the end of 2017, seven and thirty times more than their Chinese and European counterparts, respectively. Although the companies in these groups differ significantly in their activities and business models, they all have one thing in common: they were built around computers or the Internet, and are now dominant in at least one segment of their market.

¹ In decreasing order of cash on hand: Apple, Microsoft, Google, Cisco, Oracle, Facebook, Qualcomm, Amazon, Intel and IBM.

**Cash on hand of the world's leading technology companies
at the end of 2017 (in billions of dollars)**

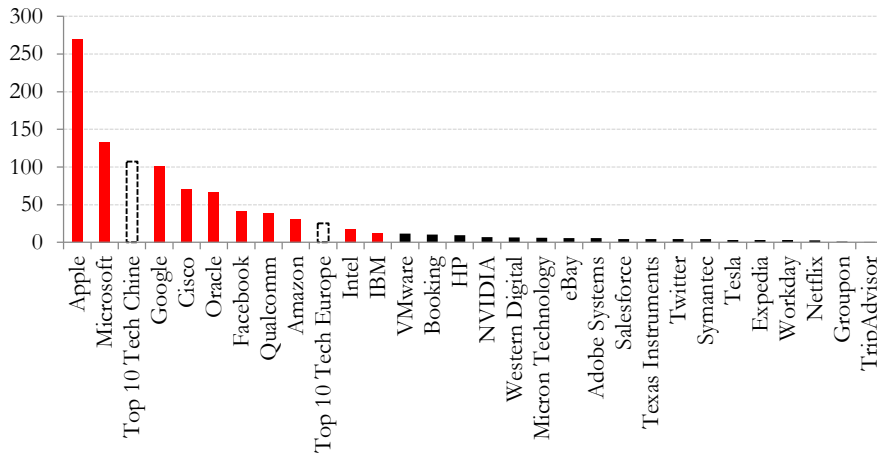


Figure 1 – © Hyppolite et Michon (2018).

Although the US tech giants' liquidity is now at record levels, has it always been the case? Over the period 2000–2017, Big Tech's cash on hand grew at an average annual rate of 16%. It is useful to compare these figures with those of the oil industry, whose ranks include companies with a reputation for being particularly solid financially, and with those of the CAC 37, which accounts for the French companies making up the CAC 40 index, with the exception of three banks. The findings are indisputable: the cash on hand of the Top 10 Tech US companies is now 3.5 times those of the top 10 oil companies (compared with 1.8 times at the end of 2000) and about 2.9 times those of the CAC 37 (compared with 0.7 at the end of 2000). The growth in the US tech giants' liquidity has therefore been out of all proportion to that of traditional large companies. Financial data show that, over the same period, Big Tech companies converted an average of 21% of their turnover into free cash flows, making them, proportionally speaking, five times more profitable than the oil giants and the CAC 37 companies, where the average is just over 4%.

Cash on hand (in billions of dollars)

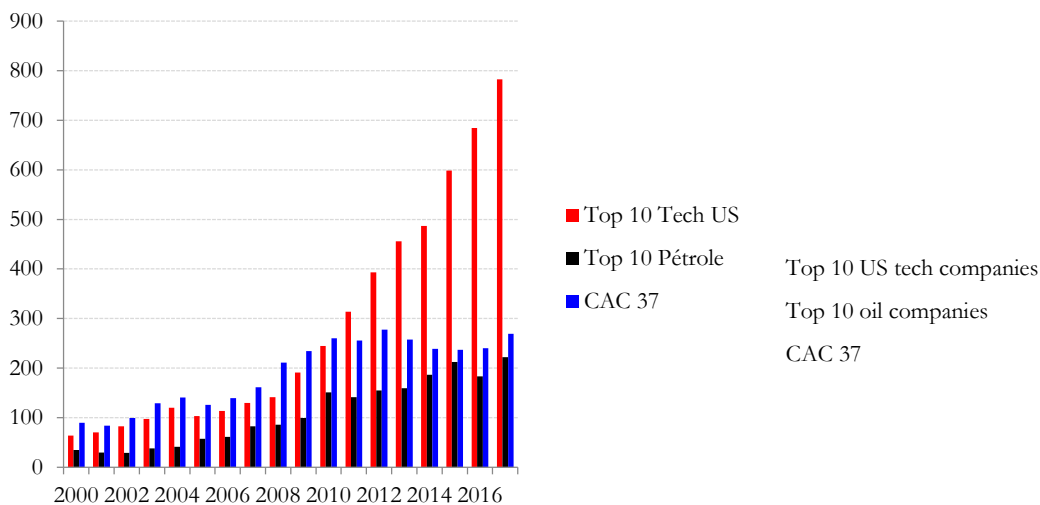


Figure 2 – © Hyppolite et Michon (2018).

Comparison of free cash flows (as a % of turnover)

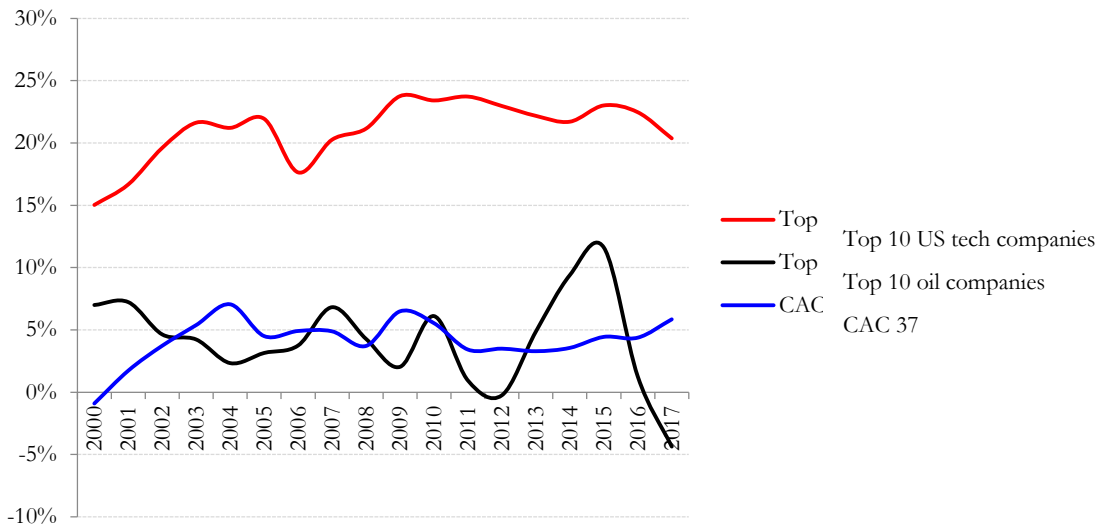


Figure 3 – © Hyppolite et Michon (2018).

To understand how these large companies allocate their profits, let us break down their free cash flows according to their different uses. If we add in alternative sources of financing (debt and equity), we obtain the following capital allocation over the period 2000-2017: respectively 11% and 46% of the free cash flows thus adjusted were used to finance business acquisitions (net of divestments) and distributions to shareholders (net of capital raising), while 43% were used to increase cash on hand. Clearly, the profits captured by the Big Tech companies are such that they exceed the financing needs corresponding to new investment opportunities (capex and mergers and acquisitions) and shareholder compensation.

Allocation of free cash flows by the top 10 US tech companies (in % of turnover)

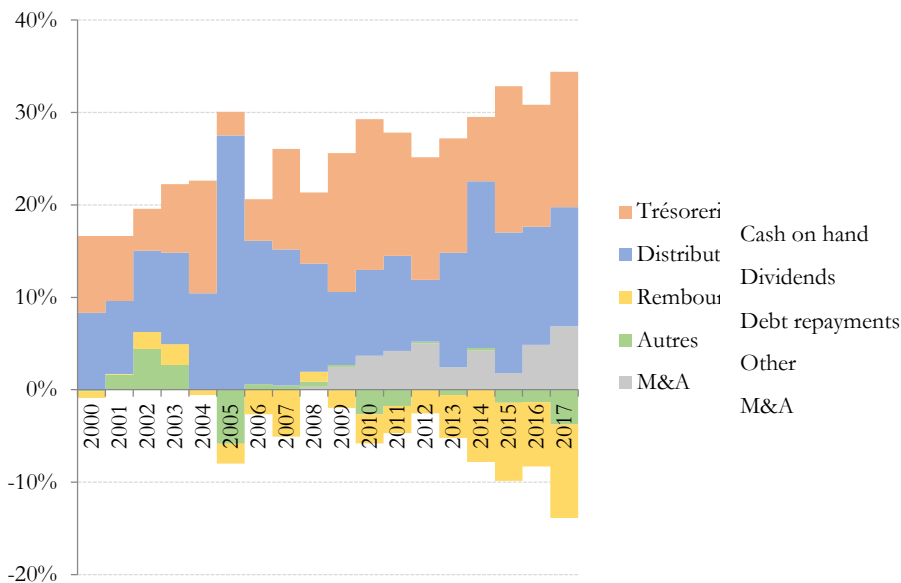


Figure 4 – © Hyppolite et Michon (2018).

In short, it is these "residual" financial surpluses, with no real use in the manufacturing process, which each year continue to consolidate previously documented cash on hand. The result is the progressive financialisation of Big Tech's balance sheet assets. Whereas the percentage of cash in the total assets of the oil giants and the CAC 37 has remained constant, averaging around 6% and 8% respectively over the period 2000–2017, that of the technology giants has grown almost continuously, from 26% at the turn of the century to 48% in 2017. As a result, half of Big Tech's balance sheet assets today consist of cash and other liquid financial securities available for sale.

On the strength of their operational successes, the American digital giants have transformed themselves into financial portfolio managers and seem to be converging more and more towards the tacit status of financial institutions.

Ultra-conservative management of hoarded funds

Let us look at how Big Tech companies allocate their cash on hand.

The companies' annual reports, along with their regulatory filings with the SEC, are a source of insight. In accordance with applicable regulatory standards, all highly liquid investments (i.e., investments that are readily convertible to a known amount of cash) with maturities of three months or less from the date of purchase are classified as "cash and cash equivalents" and all available-for-sale marketable assets with maturities greater than three months at the time of purchase are classified as "marketable securities". Unlike the oil giants and the CAC 37 companies, Big Tech companies invest the majority of their undistributed cash in financial assets with maturities of more than three months. We also note that, in parallel with the increase in Big Tech's cash on hand, the share allocated to these relatively longer-term assets has tended to increase in recent years (from 55% in 2007–2008 to more than 80% at the end of 2017), whereas it has remained more or less constant over the same period among large French companies and the oil giants (around 20–25%).

Cash on hand: cash and cash equivalents vs. marketable securities (in billions of dollars)

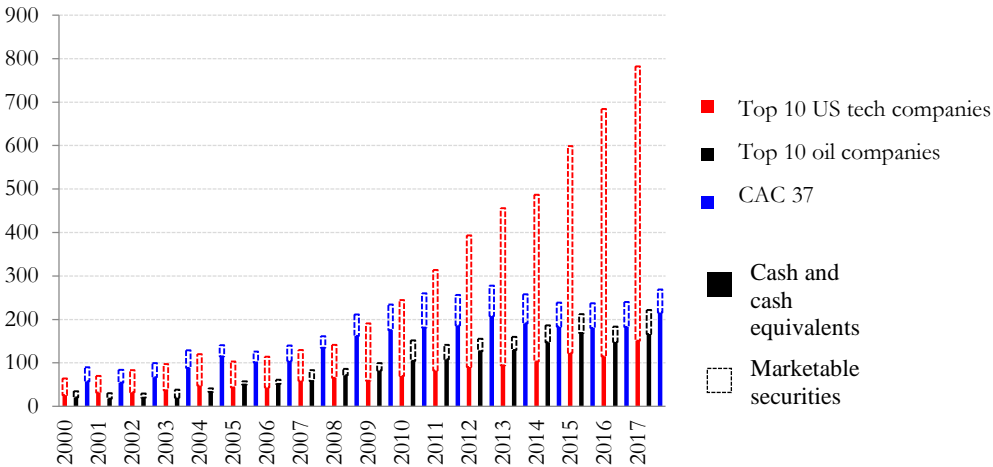


Figure 5 – © Hyppolite et Michon (2018).

These same sources provide information on the various asset classes in which Big Tech invests. Analysis of the data thus highlights the low share of cash in the total (7%). In fact, nearly 80% of their cash is invested in bonds, half of which are issued by public bodies and half by companies. Behind this sham diversification, a great deal of the portfolios are in US government debt. Several companies – including Facebook, which clearly states as much in its regulatory statements – seem to adopt an investment policy that excludes investments in foreign government bonds. It should be noted that there are interesting differences between companies in terms of investment. Apple, Oracle and Qualcomm, for example, allocate more than 50% of their cash to corporate bonds, while Microsoft and Facebook overwhelmingly finance the US government.

Breakdown of cash and equivalents by asset class at the end of 2017 for the top 10 US tech companies (as a % of total)

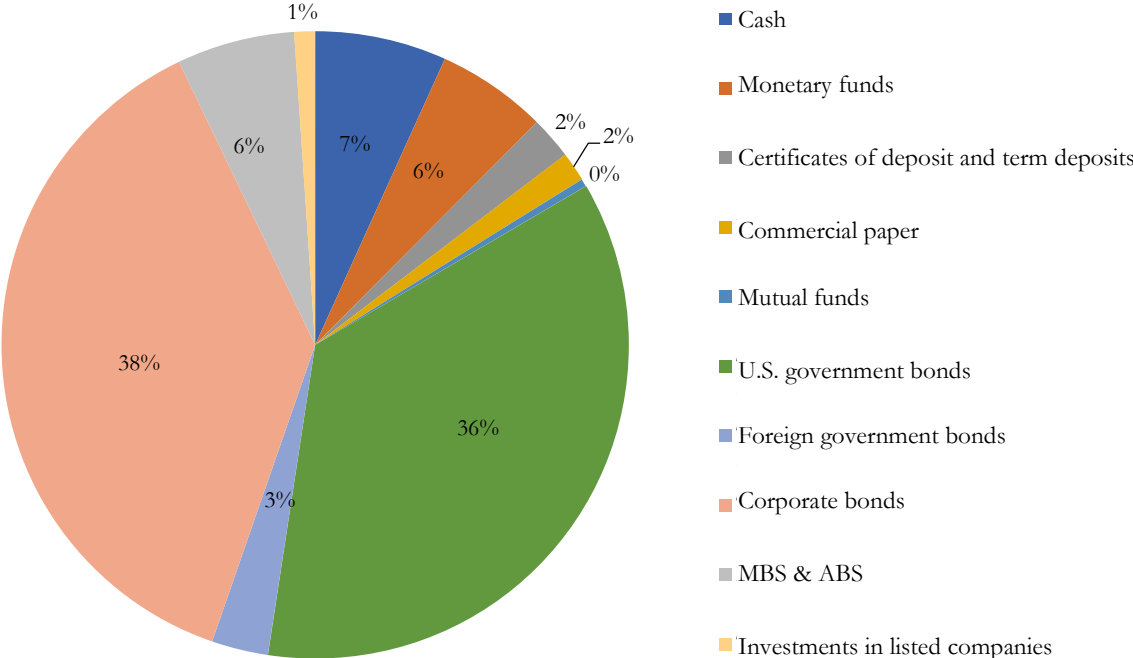


Figure 6 – © Hyppolite et Michon (2018).

Thus, while the formidable growth in the tech giants' cash on hand seems to have been accompanied by a lengthening of the average maturity of the securities in their portfolios, this has not translated into more risk-taking. Far from their image as innovators investing massively in the development of tomorrow's technologies, the technology giants are in fact allocating and managing their capital very conservatively.

Big Tech hoarding: a passing phenomenon or a new standard?

By accumulating huge financial surpluses, Big Tech companies have become key players in international finance, and the managers of their cash flow are now more like fund managers than working capital managers. Can we consider the hoarding phenomenon at the origin of this situation to be truly sustainable?

The digital giants' many stock market professionals indicate that their investors anticipate considerable future profits. Unless there is a change in their capital allocation strategy, the hoarding momentum is expected to continue. Some threats, however, could slow or even reverse this trend.

First of all, the digital giants are exposed to antitrust lawsuits: in the United States, this issue is becoming increasingly important in the race for the Democratic nomination. In Europe, the mandate of Margrethe Vestager, European Commissioner for Competition under the presidency of Jean-Claude Juncker, was marked by stiff sanctions against Google and Apple. In addition, the OECD is studying an adaptation of Western tax rules to combat the aggressive tax planning practices of certain multinationals, including the tech giants. France has already taken the lead by adopting a tax on the turnover generated by digital services rather than on profits. Finally, a number of large firms are under the threat of sanctions or regulations regarding the use of data that form the basis of their business models. In July 2019, the US Federal Trade Commission fined Facebook \$5 billion and imposed restrictions on the use of personal data following the company's breaches brought to light by the Cambridge Analytica case.

In any event, threats such as these have up to now only marginally affected investors' expectations as reflected in stock market prices, with the result that Microsoft, Amazon, Apple, Google and Facebook remain the world's top five market capitalisations. There is every reason to believe that the tech giants will continue to reap huge profits over the next few years. But will they continue to follow the same capital allocation strategy? Could they, for example, redistribute a larger share of their profits to their shareholders?

Share price to earnings ratios (P/E ratios) at the end of 2017

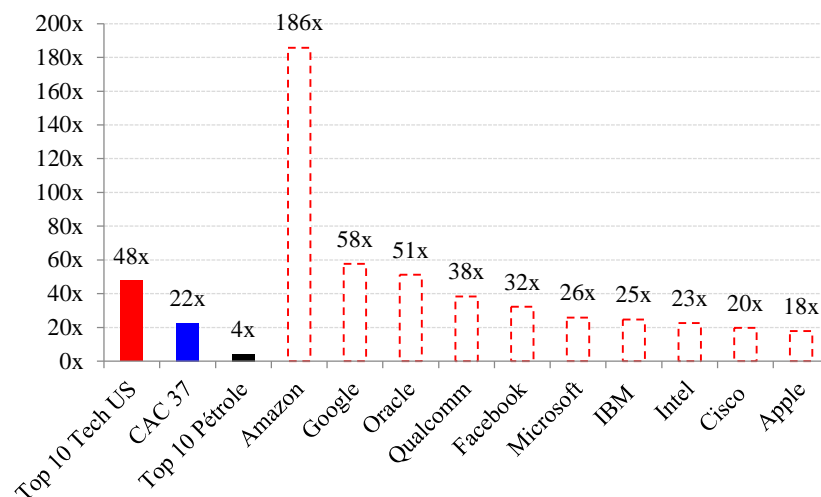


Figure 7 – © Hyppolite et Michon (2018).

Some argue that this hoarding is only a passing phenomenon. In fact, it is simple the outcome of a tax arbitrage that the Trump administration eliminated by enacting the Tax Cuts and Jobs Act of 2017. Unlike most OECD countries, the US had a global corporate tax base. US corporate profits earned abroad were taxed upon repatriation at the federal corporate tax rate, less taxes previously paid in foreign jurisdictions. The tax reform enacted under President Trump replaced the previous system with a territorial tax system under which only profits earned domestically were liable for tax. It also introduced, regardless of any considerations with respect to any repatriation, a one-time 15.5% tax on the undistributed profits accumulated by US multinationals in their foreign subsidiaries² and financing cash distributions to their shareholders (dividends and share buybacks) by taking on debt in the bond markets. Although this phenomenon did occur, it can only explain a small part of Big Tech's cash pile. Even if growth in outstanding cash on hand net of debt proves to be less sustained than that of gross outstanding debt, it is still quite significant: 15% (instead of 16%) per year on average over the period 2000–2017. At the end of 2017, "net" cash and cash equivalents totalled \$352 billion. It is therefore doubtful whether repatriating cash to the United States – past or future – could have had or would have major consequences on the hoarding phenomenon as such.

Once this explanation has been ruled out, many questions remain as to the reasons for hoarding on such a large scale and over such a long period. Several possible answers can be put forward. First, the tech giants probably want to have cash to be able to quickly carry out large acquisitions, such as Facebook's \$16 billion takeover of WhatsApp in 2014. In fact, their M&A activity has intensified in recent years, to the point of drawing regulators' attention to the possibility of killer acquisitions, designed to deliberately remove competitive threats.

For some, this desire for autonomy of the tech giants in the face of the financial markets has its cultural origins in the deep mistrust of Silicon Valley entrepreneurs with respect to Wall Street financiers. Such a statement should be qualified, bearing in mind that Big Tech had no difficulty in turning to the bond markets when it came to taking on debt to remunerate their shareholders rather than repatriating their profits made abroad to the United States.

Nevertheless, it is undeniable that dividend distributions and share buybacks have long had a negative connotation in the new technologies sector. Even today, transactions like these are associated in many entrepreneurs' minds with mature and less innovative companies. For almost ten years, Microsoft was the symbol of this: the firm regularly distributed dividends, but saw its share price and its financial results stagnate.

Moreover, the balance of power between Big Tech executives and their outside shareholders – who are primarily institutional investors – remains largely to the advantage of the former. Founders and managers often retain a significant portion of their company's shares, as does Jeff Bezos, who holds about 16% of Amazon's capital. In addition to their shareholding power, executives benefit from a strong media presence and significant professional legitimacy in their industry, which undoubtedly reinforces their influence with boards of directors. After the founders, the primary shareholders of Big Tech are US asset management giants such as Vanguard, Blackrock and State Street. Their investments are

² At the end of 2017, 82% of companies' cash on hand was thus domiciled outside the United States for accounting purposes.

driven more by a logic of diversification of US savings than by investment strategies arising out of a specific conviction concerning the business model of a particular firm. Their shareholding approach is essentially passive, in the sense that there is no intention to influence company strategy by entering into an in-depth dialogue with management or other shareholders. Any pressure on managers of the technology giants to carry out a more significant and systematic distribution of their financial surpluses seems to be rather weak. With the notable exception of a few so-called "activist" shareholders such as David Einhorn (Greenlight Capital) and Carl Icahn (Icahn Capital Management), few have tried to shake up this shareholder culture that favours hoarding. Although they have contributed substantially to influencing the allocation of capital at Apple, shareholder activist campaigns have remained relatively marginal.

The 20 largest institutional shareholders in the top 10 US tech companies (aggregated) as a percentage of total market capitalisation

1.	Vanguard Group	Gestionnaire d'actifs	US	6,9%
2.	BlackRock	Gestionnaire d'actifs	US	6,1%
3.	State Street Corporation	Gestionnaire d'actifs	US	3,9%
4.	Fidelity Investments	Gestionnaire d'actifs	US	3,2%
5.	Capital Group Companies	Gestionnaire d'actifs	US	3,0%
6.	T. Rowe Price	Gestionnaire d'actifs	US	2,0%
7.	Northern Trust	Gestionnaire d'actifs	US	1,2%
8.	BNY Mellon	Gestionnaire d'actifs	US	1,1%
9.	Geode Capital Management	Gestionnaire d'actifs	US	1,1%
10.	Invesco	Gestionnaire d'actifs	US	1,0%
11.	Wellington Management	Gestionnaire d'actifs	US	1,0%
12.	Norges Bank	Banque centrale	NO	1,0%
13.	JP Morgan Chase	Banque universelle	US	0,9%
14.	Morgan Stanley	Banque d'investissement	US	0,8%
15.	TIAA*	Gestionnaire d'actifs	US	0,8%
16.	GPIF**	Fonds de pension	JP	0,8%
17.	Bank of America	Banque universelle	US	0,7%
18.	Berkshire Hathaway	Société d'investissement	US	0,7%
19.	UBS	Banque privée	SZ	0,7%
20.	Goldman Sachs	Banque d'investissement	US	0,5%
-	Top 20	-	-	37,3%

Notes

*TIAA - Teachers Insurance and Annuity Association

**GPIF - Government Pension Investment Fund

Non-American shareholders

Légende :

Gestionnaire d'actifs --> Asset management

Banque centrale --> Central bank

Banque universelle --> Universal bank

Fonds de pension --> Pension fund

Banque privée --> Private bank

Figure 8 – © Hyppolite et Michon (2018).

In conclusion, there is a good chance that the technology giants will continue to retain significant cash reserves. The sums in question are colossal, since they are comparable, in terms of outstandings, to the foreign exchange reserves of the central banks of the main emerging regions (Latin America, the Middle East, Southeast Asia) or to assets under management of the world's ten largest private bond funds.

The macroeconomic consequences of this hoarding are not neutral. By directing a scarce resource like capital to unproductive uses, Big Tech could harm the economy's potential growth by slowing productivity gains. Through their conservative allocation of capital, the digital giants also extend the trend of declining real risk-free interest rates, which constrains central banks' room for manoeuvre and contributes to rising inequality due to higher risk premiums. It is therefore time for politicians and public policy experts to take an interest in this matter.