

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Kaldor, Yair

Article — Accepted Manuscript (Postprint)
Financialization and Fictitious Capital: The Rise of Financial
Securities as a Form of Private Property

Review of Radical Political Economics

Suggested Citation: Kaldor, Yair (2022): Financialization and Fictitious Capital: The Rise of Financial Securities as a Form of Private Property, Review of Radical Political Economics, ISSN 1552-8502, Sage Publishing, Thousand Oaks, CA, Vol. 54, Iss. 2, pp. 239-254, https://doi.org/10.1177/04866134211068885

This Version is available at: https://hdl.handle.net/10419/267901

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



Financialization and fictitious capital: the rise of financial securities as a form of private property

Yair Kaldor

University of Haifa, Department of Sociology

Abstract

In recent decades, financial securities have become a dominant form of private property,

accounting for much of the growth of wealth around the world. But what kind of property are

financial securities? What are the sources of the income they provide, and what are the social

relations that underlie its flow? This article addresses these questions through the Marxist

category of fictitious capital. Focusing on corporate stocks and bonds, the article shows that the

social relations expressed in these securities are based on the relation of capital and labor and the

exploitation of workers in the sphere of production. It concludes that although the rise of

financial securities leaves the basic conflict between capital and labor intact, it opens new

strategies within this class struggle.

Keywords: Marxist economics, class, property, money and finance, capital accumulation

JEL classification: B51, E44, P10

1

1. Introduction

From stocks and bonds to exotic credit instruments, financial securities have become a salient aspect of capitalist economies in recent decades, accounting for much of the growth of wealth around the world (Piketty 2014). Indeed, if *financialization* is understood as the increasing size and importance of financial markets, institutions, and activities (Epstein 2005), then one of its key aspects is the rise of financial securities as a dominant form of property. But what kind of property are financial securities? How do they differ from other forms of property? What are the sources of the income they provide their owners, and what are the social relations that underlie its flow?

These questions are largely neglected in the literature on financialization, which tends to focus on finance as an activity rather than a form of property. However, they are critical for analyzing financialization from a Marxist perspective, which prioritizes the sphere of production as the source of the newly created value that is distributed across the economy. It is within the production process that workers necessarily confront capital as the property of others, to whom they must sell their labor power to obtain their means of sustenance. Here lies the secret behind the creation of surplus-value, which enables capital to increase its value through the exploitation of labor (Basu 2014). Financial securities, however, play no direct role in production. Unlike machines, equipment, or raw materials, they do not come into contact with the workers who employ these means of production. For Marx, these financial securities are not capital at all, but a form of *fictitious capital*—fictitious not because they are not real or the income they provide is an illusion, but because they are not really capital, only a contractual claim on future income that is ultimately produced with capital.

The category of fictitious capital can provide valuable insights into the nature of financial securities and enrich our understanding of processes associated with financialization. Thus, it is not surprising that recent studies pay more attention to this category after it has been largely neglected in the Marxist tradition throughout the twentieth century (e.g., Vasudevan 2009; Ivanova 2011; Sotiropoulos et al. 2013; Fine 2014; Chesnais 2016; Durand 2017). These scholars identify some of the key aspects of fictitious capital and examine its impact on the development of capitalism in recent decades. However, there is still a lack of theoretical clarity regarding this category as well as its relation to other Marxist categories, including the various forms capital takes as it moves between the spheres of production and circulation.

The present article addresses these issues to provide a clearer exposition of fictitious capital that can provide a more solid basis for an analysis of financialization. Drawing on Marx's circuits of capital model, I focus specifically on corporate stocks and bonds to trace the sources of their fictitious value and their relationship to the movement of industrial capital. I then proceed to examine the circulation of these securities on the stock exchange and draw out its implications on the historical development of the class struggle between capital and labor in recent decades.

2. Fictitious capital since the financial crisis

The category of fictitious capital is introduced in the third volume of *Capital*, where Marx explains that fictitious capital can be formed through the "capitalization" of any regularly occurring income (1991 [1894]: 597). This is accomplished by treating this income as a return on some capital, regardless of its actual source, and calculating the (fictitious) value of this (fictitious) capital based on this income and the average rate of interest. For example, if someone

receives an annual income of \$1,000 and the average rate of interest is 5%, then this income can be viewed as interest on loaned capital of \$20,000. Marx proceeds to identify two main forms of fictitious capital that were common at the time: government bonds and corporate shares. These financial securities, he argues, represent nothing but accumulated claims to future income: "their money or capital value either does not represent capital at all, as in the case of national debts, or is determined independently of the real capital value they represent" (Marx 1991: 599).

Unfortunately, Marx did not go much further in his analysis of fictitious capital.¹ Hilferding (1981 [1910]) made use of this category in his study of *Finance Capital*, but it received little attention in the Marxist tradition throughout the rest of the twentieth century (Chesnais 2016). Things started to change following the financial crisis of 2007-2008, which provided a stark demonstration of how quickly the fictitious value of financial securities can vanish into thin air. Not surprisingly, the notion of fictitious capital is often mentioned in the context of the mortgage-backed securities that were at the center of the crisis (e.g., Blackburn 2009; Ivanova 2011; Chesnais 2016). It is also deployed to examine the massive growth of financial derivatives in general (e.g., Norfield 2012; Sotiropoulos et al. 2013), the role of the U.S. dollar as "world money" (e.g., Vasudevan 2009; Ivanova 2013), and more broadly to assess various developments associated with financialization (e.g., Chesnais 2016; Durand 2017; Mavroudeas and Papadatos 2018). These studies identify some of the key aspects of fictitious capital and discuss their implications. However, there is still a lack of theoretical clarity regarding this category, and a

¹ Marx's unfinished writings on the topic were collected posthumously by Engels and incorporated into Part V of *Capital Vol. III*. Engels himself complained in the preface that Marx left no finished draft or even an outline plan for this part, but that this is nevertheless "the most important subject in the entire book" (Marx 1991: 94).

need to examine more closely how it relates to more familiar Marxist categories, including the various forms capital assumes as it moves between the spheres of production and circulation.

Much of the existing confusion revolves around the relationship between fictitious capital and the category of *Interest-Bearing Capital* (IBC), which Marx uses to denote sums of money that are loaned as capital for investment in production. Thus, Sotiropoulos et al. (2013) view IBC as a form of fictitious capital, while Mavroudeas and Papadatos (2018) argue that it is fictitious capital that is a form of IBC. Fine is more circumspect when he argues that fictitious capital refers to the "independent circulation of IBC in paper form" (2013: 50) while noting that the distinction between these categories has become far from clear due to the massive growth of "hybrid" forms of capital that combine elements from both (2013: 56). Bryan and Rafferty make a similar point concerning financial derivatives, which "blend different forms of capital into a single unit of measure" (2006: 12). However, they conclude that we should drop entirely the distinction between "fictitious" and "real" forms of capital since it tends to shut down any inquiry "into what is new and dynamic about capital's use of finance" (2012: 108).

No doubt, the financial system today is far more complex than it was in the late nineteenth century, and contemporary forms of fictitious capital are much more numerous than the few examples discussed by Marx. However, these developments hardly blur the distinction between fictitious capital and IBC, not in the least because the latter is still a real form of capital, even if it is capital in its "most superficial and fetishized form" (Marx 1991: 515). Far from being autonomous from the process of production, money that is advanced as IBC is actually incorporated into the industrial capital that passes through the process of production and cannot be distinguished from it in this form. It is "the same capital that appears in a double capacity" (Marx 1991: 486), as IBC from the standpoint of the lender and as industrial capital from the

standpoint of the borrower, i.e., the functioning capitalist. The lender lends his money as capital, "and as capital it has to pass through the functions of capital, which include the circuit of money capital right through to its return to its starting-point in the money form" (Marx 1991: 471).

David Harvey also links fictitious capital with the independent circulation of IBC, suggesting that the "free-flow" of IBC is "enhanced by the existence of fictitious forms of capital" (2006: 270) and that it is only through the markets for fictitious capital that "the continuity of flow of interest-bearing capital can be assured" (2006: 277). In more recent work, Harvey again discusses the "autonomy and independence" (2013: 175) of IBC from the surplus value created through the process of production, which leads him to conclude that Marx was unable to accommodate its independent circulation within the general framework of Capital (2013: 187). Chesnais, who draws much from Harvey, also discusses "the autonomy of interestbearing capital and the fictitious forms of capital it takes," yet insists that this autonomy is necessarily temporary, and can never free itself from its dependency on the production process (2016: 88). Durand, who places fictitious capital at the heart of his analysis of financialization, hardly discusses IBC or the relationship between these two categories. However, he does argue that "the exchange of loan-capitals is a means of valorization of capital that is de-correlated from productive activity that gives rise to fictitious capital" (Durand 2017: 50), which is very close to the position held by Harvey and Chesnais. Lapavitsas (2014), In contrast, insists that it is not fictitious capital but IBC that is at the root of financialization, and thus hardly makes use of the former category or discusses the relationship between the two.

The ambiguity regarding the relationship between fictitious capital and IBC is not too surprising, given that Marx states that "the form of IBC makes any definite and regular monetary revenue appear as the interest on a capital, whether it actually derives from a capital or not"

(1991: 595). However, this is not because IBC itself is somehow transformed into fictitious capital, or that the latter enables the free circulation of the former. Rather, it is because the form of IBC makes the rate of interest appear as "a uniform, definite and palpable magnitude" (Marx 1991: 487), while it actually reflects the division of the gross profit between two types of capitalist—a money capitalist (lender) and an industrial capitalist (borrower). It is only once the rate of interest is viewed as independent from the rate of profit that every periodic income can be calculated as a return on some (fictitious) capital. In this way, the valuation of fictitious capital inverts the actual relation between capital and interest that still exists in IBC: rather than calculating the expected return based on the value of the advanced capital, with fictitious capital it is the expected return that is used to calculate the "current" value of the fictitious capital.

While the ambiguity surrounding fictitious capital and IBC does not invalidate the insights provided by these recent studies, it does point to the need for a clearer theoretical demarcation between these categories, and a better understanding of the relationship between fictitious capital and the circuits of capital described by Marx. Such an understanding, as this article aims to show, can shed light not only on the growing importance of financial securities as a form of property, but also on its implications for the development class struggle between capital and labor in recent decades, a topic that received little attention in the financialization literature so far (Kaldor 2021).

To provide these necessary clarifications, I begin with an outline of Marx's model of the circuit of capital, clearly identifying the role of IBC within this process. I then proceed to compare this unique form of capital with fictitious capital in the form of corporate stocks and bonds. I continue to examine the circulation of these forms of fictitious capital on the stock exchange, and then turn to examine how the growth of fictitious capital affects the ongoing

conflict between labor and capital. I conclude by discussing the ideological effect of the rise of financial securities and how it contributes to the unity of the capitalist class as a whole.

3. Fetishism and interest-bearing capital

Property, of course, is always already a social relation. As law scholars also recognize, the property rights of anyone are necessarily also an exclusion of others from the same right (e.g., Cohen 1954; Singer 2000). It is this ability to exclude others that allows the owner of private property to receive income by renting it out for a given period. The owner maintains ownership over the property throughout the period; what is sold is not the property itself, but the right to use it for a fixed period.

Capital too is a form of property from which workers are excluded. However, capital also involves another social relation that is based on exchange rather than exclusion, and specifically exchange with wage labor. Workers exchange their labor power for a share of the capital value paid in the form of a wage, and it is only through this relationship with labor that a thing becomes capital. This relation is implicit even in mainstream economics, which defines capital as buildings, machines, and other durable assets that are "produced in order to produce yet other goods" (Samuelson and Nordhaus 2010: 9). Since such objects do not engage in production by themselves, it is clear that someone must put them into use.

For Marx, however, capital does not exist as an innate object at all, but only in its general movement between the spheres of production and circulation, "as value in process" (Marx 1992 [1885]: 211). It is through this process that capital expands itself by generating surplus value that can be then transformed into new capital, and it is only in this movement that the advanced value

actually becomes capital. This receives a visual representation in Marx's circuit of industrial capital, which includes the various forms assumed by capital in its movement:

$$M \rightarrow C < \stackrel{MP}{\iota_{P}} \dots P \dots C' \rightarrow M'$$

This process consists of three stages. In the first stage, money is exchanged for commodities $(M\rightarrow C)$ in the form of means of production (MP) and labor power (LP). In the second stage, these commodities are consumed through the process of production (...P...) and a new commodity emerges on the other side. In the third stage, the new commodity is exchanged for a sum of money $(C'\rightarrow M')$ with a greater value than the value of the money at the beginning of the process (M< M'). This surplus-value, i.e., the difference between M and M', is created through the exploitation of workers in the process of production (Basu 2014). The end of the cycle is also the starting point for a new cycle, in which the whole process repeats itself. In this way, capital increases itself, and it is this property of self-expansion that makes it into capital.

It is important to remember that for Marx, the different forms capital takes, i.e., money capital, commodity capital, and productive capital, are not distinct types of capital that exist independently of one another. Rather, they are different moments in the total circuit of *industrial capital*. In other words, money capital, commodity capital, and productive capital are different forms assumed by the same industrial capital during its circuit. They are "particular functional forms of industrial capital, which takes on all three forms in turn" (Marx 1992: 133).

IBC enters into the picture when the industrial capitalist, rather than using his own capital, borrows the initial money needed to begin this process. This act is "a legal transaction which has nothing to do with the actual reproduction process of capital, but simply introduces it" (Marx

1991: 469). Marx links this form of capital to the circuit of industrial capital by adding two stages to the process:

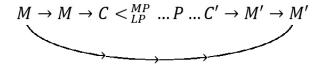
$$M \to M \to C <_{LP}^{MP} \dots P \dots C' \to M' \to M'$$

Here again money serves as the starting point. However, this time it is in the hands of a lender (money capitalist), who loans it to the industrial capitalist $(M \rightarrow M)$. The additional step at the beginning of the circuit is matched by an additional step at the end of the circuit $(M' \rightarrow M')$, in which the borrowed capital returns to its legal owner with an increment in the form of interest.

Although the sum of money that is advanced by the lender is used by the industrial capitalist as money capital, from the standpoint of the lender this money is advanced as IBC. The difference between the two is not to be found in their material form—which appears in both cases as money—but in the way they function for the lender and borrower. In the hands of the industrial capitalist, money capital is used as money, not as capital. It functions as the means of payment for labor power and the means of production, not as a self-expanding value. This also holds for commodity capital (C'), which is sold like any other commodity. Money and commodities become capital not because of the way they act in a specific moment of the circuit, but because of the way this act is connected with the overall circuit of capital (Marx 1991: 464). Things are different with IBC. Here money is advanced from the very start as capital, i.e., as a value capable of creating more value, of producing an average rate of profit. What the lender transfers to the borrower is the ability of money to function as capital, an ability that already presupposes the capitalist mode of production. It is only on the basis of capitalist production that it becomes possible to transform any sum of money into "self-expending value", i.e., into capital that can produce an average rate of profit (Marx 1991: 459).

The first step in this extended circuit, i.e., the transfer of IBC from lender to borrower, also differs from the original circuit of industrial capital in that it does not include an exchange of equivalent values (Marx 1991: 466). In the circuit of industrial capital, the transformations of money into commodity and commodity into money represent an exchange of equivalents. The value of the money capital at the beginning of the circuit is equal to the value of the means of production and labor power it buys (M=C) and the money at the end of the circuit is equal to the value of the commodity produced (C'=M'). The difference between the sums of money at the beginning and the end of the circuit (M<M') reflects the surplus value that is created in the process of production (...P...).

The transfer of money from lender to borrower, in contrast, is not considered by Marx as an act of exchange. When money is advanced in the form of IBC, no equivalent value is received. The money capitalist does not exchange this IBC but transfers it for a fixed period, at the end of which it returns to its starting point with interest. Thus, from the standpoint of the lender, the circuit of IBC appears simply as $M\rightarrow M'$, and the entire process of production falls out of view. This is why Marx regarded IBC as the most superficial and fetishized form of capital. Here it appears as if money is capable of creating value and yielding interest all on its own, "as it is the property of a pear tree to bear pears" (Marx 1991: 516).



The critical point here is that IBC—just like money capital, productive capital, and commodity capital—is not an autonomous form of capital that exists independently alongside the other forms of capital. Rather, it is incorporated into the industrial capital, as the loaned money

capital is used to buy labor power and means of production. It appears as IBC only from the standpoint of the lender (money capitalist), while it functions as money capital, productive capital, and commodity capital for the functioning capitalist, and cannot be distinguished from them during this process. It is the very same capital that appears in a double capacity. Yet this capital "functions only once, and produces profit only once. In the production process itself, "the character of capital as loan capital does not play any role" (Marx 1991: 486). It is in this sense that "interest-bearing capital is capital *as property* as against capital *as function*" (Marx 1991: 503; italics in origin).² This also means that the income flowing back to the owner of IBC necessarily comes from the surplus value created in the process of production. Thus, although the money capitalist does not directly confront the worker, he nevertheless "participates in the exploitation of labor as represented by the functioning capitalist" (Marx 1991: 504). In other words, the social relation that operates through IBC is based on the relation of capital and labor, which involves the extraction of surplus value through the exploitation of workers.

4. The fictitious value of corporate stocks and bonds

For Marx, the industrial capitalist and money capitalist served as the personification of industrial capital and IBC. While this was a reasonable simplification for his time, the situation has changed with the rise of the modern corporation as a dominant form of business organization. Under the corporate form, capital is no longer owned by any individual capitalist, but by the corporation itself. It receives the form of social capital instead of private capital. For

² The distinction is not between two independent forms of capital, one within and one outside the process of production, but between the relation of the lender (money capitalist) and the relation of the borrower (functioning capitalist) to the very same capital. Thus, Harvey is wrong to argue that "capital as property" refers to capital that exists outside of the actual process of production (2006: 257).

Marx, this development represented "the abolition of capital as private property within the confines of the capitalist mode of production itself" (1991: 567). The socialization of capital under the corporate form, which was only incipient in the late nineteenth century, has become the general rule during the twentieth century (Roy 1997).

The rise of the modern corporation has transferred the control over production to hired managers, and transformed the industrial capitalist into a mere shareholder. However, it did not change the circuit of industrial capital, which still involves the extraction of surplus value through the exploitation of workers. Like the industrial capitalist of the nineteenth century, corporations also rely on money from external sources to finance production. These sums of money can be advanced as debt or equity, against which earn a return in the form of interest or dividends respectively.

External Finance Corporate Sphere Dividends, Interest
$$\widehat{M} \to M \to C < \stackrel{MP}{LP} \dots P \dots C' \to M' \to M'$$

Just like the interest accruing to the money capitalist, the income flowing to corporate shareholders and creditors is ultimately paid from the surplus value created in the production process. And just like the money capitalist, shareholders and creditors do not confront workers directly, yet participate indirectly in the exploitation of labor that takes place within the corporate sphere. Here we find workers oppose managers as the representatives of capital in general, a role Marx assigned to the functioning capitalist, who has now become a mere shareholder removed from the process of production.

Nevertheless, stocks and bonds issued by the corporation are not IBC, but forms of *fictitious* capital. As noted above, money advanced as IBC is actually incorporated into the industrial

capital that passes through the process of production. This is not the case with the securities issued by the corporation, which indeed circulate independently from the circuit of industrial capital. Although these securities might originate from money capital that was once advanced for production, they are no more this capital than a mortgage on a house is the house itself. The original sums of money were already transformed into capital in the form of machines, raw materials, and labor power, which now exist as the property of the corporation itself. This capital "does not exist twice over, once as the capital value of the ownership titles, the shares, and then again as the capital actually invested... It exists only in the latter form, and the share is nothing but an ownership title... to the surplus-value which this capital is to realize" (Marx 1991: 597).

However, it is not their independence from the sphere of production *per se* that makes corporate stocks and bonds into fictitious capital. Commercial capital, for example, also remains outside the sphere of production (Marx 1991: 379-382), yet this does not make it into fictitious capital. Rather, stocks and bonds are fictitious capital because they have no real value of their own, which according to Marx's labor theory of value, is determined by the *socially necessary labor time* expended in production. What is considered as the value of these securities, i.e., the prices quoted on the stock exchange, is not determined by the actual value of the capital assets they are thought to represent (which like other commodities, depends on the socially necessary labor time required for their production). Instead, the valuation of financial securities depends on the future income they are expected to provide, the risk associated with it, and the average rate of interest (Marx 1991: 598-599). Other things being equal, an increase in the expected return would lead to a higher valuation, while an increase in the level of risk and / or rising interest rate would lead to a lower valuation (Damodaran 1994).

In short, the value of financial securities is fictitious because it is imputed value, which does not exist in reality. Therefore, the distinction between fictitious capital and IBC does not depend on whether or not the investment succeeds in producing surplus value.³ Rather, it is a distinction between money that is actually incorporated into the circuit of industrial capital and money that is used to buy a paper claim on the future profit produced with this capital. To be sure, this distinction hardly matters for the investors who buy stocks and bonds: from their standpoint, the money is used as IBC in both cases (Marx 1991: 596). Nevertheless, from the standpoint of the economy as a whole, it is only in the former case that this money functions as capital, produces surplus value, and contributes to capital accumulation. In the latter case, money is simply transferred from one party to another without any effect on the actual functioning capital.

Summarizing the analysis so far, Marx argues that on the basis of capitalist production every sum of money can potentially function as capital and produce an average of profit. This allows the owner of money to loan it as IBC that is used to produce a profit, from which interest is paid. But once it is taken for granted that every sum of money is capable of producing a regular stream of income, the interest rate itself appears to be independent of the rate of profit, which in turn makes every regularly occurring income appear as the product of some original capital. Here also lies the key to understanding other types of financial securities, from government bonds to various asset-backed securities, which have no relation whatsoever to the process of production. Such financial instruments are also a form of fictitious capital since their (fictitious) value is imputed based on the future income they are expected to provide.

³ Clearly, an investment in production can fail even when it is financed by the corporation from its own resources. However, this does not make the money capital so invested into fictitious capital.

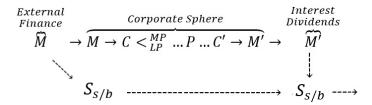
5. The circulation of fictitious capital

When money is loaned as IBC, there is no exchange of equivalents. The money capitalist remains the owner of the IBC even when it is employed by the functioning capitalist, just like a house remains the property of the landlord even when it is occupied by a tenant. With financial securities, in contrast, money is exchanged against the security itself, i.e., against a contractual claim on future income. This contractual claim can be sold again for money just like any other commodity. In this sense, financial securities are indeed *sui generis commodities* (Sotiropoulos et al. 2013: 53). However, this commodity is not capital, as with IBC, but a contractual claim on future income. This is why "the customary description of the stock exchange as the 'capital market' misses the essential nature of that institution" (Hilferding 1981: 131). Rather than capital, the stock exchange mobilizes claims on future income, which increasingly displace capital—now owned by the corporation itself—as a dominant form of capitalist property.

As a form of property, financial securities are specifically designed to be traded on the stock exchange: they are *negotiable*, which means that their legal ownership is readily transferable from seller to buyer; they are also *fungible*, which means that individual units of the same security are interchangeable and cannot be distinguished from one another. Financial securities are also highly *liquid*, which means that they can be bought and sold quickly with a minimal impact on their price. But while securities are fungible and negotiable by design, their liquidity is a matter of degree and depends not only on constantly changing market conditions, but also on the technology used for trading, the laws and regulations governing financial markets, and more. In other words, liquidity is an outcome of historical development. Modern stock exchanges take active steps to ensure the liquidity of financial securities, for example by assigning "market-makers" that trade continuously or installing advanced technological systems that speed up trade

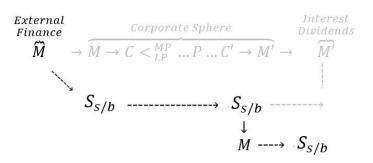
(Carruthers and Stinchcombe 1999; Jain 2003). State regulators often join these efforts through specific policies designed to improve the ease and efficiency of stock trading (Bhide 1993; Holden et al. 2014).

In contrast to IBC, the circulation of financial securities on the stock exchange remains independent from the circuit of industrial capital, and this independence "strengthens the illusion that they constitute real capital besides the capital or claim to which they may give title" (Marx 1991: 598). In the case of corporate stocks and bonds, this movement can be described alongside the circuit of industrial capital as follows:



Here again a sum of money is loaned for production, just like with IBC. However, this time the money is not simply advanced without receiving an equivalent value. Rather, it is exchanged for a financial security in the form of corporate stocks or bonds ($S_{S/B}$). Thus, the circulation of these securities begins with $M \rightarrow S_{S/B}$. In the second step, this security "gives birth" to financial income in the form of dividends or interest. Stocks are never fully transformed into money and remain the property of the shareholder indefinitely. With corporate bonds, it can be said that they are completely transformed into money when they reach *maturity*, i.e., the date on which the life of financial security ends. However, since corporations constantly redeem old bonds and issue new ones, investors can simply transfer their money from one to the other.

The liquidity of financial securities allows investors to convert them back into money at any given moment with great ease. While the nineteenth-century money capitalist had to commit his IBC for a fixed period and could not recover it before it passed through the process of production, modern shareholders and bondholders can quickly withdraw their money by selling the securities they hold. However, this trade in financial securities requires new money that has nothing to do with the money originally exchanged for them. Selling the security at a higher price than it was bought provides a monetary reward in the form of a capital gain. Yet such capital gains do not result from the creation of new value but are the outcome of a zero-sum game between actors on the stock exchange (Pollin 1996; Durand 2017)



The constant flow of new money into the stock exchange is a necessary condition for the growth of fictitious capital and helps sustain its independence from the sphere of production. The extent of this independence was on display following the outbreak of the Covid-19 pandemic early in 2020, as stock exchanges in the U.S. and Europe quickly rebounded even as productive sectors were grinding to a halt. This "disconnect" can be attributed to a large extent to the actions taken by central banks, which helped sustain the liquidity on financial markets (Igan et al. 2020; O'Hara and Zhou 2021). The steps taken by central banks led to a sharp drop in discount rates, which account for much of the upward movement in stock markets both in the U.S. and Europe

(Igan et al. 2020: 9). Similar steps were also taken by central banks in emerging economies (Gubareva 2021; Pordeli et al. 2021).

While the monetary responses to the Covid-19 pandemic might have been "unprecedented" in its scope (Igan et al. 2020: 9), its overall direction is far from new. Central banks have long been pursuing policies that encourage and support the financialization of domestic economies (Gabor 2010; Lapavitsas and Mendieta-Muñoz 2016; Braun and Gabor 2020). Interest rates across most developed economies have been in a downward trajectory since the mid-1980s, fulling the continuous appreciation of fictitious capital on the stock exchange (Guttman 2017; Walter and Wansleben 2020). At the same time, neoliberal reforms aimed at deregulation and liberalization of markets have led to the massive growth of international capital flows that mainly benefitted financial asset holders in advanced economies (Lapavitsas 2014; Chesnais 2016). The rise of institutional investors, including pension funds, mutual funds, and more recently index funds, has provided an ever-increasing flow of money to financial markets that also contribute to their liquidity (Clarck 1998; McCarthy 2014; Fichtner 2020). In short, many of the developments associated with financialization have contributed, in one way or another, to the massive growth of fictitious capital and sustained its independence from the ebbs and flows of productive sectors.

However, this does not mean that the accumulation of fictitious capital is responsible for the slowdown in real capital accumulation, as is often suggested in the financialization literature (e.g. Lazonick and O'Sullivan 2000; Stockhammer 2004; Orhangazi 2008). Rather, the causal link runs in the opposite direction: it is the problem of overaccumulation and global excess capacity that persisted since the early 1970s which is at the root of the shift toward finance. In this sense, the flow of money to financial markets should be viewed as "a symptom of global

overaccumulation, as it points to falling rates of return on capital investment" (Ivanova 2011: 867; see also Brenner 2006; Benanav 2020).

6. Fictitious capital and class struggle

While capital gains from trading in securities are a "zero-sum game", the dividends and interest payments flowing to corporate shareholders and bondholders are a part of the gross profits generated in production. This means that the contractual claims represented in these securities depend on the capitalist relations of production and presuppose their existence. In other words, the social relation that operate through corporate stocks and bonds is ultimately based on the social relation of capital and wage-labor, and the extraction of surplus value created in the sphere of production through the exploitation of workers. Other things being equal, higher wages mean lower gross profit, from which both dividends and interest are also paid.

It is not surprising, therefore, that economists find that strikes and labor disputes are associated with a decline in stock prices (e.g., Becker and Olson 1986; Abowd 1989; Nelson et al. 1994; Dinardo and Hallock 2002), while wage concessions and approval of "right-to-work" laws contribute to rising stock prices (e.g., Becker 1987; Thomas et al. 1995; Abraham and Voos 2000). Evidence of the link between labor disputes and stock prices can also be found in the financial media, and this is perhaps the only context in which it covers labor-related issues (for recent examples see Kilgore 2017; Meijer and Kar-Gupta 2018; Owusu 2018; Riley 2018). The online retailer Amazon provides a recent example: after workers in Alabama voted against forming a union, Amazon's stock gained 2.04 percent—its largest single-day increase in seven weeks (Deagon 2021).

Although the rise of financial securities as a dominant form of property leaves the basic conflict between capital and labor very much intact, it opens up new strategies and courses of action within this class struggle. Such strategies are made possible, first, because fictitious capital in the form of stocks and bonds represents a contractual claim on the future surplus value and as such can preempt wage demands by committing this income in advance; and second, because these securities are intangible, fungible, and highly liquid, and thus provide enormous flexibility to the capitalist class in shifting money between industries, escaping the control of governments, and subordinating rules and regulations to their requirements. These strategies help explain the negative impact of financialization on the bargaining power of trade unions noted by some scholars (e.g., Tomaskovic-Devey and Lin 2013; Hein et al. 2016). Indeed, the shareholder value model that has come to dominate the sphere of corporate governance in the age of financialization is in essence a menu of such strategies. Officially intended to "maximize" the value for investors, the prescriptions of its proponents—including increased dividend distribution, stock buybacks, and the substitution of debt for equity—have nothing to do with the creation of "new" value, only with the distribution of value already produced by the corporation.

The dispersion of stock ownership, which gives rise to the agency costs that the shareholder value model is supposed to eliminate (e.g., Jensen and Meckling 1976), also means that shareholders are less exposed to the risks associated with any individual corporation, since they hold a diversified portfolio with stocks in various firms. For the same reason, dispersed stock ownership undermines the power of organized labor, since the main threat of unionized workers—the economic damage they can inflict on their employer—is much less effective when each shareholder has a very small stake in the corporation. The substitution of debt for equity, which is described by agency theorists as a method to "discipline" managers (e.g., Jensen 1986),

is more likely to discipline workers since it commits future income that could otherwise be used for wage increases. A long-standing scholarship in financial economics actually recommends the use of corporate debt as an effective "negotiation device" to extract wage concessions from organized labor (e.g., Perotti and Spier 1993; Hanka, 1998; Klasa et al. 2009; Matsa 2010).

Financialization is also bound with the globalization of production and the international division of labor (Milberg 2008; Smith 2016; Auvray and Rabinovich 2017). Indeed, much of the value distributed to shareholders in advanced economies is created through the exploitation of low-wage workers in the Global South. Here the negative impact of financialization on labor is compounded by a subordinate position in international financial markets (Lapavitsas 2014; Bonizzi et al. 2020), and power asymmetry between multinational corporations and their southern suppliers (Palpacuer 2008; Newman 2012; Froud et al. 2014). Governments actively seek to improve their "investment climate" by easing labor laws and repressing militant unions (Ness 2015; Suwandi 2019). Local elites—especially those incorporated into global value chains or international finance—are often more than happy to accommodate these demands, from which they have much to gain (Robinson 2012).

The growing centrality of finance in recent decades helps obscure these exploitative relations and uneven exchanges. While scholars emphasize the growing reliance of nonfinancial corporations (NFCs) on income from financial investments as a key indicator of financialization at the firm level (e.g., Krippner 2005), a large share of this income actually comes from

⁴ Recently in India, PM Narendra Modi chaired a "Virtual Global Investor Roundtable" with top global fund managers, where he took pride in the recent labor law reform—strongly opposed by trade unions and labor activists for its "anti-worker" provisions (Jayaswal 2020). In Indonesia, a "Job Creation Act" designed to attract foreign investments led to massive protests across the country. According to the International Trade Union Confederation, the bill would cut wages, remove sick leave provisions, and undermine job security (Moss 2020)

dividends distributed by foreign subsidiaries to their parent firms in advanced economies (Fiebiger 2016). Foreign direct investment (FDI) is also increasingly channeled through a complex web of related entities, leading the Bank of International Settlements to discuss the "financialization of FDI", which has become "less and less a reflection of real investment or the expansion of production technologies" (López and Stracca 2021: 6-7). At the same time, the growing use of arm's length contracting, also known as "non-equity modes of production", makes the extraction of surplus value from low-wage workers in the Global South completely invisible, since most of the product's value is attributed to the branding and marketing activities of lead firms in advanced economies (Smith 2016; Suwandi 2019). This adds another degree of separation between corporate stocks and bonds and the real capital employed in production, which is no longer owned by the corporation itself but by the producers and suppliers in low-wage countries.

The growth of fictitious capital in the form of corporate stocks and bonds, evident in their rising prices on the stock exchange, cannot be fully understood without taking into account the intersections of financialization and globalization, the international division of labor, and the ongoing class struggle between labor and capital on a global scale. As Smith succinctly concludes, "the rising weight of financial assets and their associated revenue streams... is to a significant extent a materialization of surplus-value extracted from super-exploited workers in low-wage countries" (2016: 299). The income flowing to shareholders and bondholders in advanced economies, which provide the basis for the valuation of these securities, increasingly

⁵ Both Froud et al. (2014) and Smith (2016) use the well-known example of Apple and the contract manufacturer Foxconn, showing how according to national accounts and financial flows statistics, the Chinese workers who produce Apple's iPhone contribute almost nothing to its final selling price, which is mainly attributed to value added created by Apple itself within the U.S.

represents the appropriation of surplus value created in the Global South, which is used for dividend distribution and stock buybacks that push up stock prices while increasing the concentration of wealth. The form of these securities, however, tells us nothing about this process of production or its conflictual nature. The sources of their income, the social relations it presupposes, and the legal infrastructure that ensures its flows, all remain hidden behind their legal-contractual form. Thus, "on the stock exchange capitalist property appears in its pure form, as a title to the yield, and the relation of exploitation... upon which it rests, becomes conceptually lost" (Hilferding 1981: 149).

With the growing centrality of financial securities as a form of property, the stock exchange increasingly serves as a center of communication between corporate managers, shareholders, and bondholders. CEOs communicate with investors through public announcements, periodical reports, and financial statements. Changes in stock prices transmit a "reply" back to managers, and stock-based compensation ensures they are always attuned to the judgment of "the market". Labor, of course, is excluded from this "conversation". Nonetheless, the contractual claims of stocks and bonds establish a social relation between workers and outside investors, as their claims are for a share of corporate profit, which is inversely related to the wages of workers. Thus, the basic conflict between labor and capital remains much the same as it was before the rise of finance. However, this conflict remains hidden behind the daily operations of the stock exchange, the constant buying and selling of stocks and bonds, which have nothing to do with the actual production process that takes place within the corporation.

7. Conclusion

The growing importance of financial securities as a form of private property is one of the key aspects of financialization. This form of property is mainly concentrated in the hands of the wealthiest members of society and has become even more so in recent decades (Saez and Zucman 2016; Wolff 2016). Indeed, the power of the capitalist class today appears to reside less in the direct ownership over the means of production, and more in the paper claims it holds over the surplus value produced by labor.

The category of fictitious capital helps us conceptualize the relationship between corporate stocks and bonds and the process of production, and reestablish the link between the circuit of industrial capital and the prices quoted on the stock exchange. While many scholars view financialization as a novel stage of capitalism, characterized by the growing independence of finance from the "real" economy, the category of fictitious capital reminds us that the income flowing to corporate shareholders and creditors ultimately comes from the surplus value created by labor, and thus presupposes the social relation of capital and the exploitation of workers in the sphere of production. It also suggests that the appearance of independence from the process of production is not accidental, but arises from the very form of fictitious capital, which represent a contractual claim on future income rather than the actual value of existing assets. This ideological effect is already present in the fetishized form of IBC, in which money appears to create more money all on its own. However, it reaches its high point in fictitious capital, in which a flow of income is used as the basis to calculate the hypothetical capital from which this income is allegedly derived.

The growing centrality of financial securities involves a broader shift in property relations, which includes legal and regulatory changes, novel institutional arrangements, and specific

policies designed to protect the (fictitious) value of this form of property. These help sustain the independent circulation of financial securities by ensuring their convertibility into money at any given moment. Nevertheless, this independence cannot be maintained indefinitely, since the valuation of corporate stocks and bonds ultimately depends on the surplus value created in the process of production through the exploitation of workers. Thus, the link between the fictitious value of corporate stocks and bonds and the conflict between capital and labor reasserts itself whenever the process of production is interrupted through the collective action of workers, during strikes and work stoppage, which threaten the ability of corporate managers—acting as the representatives of the capitalist class—to continue extracting surplus value at the level expected by investors. These struggles continue to take place in mines, fields, and factories across the globe, and it is their outcomes—rather than the conflict between managers and shareholders or between finance and industry—that will determine the future trajectory of financialization and the faith of capitalism in the twenty-first century.

References

- Abowd, John M. 1989. The effect of wage bargains on the stock market value of the firm. *The American Economic Review* 79 (4): 774–800.
- Abraham, Steven E., and Paula B. Voos. 2000. Right-to-work laws: new evidence from the stock market. *Southern Economic Journal* 67 (2): 345–62.
- Auvray, Tristan, and Joel Rabinovich. 2019. The financialisation—offshoring nexus and the capital accumulation of us non-financial firms. *Cambridge Journal of Economics* 43 (5): 1183–1218.
- Basu, Deepankar. 2014. Comparative growth dynamics in a discrete-time Marxian circuit of capital model. *Review of Radical Political Economics* 46 (2): 162–83.
- Becker, Brian E. 1987. Concession bargaining: the impact on shareholders' equity. *ILR Review* 40 (2): 268–79.
- Becker, Brian E., and Craig A. Olson. 1986. The impact of strikes on shareholder equity. *ILR Review* 39 (3): 425–38.
- Benanav, Aaron. 2021. Automation and the Future of Work. New York, NY: Verso.
- Bhide, Amar. 1993. The hidden costs of stock market liquidity. *Journal of Financial Economics* 34 (1): 31–51.
- Blackburn, Robin. 2009. Value theory and the chinese worker. New Left Review, no. 56: 128–35.

- Bonizzi, Bruno, Annina Kaltenbrunner, and Jeff Powell. 2020. Subordinate financialization in emerging capitalist economies. In *The Routledge International Handbook of Financialization*, eds. Philip Mader, Daniel Mertens, and Natascha van der Zwan, 177–87. Milton Park: Routledge.
- Braun, Benjamin, and Daniela Gabor. 2020. Central banking, shadow banking, and infrastructural power. In *The Routledge International Handbook of Financialization*, eds. Philip Mader, Daniel Mertens, and Natascha van der Zwan, 241–52. Milton Park: Routledge.
- Brenner, Robert. 2006. The Economics of Global Turbulence. London; New York, NY: Verso.
- Bryan, Dick, and Michael Rafferty. 2006. *Capitalism with Derivatives: A Political Economy of Financial Derivatives, Capital and Class*. New York, NY: Palgrave Macmillan.
- ——. 2012. Why we need to understand derivatives in relation to money: A Reply to Tony Norfield. *Historical Materialism* 20 (3): 97–109.
- Carruthers, Bruce G., and Arthur L. Stinchcombe. 1999. The social structure of liquidity: flexibility, markets, and states. *Theory and Society* 28 (3): 353–82.
- Chesnais, François. 2016. Finance Capital Today: Corporations and Banks in the Lasting Global Slump. Leiden; Boston, MA: Brill.
- Clark, Gordon L. 1998. Pension fund capitalism: a causal analysis. *Geografiska Annaler. Series B, Human Geography* 80 (3): 139–57.
- Cohen, Felix. 1954. Dialogue on private property. *Faculty Scholarship Series*. Accessed at: https://digitalcommons.law.yale.edu/fss_papers/4360
- Damodaran, Aswath. 1994. Damodaran on Valuation: Security Analysis for Investment and Corporate Finance. New York, NY: Wiley.
- Deagon, Brian. 2021. Union efforts at amazon fail, in a hard-fought battle with big risks. *Investor's Business Daily*. Accessed at: https://www.investors.com/news/technology/amazon-stock-union-bessemer-vote-amzn/
- Dinardo, John, and Kevin F. Hallock. 2002. When unions 'mattered': the impact of strikes on financial markets, 1925–1937. *ILR Review* 55 (2): 219–33.
- Durand, Cédric. 2017. Fictitious Capital: How Finance Is Appropriating Our Future. London; New York, NY: Verso.
- Epstein, Gerald A. 2005. Introduction: financialization and the world economy. In *Financialization and the World Economy*, ed. Gerald A. Epstein, 3-16. Cheltenham: Elgar.
- Fichtner, Jan. 2020. The rise of institutional investors. In *The Routledge International Handbook of Financialization*, eds. Philip Mader, Daniel Mertens, and Natascha van der Zwan, 265–75. Milton Park: Routledge.
- Fiebiger, Brett. 2016. Rethinking the financialisation of non-financial corporations: a reappraisal of us empirical data. *Review of Political Economy* 28 (3): 354–79.
- Fine, Ben. 2013. Financialization from a Marxist perspective. *International Journal of Political Economy* 42 (4): 47–66.
- Froud, Julie, Sukhdev Johal, Adam Leaver, and Karel Williams. 2014. Financialization across the Pacific: manufacturing cost ratios, supply chains and power. *Critical Perspectives on Accounting* 25 (1): 46–57.
- Gabor, Daniela. 2010. (De)Financialization and crisis in eastern Europe. *Competition & Change* 14 (3–4): 248–70.
- Gubareva, Mariya. 2021. Covid-19 and high-yield emerging market bonds: insights for liquidity risk management. *Risk Management* 23 (3): 193–212.

- Guttmann, Robert. 2017. Financialization revisited: the rise and fall of finance-led capitalism. *Economia e Sociedade* 26 (December): 857–77.
- Hanka, Gordon. 1998. Debt and the terms of employment. *Journal of Financial Economics* 48 (3): 245–82.
- Harvey, David. 2006. The Limits to Capital. London; New York, NY: Verso.
- ——. 2013. A Companion to Marx's Capital: Volume 2. London; New York, NY: Verso.
- Hein, Eckhard, Daniel Detzer, and Nina Dodig, eds. 2016. *Financialisation and the Financial and Economic Crises: Country Studies*. Cheltenham, UK: Edward Elgar Publishing.
- Hilferding, Rudolph. 1981 [1910]. Finance Capital: A Study in the Latest Phase of Capitalist Development. London; Boston, MA: Routledge & Kegan Paul.
- Holden, Craig W., Stacey E. Jacobsen, and Avanidhar Subrahmanyam. 2014. The empirical analysis of liquidity. Rochester, NY: Social Science Research Network. Accessed at: https://doi.org/10.2139/ssrn.2402215
- Igan, Deniz, Divya Kirti, and Soledad Martinez Peria. 2020. The disconnect between financial markets and the real economy. *Special Notes Series on COVID-19, IMF Research*.
- Ivanova, M. N. 2011. Money, housing and world market: the dialectic of globalised production. *Cambridge Journal of Economics* 35 (5): 853–71.
- Ivanova, Maria N. 2013. The dollar as world money. Science & Society 77 (1): 44–71.
- Jain, Pankaj K. 2003. Institutional design and liquidity at stock exchanges around the world. Rochester, NY: Social Science Research Network. Accessed at: https://doi.org/10.2139/ssrn.869253
- Jayaswal, Rajeev. 2020. At roundtable with global investors, PM Modi pitches Atmanirbhar Bharat. *Hindustan Times*. Accessed at: https://www.hindustantimes.com/india-news/at-roundtable-with-global-investors-pm-modi-pitches-atmanirbhar-bharat/story-K7xERqmNrvoE19UEh2yHtK.html
- Jensen, Michael, C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *The American Economic Review* 72 (2): 323–29.
- Jensen, Michael C., and William H. Meckling. 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3 (4): 305–60.
- Kaldor, Yair. 2021. Financialization and income inequality: bringing class struggle back in. *Critical Sociology*. Accessed at: https://doi.org/10.1177/08969205211029359
- Kilgore, Tomi. 2017. American Airlines' stock sinks as pay-raise plan is panned by Wall Street. *MarketWatch*. Accessed at: https://www.marketwatch.com/story/american-airlines-stock-sinks-as-pay-raise-plan-is-panned-by-wall-street-2017-04-27
- Klasa, Sandy, William F. Maxwell, and Hernán Ortiz-Molina. 2009. The strategic use of corporate cash holdings in collective bargaining with labor unions. *Journal of Financial Economics* 92 (3): 421–42.
- Krippner, Greta R. 2005. The financialization of the American economy. *Socio-Economic Review* 3 (2): 173–208.
- Lapavitsas, Costas. 2014. *Profiting without Producing: How Finance Exploits Us All*. London; New York, NY: Verso.
- Lapavitsas, Costas, and Ivan Mendieta-Muñoz. 2016. The profits of financialization. *Monthly Review* 68 (3): 49–62.
- Lazonick, W, and M. O'Sullivan. 2000. Maximizing shareholder value: a new ideology for corporate governance. *Economy and Society* 29 (1): 13–35.

- López, Gerardo García, and Livio Stracca. 2021. *Changing Patterns of Capital Flows*. Committee on the Global Financial System 66. Basel: Bank for International Settlements. Accessed at: https://www.bis.org/publ/cgfs66.htm
- Marx, Karl. 1991 [1894]. *Capital: A Critique of Political Economy, Vol. 3.* London: Penguin Books in association with New Left Review.
- ——. 1992 [1885]. *Capital: A Critique of Political Economy, Vol. 2.* London: Penguin Books in association with New Left Review.
- Matsa, David A. 2010. Capital Structure as a strategic variable: evidence from collective bargaining. *The Journal of Finance* 65 (3): 1197–1232.
- Mavroudeas, Stavros, and Demophanes Papadatos. 2018. Is the financialization hypothesis a theoretical blind alley? *World Review of Political Economy* 9 (4): 451–76.
- McCarthy, Michael A. 2014. Turning labor into capital: pension funds and the corporate control of finance. *Politics & Society* 42 (4): 455–87.
- Meijer, Bart H., and Sudip Kar-Gupta. 2018. Air France-KLM shares fall, Dutch pilots threaten to strike. *Reuters*. Accessed at: https://www.reuters.com/article/us-air-france-klm-ceo-idUSKBN1L211I
- Milberg, William. 2008. Shifting sources and uses of profits: sustaining US financialization with global value chains. *Economy and Society* 37 (3): 420–51.
- Moss Daniel. 2020. Is Indonesia selling out to investors? *Bloomberg*. Accessed at: https://www.bloomberg.com/opinion/articles/2020-10-14/indonesia-protests-labor-reforms-are-difficult-but-overdue
- Nelson, Morton, Ben Amoako-Adu, and Brian Smith. 1994. Impact of labor strikes on equity values: Canadian evidence. *Journal of Economics and Business* 46 (3): 153–65.
- Ness, Immanuel. 2016. *Southern Insurgency: The Coming of the Global Working Class*. Wildcat: Workers' Movements and Global Capitalism. London: Pluto Press.
- Newman, Susan. 2012. Financialized corporate strategies and restructuring of global supply chains. *International Institute of Social Studies, The Hague*, no. 14/1.
- Norfield, Tony. 2012. Derivatives and capitalist markets: the speculative heart of capital. *Historical Materialism* 20 (1): 103–32.
- Orhangazi, Özgür. 2008. *Financialization and the US Economy*. New Directions in Modern Economics. Cheltenham, UK; Northampton, MA: Edward Elgar.
- Owusu, Tony. 2018. Casino stocks tumble as union strike deadline approaches. *TheStreet*. Accessed at: https://www.thestreet.com/investing/casino-stocks-tumble-as-union-strike-deadline-approaches-14607224
- Palpacuer, Florence. 2008. Bringing the social context back in: governance and wealth distribution in global commodity chains. *Economy and Society* 37 (3): 393–419.
- Perotti, Enrico C., and Kathryn Spier. 1993. Capital structure as a bargaining tool: the role of leverage in contract renegotiation. *The American Economic Review* 83 (5): 1131–41.
- Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: Harvard University Press.
- Pollin, Robert. 1996. Contemporary economic stagnation in world historical perspective. *New Left Review* 219 (109): 109–18.
- Pordeli, Sam, Lorenzo Schofer, and Maxwell Sutton. 2021. The response by central banks in emerging market economies to COVID-19. *Bulletin March*. Accessed at:

- https://www.rba.gov.au/publications/bulletin/2021/mar/the-response-by-central-banks-in-emerging-market-economies-to-covid-19.html
- Riley, Charles. 2018. Ryanair's strikes are hitting its profits. *CNN*. Accessed at: https://www.cnn.com/2018/10/01/investing/ryanair-profit-warning/index.html
- Robinson, William I. 2012. Global capitalism theory and the emergence of transnational elites. *Critical Sociology* 38 (3): 349–63.
- Roy, William G. 1997. Socializing Capital: The Rise of the Large Industrial Corporation in America. Princeton, NJ: Princeton University Press.
- Saez, Emmanuel, and Gabriel Zucman. 2016. wealth inequality in the United States since 1913: evidence from capitalized income tax data. *The Quarterly Journal of Economics* 131 (2): 519–78.
- Samuelson, Paul A., and William D. Nordhaus. 2010. *Economics*. Boston, MA: McGraw-Hill Irwin.
- Singer, Joseph. 2000. Property and social relations: from title to entitlement. In *Property and Values: Alternatives to Public and Private Ownership*, eds. Charles Geisler and Gail Daneker, 69–90. Covelo, CA: Island.
- Smith, John Charles. 2016. *Imperialism in the Twenty-First Century: Globalization, Super-Exploitation, and Capitalism's Final Crisis*. New York, NY: Monthly Review Press.
- Sotiropoulos, Dimitris, Giannēs Mēlios, and Spyros Lapatsioras. 2013. *A Political Economy of Contemporary Capitalism and Its Crisis: Demystifying Finance*. London; New York, NY: Routledge.
- Stockhammer, Engelbert. 2004. Financialisation and the slowdown of accumulation. *Cambridge Journal of Economics* 28 (5): 719–41.
- Suwandi, Intan. 2019. *Value Chains: The New Economic Imperialism*. New York, NY: Monthly Review Press.
- Thomas, Steven L., Dennis Officer, and Nancy Brown Johnson. 1995. The capital market response to wage negotiations in the airlines. *Industrial Relations: A Journal of Economy and Society* 34 (2): 203–17.
- Tomaskovic-Devey, Donald, and Ken-Hou Lin. 2013. Financialization and U.S. income inequality, 1970–2008. *American Journal of Sociology* 118 (5): 1284-1329.
- Vasudevan, Ramaa. 2009. From the gold standard to the floating Dollar standard: an appraisal in the light of Marx's theory of money. *Review of Radical Political Economics* 41 (4): 473–91.
- Walter, Timo, and Leon Wansleben. 2020. How Central bankers learned to love financialization: The Fed, the bank, and the enlisting of unfettered markets in the conduct of monetary policy. *Socio-Economic Review* 18 (3): 625–53.
- Wolff Edward N. 2016. Household wealth trends in the United States, 1962 to 2013: what happened over the great recession? *The Russell Sage Foundation Journal of the Social Sciences* 2(6): 24–43.