THE FINANCIALIZATION HYPOTHESIS: A THEORETICAL AND EMPIRICAL CRITIQUE

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ABSTRACT

The Financialization Hypothesis (FH) is a popular leitmotiv which argues that the financial system conquers the commanding heights of the capitalist economy. It maintains that finance gained independence from productive capital and began to dominate it. The FH bases this argument on several empirical claims concerning the size and the strategic role of financial entities. This paper offers a critique of crucial analytical and empirical claims of the FH. It argues that the FH overrates the importance of novel financial instruments, misunderstands their function and, thus, fails to situate the role of finance in the capitalist system. Especially, it erroneously divorces finance from and superimposes it on productive capital. Moreover, this paper argues that crucial empirical claims of the FH do not stand up to scrutiny.

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INTRODUCTION

This paper criticizes, both theoretically and empirically, the *financialization hypothesis* (FH) that became a popular leitmotiv since the 1990s. It argues that, at least in contemporary capitalism, the financial system conquered the commanding heights of the economy and the other sectors dance according to its tunes. This is a novel idea because, till then, almost all currents of economic thought considered the *real economy* (the producing sector) as the center of the economic circuit and the financial system as a necessary but secondary activity. If the FH holds, it not only changes the whole modus operandi of the economy but also the social structures based on it. If the financial system is the new pivot of the whole system, then the relations between the main economic agents (social classes) and processes (production and circulation) alter radically.

However, despite its novelty and popularity, the FH suffers from serious analytical and empirical problems. Following an earlier theoretical critique of the FH (Mavroudeas & Papadatos 2018), this paper proceeds further to elaborate on these analytical problems and provides empirical evidence that goes against the expectations of the FH.

The first problem is related to the theoretical domain of financialization. Even erudite authors (e.g. Fine 2014) consider financialization as the exclusive property of heterodox economics. However this is not so because there is also a strong Mainstream New Keynesian version (see Mavroudeas & Papadatos 2018). We delineate three main financialization traditions (Mainstream, Post-Keynesian and Marxist/Marxisant) and their sub-currents and analyze their main points and differences.

1. The second problem is related to the very definition of the term. As it usually happens with leitmotivs, its popularity has led to the increased vagueness of the term as different authors and theoretical streams ascribe to it quite different contents. Initial definitions placed emphasis on four (supposed or not) novel characteristics of the contemporary capitalist financial system that appeared since the 1990s:Financial system's increased share in GDP.
2. The creation of new financial instruments (mainly shadow banking and derivatives) that led to increased speculation and volatility.
3. The dominance in managerial practices of shareholders' value maximization policies and the rise of the absentee investor. Share buybacks and shortermism investment decisions (shareholders' interests as opposed to stakeholders' interests) were considered the trademark of this 'financialisation of non-financial corporations (e.g., Lazonick (2014)).
4. The increased indebtedness of households.

Initial definitions emphasised these professed new structural features and there was a subsequent division between those that argued that this is a transient policy (e.g. Krippner) and those arguing that it constitutes a new stage. However, once FH's popularity expanded further, several authors maintained that it is a recurrent phenomenon that has also happened in the past. They resorted to Arrighi's (1994) argument that each distinct epoch of capitalism's world system is characterized by a hegemonic power. When the hegemon's power is failing and its each epoch is ending then there is a growing recourse to financial activities rather than productive ones. This new perspective required a broader definition of financialization that tries to encapsulate quite different phenomena existing under very different historical circumstances. FH's expansion in other study areas enhanced the tendency of the majority of financialisation's adherents to use it as a buzzword denoting the expansion of financial activities and without paying attention to any special features.

FH's definition as a structural break has the merit of being more specific and bodes well with the argument that financialisation is a new epoch characterized by a structurally different new capitalism. If the financial system has broken lose from the yoke of the productive sector and has imposed a new modus operandi on the whole system, this certainly did not exist in the past. This version of financialisation argues that financial capital is not receiving a portion of the surplus-value extracted by productive-capital but it is directly and independently receiving income by usuriously exploiting indebted households and other capitals (through shadow banking and shareholders' value maximizing).

FH's definition as a recurrent event is rather indeterminate. At certain historical conjunctures the weight of the financial system in relation to the rest of the economy can increase but this can be transient and does not entail necessarily some deep structural changes. For example, Arrighi's (1994) argument hinges upon the idea that a hegemonic power gradually loses its strength when its production system ceases to be the pacesetter. Then, for a period, the weakening hegemon uses its amassed financial resources to boost its failing economy. But as the financial system exists on the back of the productive system this recourse cannot be long-

lived. Moreover, Arrighi's capitalism of the 'long-duree' equates capitalism with pre-capitalist eras (mercantilism) and loses the former's specificity.

We argue that, if financialization purports to have any significant meaning, then it must identify itself with the first definition. If it is simply a transient phase of the downturn of economic cycle (presumably a long-wave one) or a policy choice then it does matter but it does not deserve the superfluous attention drawn to it.

Finally, apart from the disagreements over its novelty, opinions also differ regarding whether financialization is responsible for the slowdown in real accumulation. Differences also exist on whether financialization follows a basic model (as in the US and the UK) or if there are several types of financialization. This paper tackles these issues in both its first part where the different streams of the FH are presented and criticized and its second part where fundamental empirical expectations of the FH are scrutinized and rejected.

THE THEORETICAL DEBATE

The FH appeared in the 1990s when capitalism had surpassed its third global crisis (in the 1970s) only to fall in a prolonged era of weak accumulation. After several heuristic capitalist restructuring waves that produced meager results, there has been an increasing application of old and new financial instruments as means to evade sluggish accumulation since the 1990s. Financialization has been employed within almost all major economic traditions as an explanation of this state of affairs (Mavroudeas & Papadatos 2018). Common to all financialization theories is the reference to four observations:

Mainstream financialization theories stem mainly from New Keynesianism and argue that new financial capitalism has emerged where finance is a major growth contributor (King and Levine 1993). They abandon general equilibrium's aversion to a big financial sector and praise (a) the increasing role of capital markets by arguing that market-based financial systems are more efficient and less risky than bank-based ones and (b) households' increased participation in the stock market as the *democratization of ownership* and shareholders' capitalism. Based upon New Keynesianism's endogenous money theory and *financial accelerator,* they reject money neutrality and maintain that the credit market and the financial intermediaries cause economic fluctuations through the endogenous allocation of existing liquidities. Information asymmetries (adverse selection, moral hazard, etc.) cause credit-market imperfections (e.g. borrowers with strong financial backing obtain credit more readily and cheaply). Firms and households use some of their assets as collateral in the borrowing activities to ameliorate these *frictions*. This results in an environment where external finance is more expensive than internal finance when the former is not covered by collateral; thus, creating an *external finance premium*. The latter affects the overall stock of capital, thereby influencing investment decisions and aggregate demand. These cause multiplier effects (through the *financial accelerator*) that affect output dynamics (Bernanke and Gertler 1989) and propagate and amplify shocks to the macroeconomy. On this basis, New-Keynesianism explains contemporary financial phenomena such as *shadow banking* and repos.

Mainstream FH's endogenous credit-money theory has well-known problems. First, it lacks a robust stages theory. Thus, when it considers financialization as a new stage, it views it as a chance event rather than being able to relate it to the main functions of the capitalist system. Finally, because it has a non-social perspective (it does not recognize social classes) it has limited explanatory ability.

In Heterodox economics, the FH was introduced by the Monthly Review (MR) school. However, soon Post-Keynesianism adopted the term (Stockhammer 2004, Hein 2013) and even

treated it as its own (van Treeck 2008). Both currents acknowledge Minsky's (1992) Financial Instability Hypothesis as their forerunner.

Post-Keynesians often place financialization within a stages theory and argue that new *finance-dominated capitalism* (Hein 2013) emerged at the end of the 20th century. In this stage, the financier assumed primacy over the industrialist. Their analysis dichotomizes capitalists into two separate classes: industrialists and financiers with opposing interests. The advent of neoliberalism in the 1980s empowered the former over the latter and caused a tremendous increase in financial leverage and financial profits at the expense of slowing investment and growing instability. This resulted in the 2008 crisis, which is considered a purely financial one. The post-Keynesian remedy is a return to prudent Keynesian regulation to stabilize capitalism. In analytical terms, the Post-Keynesian FH is founded (similarly to New-Keynesianism) on a theory of credit-money created endogenously via the operation of the banking system. Moreover, several post-Keynesians consider endogenous money primarily as endogenous finance (Wray 1992 and Toporowski 1999). Hence, the interaction between financial and goods markets includes wider forms of finance and not only bank-credit.

The Post-Keynesian FH endogenous credit-money theory cannot define coherently what is *capital*. Consequently, it misconstrues the relation between interest and profit. Furthermore, the Post-Keynesian theory of classes is based on distribution (and not on production) and it is preoccupied with the problem of the *rentier* (an economic agent that supposedly hinders the proper functioning of the capitalist system). It identidies modern rentiers with financiers. Thus, it separates them and pits them against the other two fractions of the capitalist class; thus, ignoring their primary common interests and their complementary roles (despite their secondary antagonisms).

The MR school was the forerunner for the introduction of financialization in the Marxist tradition within which some remain in the Marxist analytical framework whereas others have a rather Marxisant flavor as they abandon its critical features.

The Marxist versions analyze financialization via the Labour Theory of Value (LTV) and by focusing on the notion of fictitious capital. Furthermore, they continue to consider financial profits as a redistribution of surplus-value. On the contrary, Marxisant versions argue that new forms of exploitation appear that are accompanied by new class structures and that the LTV cannot grasp these developments. Fine (2014) and the MR tradition offer prominent examples of the Marxist versions. Lapavitsas (2014) and Bryan et.al (2008) represent Marxisant versions.

Fine considers financialization as the essence of neoliberalism. He defines financialization as the extensive and intensive accumulation of interest-bearing-capital (and fictitious capital). The *intensive accumulation* is the proliferation of the mass of financial assets, which goes hand-in-hand with their growing distancing from production. The *extensive accumulation* is the encroaching of interest-bearing-capital into new fields of socio-economic life through novel hybrid forms (Fine 2014). Under such conditions, finance dominates capital accumulation via *shadow banking*. However, the financial system does not acquire autonomous channels of exploitation of labor. The novel forms of money-capital and institutional arrangements are policies that are used by capital to surpass its contradictions. Hence, Fine keeps the Marxist tradition that relates finance to the sphere of production and considers financial profit as part of the surplus-value. But, he does not relate coherently the emergence of financialisastion-as-a-structural-break (and the 2008 global crisis) to profitability.

The MR argues that Monopoly Capitalism has evolved to a new phase of Monopoly-Finance Capitalism as the system discovered novel ways of reproducing itself. More specifically, debt and speculation became instrumental in engineering growth periods. This was facilitated by Neoliberalism and its deregulation drive as it unleashed finance. In this new phase, underconsumption is hidden as increasing income inequalities are covered by the snowballing

indebtedness of households. At the center of this new phase stands finance capital which is defined broader than Hilferding (as encompassing the whole financial system and not only banking). The simplified versions of MR's FH (Foster 2008) have significant analytical and empirical deficiencies. First, they do not explain coherently what this new finance capital is, how it came into being and how it can boost accumulation. Second, they rely heavily on Minsky's Financial Instability Hypothesis, that divorces the financial system from real accumulation; an issue rightfully criticized by the Marxist tradition.

Guillen (2014) offers a more considerate version by arguing that as capitalism passes from different stages its three generic fractions (productive, money and merchant capital) change. In monopoly capitalism, their differences (and the differences between the types of profit they receive) are blurred. He maintains that Hilferding had (apart from his typical definition of finance capital) another more coherent definition that identifies it with the segment of capital that controls the issuance and circulation of fictitious capital. In monopoly capitalism this finance capital is dominant but there are periods of financialization and periods of non-financialization. In modern capitalism, this has evolved to monopoly-finance capital. This new hybrid is based on the extraction of the promoter's profit. Finally, following Arrighi (1994), he defines financialization as periods of 'maturing and decline of hegemonic powers' (Guillen 2014). His analysis shares the general criticisms concerning MR's monopoly theory and Hilferding's promoter's profit. Moreover, his adherence to Arrighi's definition of financialization periods weakens the significance of financialisation. Nevertheless, all versions of the MR consider financial profits as a redistribution of surplus-value and do not propose a separate mechanism of exploitation.

The Marxist FH versions make some interesting points despite having minor weaknesses. However, they are marginal within the FH tradition as Heterodox and Mainstream approaches predominate.

Lapavitsas' (2014) financialization theory is closer to post-Keynesianism. He maintains that *shadow banking* makes traditional banking redundant. Consequently, the financial system becomes totally stock-exchange based. Lapavitsas (2014: p.110) conflates interest-bearing-capital with loan-money-capital by downgrading the latter to a more concrete category and, hence, appropriate for analysing financialization (as opposed to the abstractness of interest-bearing-capital). This is a sleight of hands, because for Marx loan-money-capital is the general abstract concept out of which interest-bearing-capital and money-dealing-capital arise. Via this conflation Lapavitsas, ultimately, foregoes the crucial distinction between money-as-money and money-as-capital. He rejects the concept of fictitious capital as obscure ('a widow's cruse') and declares that new financial tools and processes are almost unrelated to the sphere of production and must be analyzed independently. Thus, the LTV and its monetary theory are effectively abandoned. He proposes the vague notion of *finance* as capitalism's new core. To evade the critique of suggesting two separate capitalist classes he contends that *finance* subsumes and restructures the productive-capital. So, there is no meaningful distinction between them and productive and money-capital (taking merchant-capital along) have become unified. But, curiously enough, *finance* has a serious difference from the other two. It acquired a separate channel of direct exploitation of workers through the provision of usurious loans: 'These practices are reminiscent of the age-old tradition of usury, but they are now performed by the formal financial system' (Lapavitsas 2009). He terms this new source of financial profit as *financial expropriation*. This autonomous source enables financial institutions to increase their profits independently of surplus-value and possibly to exploit *us all* (Lapavitsas 2014), alluding to the financial expropriation of other social strata apart from labor. While he rejects Hilferding's promoter's profit as problematic, he essentially inflates it. In his logic, *finance* exploits its oligopolistic position and amasses extra revenues (from fees, etc.) not only from other capitalists but also from every other social stratum that falls into its hands. This is indeed

akin to Hilferding's promoter's profit but with a major difference. Although promoter's profit is a part of surplus-value for Hilferding, for Lapavitsas profits from financial expropriation are not. For him, this new structure constitutes a new *social order*, which is essentially the alias for a new stage. Furthermore, for Lapavitsas there is no general Marxist theory of crisis but each crisis is historically specific. Of course, there are crises in capitalism not directly related to falling profitability and Marx and the Marxist tradition recognizes it. But, at the level of general (abstract) theory, all different Marxist approaches (falling rate of profit, underconsumption, disproportionaliey etc.) define a basic mechanism generating crises in capitalism and they relate it to profitability. Lapavitsas departs from this. Characteristically, he considers the 2008 crisis, the hallmark of the new financialization epoch as unrelated to profitability (Lapavitsas & Kouvelakis 2012).

Bryan et.al (2008) contend that since the early 1980s finance became commodified through several financial innovations (securitization, derivatives, etc.). Although evading branding this as a new capitalist stage (Bryan (2010)), they actually infer so. For them, increased leverage and derivatives and workers' financial exploitation through usury alter fundamentally capitalism's functions and class structure. They claim that labor became a form of capital because the reproduction of labor is now a source of surplus-value transfer (through interest payments and the *financialization of daily life*). Thus, capitalist exploitation is not only unpaid labor-time but also usurious interest payments. Additionally, if labor has become a form of capital this entails directly that a new class structure different from typical capitalism has emerged. Among the other problems in their analysis prominent is the flawed idea that derivatives obtain money functions.

The Marxisant FH, essentially adopt the post-Keynesian endogenous money theory. They discard (or deform beyond recognition) the crucial Marxian concept of fictitious capital and ultimately concur with the Mainstreamers and the post-Keynesians that the unproductive dominates productive capital and that the former acquires autonomous (from surplus-value) sources of profit. Consequently, they converge to a great extend with the Keynesian theory of classes and consider industrialists and financiers as separate classes. For Keynesian analysis this is not a problem as it posits that different factors affect savings and investment. However, Marxism conceives money and productive capital as forms of total capital that both take part in the formation of the general rate of profit (which among others is a process unifying the bourgeoisie against the proletariat). Therefore, since interest is part of surplus-value and financial profits depend upon the general rate of profit, Marxism does not elevate the distinctiveness of money-capital and productive-capital to the point of being separate classes.

Finally, the Marxisant FH currents have a problematic crisis theory. Instead of a general theory of capitalist crisis they opt for a conjunctural one. Each historical era and each particular crisis have their own specificities. But fundamentally, as Tome (2011) demonstrates, the FH eventually ascribes to a Keynesian possibility theory of crisis which has well-known shortcomings.

In conclusion, the FH variants fail to offer a realistic account of the rise of fictitious capital activities during the recent period of weak profitability and increased over-accumulation of capital. Mavroudeas & Papadatos (2018) has shown that the Classical Marxist perspective – on the basis of the distinction between interest-bearing-capital and money-dealing-capital and by applying the notion of fictitious capital - explains satisfactorily periods of increased financial profitability and also the creation of novel financial instruments (derivatives, repos etc.). for these developments. Moreover, it does so by realistically keeping th primacy of the production sphere over circulation and also the notion that interest is part of surplus-value extraction.

THE EMPIRICAL MYTHS OF FINANCIALIZATION

Whatever theoretical perspective is taken, financialization must be accompanied by a series of empirical developments. For example, Fine (2019) suggests that 'just a few hundred multinational corporations [….] run the world economy' and 'of these, two-thirds are financial companies'. Further, he associates financialization with 'the extraordinary rise of finance' and argues that 'the ratio of financial assets to economic activity increased threefold over the past thirty years'. He asks 'why, on average, should it take three times as much finance to produce something as previously?' According to Sawyer (2016), financialization involves the growth of the financial sector which has become *too large*. Ashman and Fine (2013) suggest that finance expands at the expense of real investment. Financialization, therefore, is an important cause of deindustrialization (Palley 2013, Davis 2018). It is often claimed that financialization is largely due to financial liberalization (Krippner 2011, Soener 2020). And while financialization develops at different paces and forms it has a global reach and therefore is a global phenomenon (Bonizzi 2014 and Sawyer 2016). These are empirically testable claims that will be reviewed and shown to be largely myths.

Myth 1: Two-thirds of the few hundred largest multinational companies are financial

At first glance, the empirical evidence seems to support this claim. Forbes (2018) data suggests that 8 out of 10 (80%) largest multinational companies are financial (Figure 1A). A closer inspection of the data, however, unfolds a rather different picture.

First, as the number of largest companies increases, the share of the financial companies declines rapidly. The figure declines to 44% for the largest 50 multinational companies, 39% for the largest 100 multinational companies, 31% for the largest 500 multinational companies, and 17% for the largest 1000 multinational companies. The suggestion that two-thirds of the few hundred multinational companies are financial, therefore, is not supported by the evidence. It is also interesting to note that 5 out of the 8 largest financial multinational companies are Chinese. While Fine (2019) suggests that 'the Chinese state continues to hold considerable control over the use of finance, and directs it to investment rather than speculation', why a country that is associated with industrialization rather than financialization should have such large financial multinational companies requires an explanation.

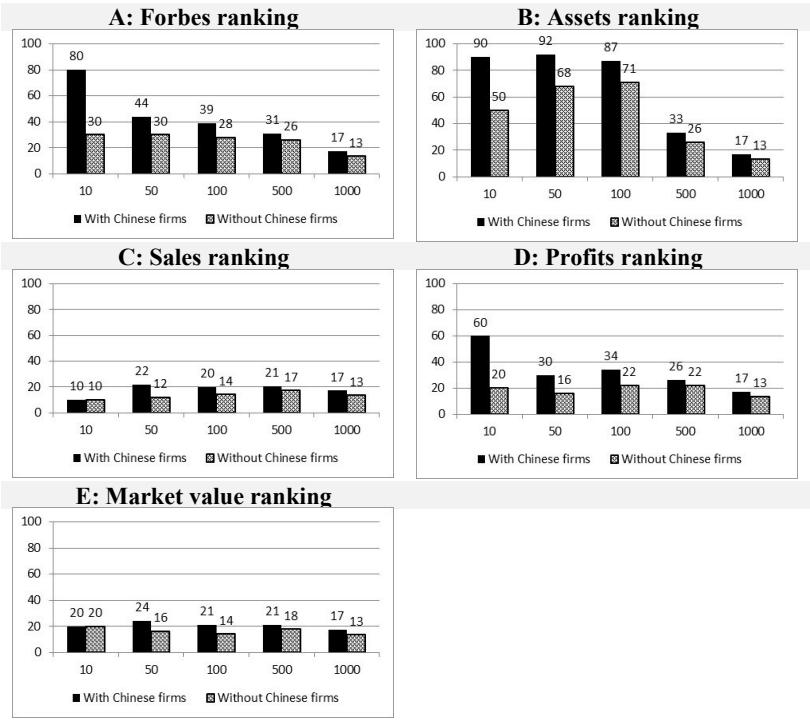
Second, Forbes uses 4 different measures to create its ranking, which are assets, sales, profits, and market value. The ranking of the financial multinational companies is heavily influenced by the assets component, which needs careful elaboration. Figure 1B shows the ranking of multinational companies in terms of assets and indicates a more favorable ranking for financial multinational companies. This time, 9 out of 10 (5 if Chinese multinational companies are excluded) largest multinational companies are financial. The Figure increases to 92% for the largest 50 multinational companies and then declines to 87% for the largest 100 multinational companies, 33% for the largest 500 multinational companies, and 17% for the largest 1000 multinational companies.

The ranking of multinational companies in terms of assets, however, is problematic because the largest proportion of banking assets are loans and securities held. In the US for example, loans (52.6%) and securities held (20.7%) accounted for 73.3% of the banking assets in 2014 (Parez 2015). As opposed to these assets, banks also have liabilities (i.e. deposits) that need to be considered. The assets component of the Forbes figures, therefore, exaggerates the real size of the financial multinational companies. This can be seen in Figure 2, where 39 financial and 61 non-financial multinational companies in the top 100 multinational companies are compared. Assets and market values of companies are normally expected to be closely linked. This is true for non-financial multinational companies, where assets are slightly higher than market value. For financial multinational companies, however, assets are 11.4 times higher

than their market value. The ranking of financial multinational companies in terms of assets is problematic and the inclusion of assets in the final Forbes ranking also exaggerates the significance of financial multinational companies.

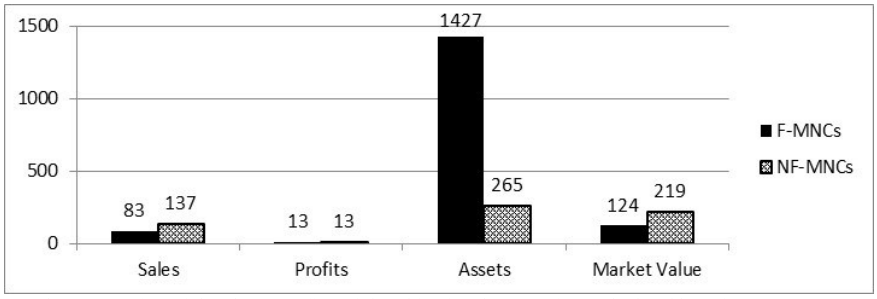
The ranking of multinational companies in terms of sales (Figure 1C), profits (Figure 1D) and market values (Figure 1E) provides a much modest share for the financial multinational companies, particularly when Chinese financial multinational companies are excluded. Figures are as low as 10% and they barely exceed 20%. They are nowhere near two-thirds of the multinational companies.

Figure 1: The share of financial multinational companies in total (%)



Source: Forbes (2018)

Figure 2: Comparing 39 financial (F) and 61 non-financial (NF) multinational companies in terms of sales, profits, assets and market value (Billion US Dollars)



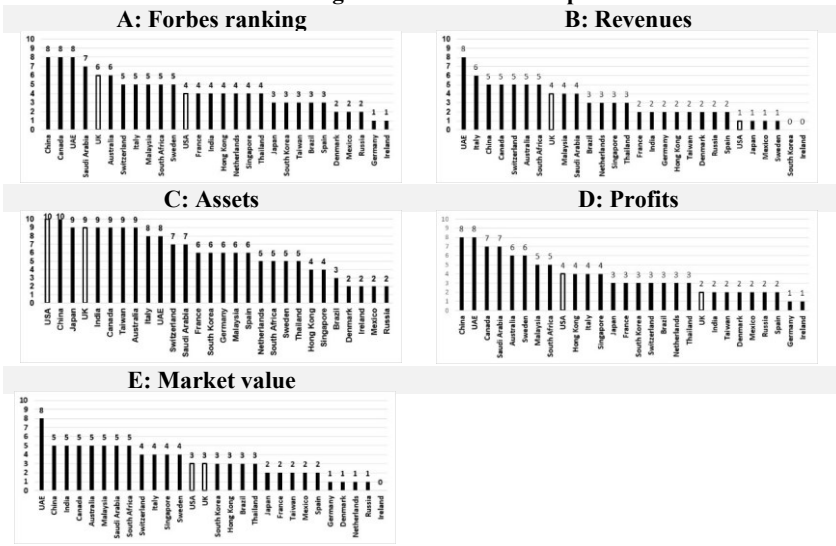
Note: largest 39 Financial and 61 non-financial multinational companies. Calculated by using averages.
Source: Forbes (2018)

Country Rank analysis

The US and the UK come to mind first when considering financialization. Indeed, within the largest 100 financial multinational companies, the US has 40 and the UK has 8 companies. There are some surprising results, however, when countries are ranked by the number of large financial multinational companies. The ranking of the countries according to the number of financial companies among the top 10 companies will be considered first (Figure 3). Looking at the 28 countries (for which the data is available) reveals that the most financialised countries are neither the US nor the UK, but China, Canada and the United Arab Emirates (Figure 3A). According to this ranking, the UK leaves 22 and the US leaves only 10 countries behind.

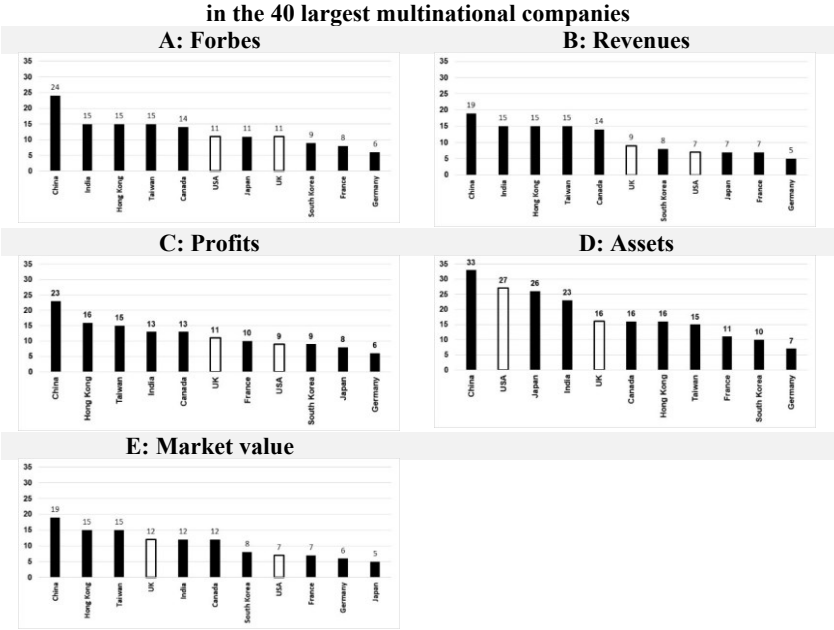
The ranking of countries changes considerably when the components of the Forbes measure are considered. The US is ranked the 1st in terms of assets but ranked the 9th in terms of profit, 13th in terms of market value, and 23rd in terms of revenues. The UK is ranked the 4th in terms of assets but was ranked the 8th in terms of revenues, the 14th in terms of market value, and the 20th in terms of profits. Surprisingly, these countries fall behind in the rankings.

Figure 3: Ranking of countries in terms of financial multinational companies in the 10 largest multinational companies



Considering 11 countries that have data for the largest 40 multinational companies reveals that the US is ranked the 2nd behind China in terms of assets but ranked the 8th in terms of revenues, profits, and market value (Figure 4). The UK is ranked the 4th in terms of market value, the 5th in terms of assets, the 6th in terms of revenues and profits. Remarkably, countries such as China, Taiwan and South Korea, which are associated with industrialization are ahead of the US and the UK in this ranking. Even India and Hong Kong appear to be more financialised than the US and UK.

Figure 4: Ranking of countries in terms of financial multinational companies in the 40 largest multinational companies



Thus, the suggestion that two-thirds of a few hundred multinational companies are financial is incorrect, and the leading countries in financialization are not the US and the UK, but China, which is not associated with financialization.

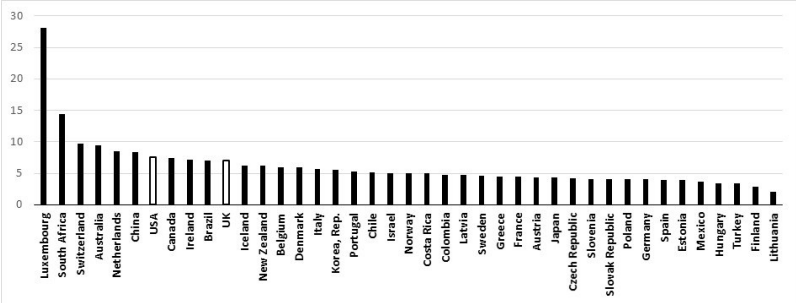
Myth 2: The ratio of financial assets to economic activity increased threefold over the past thirty years

This section analyses the change in the share of the financial sector (finance and insurance) value-added in total national income in 41 countries to assess the claims that the financial sector has expanded significantly during the last 30 years. Data availability (beginning and the end of the data) varies by country and ranges from 13 years to 48 years, but our analysis is limited to *the* 1998-2018 period (*past 30 years).*

Figure 5 shows that the share of financial sector value added in 2015 was above 10% for only 2 countries: Luxembourg and South Africa. While the financial sector share in 19 countries is between 5% and 10%, it is below 5% in the other 20 countries. The US (7th) and

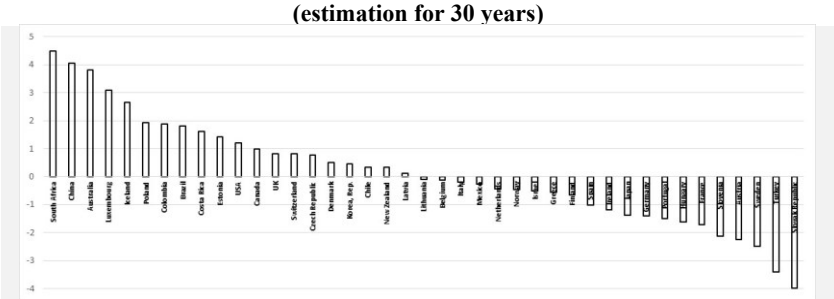
the UK (11th) are ranked relatively high but South Africa and China are ranked higher than the US and Brazil are ranked higher than the UK. Portugal (5.3%), Greece (4.5%) and Spain (4.0%), which were among the countries most affected by the 2008 crisis, are far behind on the list. The relative size of the financial sector does not seem unusual except in a few countries.

Figure 5: Ranking of countries according to the share of the financial sector in total value added (% in 2015)



The findings are more striking when considering the same countries in terms of the change in the share of the financial sector in national income. Figure 6 shows that the financial sector share increased in 20 countries and decreased in 21 countries (indicating *de-financialization*) which refutes the claim that financialization is a global phenomenon. The fastest financialising countries are South Africa (4.50%), China (4.06%), Australia (3.81%), and Luxembourg (3.09%). Most countries experienced modest increases. The US is ranked 11th (by 1.19% increase) and the UK is ranked 13th (by 0.83% increase) in the list. Only 5 countries experienced an increase between 2% to 4.5% and 15 countries less than 2%. None of these figures implies a significant rise in the share of the financial sector. Portugal, Greece and Spain are among the 21 countries that experienced de-financialization.

Figure 6: Change in the share of the financial sector in GDP % (estimation for 30 years)



Note: Since data availability varies by country, 30 years of data have been estimated by using the available data.

The idea that the rate of economic activities of the financial sector has tripled in *the past 30 years*, therefore, is another myth. Although the share of the financial sector in national income increased (due to the financial bubble) in many countries until the 2008 crisis, this situation was not permanent and decreased after the crisis. Indeed, the share of the financial sector in national income increased in 26 (65%) of 40 countries[1] before the financial crisis (between 2000 and 2007), it declined in 24 countries (60.0%) after the crisis (between 2007 and

[1] Full data is unavailable for two countries for these periods.

2018). Between 2000 and 2018 it increased in 19 countries (47.5%) and declined in 21 countries (52.5%).

Myth 3: Financialization is an important reason for deindustrialization.

The conflict between financial and productive capital is at the heart of the financialization debate. Very often the expansion of the financial sector is held responsible for the decline in the productive (manufacturing) sector which is one of the main themes of the FH. Financialization is associated not only with the increase in the number and power of financial companies but also with the increasing penetration of non-financial companies into financial markets (Davis and Kim 2015). In this view non-financial companies increasingly substitute real investments with financial investments which contribute to rapid de-industrialization, slow growth, lower profits and economic crises (Krippner 2005, Baud and Durand 2012, Palley 2013, van der Zwan 2014, Dünhaupt 2017, Davis 2018).

Rabinovich (2019) tested this thesis for US companies and showed that only 2.5% of the total revenues of non-financial companies are financial. It has also been shown that the share of financial income in these non-financial companies, which started to increase since the 1990s, has decreased since 2005. By focusing on non-financial companies in the largest 37 countries from 1991 to 2017 Soener (2020) raises doubts about the overall validity of corporate financialization. He finds no evidence of real investment being substituted with financial investment and suggests that the share of financial assets and income have fallen over time.

Alternatively, the slowdown in investment rates has been argued to be at the heart of financialization. In this view, the decline in profitability stimulated non-financial companies to focus on financial activity instead (Brenner 2003, Krippner 2005). in a cross-country analysis for 17 OECD countries for the 1997-2007 period, however, Karwowski, Shabani and Stockhammer (2017) found no indication that investment slowdown precedes financialization.

There is little doubt that the share of the manufacturing sector in total value added declined in most countries and the share of financial services increased in many. However, such a simple observation does not lend credibility to the idea that financialization is responsible for de-industrialization, as significant increases are also observed in non-financial service sectors. The purpose of this part, therefore, is to examine the extent to which the decline in the manufacturing sector can be associated with an increase in the financial sector.

Figure 7 shows that the share of financial services in total services declined in 27 (65.9%) countries and increased in 14 (34.1%) countries over the past 30 years. This implies that service sectors other than financial services may have contributed more to de-industrialization in these countries. This observation is important because some authors have argued that financialization shifted the gravity of economic activity not only from production but also from much of the growing service sector to finance (Foster 2007).

Figure 7: Change in the share of Finance in services %
(estimation for 30 years)

Although the above observation is meaningful, the data allow us to examine the contribution of the financial sector to deindustrialization, even if indirectly. For example, if a 10% decline in the share of the manufacturing sector in GDP is associated with a 10% increase in the share of the financial sector in a certain period (while there is no change in the share of other sectors), the increase in the financial sector can be said to be fully responsible for the decrease in the share of the manufacturing. If the 10% decline in the share of the manufacturing sector is associated with a 2% increase in the share of the financial sector and an 8% increase in other sectors, however, only 20% of the decrease in the share of the manufacturing industry is due to the expansion in the financial sector and 80% is due to the expansion in other sectors.

Of course, in any economy, there will be sectors with an increasing (decreasing) share besides the financial (manufacturing) sector. Therefore, it would be useful to look at the share of the increase (decrease) in the financial (manufacturing) sector among other increasing (decreasing) sectors. If a significant increase (decrease) in the share of the financial (manufacturing) sector is associated with a significant decrease (increase) in the share of the manufacturing (financial) sector, financialization can be held responsible for deindustrialization.

Table 1 shows the percentage share of the proportional increase in the finance (manufacturing) sector among other rising (falling) sectors in 35 countries between 2000-2007 and 1995-2018. An example will help the reader in understanding the table. In Iceland, for example, the total share of 5 sectors in national income decreased and the total share of 6 sectors increased by 12.2% between 2000 and 2007 (Figure 8A). Two observations can be made here. First, the finance sector has been the sector whose share has increased the most (by 7.2%) among 6 sectors and this is shown as 1/6 in parentheses in Table 1. And the manufacturing sector has been the sector whose share has decreased the most (by 4.3%) among 5 sectors (1/5). Second, the share of the finance sector in all sectors whose share has increased is 59.4% (7.24 / 12.2 = 0.594) and the share of the manufacturing sector in all sectors whose share has decreased is 34.9% (4.25 / 12.2 = 0.349). It can be said, therefore, that the expansion in the financial sector is the most important determinant of deindustrialization in this country.

The numbers in Table 1, therefore, are large if the expansion (decline) of the finance (manufacturing) sector is large. Multiplying these figures (0.594 and 0.349) also provides (0.207 or 20.7%) additional information. This Figure will vary between 0 and 100% and indicate the importance of an increase in the financial sector on the decline in manufacturing. It will be large if the decline in manufacturing and the increase in finance are large. It will be 100%, for example, if the financial sector is the only sector that expands and the manufacturing sector is the only sector that shrinks. In this case, the increase in the financial sector fully explains the decline in manufacturing. The Figure will be small if the decline in manufacturing

and/or increase in the finance sector is small. It will be zero if the financial sector declines or the manufacturing sector increases.

Under 3 scenarios the financial sector will not be responsible for deindustrialization. First, the share of the financial sector may be small among sectors whose share in national income is increasing. In Latvia, for example, the share of the manufacturing sector decreased by 7.95% between 1995 and 2018 and the share of the financial sector increased only by 0.10% (Figure 7B). While the manufacturing sector declined the most amongst the declining 4 sectors (1/4) and responsible for 46.8% of the total decline in these 4 sectors, the financial sector increased the least amongst the increasing 7 sectors (7/7) and responsible for 0.6% of the total increase in these 7 sectors. Multiplying these figures produces 0.3%, indicating that the expansion in the financial sector is the least important determinant of the deindustrialization observed in this country. Real estate, science, information, construction, wholesale and other services contributed a lot more than the financial sector to de-industrialization.

Second, the share of the financial sector can decrease. In the Slovak Republic, for example, there is a decrease in both the manufacturing industry's share (3.4%) and the financial sector's share (3.2%) between 1995 and 2018 (Figure 7C). While the manufacturing sector declined the most amongst the declining 5 sectors (1/5) and responsible for 26.9% of the total decline in these 5 sectors, the financial sector is not responsible for deindustrialization in this country.

Third, the share of the manufacturing industry may be increasing. Between 1995 and 2018, the share of the manufacturing industry in national income increased in countries such as Ireland, South Korea, Czech Republic, Hungary, and Lithuania. In Ireland, not only the manufacturing sector expanded but also the finance sector shrunk (Figure 7D).

Under these 3 scenarios, it would not be meaningful to talk about deindustrialization or to keep the financial sector responsible for it.

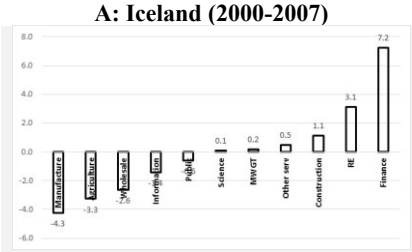
Table 1: The percentage share of the proportional change in the finance and manufacturing sectors among other sectors in 35 countries

	2000-2007				1995-2018		
	Manufacture	**Finance**	**Man*Fin**		**Manufacture**	**Finance**	**Man*Fin**
Australia	37.2 (1/7)	0	0		57.8 (1/5)	11.2 (4/6)	6.5
Austria	3.3 (6/7)	0	0		18.9 (3/7)	0	0
Belgium	56.4 (1/6)	0	0		90.3 (1/6)	0	0
Canada	85.0 (1/4)	8.6 (4/7)	7.3		88.0 (1/4)	8.6 (5/7)	7.5
Czech Republic	0	13.3 (4/7)	0		0	7.0 (2/6)	0
Denmark	63.5 (1/4)	23.8 (2/6)	15.1		36.6 (1/6)	6.3 (5/5)	2.3
Estonia	15.7 (5/7)	8.1 (3/4)	1.3		34.7 (1/6)	9.0 (4/5)	3.1
Finland	62.1 (1/4)	0	0		60.4 (1/5)	0	0
France	68.8 (1/5)	0	0		70.2 (1/5)	0	0
Germany	0	7.1 (7/7)	0		0	0	0
Greece	17.2 (3/4)	0	0		10.2 (4/5)	0	0
Hungary	7.6 (4/6)	21.2 (3/5)	1.6		0	0	0
Iceland	34.9 (1/5)	59.4 (1/6)	20.7		44.1 (1/4)	14.7 (3/7)	6.5
Ireland	58.2 (1/4)	25.3 (1/7)	14.7		0	0	0
Israel	21.6 (2/5)	15.2 (3/6)	3.3		40.8 (1/6)	0	0
Italy	41.6 (1/6)	15.9 (3/5)	6.6		58.1 (1/5)	2.1 (6/6)	1.2
Japan	12.5 (4/5)	23.3 (2/6)	2.9		32.8 (1/7)	0	0
Korea, Rep.	14.4 (4/6)	16.8 (3/5)	2.4		0	0	0
Latvia	33.6 (1/6)	16.0 (3/5)	5.4		46.8 (1/4)	0.6 (7/7)	0.3
Lithuania	11.7 (5/7)	14.4 (3/4)	1.7		0	0	0
Luxembourg	30.8 (2/8)	57.3 (1/3)	17.7		62.1 (1/6)	20.8 (3/5)	12.9
Mexico	57.0 (1/5)	24.1 (2/6)	13.7		21.2 (2/5)	4.1 (5/6)	0.9
Netherlands	36.3 (1/5)	0	0		51.6 (1/6)	0	0
New Zealand	63.7 (1/5)	0	0		67.9 (1/4)	14.8 (4/7)	10.1

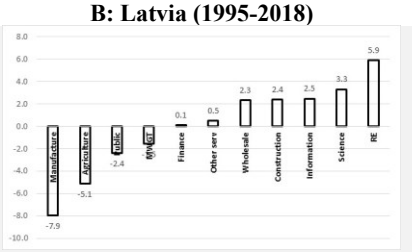
Norway	17.5 (2/7)	20.0 (3/4)	3.5		44.7 (2/4)	4.5 (5/7)	2.0
Poland	0	0	0		26.1 (2/7)	15.4 (3/4)	4.0
Portugal	56.0 (1/4)	34.6 (1/7)	19.4		35.9 (1/4)	0	0
Slovak Republic	12.0 (4/5)	23.8 (2/6)	2.8		26.9 (1/5)	0	0
Slovenia	30.4 (1/6)	0	0		23.7 (3/7)	0	0
Spain	45.8 (1/5)	11.2 (4/6)	5.1		37.4 (1/7)	0	0
Sweden	50.4 (1/6)	0	0		61.8 (1/5)	0	0
Switzerland	0	3.2 (4/4)	0		20.6 (3/4)	12.8 (3/7)	2.6
Turkey	24.8 (3/3)	0	0		31.2 (2/4)	0	0
The UK	58.3 (1/6)	46.3 (1/5)	27.0		73.0 (1/4)	6.7 (5/7)	4.9
The US	58.7 (1/5)	0	0		74.8 (1/5)	12.9 (5/5)	9.6

Figure 8: The proportional change in the sectoral share for selected countries

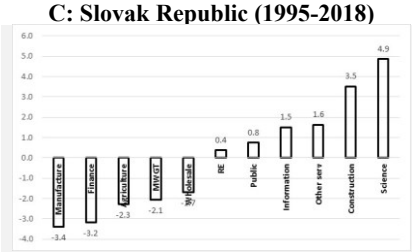
A: Iceland (2000-2007)



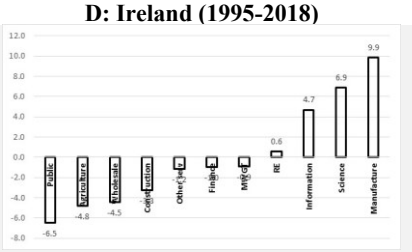
B: Latvia (1995-2018)



C: Slovak Republic (1995-2018)



D: Ireland (1995-2018)



Note: The sectors are Agriculture, forestry, fishing (Agriculture); Manufacturing; Construction; Wholesale, retail trade, repairs, transport; accommodation, food services (Wholesale); Information, communication (Information); Finance and insurance (Finance); Real estate (RE); Professional, scientific, support services (Professional); Public administration, defense, education, health, social work (Public); Other services activities (Other serv.); MWGT (mining, water, gas, transport)

It is useful to examine the data in 2 separate periods, 2000-2007 and 1995-2018. In most of these countries, there was an extraordinary increase in the share of the financial sector due to the bubble economies that occurred during the 2000-2007 period. Therefore, it can be expected that the effect of the expansion in the financial sector on the manufacturing industry (and other sectors) will be stronger in the 2000-2007 period. Examining the same relationship between 1995 and 2018 will show how the relationship between finance and the manufacturing industry has changed over a longer period. The cells where *zero* is entered in the table show either a decrease in the share of the financial sector or an increase in the share of the manufacturing industry, in which case there is no evidence to support the financialization thesis.

A detailed examination of the table provides some interesting findings. First, there is no meaningful relationship between 'financialization' and deindustrialization (zero values in the table) in 16 (45.7%) countries in the period 2000-2007 and for 20 (57.1%) countries in the period 1995-2018. In only 10 countries (28.6%) there is a meaningful link between the financial

and manufacturing sectors in both periods. In 11 (31.4%) countries there is no meaningful link in both periods and in 14 countries (40%) there is a meaningful link in only one period. Therefore, only in 10 countries, financialization thesis can somehow be supported.

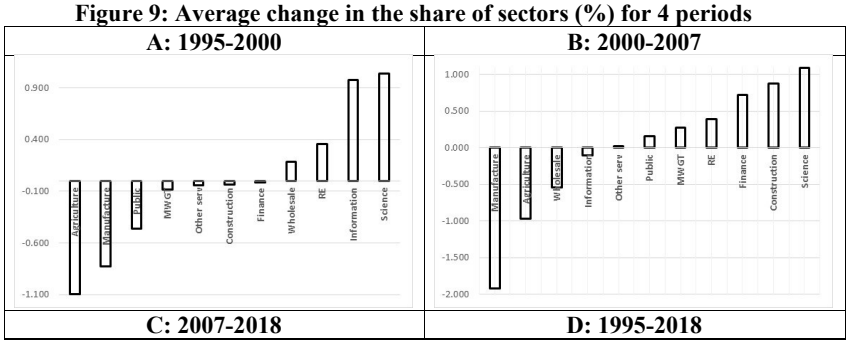
A closer inspection of these figures is needed to assess how important is the financial sector expansion for the decline in manufacturing in these countries. In only 11 countries the figures in Table 1 for the financial sector exceeded 20% and only in 4 countries exceeded 30% in the 2000-2007 period. In the 1995-2018 period, only 1 country exceeded 20% and no country exceeded 30%.

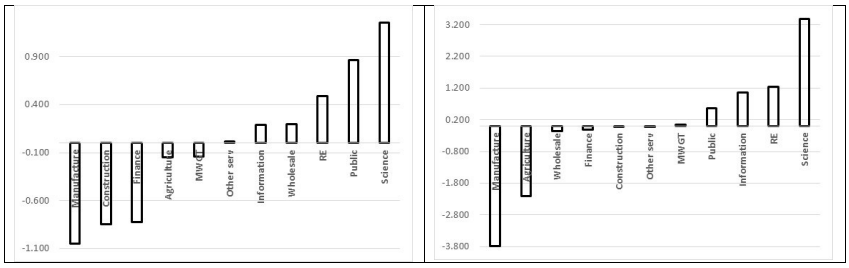
In the 2000-2007 period, the 'construction' sector was the fastest-growing sector in 7 countries, science in 6 countries, finance and RE in 5 countries, public in 4 countries, MWGT in 3 countries; manufacture and wholesale in 2 countries and information in 1 country. In the 1995-2018 period, the science sector was the fastest growing sector in 19 countries, RE in 7 countries; MWGT, public and wholesale in 2 countries; construction, information, and manufacture in 1 country. In no country was the finance sector the fastest growing sector in the 1995-2018 period. In the 2000-2007 period, the financial sector was ranked first in 5 countries, was ranked second in 4 countries. In the 1995-2018 period, while there was no country in which the financial sector was ranked first and second, only in 4 countries it was ranked third. Also, the increases observed in the share of the financial sector in the 2000-2007 period were reversed in the 1995-2018 period and most countries experienced a rapid decline. For example, the figure went down from 59.4% to 14.7% in Iceland, from 57.3% to 20.8% in Luxembourg and from 46.3% to 7.7% in the UK.

These findings suggest that sectors other than the financial sector may have played a more significant role in the decline of the manufacturing sector. The expansion in the financial sector may have contributed most to the decline in the manufacturing industry in the 2000-2007 period, which indicates that financialization is a cyclical development specific to this period. In the 1995-2018 period, the increase in the professional, public, and information services and real estate sector came to the fore rather than the increase in the financial sector.

To support this discussion, Figure 9 shows the average change in the share of sectors for 4 periods in 35 countries. In the 2000-2007 period, the finance sector was the fastest-growing sector after the science and construction sector (Figure 8B). As opposed to this, the share of both finance and construction sectors decreased in both the 1995-2000 (Figure 8A) and 2007-2018 (Figure 8C) periods. The decline in both sectors is remarkable in the 2007-2018 period. As a result, in the 1995-2018 (Figure 8D) period, the share of both sectors declined slightly. While the manufacturing and agriculture sectors declined significantly in all periods; science, RE, and information and public are the increasing sectors. The increase in science is particularly noteworthy.

Figure 9: Average change in the share of sectors (%) for 4 periods





In conclusion, it is another myth that financialization played an important role in deindustrialization. Although a relative shrinkage was observed not only in the manufacturing industry but also in other sectors due to the expansion in the financial sector due to the bubble economies formed in 2000-2007, a normalization trend started with the collapse of the bubble.

Myth 4: Financialization originated from financial liberalization

Another argument of the FH is that financialization is related to financial liberalization (Karwowski, Shabani and Stockhammer 2017, Krippner 2011, Soener 2020). The fact that countries such as China, Taiwan and South Korea, which are not financially liberal and not identified with financialization, are at the forefront of financialization shows the importance of testing this thesis empirically.

The following simple regression analyses were used to test this thesis. The first regression examines the relationship between the share of the financial sector in national income and financial freedom for 2007 just before the crisis, while the second regression examines the same relationship in terms of changes between 1998-2007.

1. Financial sector share = f (financial freedom)
2. Change in financial sector share = f (change in financial freedom)

In other words, the first regression aims to analyze the effect of financial liberalization level on the financialization level and the second one aims to analyze the effect of change in financial liberalization on the financialization level.

Table 2: Statistical test of the relationship between financialization and financial freedom

	Constant	Financial freedom	Iceland dummy	Turkey dummy	R^2	F	DW
Regression 1	0,976 (1,05)	0,167 (0,752)			0,015	0,566	2,04
Regression 2	0,098 (2,40)	0,218 (1,67)	0,996 (4,88)	-0,912 (-4,40)	0,722	19,13	1,90

Note: 37 countries were used in the analysis. The data has been converted into logarithmic form. Dummy variables for Iceland and Turkey were used in the second regression since these countries created normality problems.
Source: Financial sector share data from OECD and financial freedom data from Heritage Foundation.

The regression results show no significant statistical relationship between financial liberalization and financialization level, neither in terms of level nor change. Therefore, the view that financial liberalization is the main cause of financialization is another myth, and the reasons for the expansion in the financial sector in a certain period should be investigated more carefully.

CONCLUSIONS

This paper argued that the FH fails to present a credible analysis of contemporary capitalism and it is marred by both analytical and empirical weaknesses.

In analytical terms, all FH variants (with the noteworthy exceptions of Fine's and Gullen's analyses) err in considering the financial system as an autonomous producer of economic wealth; not only independent from 'real accumulation' but also surpassing productive capital in wealth-creating capacity. Especially the FH variants that propose a novel financial direct exploitation; mechanism equates unwarrantedly capitalism with the pre-capitalist forms of finance that have ceased to exist long ago. Moreover, the FH tends to interpret short-run and conjunctural phenomena (such as the rise of finance during the onset of a crisis) as long-run structural changes. Thus, in methodological terms, the FH is truly a middle-range theory crawling behind conjunctural events and unable to produce a general theory.

These analytical deficiencies are coupled with seriously flawed empirical expectations. This study tested several crucial FH empirical suggestions and showed that they are largely just myths. First, the claim that most of the largest multinational companies are financial is rejected. Second, regarding the share of the financial sector in national income and its change over the last 30 years, China is ahead of the US and the UK in terms of both level and rate of increase. China, known for its rapid industrialization, is not a country associated with financialization. The question to be asked here is why an industrial giant like China needs a bigger financial sector than the US and why the rapidly increasing financial sector share does not prevent China's industrialization. Another important fact that fails to support the FH is that over the last 30 years the financial sector share in GDP declined by 51.2% and the financial sector share in services declined in 65.9% of the countries in our study. Third, there is no evidence that the expansion in the financial sector is a significant predictor of the decline in the manufacturing industry. Although the rapid expansion in the financial sector observed in some countries before the 2008 crisis suggests that the financial sector may have played an important role in deindustrialization, this situation seems to be cyclical when it comes to a wider time frame.

Finally, there is no significant statistical relationship between financial liberalization and financial expansion.

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