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## Capital Accumulation through Private Finance

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# Bard

# Capital Accumulation through Private Finance

Senior Project  
December, 2020

Dylan Reagh

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### **Abstract**

Capitalist economies are societies of production and distribution, in which financial systems determine the structure of resource creation. Capital accumulation is the structure through which wealth is distributed from this process through time. The paper examines the ways in which private financing defines, constructs and destabilizes this system. Chapter 1 describes the general process through which finance defines the composition of capital in the economy. Chapter 2 describes the recent history of financialization, in which the American economy has become increasingly subordinated to and destabilized by private finance through a complex web of institutional and operational aspects. The paper is a critical analysis of and commentary on capitalism, as mediated by finance.

## **Introduction**

Economic activity in America is dominated these days by financial contracts . It is common for young people between 17 and 18 years old to take on major private debts in order to become certified with college degrees. These educations have become more necessary and much more expensive, even as they have become much more common, and therefore less unique in the labor market. It is a default activity for higher-level economic participation.

Housing, a critical and extremely expensive asset, is generally purchased either temporarily, through the signing of a lease (a rental contract) or the purchase of real estate with a large credit line - a mortgage - which will usually initiate a debtor relationship of 15 to 30 years, in which large monthly payments are made by the debtor back to the creditor, usually a bank. Housing prices have been rising continually for decades, even after the interruption of the 2008 financial crisis. Many American's dream of accessing a comfortable financial state if they can sell their own property at an inflated price one day. The debtors who must pay the *present* real housing price - usually more inflated than it has ever been - and must go deeply into debt to do so, are convinced that this is a good thing because at some point in the future they *might* benefit from the inflation by selling their own asset, thus being able to repay their debt to the bank, and collect a personal profit. But the house is gone. They will have to buy a new one and start over. To not participate in this market is to be a renter, and sign a contract obliging the tenant to a large monthly payment scheme, without ownership of the housing asset. Therefore a renter, by not participating in the inflating housing market, is worse off than the homeowner.

Most Americans take on large loans to purchase cars. These expensive vehicles are necessary because in most areas there is inadequate access to public transportation, and the distances in this country are often very wide.

Most Americans require expensive insurance contracts for access to a number of important services, health insurance (for access to inflated health services) being the most prominent scheme. Many Americans routinely enter debt contracts for daily commodity consumption with credit cards. If they are unable to service these small-scale debts the interest rates can double in a month. Most Americans rely on

financial payment contracts for the provision of basic services; trash, electricity, water, internet.

It is common now for people to feel a pressure to be 'financially literate' if they want to retire above the poverty line or access life's basic necessities. We should remember that financial literacy for the masses is a new concept.

This complex system is hard to understand, to a large degree because false narratives concerning government expenditure and the distribution of wealth cajole Americans into believing that the services and necessities they indebt themselves to access are 'too expensive' for the central authority to provide, that it is a moral responsibility to repay ones debts to creditors, corporations, and landlords, and that the vastly unequal ownership and control of assets is normal and acceptable.

Financial contracts are designed to lock people into payment plans; they establish a coercive economic relationship in which the loan-issuer receives by obligation more money over time than it put in. Credit, as a rule in America, is offered in exchange for a combination of a 'principle' and an 'interest' payment, the principle being equal to the credit, and the interest being an additional sum paid like a fee for access to the credit line; it is the price of money as set by creditors (banks and financiers) and also to their own benefit.

A large apparatus of financial markets and institutions has ballooned in the last few decades to commodify and exchange within this debt-structure. It is quite common for economics students, trained in the analysis of market dynamics, to be directed into private financial institutions for the purpose of perpetuating financial accumulation, debt-issuance, securitization, abstract services, 'money-management', and stock-market maneuvering. Financial actors themselves often discuss the economy and its real contracts in a detached way, speaking about debt-securities and capital in terms of 'alpha', industry jargon for the active return on an investment as measured mathematically. The 'economy' is described in media and political discourse in terms of equity markets, capitalization figures, and aggregated growth in sales receipts.

The entire system is therefore financialized, and the financial system and its private sector dominate socioeconomic life. This process is a constituent structure of American capitalism.

Capitalism is a 'balance-sheet economy' of privately ownership and control, meaning that all the capital and assets and liabilities can be delineated in dollar amounts and that these assets and liabilities are mostly owned and controlled by individual people and legal entities. It is also an economy of capital, meaning that it is constituted of many tangible materials, machines, buildings, and technologies which produce outputs for profit, profit being the difference (-) between revenues (gains) and expenditures (costs). And it is an economy of finance, meaning that economic activities and objects are actualized, made real, through 'cash flows' sent between people and entities as either credits, purchases, or liabilities (obligations) as derived from contracts. The financial system also encompasses the many money-objects which exist within capitalist in order to further the process of production and accumulation; these include funds and trusts, stocks and bonds, and securitized debts. It is a system which is managed and 'engineered' for profit by banks and other financial institutions.

All factors of production and investment can be expressed in terms of numbers and monetary adjacency; every valuable asset is either money or evaluated in relation to money, and assets are expected either to access income over time (capital), generate income through a sale (investment output) or act as a claim on income over time (financial contracts). The concept of a default is that a financial asset cannot in actuality produce the cash flows which it promises to deliver. When this happens on a large scale, and many assets and financial relationships are found to be insolvent, it can trigger a collapse of asset values across the financial system, its markets, and then the entire economy as the financial apparatus which structures the general economy fails.

The incentive of capitalism is private profit; in a capitalist society most firms, investors, capital-owners and individuals work towards the expansion of their own wealth, for private gain. This fundamental desire determines the process of accumulation: within the collective function of financing, enterprises, and markets is the aggregated drive for 'more money' now, and more capital and more assets, for the purpose of obtaining more money in the future, which can then be utilized to make more money after that point, forever, with a system-wide goal of continual expansion.

Capitalist systems are intertemporal. Capitalism has a past, a present, and a future, in which accumulation either continues successfully - measured in asset-price inflation and output levels - or fails, measured in declining output, declining sales,



declining incomes, and declining asset values. Over the course of time many contexts and realities change, altering the specifics of how capital is accumulated, how profit is pursued, and how the system and its component parts react to the social structure of production and distribution. But profit is always pursued through an institutionally structured process of accumulation.

Finance links together the past, present, and future of capitalism. Whereas the purchase of a commodity or service in a real market occurs in the present moment, financial contracts exchange money in the present for money in the future, usually at a markup (interest), or otherwise stake claims on assets or wealth across present and future time. By offering credit (present money), private debt-issuers can ensure access to a future stream of income in excess of their initial payment.

Everybody who has been in debt or established a contract to pay over-time understands this system intuitively to a certain degree, but it is widely accepted, often uncritically. In this paper I present a critical analysis of this system: the system of accumulation through private financial operations. By examining the nature of financial accumulation through real time - the past and the present - we can see a systemic reality in which private finance destabilizes capitalism and harms the general population. The financial process of capital accumulation indicates a broader problem with the structure through which capitalism produces and reproduces itself through time. That problem is an antisocial perpetuation of greed, exploitation, and overexpansion.

The framework through which to analyze finance in relation to capitalism and its real accumulation through time is explained in Chapter 1. It provides an explanation of how economic theory can help us understand systems of capital development and capital accumulation as structured by finance. Chapter 2 examines the historical and institutional process of 'financialization', through which private financial systems and operations have expanded and occupied an increasingly domineering posture within the American economy. This is read as an expansion and acceleration of the dynamics explained in Chapter 1.

The 'problem' to be addressed by the theory and analysis is defined by real societal issues which are elaborated later on; issues of major importance (and often misery) to the American people, which are empirically harmful in a myriad of ways, and disturbing and upsetting to the author on a personal level. Whalen explains that this

examination - one which consciously examines the dynamic fragility and intertemporality of capital - should be the 'task of economics' today:

The task confronting economics today may be characterized as a need to integrate Schumpeter's vision of a resilient intertemporal capitalist process with Keynes hard insights into the fragility introduced into the capitalist accumulation process by some inescapable properties of capitalist financial structures.<sup>1</sup>

This characterization is the analytical framework of the paper.

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<sup>1</sup> Whalen (1999), pg. 2

## Chapter 1: Finance and Capitalism

The most important dynamic of focus is the intertemporal (over time) process described by Minsky (1992), in which resources and capital assets are developed and accumulated in capitalist economies. This dynamic is the system of investment financing, an exchange of ‘present money’ for ‘future money’.

By examining this dynamic in relation to capital development and capital accumulation, and by distinguishing between these processes as ‘productive vs extractive’, we can elaborate a theory through which financial operations construct and destabilize the capitalist system.

In American capitalism, financial relations and structures determine the composition of the general economic system<sup>2</sup>. For this reason, analyzing finance is a window through which to understand American capitalism. Minsky worked extensively to analyze finance and its relationship to capitalism. Here is his characterization of our economic system:

A capitalist economy is characterized by a financial structure which leads to the prior commitment of cash flows received, by households, business, governments, banks and non-bank financial institutions, to validate their liabilities.

These cash flows are received either from the distribution of the value of output among the participants in producing and financing output or from the fulfillment of financial contracts<sup>3</sup>

These ‘cash flows’ are the payments received within the capitalist economy; they come from either the distribution of income as derived from productive activity (wages, salaries, profits), or from contractual commitments; this is how debt contracts, insurance contracts, and leases generate incomes through obligation, rather than productivity. They are legal claims on somebody else's money in a scheduled payment process over time; usually a month-to-month basis.

This concept - of a distinction between over-time payment obligations and the productive activity of capital assets to create resources - is the basis of Minsky’s

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<sup>2</sup> From Whalen, “Hyman Minsky's Theory of Capitalist Development” (pg 3.) “the in-place financial structure is a central determinant of the behavior of a capitalist economy” (Minsky 1993a, 106)”

<sup>3</sup> Minsky (1992), The Capital Development of the Economy and The Structure of Financial Institutions. Levy Institute working paper no. 72 (pg. 3)

“theoretical argument of the financial instability hypothesis”<sup>4</sup>, which “starts from the characterization of the economy as a capitalist economy with expensive capital assets and a complex, sophisticated financial system.”<sup>5</sup> The economic ‘problem’ addressed by this theory is “following Keynes... the ‘capital development of the economy’”<sup>6</sup> This characterization is relevant because our American economy today is a capitalist economy defined by expensive capital assets and sophisticated finance<sup>7</sup>.

‘Capital development’ is a process of social resource creation which is “accompanied by exchanges of present money for future money. The present money pays for resources that go into the production of investment output, whereas the future money is the “profits” which will accrue to the capital asset owning firms”.<sup>8</sup>

For this reason, “the focus [of analysis] is on an accumulating capitalist economy that moves through real calendar time”.<sup>9</sup> As capital development is rooted in finance-through-time, so is capital accumulation, the system through which output and financial markets yield profits to capitalists and financiers (more broadly, owners and controllers):

Keynesian economic theory tells us that capitalist accumulation, which involves financial and output markets, is a process which ties the past, present and future together. It also allows us to identify variables that affect the processes.<sup>10</sup>

The process is contextual, and has no inherent stability. In fact because it is fluctuating and ‘multidimensional’ it induces an inherent trend towards instability:

These processes are not constrained by the inherent nature of capitalist economies to lead to satisfactory system behavior: there is no guarantee that the processes will interact to lead to some nice coherent expansion (growth) of the economy.

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<sup>4</sup> Financial Instability Hypothesis, 2

<sup>5</sup> Financial Instability Hypothesis, 2

<sup>6</sup> Financial Instability Hypothesis, 2

<sup>7</sup> In regard to ‘expensive capital assets’ we can consider inflations in equity prices, real estate prices, rents, college tuitions, and healthcare. These inflations exist in concurrence with the very expensive ‘baseline’ of the American economy; a vast assembly of fixed capital, public infrastructure including an electrical grid, a highway network, the Internet, etc. The system is extremely flushed with evaluated wealth, and therefore expensive to maintain, operate and expand. The increasing sophistication of finance will be explained more in part 2.

<sup>8</sup> Financial Instability Hypothesis, 2

<sup>9</sup> Financial Instability Hypothesis, 2

<sup>10</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 11-12. My emphasis.

In particular we know that the dynamics are best characterized by time dependant, nonlinear, and multidimensional relations. This implies that hysteresis, chaos or incoherence will characterize the time series that are generated, not always but from time to time<sup>11</sup>

For the purposes of this paper, I will define this complex system as a general structure of *making* and *taking* through time. This process is an unstable dynamic between capital developement and capital accumulation as structured by finance. We will also increase the critical tone of the analysis based on a large quantity of literature and evidence suggesting that the ‘hysteresis, chaos or incoherence’ has been closer to ‘always’ than ‘from time to time’ over the last 50 years.

### **1.1 Capital Development**

Capital developments are the resources which accrue to society from the accumulation process. Minsky explains his framework:

Keynes shifts the argument from the Smithian emphasis upon the allocation of resources to the capital developement of the economy, the creation of resources.<sup>12</sup>

Here is his description of the over-time process through which the developement of capital occurs:

The creation of resources is a process in time. It involves what Keynes called enterprise: the forecasting of the prospective yield of assets over their whole life. Keynes's dichotomy between enterprise and speculation draws attention to the financial structure as an essential element in the capital development process. In a successful capitalist economy the financial structure abets enterprise.<sup>13</sup>

Enterprise in this sense refers to economic activities which contribute to innovations, structural improvements, or income growth within capitalism<sup>14</sup>. The connection between developement and finance is that developement must be financed before it can occur. This financing occurs because the financier (the creditor or investor) expects to receive an income stream from the debtor in excess of their initial contribution; “the

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<sup>11</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 11-12. My emphasis.

<sup>12</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 11-12. My emphasis.

<sup>13</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 11

<sup>14</sup> Mazzucato and Wray (2016) explain that ““Capital development” is a term defined by Hyman Minsky to refer to a broad measure of investment that goes beyond privately owned capital equipment and to include technology, human capital, and public infrastructure.” (pg. 2)

process “begins with money to end up with more money”—as both Marx and Keynes said<sup>15</sup>. Recall this description:

The capital development of a capitalist economy is accompanied by exchanges of present money for future money. The present money pays for resources that go into the production of investment output, whereas the future money is the “profits” which will accrue to the capital asset owning firms<sup>16</sup>

This circuit relies on three primary payments, all of which stimulate a flow of economic activity: the initial payment (1) from the creditor establishes the debt contract with the productive entity (a firm or individual) in exchange for a quantity of money (credit) so that capital can be accessed, materials can be purchased, workers can be hired, etc. After this point the productive entity engages in economic activity which must yield an income; This payment (2) is a quantity of money given from a buyer or obligee to the productive entity in exchange for some product or service. Thereafter the productive entity - the debtor - can service their financial obligations (payment 3) out of their own operational revenues (as derived from payment(s) 2 within the circuit). The creditor can use these new incomes as derived from payment(s) 3 to extend new credit lines or otherwise invest in the establishment of new contracts expected to yield an excess quantity of money in the future.

This development process can take on many forms and range from socially beneficial to socially harmful. It can be equitable or highly stratified in its creation and distribution of resources-produced. A hospital has a much different social impact than a weaponry plant established to build missiles; both rely on a financial circuit to be created. Furthermore the ownership structure of any particular enterprise as established by private investment will involve a certain distribution of incomes-from-output among the various members of the firm. The process by which financial structures shape the real control of capital assets is a facet of the accumulation process; the ‘taking’ of capitalism.

The focus on ‘development’ as distinct from accumulation is that it involves a broader measure of benefit; in between the capitalist accumulation process there might be improvements to infrastructure, technology, innovation, and purchasing power for

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<sup>15</sup> Mazzucato and Wray, 8

<sup>16</sup> FIH, 2

the majority population. Development within the capitalist financial cycle is the ‘making’ of the economy; the functional process which can realize the benefits of capitalist production.

## **1.2 Capital Accumulation**

The accumulation process, involving “financial and output markets, is a process which ties the past, present, and future together”<sup>17</sup>. Accumulation is the accrual and expansion of wealth over time as derived either from output (sales to the real economy) or financial contracts (monetary relationships, payment schemes, obligations, and services related to these relations).

The simplified Marxian M-C-M’ circuit represents the accumulation and development process in a capitalist system. M is the initial money advanced for the production of a commodity (C), which is sold for a price exceeding the initial cost in money-quantity (M’). This micro-circuit aligns with Minsky’s description of financed capital development; a process of resource creation which occurs between an initial advance of ‘present’ money and a later profit of ‘future’ money.

The production of commodities which occurs between M and M’, today expanded to include ‘resources’ of varying benefit, becomes the Schumpeterian-Keynesian focus in contemporary economic theory<sup>18</sup>. The development process as explained by Minsky is “accompanied by the exchange of present money for future money”. By nature of capitalist profit-seeking, the ‘future money’ must be in excess of the present money for the circuit to be successful; in quantitative terms M’ must exceed M.

The cash flows in the future are legally secured with the initial credit-line of the financial entity. The accumulation process is the past-present-future process which binds together the money of the past, to the activity of the present, to the increased quantities of money or evaluations of assets in the future. At its core is a drive for more wealth.

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<sup>17</sup> Capital Development, 7

<sup>18</sup> Minsky called the development-emphasis Keynesian in the Financial Instability Hypothesis (1992) and Schumpeterian in The Capital Development of the Economy and The Structure of Financial Institutions (1992). The synthesis of these economists, as described by Mazzucato and Wray (2016) is a framework accounting for the inherent instability and intertemporal resilience of financed capitalism.

Capital Accumulation is the ‘taking’, in which profits accrue to those controllers who possess ownership positions within capitalism. Capital Development is that process through which the general society expands its resources, infrastructure, and net wealth - the ‘making’ of capitalism. Both are intertwined in that the development of capital is a matter of the *control* of capital, and both are mediated through and determined by the financial system and its contracts:

As a result of the process by which investment is financed, the control over items in the capital stock by producing units is financed by liabilities -- these are commitments to pay money at dates specified.<sup>19</sup>

We can think of a single factory producing ‘investment output’ to illustrate this reality: as the factory comes ‘online’ and begins producing output, the revenues it collects from the sale of its products will be distributed amongst those involved in the production process based on the ownership structure of the firm: most workers will receive preset wages, registered on the balance sheet as ‘costs of production’ and therefore *minimized* wherever possible, whereas revenues in excess of production costs are the ‘profits’ which accrue to the legal owners of the factory<sup>20</sup>; *maximizing* these gains on behalf of capital controllers is the operational goal of capitalist productive units. The owners may own the unit (the factory) outright, or may own ‘shares’ in the unit as one among many shareholders. The latter scenario is the structure of a legal corporation, in which case our factory would usually only be one industrial unit within a larger organizational structure<sup>21</sup>.

More likely than not, the initial monetary sum needed to establish the factory as a productive unit was provided to the current owner(s), in the past, by a creditor, for example a bank which therefore possesses in the present a claim on regular payments from the factory owner for a period of time stretching into the future. The owner of the factory, a debtor to the creditor, must service this obligation out of their revenues as derived from real sales (successful operations). This is the ‘accumulation’ process in action. Profits accrue to capital owners, incomes are paid out to employees as a

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<sup>19</sup> Financial Instability Hypothesis, 2

<sup>20</sup> The separation of ownership and control which defines modern corporations makes this system less direct and more complex.

<sup>21</sup> Consider that the departments of corporations dedicated to ‘human resources’, marketing, diversity, accounting, and logistics (for example) are not actually productive units, but rather institutional support-structures of the broader organization.



production cost, and financial obligations are paid out to creditors or other financial contractors (landlords, insurance brokers). It is the stratified (unequal), legally-enforced (obligatory) and socially-structured (institutional) distribution of these incomes which defines the accumulation process by which capitalism expands over time. Minsky cites Keynes to explain the financial dimension of this system:

There is a multitude of real assets in the world which constitutes our capital wealth - buildings, stocks of commodities, goods in the course of manufacture and of transport, and so forth. The nominal owners of these assets, however, have not infrequently borrowed money... in order to become possessed of them. To a corresponding extent the actual owners of wealth have claims, not on real assets, but on money.

A considerable part of the this financing takes place through the banking system, which interposes its guarantee between its depositors who lend it money, and its borrowing customer whom it loans money wherewith to finance the purchase of real assets. The interposition of this veil of money between the real asset and the wealth owner is an especially marked characteristic of the modern world.” (p. 151)<sup>22</sup>

This model was described in the 1930s to explain how financial institutions shaped the control of capital assets, and utilized financial contracts to establish claims on the incomes generated from the output of the capital they helped create. Minsky updates this model of financial accumulation for the 1990s:

The Keynesian vision imposes a structure on spending... A modern capitalist economy is structured so that the capital assets of the economy are owned by firms that are organized as corporations, firms finance control over these assets by liabilities, and directly or through intermediaries households own these liabilities...<sup>23</sup>

Within this system the financial investment process determines both output levels and the distribution of income; a process shaped by the profit-seeking of financiers.

the pace of investment is viewed as calling the tune for both aggregate income and its distribution, which is viewed as being determined by the structure of demands... In modern capitalist economies, complex corporate organizations struggle for market power in order to get an edge in the competition among capitals for profits.<sup>24</sup>

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<sup>22</sup> FIH, 3, quoting Keynes (1972)

<sup>23</sup> Minsky, “Uncertainty and the Institutional Structure of Capitalist Economies” (1996), pg. 3

<sup>24</sup> Minsky, “Uncertainty and the Institutional Structure of Capitalist Economies” (1996), pg. 3

Therefore the role of financial institutions (the corporation itself being a business firm which has been disaggregated into financial assets<sup>25</sup>) is expressed in determining the structure of capitalism, both as a societal ownership structure and as a business-activity structure. There is also an intertemporal factor; the role of finance in binding together capitalist operations across time via financial contracts:

In a capitalist economy the past, the present, and the future are linked together not only by capital assets and labor force characteristics but also by financial relations. The key financial relations link the creation and the ownership of capital assets to the structure of financial relations<sup>26</sup>

At the core of the process is the profit-motive, which defines the operations of capital accumulation as well as the underlying psychological engine of the economy. “In spite of the great complexity of financial relations, the key determinant of system behavior remains the level of profits.”<sup>27</sup>

Therefore there is a continually concurrent process of ‘making’ and ‘taking’ in the capitalist economy. The dynamics and contexts of this process change over time. This is why Marx focused his political economy on the labor-capital dynamic as the main process of ‘making and taking’ in his time.

The various stages of development in the division of labour are just so many different forms of ownership, i.e. the existing stage in the division of labour determines also the relations of individuals to one another with reference to the material, instrument, and product of labour.<sup>28</sup>

Today the relationship between debtor and creditor - and more broadly between the financial *obligor* and their financial *obligee*<sup>29</sup> - appears more significant than the relationship between labor and capital, although they are both representative of the process by which capitalism is developed and expands. Marx discusses it here:

Nothing is more common than the notion that in history up till now it has only been a question of taking...

Taking is further determined by the object taken. A banker's fortune, consisting of paper, cannot be taken at all, without the taker's submitting to the conditions

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<sup>25</sup> Stocks, being ‘shares’ of corporations which are sold by the corporation itself to raise cash, are a fascinating system through which major businesses now widely operate.

<sup>26</sup> Financial Instability Hypothesis, 4

<sup>27</sup> Financial Instability Hypothesis, 5

<sup>28</sup> Karl Marx, “The German Ideology” (5. The Contradiction Between the Productive Forces and the Form of Intercourse as the Basis for Social Revolution)

<sup>29</sup> The obligor is the one which owes by contract, the obligee is the one which is entitled to what is owed.

of production and intercourse of the country taken. Similarly the total industrial capital of a modern industrial country. And finally, everywhere there is very soon an end to taking, and when there is nothing more to take, you have to set about producing.<sup>30</sup>

The process of making and taking occurs through financial operations and in-between the productive operations of capital assets. Since profit-seeking determines the character of innovation and expansion, there is a continual incentive for financiers to exploit the capital development process for their own gain within the broader accumulation process.

So long as investment continues to increase, profits increase and encourage greater leveraging of prospective income flows. This leads to a self-fulfilling prophecy as dependence on external finance increases the size of the circular flow such that incomes are even greater than expected, so that margins of safety for the next round of spending can be reduced.<sup>31</sup>

We can see from the analysis that even a stable and profitable accumulation regime engenders instability *over time* through the following sequence: as incomes expand (a process generated by investment financing), the increase in liquidity and wealth entering the payment system allows ‘margins of safety’ to be reduced ‘for the next round of spending’. Basically, the success of accumulation as registered in monetary gains allows for a concurrent expansion of financial leveraging in the future; in the process the accumulation process is destabilized.

### **1.3 The Liability Structure and Financial Instability**

Financial instability in capitalism emerges from the functional process of development and accumulation. Using the concept of making and taking, financial systems become increasingly unstable as the ‘taking’ of committed<sup>32</sup> cash flows exceeds the ‘making’ of real production; or incomes from investment output, wages, profits, and financial income streams claimed by debtors themselves. Recall that a capitalist economy is “characterized by a financial structure which leads to the prior commitment of cash

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<sup>30</sup> German Ideology, 5. The Contradiction Between the Productive Forces and the Form of Intercourse as the Basis for Social Revolution

<sup>31</sup> Mazzucato and Wray, 23

<sup>32</sup> For a cash flow to be ‘committed’ means that it is legally locked in through time; it is a relationship which extends via contract into the future.

flows”<sup>33</sup>, meaning obligatory payments. These cash flows ‘validate the liabilities’ of economic entities; firms, individuals, households, financial institutions.

The validation of liabilities means that the debts are followed through on. Defaults and insolvency are situations within which liabilities *cannot* be validated. For the debtor this situation is a bankruptcy; a total insolvency. For the creditor this is a default of an asset (the liability of the debtor is an asset for the creditor) and a loss on investment. A bad situation for everyone; a loss-loss. Therefore it is paramount that the cash flows capable of validating liabilities are realized. These cash flows derive from two sources:

the distribution of the value of output among the participants in producing and financing output or from the fulfillment of financial contracts<sup>34</sup>

Minsky explains that a ‘hedge’ relationship is one in which the debtor can service both their principal and interest obligations from their operational income - their own cash flows as derived from the distribution of output-sales<sup>35</sup> or from financial contracts which they hold as a claim on someone else’s income. The contrast to this is a ‘ponzi’ relationship, in which the debtor cannot service their payment obligations except by selling assets (surrendering capital) or taking on more debt (increasing the overall obligation but delaying bankruptcy further into the future) . This is why Keynes argued that “In a successful capitalist economy the financial structure abets enterprise. When finance fosters speculation the performance of a capitalist economy falters.”<sup>36</sup>

Therefore, instability increases within the capitalist system as the liability structure is composed of a growing number of ‘ponzi units’, or unpayable debts. Speculation engenders ponzi finance in that speculative finance is unconcerned with the welfare or stability of the debtor; instead it is based on short-term gains. As an individual financial relationship the ponzi unit is an extractive dynamic between a debtor and creditor: the creditor is demanding of the debtor a sum which cannot be paid. On a macro level, a financial structure which demands more payments than the

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<sup>33</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 3

<sup>34</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 3

<sup>35</sup> This still applies to normal people. In the case of a single worker, the “cash flows as derived from the distribution of output-sales” are the wages allocated to labor as a share of productive income.

<sup>36</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 11

productive sphere or households can generate can only grow through a debt-bubble: the issuance of new debts to continually prevent a debt-deflation of formerly issued obligations.

The liability structures of capitalist societies form the intertemporal system of accumulation; they “link yesterdays and tomorrows to today”<sup>37</sup>.

The overall robustness or fragility of an economies financial structure is determined by the mix of hedge, speculative and Ponzi financing units... a liability structure in which units are heavily in debt... will be towards the fragility end of the spectrum. The financial instability hypothesis... holds that over a run of good times the financial structure evolves from being robust to being fragile. This hypothesis rests upon the profitability of debt financing.<sup>38</sup>

Financial structures shape the capital control of the economy as a factor of financier profit-seeking. Since speculative behaviors are rooted in a profiteering desire to realize gains at an accelerated and expanded rate, there is a fundamental connection between unhealthy financial operations - involving gambling, greed, and instability - and concurring malformations in the capital structure of the real economy.

Speculation in finance translates directly into extraction from the real economy, since the financial contracts of the financial system become the liability structure of the economy while simultaneously shaping the control and ownership of capital through investment financing. The capital structure established by investment financing is the same productive system which must validate the liability structure.

The incentive of speculation through debt-financing leads to financial relationships and credit-transfers which engender extraction rather than stable production. As Minsky put it, “Ponzi financing decreases equity for debt increases without any increase in assets”<sup>39</sup>. A special advisor to the Norwegian Central Bank recently cited Minsky to explain the fundamental instability of privately-financed capitalism, as is currently an emergency situation in America and much of Europe:

Minsky’s financial instability hypothesis (FIH) is an attempt to build a theory that is more relevant to our financially sophisticated capitalist economy and to show why such an economy is unstable (Minsky 1982, p. 69). Such a theory is required if we are to understand the recurrent financial crises affecting our economies. Instability should be part of the theory (an endogenous phenomenon)

<sup>37</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 3

<sup>38</sup> Ibid, 5-6

<sup>39</sup> Ibid, 6

and not simply the result of some arbitrary external shocks. Our economy is not unstable because it is shocked by oil, wars, or monetary surprises, but because of its nature."<sup>40</sup>

#### **1.4 The Role of Money and Banks**

When we examine the financial accumulation system of capitalism, we are referring to a system in which money is the primary tool of operations, and the object of desire<sup>41</sup>. It is *not* a byproduct of ‘real’ production or commodity exchange, but rather the specified beginning and end of capitalist activity.

Money is the stimulant which actualizes the development process and the object to be collected and accrued as profits. Therefore it corresponds to our description of ‘making and taking’; it is the tool of making and the object to be taken.

Even capital and other assets which are not money in themselves are evaluated in terms of a relation to money; a stock is worthless if it cannot be liquidated and sold at its market value, for a ‘higher’ form of cash. We can turn here to the ‘hierarchy’ of money, which describes the pyramid-structure through which different money-things operate as more or less functional within American Capitalism:

in the United States the money of account is the dollar, the measure of nominal value designated by the state. Many important economic values are denominated in dollars: taxes, prices (including wages, fees, and fines), and court-ordered restitutions.

the term “dollar” is also used to describe the paper notes issued by the Federal Reserve Bank (and coins issued by the Treasury). Most economists would also include bank deposits in their definition of money—certainly demand deposits and perhaps time deposits—against which checks can be written that can be used in payment.

However, another approach is to use the term money to signify the unit of account, and to designate as “money things” the IOUs (debts or liabilities) denominated in the money of account. Some money things can be used as media

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<sup>40</sup> Thorvald Grung Moe (2012), “Shadow Banking and the Limits of Central Bank Liquidity Support: How to Achieve a Better Balance between Global and Official Liquidity” Levy Working Paper No. 712

<sup>41</sup> Wray, “Money” (pg. 4) “The claim that a capitalist economy is a “monetary production economy” is... adopted by Marx and Veblen and their followers (Dillard 1980). The purpose of production is to accumulate money—not to barter the produced commodities for other commodities. As Heilbroner (1985) argues, this provides a “logic” to production that makes it possible to do economic analysis. Analysis from Marx’s departments, to the circuit approach, to Godley’s (1996) sectoral balances and stock-flow consistency, to Kalecki’s (1971[1936]) profits equation, and even to GDP accounting all rely on this “logic”.”

of exchange for purchases and means of payment to retire debt; all can be used as stores of value (albeit some are more risky than others).

We can think of a hierarchy of money things, with the government's own IOUs (central bank notes and treasury coins, but also central bank reserves—taken together these are called high-powered money or the monetary base) at the top<sup>42</sup>.

The 'government's own IOU's', at the top of the hierarchy, are high-powered monies, issued by the central authority, and therefore the ultimate form of money in American capitalism; all other money-things exist in relation to the government's IOUs - in terms of their ability to be converted into Federal Reserve Notes (cash) or Reserves. This monetary base is issued as the debts of the central authority.

Just below that would be the deposit liabilities of banks and other financial institutions with direct access (or indirect access through correspondent banks) to the central bank.<sup>43</sup>

We can see that chartered banks occupy a unique position of power within the money hierarchy. Their deposits (numeric quantities of cash registered as liabilities to depositors) which they establish through private operations are considered just below the notes of the central authority in terms of monetary legitimacy.

Other (nondeposit) short-term liabilities of financial institutions would be below that, then would come the short-term liabilities of nonfinancial corporations. Finally, at the bottom would be the short-term liabilities of households and small businesses. Taking this approach, one would be following Hyman Minsky (see Minsky 2008), who always said that anyone can create money (things), the problem lies in getting them accepted.<sup>44</sup>

The primary power of banks then is their ability to operate with a unique position of privilege and power within the monetary regime. This is surely a great power: Tchernvea explains that

Money not only predates markets and real exchange as understood in mainstream economics but also emerges as a social mechanism of distribution, usually by some authority of power (be it an ancient religious authority, a king, a colonial power, a modern nation state, or a monetary union). Money, it can be said, is a "creature of the state" that has played a key role in the transfer of real resources between parties and the distribution of economic surplus.<sup>45</sup>

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<sup>42</sup> Money in Finance, 2

<sup>43</sup> Money in Finance, 2

<sup>44</sup> Money in Finance, 2

<sup>45</sup> Tchernvea (2016), "Money, Power, and Monetary Regimes" Levy Economics Institute, Working Paper No. 861 (abstract)

We can connect this power to transfer resources and distribute surplus to the development/accumulation process inherent to capitalism:

in an “exchange” economy, resources can be redirected to the innovating entrepreneur only through provision of new purchasing power, that is, provision of money as a claim on social resources.<sup>46</sup>

Therefore,

economic development... [occurs] through creation of new purchasing power that would give innovators command over previously utilized resources... economic development requires creation of new purchasing power, which can only come from credit creation. Credit allows “detaching productive means (already employed somewhere) from the circular flow and allotting them to new combinations<sup>47</sup>

In American capitalism this authority to create new purchasing power via credit - anchored in the power of the state and universalized by the balance-sheet nature of capital - has been ‘privatized’. The responsibility of expanding the money supply within the private economy (therefore establishing new purchasing power for the creation of resources) is given to private banks.

The majority of the liabilities in the current monetary system are the result of banks’ multiplication of the money base created by public authorities, through the grant of bank credit matched by creation of deposit liabilities or deposit transfers credited to enterprises and households.<sup>48</sup>

Chartered banks have a special access to ‘deposit insurance’ as provided by the Federal Deposit Insurance Corporation and the National Credit Union Administration. These agencies of the American central authority insure the deposits of chartered banks and financial institutions, providing a fundamental liquidity guarantee to the primary liabilities of banks.

Money therefore exists in a dual role: as a public tool of social power, and a privately-manipulated object of capitalist desire. Recall that profit-seeking and the

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<sup>46</sup> Mazzucato and Wray, 16 emphasis mine

<sup>47</sup> Mazzucato and Wray, 16 emphasis mine

<sup>48</sup> Kregel and Savona (2020), "The Impact of Technological Innovations on Money and Financial Markets" Levy Economics Institute, Public Policy Brief No. 150



profitability of debt determines the behavior of financial institutions. This ‘profitability’ of debt, coexisting with the public-purpose of bank credit as a development tool, creates a contradiction.

We can observe that the development and accumulation process is a matter of private institutions utilizing a government-issued public resource for their own gain. When we consider that the most liquid (convertible) and stable forms of money are the ‘M1-type money’ which are *created* by the government and *issued* by banks, we can see that the financial accumulation process as well as the socioeconomic development process is anchored to and mediated through a coherent social system of purchasing power.

This gives banks a unique position within the capitalist payment system, the liability structure, and the private financial markets which anchor new operations and assets to the debt structure. Kregel cites Minsky to explain this positioning of banks and the privilege they maintain within capitalism:

Minsky (1995) notes that even today, despite financial innovation in the mechanisms providing clearing of credits and debts, “[a]s the twenty-first century approaches, the only reason why banks are special is that they operate the ‘ultimate’ payment system within economies (the proximate payment mechanism is now often a credit card). There are now alternatives to banks for all but the provision of the ultimate payment mechanism function. Because banks operate the ultimate payments mechanism, those liabilities of banks which serve as the ‘medium of exchange’ also serve as the standard in which domestic public and private debts are denominated.”<sup>49</sup>

Because they are protected by the United States government, American banks and financial institutions can maintain a continual state of equity; the legally mandated level of equity, as targeted by the Federal Reserve. Since the whole thing is now classified by what is often called Modern Monetary Theory, it has a feeling of being pre-ordained. In the sense that the structural process is centrally, legally administered, it cannot be called a free market, but rather a privatized system of monetary-regime managers with *market elements*.

Government regulates, oversees, and protects financial institutions. Access to the central bank as lender of reserves—and, especially, lender of last resort—is

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<sup>49</sup> Kregel, “Democratizing Money” pg. 17

essential to keeping bank liabilities liquid by ensuring banks can always convert them to high powered money on demand...

This is further guaranteed by deposit insurance— government ensures that even if a financial institution becomes insolvent, its insured liabilities can be redeemed against government liabilities at par.

With such a guarantee, markets cannot possibly “discipline” the activities of protected institutions—who can use insured deposits to finance positions in risky assets.<sup>50</sup>

Banks are not ‘savings and loans’ institutions any longer, but rather money managers who maintain an oligopolies over the *practices* of saving and lending. They accept incomes from depositors and offer credit lines for the establishment of debt contracts, as well as a range of complex financial services involving the manipulation and handling of financial instruments. This monetary process takes place within the electronic infrastructure of the banking apparatus; it is not a bank-vault system of cash quantities held in materiality but more broadly a system of credits and debits accounted for in a digital matrix. Wray explains it:

Banks do not lend reserves. When a bank accepts a borrowers IOU, it creates a demand deposit... a "money thing" - through a keystroke, simultaneously creating a bank liability and an asset in the form of a checkable deposit in the name of the borrower... banks make loans and then seek reserves - in private markets (the Fed funds market in the United States) or at the central bank. In any case, almost all central banks in developed countries now operate with an explicit overnight interest rate target, supplying reserves on demand to ensure the target is hit with a discretionary rate...<sup>51</sup>

This means that the ‘reserves’ needed to legitimize the banking system as a trustworthy and responsible redistribution agent are obtained through 1) private exchange markets and 2) government subsidy. This continual refinancing mechanism is in the hands of private bankers, a structural privilege that other economic organizations cannot access. In fact the process has now expanded - in a more insecure form - to nonfinancial firms, as businesses enterprises have learned over-time how fruitful the riches of financial enterprise can be:

large corporations discovered they could issue commercial paper to finance operations at interest rates below those charged by banks on loans. To enhance

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<sup>50</sup> Money in Finance (my formatting)

<sup>51</sup> Money in Finance, 8-9

liquidity of commercial paper, they obtained back-up lines of credit from banks. When commercial paper matures, if holders decide they do not want to “roll over” into new commercial paper, the issuing firm can use its line of credit to pay off the paper. In this manner, the corporation only needs access to bank credit if something goes wrong in the commercial paper market. A given quantity of M1-type money (issued by banks) can finance a larger amount of economic activity because other money things (issued by shadow banks and nonfinancial corporations) are used.<sup>52</sup>

Despite this expansion of financial paper-issuance, we can see that banks *specifically* are the providers of the ‘M1’ credit anchoring the rest of the financial system and business structure into a stabilized accumulation process. Therefore we see the position of private, chartered banks in accessing the distribution and creation of new purchasing power without risk. In the capitalist system of development-through-accumulation, the pie grows through debt, as mediated by banks:

if we want a higher national income and gross domestic product through higher investment, it must be financed through additional debt<sup>53</sup>

This managerial role coexists with an extractive and profit-seeking role; the coexistence makes banks contradictory agents and contributes to a continual undermining of their purpose. The pattern which is theorized, and which has been observed in increasing volume over time, is that banks and financial institutions focus too much on accumulation while neglecting development; or in other words they take more than they make. Bezemer and Hudon (2016) provide a framework for conceptualizing this:

banks monetize debt, and attach it to the economy’s means of production and anticipated future income streams. In other words, banks do not produce goods, services, and wealth, but claims on goods, services, and wealth — i.e., Soddy’s “virtual wealth.” In the process, bank credit bids up the price of such claims and privileges because these assets are worth however much banks are willing to lend against it.<sup>54</sup>

The authors argue that bank credit today, being ‘extended against collateral’, is ‘based on the ownership of assets’; therefore the dynamic which establishes the control of assets is based today upon a pre-existing control of assets.

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<sup>52</sup> Money in Finance, 9

<sup>53</sup> Money in Finance, 9

<sup>54</sup> Dirk Bezemer & Michael Hudson (2016) Finance Is Not the Economy: Reviving the Conceptual Distinction, *Journal of Economic Issues*, 50:3, 745-768, DOI: 10.1080/00213624.2016.1210384,

Economic growth does require credit to the real sector, to be sure. But most credit today is extended against collateral, and hence is based on the ownership of assets. As Schumpeter (1934) emphasized, credit is not a “factor of production,” but a precondition for production to take place<sup>55</sup>

To analyze banks more functionally we can think of a distinction between economic value and economic rent:

the distinction between value and rent, which is all but lost in contemporary analysis. Only then can we understand how the bubble economy’s pseudo-prosperity was fueled by credit flows — debt pyramiding — to inflate asset markets in the process of transferring ownership rights to whomever was willing to take on the largest debt<sup>56</sup>.

A bank “monetizing debt” means that they are turning the financial contract into a commodified object of short-term value. This is what happens when a debt contract is ‘securitized’; sold off. Bezemer and Hudson argue that banks are not producing real goods or services, or even wealth, but instead claims on wealth. Minsky described the behavior of banker innovation and profit-seeking as critical to the financial instability dynamic. The ‘profitability of debt’ is destabilizing to the economy because banks have an obvious and continual incentive to operate and innovate in a way which engages the profitability of debt to the detriment of their debtors. Banking is a business enterprise which generate large revenues and asset-price inflations. We should understand banks to be rent-capturing enterprises. Minsky explains this behavior in relation to a financial instability model:

the financial instability hypothesis takes banking seriously as a profit-seeking activity. Banks seek profits by financing activity and bankers. Like all entrepreneurs in a capitalist economy, bankers are aware that innovation assures profits. Thus, bankers (using the term generically for all intermediaries in finance), whether they be brokers or dealers, are merchants of debt who strive to innovate in the assets they acquire and the liabilities they market.<sup>57</sup>

To summarize, the monetary system is a top-down structure of decreasingly liquid money-objects, the wellspring of high-powered money being the central authority (the US government), and the primary distributive apparatus of this resource-claim system being the private banking system as maintained by the ‘central bank’, the Federal

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<sup>55</sup> Bezemer and Hudson, 747

<sup>56</sup> Bezemer and Hudson, 749

<sup>57</sup> Financial Instability Hypothesis, 6

Reserve. This institutional structure, reproduced to maintain a stable payment system and a development-accumulation financing process, is run by profit-seeking banks which strive to innovate and expand in their operations; this involves the issuance of debt obligations to the public, the holding of public money-stocks in digitally networked deposits, and the servicing and manipulation of financial contracts. The process is driven by a continual pursuit of profit, with an emphasis on the maximum extraction of future income flows from the population by banks and financial institutions.

### **1.5 Finance beyond Banking**

Finance can be divided into two wide categories. Firstly and primarily there is the ‘paper-issuance’ associated with the establishment of financial contracts. This is what banks investors do when they extend credit lines as loans, what insurance brokers do when they insure, and what landlords do when they offer leases for future-scheduled rent payments.

Secondly and extending out of this system is a vast structure of markets, firms, managers and ‘engineers’, the general objective being to accrue profits from the liability structure.

The United States financial structure is a mixture of institutions that originate financing and market based institutions that hold paper which they “buy” from markets.<sup>58</sup>

Banks can create “money” and finance spending, but other financial institutions cannot—they can only create substitutes for money, intermediating between banks and final users”<sup>59</sup>

We can consider the stock market: this is an exchange system in which pieces of corporations are traded. Traders hope to profit from the fluctuating evaluations of such assets. The ‘paper’ of issuance is the share itself; an asset issued by the corporation to raise cash for its operations. Therefore the capacity of the stock-trader to profit from market operations rests upon the legitimacy of the corporation in issuing a share of its own corpus, objectified in a legal asset. The value of the stock - a symbolic asset - is anchored in the real capacity of the firm to generate profits from its operations.

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<sup>58</sup> The Capital Development of the Economy and the Structure of Financial Institutions, 22

<sup>59</sup> Money in Finance, 9

A mortgage-backed security is a tradable commodity. Its value is anchored in the obligatory cash-flows of the debtor (the home-buyer) to the creditor (the bank). The mortgage - which is itself a contract promising continual payment - is packaged and sold within a new commodity to financial markets.

The securitization of standard mortgages was a technique by which Savings and Loans and Mortgage companies originated mortgages which were then packaged as securities for the portfolios of holders such as pension funds, life insurance companies, mutual trusts and various international holders<sup>60</sup>

Minsky explains the 'steps and players' of securitization:

- (1) A debtor: the fundamental paper emitter and source of the cash flows from income that validate the securities
- (2) The paper creator: the bank loan officer who structures the credit and accepts debtors promises to repay.
- (3) The investment banker... finds and negotiates with the paper creator, buys the paper... the paper becomes the corpus of the trust. Investment banker creates securities, devising ways to enhance credit (insurance, complex of liabilities, ersatz equity in the form of junk bonds). The investment banker hires "econometricians" or financial economists to demonstrate that the risks of default on interest and principle of some class of the securities it proposes to issue are so small that these instruments deserve to have an investment rating that implies a low interest rate.
- 4) The trustee: holds the basic paper - the corpus of collateral for the securities
- 5) The servicing organization: (often the paper creator, a source of bank fee income) receives payments from the corpus and transmits the funds to the trustee.
- 6) The rating services: places the resulting securities into risk classes... if the securities fall below some rating or perhaps are threatened to fall below some rating the trustee is supposed to act to protect the interests of the security holders.<sup>61</sup>

We can see that this system relies on the same fundamental structure of financed capitalism: the debtor is locked into an obligatory repayment scheme, diverting their cash flows from their incomes or other sources of wealth (sale of capital or financial relationships) to the servicing of their obligations. The legal enforcement of repayment stretching into the future is the process by which securities and financial instruments derive their value and can be engineered or traded within the financial sector. Despite its complexity, it is rooted foremost in the financial relationship subjecting the obligor to a compulsory cash flow, and psychologically by the desire of the financiers involved in

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<sup>60</sup> The Capital Development of the Economy and the Structure of Financial Institutions, 22

<sup>61</sup> Minsky, "Securitization", 7-8 (my formatting)

the process to realize profits and gains for themselves by ‘taking’ from those obliged to give.

We can think of Minsky’s schematic as the skeleton of the ‘financial superstructure’ which has dominated American society for decades. In its real form it is much more complex, but it relies on this premise: a liability structure made up of legal obligations to deliver payments, fed by ‘paper creators’ - which in private finance are often bankers - and beyond this a larger institutional structure<sup>62</sup> of financial, insurance, analytical and servicing organizations which commodify, ‘engineer’, and exchange within the system for private gain.

We can consider to this end that the steps and players extending beyond players (1) and (2) of securitization, meaning those entities which operate in terms of the commodification of papers rather than the actual debtor-creditor relationship encoded in the paper, are almost all functionally useless to society, as they do not contribute to the development process but rather generate multiplied degrees of accumulation by ‘engineering’ financial contracts for sale.

The ‘security’, fundamentally, is a financial relationship which has been transformed into a commodity that can be bought and sold easily in a market. Securities elucidate broader developments within financed capitalism, discussed by Minsky in the late 1980’s:

Securitization reflects a change in the weight of market and bank funding capabilities: Market funding capabilities have increased relative to the funding abilities of banks and depository financial intermediaries<sup>63</sup>

For this reason, “securitization implies that there is no limit to bank initiative in creating credits”<sup>64</sup>. There is a distinction between the establishment of financial relationships (debt contracts, property leases, insurance contracts, capital [corporate] stock) on one hand, and the commodified exchange of papers<sup>65</sup> on the other .

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<sup>62</sup> Examples of this include equities markets, ‘futures’ contracts, repurchase agreements, mortgage-backed-securities, hedge funds, pension funds, private equity firms, mergers and acquisitions firms, ratings agencies, asset managers, ‘quants’, finance and business lawyers, etc.

<sup>63</sup> Minsky, “Securitization”, 2

<sup>64</sup> Minsky, “Securitization”, 4

<sup>65</sup> Institutional and structural examples of this include the stock markets, ‘futures’ contracts, mortgage-backed-securities, hedge funds, pension funds, private equity firms, mergers and acquisitions firms, ratings agencies, ‘wealth management’, economics departments.

With financial contracts being the primary ‘anchors’ of the system, and the accumulation of wealth or money being the general objective, we can connect the development and accumulation process of capitalism to the superstructure of financial markets and financial engineering; the theory being that the operations through which capitalism expands provides a continual flow of value-anchors to finance which can be packaged and sold, sliced and diced, and otherwise manipulated by traders and money-managers for private profits.

Objects of new value are created based on the promise of somebody else’s new cash flows. Bezemer and Hudson examine finance, insurance, and real estate (the ‘FIRE’ sector) in America to explain a “classical rent theory” of finance. The FIRE sector is contrasted to GDP as a metric of accumulation. This is because GDP represents real sales - accumulation through the sale of goods and services - whereas the FIRE sector accumulates primarily through its own financial contracts: debt obligations, insurance payments, fees and fines, the sale of financial assets, the securitization of financial relationships, etc.

To the extent that the FIRE sector accounts for the increase in GDP, this must be paid out of other GDP components. Trade in financial and real estate assets is a zero-sum (or even negative-sum) activity, comprised largely of speculation and extracting revenue, not producing “real” output.<sup>66</sup>

The most important situation is a contemporary dynamic corresponding to Minsky’s model of a ‘Ponzi’ liability structure.

The long-term impact must be to increase debt-to-GDP ratios, and ultimately to stifle GDP growth as the financial bubble gives way to debt deflation, austerity, unemployment, defaults, and forfeitures. This is the sense in which today’s financial sector is subject to classical rent theory, distinguishing real wealth creation from mere overhead.<sup>67</sup>

The rentier theory is explicitly critical of finance, the perspective being that rather than contributing to productivity, private finance extracts value from the economy through networks of obligation. To this end it is necessary to critique the structures which legitimize the financial system, such as the accounting systems of economic analysis commonly used to ‘explain’ what is going in on in American capitalism. Bezemer and Hudson argue that the

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<sup>66</sup> Bezemer and Hudson, 749

<sup>67</sup> Bezemer and Hudson, 749



“real” economy is where goods and services are produced and transacted, tangible capital formation occurs, labor is hired, and productivity is boosted. Most productive income consists of wages and profits. The rentier network of financial and property claims — “Economy #2” — is where interest and economic rent are extracted. Unfortunately, this distinction is blurred in official statistics.

The [National Income and Products Accounts] conflate “rental income” with “earnings,” as if all gains are “earned.” Nothing seems to be unearned or extractive. The “rent” category of revenue — the focus of two centuries of classical political economy — has disappeared into an Orwellian memory hole.

National accounts have been recast since the 1980s to present the financial and real estate sectors as “productive” (Christophers 2011). Conversely, much of the notional household income in national accounts does not exist in cash flow terms (net of interest and taxes)... That is what makes the seemingly empirical accounting format used in most economic analysis an expression of creditor-oriented pro-rentier ideology.<sup>68</sup>

This extends to a general critique of the financial sector, at least in the contemporary economy but more broadly as a result of the financial process of capital accumulation:

The financial sector does not produce goods or even “real” wealth. And to the extent that it produces services, much of this serves to redirect revenues to rentiers, not to generate wages and profits.

banks monetize debt, and attach it to the economy’s means of production and anticipated future income streams. In other words, banks do not produce goods, services, and wealth, but claims on goods, services, and wealth... In the process, bank credit bids up the price of such claims and privileges because these assets are worth however much banks are willing to lend against it. To the extent that the FIRE sector accounts for the increase in GDP, this must be paid out of other GDP components<sup>69</sup>

We can see an example of this process in the securitization of mortgages. Mortgages are very large debt contracts which are usually established with bank credit lines, for the purpose of purchasing a permanent access (a deed) to housing. They typically consign the debtor household to a 15-30 year repayment scheme averaging “\$1,275 [per month] on 30-year fixed mortgage, and \$1,751 [per month] on a 15-year fixed mortgage”<sup>70</sup>, not

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<sup>68</sup> Bezemer and Hudson, 749

<sup>69</sup> Bezemer and Hudson, 749-750

<sup>70</sup> Liz Knueven (2020), "The average monthly mortgage payment by state, city, and year". Business Insider, 'Personal Finance' section: "The median monthly cost of homeownership in the US is \$1,556 per month, according to the most recent data from the Census Bureau's 2018 American Community Survey. That cost includes not only the monthly mortgage payment, but also other necessary costs like insurance, HOA fees, and property taxes."

to mention insurance contracts, homeowners-association fees, and property taxes.

These mortgages, once established as legal contracts, in turn act as value-anchors which financial institutions can use to establish new financial instruments and assets:

each mortgage—serviced out of income flows of the homeowner—might serve as collateral behind all sorts of securities, and securities of securities, and securities cubed, and all manner of other derivatives that were essentially bets on default. If we look at aggregate numbers, each dollar of US income was devoted to servicing five dollars of debts and securities, and unknown dollar amounts of derivatives. Worse, the terms of the debts were—literally—impossible for homeowners to meet. The whole superstructure of finance began to collapse in late 2007.<sup>71</sup>

The concept of a financial-contract sector which extracts wealth from the economy, rather than contributing new value, allows us to analyze finance as harmful rather than productive to the economy. We can model this harm in multiple ways: there is evidence indicating economic stagnations and downgrades over time in the American economy. There is also a process within American finance which appears to be biased towards short-termism, rising indebtedness, asset-price inflations and continual expansionism. This is financialization; the process is explained in Chapter 2.

The concept of ‘shadow banking’ broadly illustrates the growing institutional sophistication of finance-beyond-banking which has been occurring over time, reshaping the accumulation system as defined by private finance.

Shadow banking is defined as “credit extension outside of the banking system” (FSB 2011b). It includes entities such as hedge funds, money market funds, pension funds, insurance companies, and to some extent the large custodians such as Bank of New York and State Street Bank. Shadow banks typically fund themselves with securities lending transactions, i.e., use (and reuse) of the collateral they post with banks. Investment banks may conduct much of their business in the shadow banking system, but they are not shadow banks themselves. The shadow banking system makes up 25 to 30 percent of the total financial system (FSB 2011b) and was a major contributor to the GFC.<sup>72</sup>

Over the past half century, other “nonbank” or “shadow bank” financial institutions have developed a wide variety of substitutes for bank demand deposits, some of which allow holders to write checks for payment. Increasingly, credit cards and debit cards are used in payments. All of these developments appear to make it difficult to define money with precision.<sup>73</sup>

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<sup>71</sup> Money in Finance, 11

<sup>72</sup> Moe, 36

<sup>73</sup> Money in Finance, 2

To conclude, the private financial sector as it extends beyond the ‘basics’ of banking is vast and overcomplicated. The most important dynamic exhibited throughout the system is the commodification of financial relationships for private markets, and more broadly a socioeconomic process through which finance ‘takes’ far more than it ‘makes’ within the capitalist process of development and accumulation. The multifaceted composition of finance, rather than contributing to healthy system diversification, can be read as a series of maladaptive overgrowths encouraging a deviancy of financial operations away from productive contributions to the general society.

### **Summary of Chapter 1**

We can conclude that there is a financial process through which capitalist economies develop and accumulate capital through time, with financial contracts being the primary ‘tools’ of the system, their main purpose being to inject credit into the economy as investment financing or otherwise provide some financial service, in exchange for an obligatory payment-plan which is scheduled into the future.

This economic system is a ‘monetary production’ regime in which a centrally-administrated resource (money) is distributed and accumulated through banking networks, for private gain. The functional process establishes a large pool of assets and wealth through which new financial instruments can be packaged and engineered, to be sold in financial markets or held in portfolios, with the general objective at any given point being the continually-expanding accumulation of wealth and capital for those who retain ownerships - positions of power and control - within the capitalist system.

We can also note that the process by which this system is destabilized, namely the ‘financial instability hypothesis’ as described by Minsky, is a theoretical model which explains the structure in which this dynamic will produce its own undermining conditions and ruin the process of orderly accumulation through time. The continually extractive elements of finance create conditions of untenable liability structures, through which the general economic system of capitalism - as mediated through a financial circuit process - is destabilized.

In the following chapter we will examine the recent history, of the past 50 years, in which this general system has become amplified and increasingly dysfunctional; the

process of 'financialization' which has overtaken the American economy. This analysis is conducted through a review of the literature and empirical evidence related to these over-time institutional transformations.

## **Chapter 2: 'Financialized' Capital Accumulation**

*The way to make money is to buy when blood is running in the streets.*

- *John D. Rockefeller*

In order for the American economy - which is highly capitalistic - to grow and develop over time, there must be a set of institutions and structures which form an orderly system of administration, an 'accumulation regime'. Stockhammer (2008) describes an accumulation regime as a "macroeconomic dynamic... embedded in a particular institutional setting (the "mode of regulation")"<sup>74</sup>.

The arguments of this chapter are that a process of 'financialization' has generated a highly complex and multi-variant shift within American capitalism since the 1970's, continuing into the present day. Despite the complexity of this transition, the fundamental dynamic is as an increasing penetration and domination of financial operations within and over the accumulation process of American capitalism.

We have established the structure through which private finance determines and drives the process of capitalism - primarily through hierarchical investment circuits and more broadly through a financial system which seeks to profit from this structure in a myriad of ways. With this structure in mind we will analyze contemporary capitalism through the following sequence of examination:

Section 2.1 describes the evolution of capitalism into a 'new mode' of accumulation, identified by Minsky (for example) as 'Money Manager Capitalism'. This overtime transition is the process of financialization.

Section 2.2 describes the capital accumulation paradigm which has been established as a result of financialization; the argument is that the old form of capitalism, as defined by investments in tangible productivity and growth through firm profits and wages, has been replaced by a 'bubble economy', in which the primary growth model involves utilizing financial circuits to inflate the price of capital and financial assets.

Section 2.3 provides some description of the real operations which occur within this accumulation system, primarily the contemporary systems employed by the financial sector to actualize the 'bubble economy'.

Section 2.4 describes how this accumulation regime is maintained by and embedded within an institutional structure, involving the central authorities, the legal system, and the social structure, the argument being that capitalism in its current,

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<sup>74</sup> Stockhammer, 185

financialized form is not a ‘free market’ but rather a highly organized and administrated (i.e. ‘planned’) apparatus.

These sections cohere to provide a general description of contemporary American capitalism as defined by financialization and a debt-bubble expansionism. Since the primary and recurring factor throughout each pillar is the expanded penetration of private financial operations and systems into the social structure, the argument is that the general process of financed-accumulation as explained in Chapter 1 is the explanatory aspect of this system.

## **2.1 Financialization**

Minsky in the 1990’s identified and described a new period in the long-term development of capitalism, which he called Money-Manager Capitalism.<sup>75</sup> The concept of ‘money management’ refers to investment entities and actors who, rather than providing credit for the establishment of tangible financial relationships, instead utilize existing financial relationships as ‘legalized’ in contracts (and made tangible in ‘pools’ of financial assets and instruments) to generate profits within the financial sector. Whalen (1999) explains it as such:

The rise of institutional investors encouraged continued financial-system evolution by providing a ready pool of buyers for securitized loans, the commercial paper of finance companies, and other innovations.

It also fueled the trend toward mergers, acquisitions, corporate breakups, leveraged buyouts and stock buybacks--since fund managers have a strong incentive to support whatever initiatives promise to boost near-term portfolio value. These managed-money funds often provided the resources that raiders needed to secure corporate control<sup>76</sup>

Recall the explanation in section 1.5 of how the financial sector, expanding ‘beyond banking’, can utilize financial ‘papers’ such as bank loans and corporate bonds to engineer new assets. We can recognize that institutional investors, working within

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<sup>75</sup> Whalen, 5 (citing Minsky) (my emphasis): “[Money-Manager Capitalism] Became a reality in the 1980s as institutional investors... the largest repositories of savings in the country, began to exert their influence on financial markets and business enterprises... business leaders became increasingly sensitive to short-term profits and the stock-market valuation of their firm... By the 1980s, money managers were the masters.”

<sup>76</sup> Whalen, 6

profit-seeking firms and with large volumes of financial objects at their disposal, have exerted an increasing influence over the economic system over time. There are many trends associated with this evolution: ‘mergers and acquisitions’, ‘leveraged buyouts’, and ‘corporate breakups’ for example, involve the utilization of funds to ‘raid’ or otherwise restructure business firms, even sell them off for piecemeal gain. ‘Stock buybacks’ are a process through which corporations spend cash to ‘repurchase’ shares of their own firms.

The general motivation within any of these systems are short term gains for financial actors, who can profit from sales of financial assets, or see their portfolios increase in value from holding financial instruments which are ‘well managed’ - meaning operationalized in the ways described above (and more!). As the financial system has expanded and grown, the ‘pools’ of instruments and assets which enable these operations have grown as well. Stockhammer describes the complexity of this evolution:

While there is a universal agreement that the Fordist accumulation regime has come to an end in the course of the 1970s, there is no agreement on how to characterize the post-Fordist regime (or if a such is already in place). After an initial emphasis on flexibility and, later information and communication technology as driving forces of the accumulation regime, financial factors have recently received more attention.

The notion of a “finance-dominated” accumulation regime is proposed to highlight that financial developments crucially shape the pattern and the pace of accumulation.<sup>77</sup>

The Fordist regime, associated with mass-industrialization, was stabilized by the structure of what Minsky called ‘managerial capitalism’, in regulatory interventions and social services constrained the excesses of capital accumulation. For the purposes of this paper we can examine financialization as a period shift and institutional realignment of finance within American capitalism. It culminated in the 2008 financial crisis (which became the Global Financial Crisis) in terms of the most extreme period of financial instability. The liability structure failed (a debt-deflation), and its failure was rooted in the new accumulation structure of the United States.

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<sup>77</sup> Stockhammer, 185

Keeping in mind the dual role of development and accumulation within financed capital circuits (the exchange of present-for-future money), we can examine the increasing role of finance as an accumulating system, rather than a developmental system. We can also examine the expanding ways in which finance has contributed to a general destabilization of society through the same dynamic elaborated in part 1; that dynamic being the use of credit to (1) establish the control over real capital in the economy and (2) establish claims on future income streams.

Financialization is an economic process approached from many angles. Wide scholarly interest in the phenomenon is explained by Zwan:

Since the late 1990s and early 2000s, scholars from a variety of disciplines... have used the concept of financialization to describe [the] shift from industrial to finance capitalism... what unites these studies is a view of finance beyond its traditional role as provider of capital for the productive economy.<sup>78</sup>

Stockhammer explains:

The notion of financialization covers a wide range of phenomena:

- the deregulation of the financial sector and the proliferation of new financial instruments
- the liberalization of international capital flows and increasing instability on exchange rate markets
- a shift to market-based financial systems
- the emergence of institutional investors as major players in financial markets
- the boom (and bust) asset markets, shareholder value orientation and changes in corporate governance (of non-financial business)
- increased access to credit by previously 'underbanked' groups or changes in the level of (real) interest rates.
- Financialization has also been used to highlight psychological changes and ideological structures.<sup>79</sup>

This is a very complicated process - it is highly sophisticated and multivariate. So we can analyze it from a simplified framework which reflects the general trend in each disaggregated system of financialization: that is the increasing penetration of private financial operations and accumulative behavior into the social system.

Therefore in any given economic issue related to financialization - interest rates, indebtedness, institutions and organizations, shareholder value, access to credit, etc. - there is always the trend of an expansion of financial operations; the private

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<sup>78</sup> Zwan, 99

<sup>79</sup> Stockhammer, 184 (my formatting)



establishment of financial-obligation contracts and the trading / manipulation of these contracts by financial institution, for private and sectorally internalized gain.

The argument is that the financial system has evolved over time, becoming increasingly complex and internally-innovative. Investors have become ‘institutionalized’, operating increasingly within financial channels rather than in relation to productive enterprise. This paradigm has been fueled by ‘funds’ of managed assets which are pooled together and accumulated from debt-securities, commercial papers, and newly-engineered financial instruments. The vast quantity of financial assets at the disposal of funds and money-managers (continually fed by newly-issued financial contracts) enable practices like ‘corporate raiding’, mass-market trading, ‘shareholder-value orientations’, and ‘stock buybacks’, the continual trend being the accrual of profits and short-term gains from financial operations, often at the expense of productive or tangible enterprise. This has negative consequences for the ‘real’ economy and the general population of workers:

Money manager pressures... encouraged corporate downsizing and re-engineering... in addition to job insecurity, employees...faced a workplace in which productivity pressures and contingent work was on the rise while many intra-organizational job ladders and employer-provided training opportunities were being eliminated<sup>80</sup>

We can observe that between the 1980’s and now the American economy has become ultra-financialized. The literature surrounding financialization appears to agree that America capitalism has become increasingly subordinated to financial operations and institutions in its ‘pattern and pace of accumulation’.

Consider that this pattern and pace of accumulation is in fact the financially structured system through which social resources are produced, and through which the control and real ownership of capital is determined, as discussed in Chapter 1. Therefore the financialization paradigm is not only a commentary on finance but more broadly on the *role* of finance in establishing a *new* capitalism:

Capitalism in the United States is now in a new stage, money manager capitalism, in which the proximate owners of a vast proportion of financial instruments are mutual and pension funds.

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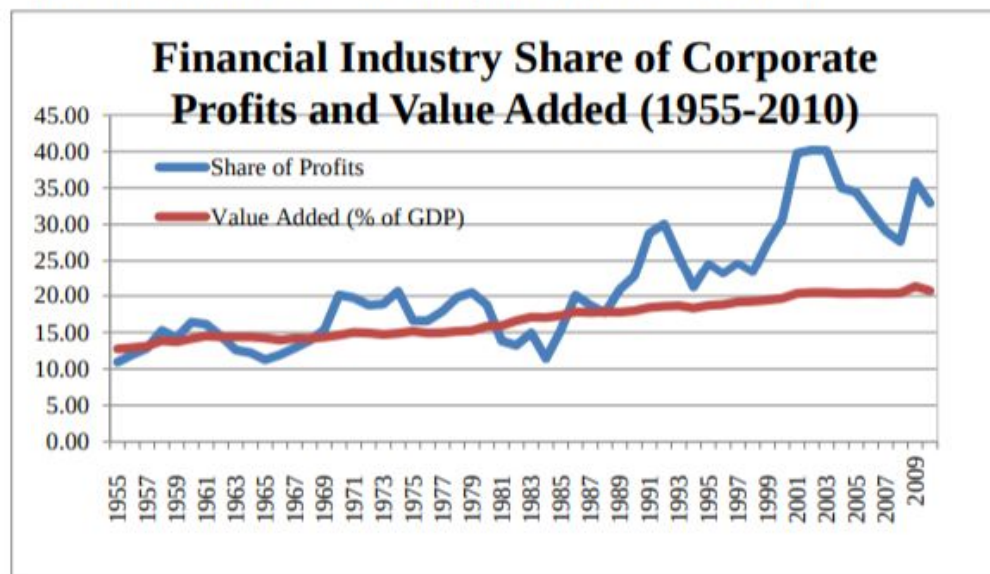
<sup>80</sup> Whalen, 6

The total return on the portfolio is the only criteria used for judging the performance of the managers of these funds, which translates into an emphasis upon the bottom line in the management of business organizations.

It makes the long view a luxury that only companies which are essentially owned by a single individual and which are not deeply dependent upon external financing can afford.<sup>81</sup>

The analytical commentary on financialization is quite negative. We can see that it has involved benefits to the private financial sector at the expense of most people, even many business structures within American capitalism.

Figure 1 US Financial Sector Share of Corporate Profits and Value Added



Source: Bureau of Economic Analysis.

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From this graph we can see that the financial industry's share of profits has been outpacing its 'value added' contribution to the general accumulation process since the late 1980's. In this empirical sense finance is 'taking' more than it is 'making'.

<sup>81</sup> Minsky (1996), "Uncertainty and the Institutional Structure of Capitalist Economies", pg. 1

<sup>82</sup> Mazzucato and Wray, pg. 3. The authors explain the graph: "the financial system evolved over the post-war period from one in which closely regulated and chartered commercial banks were dominant, to one in which financial markets dominated the system. Over this period, the financial system grew rapidly relative to the nonfinancial sector, rising from about 10% of value added and a 10% share of corporate profits to 20% of value added and 40% of corporate profits in the US (see below). This was, to a large degree, because instead of finance financing the capital development of the economy, it was financing itself" (pg. 2)

Lapavistas and Mendiata-Munoz (2016) discuss the history of these expansionary profits which the financial sector have reaped, beginning even before the period of financialization:

From the end of the Second World War to the early 1960s... financial profits began to rise as a proportion of total profits...

from the early 1960s to the early 1980s... financial profits made up a fairly stable part of total profits. That period was marked by the gradual abolition of controls over interest rates, a rise in inflation and, crucially, a profound crisis of capitalist accumulation in the 1970s, which ushered in financialization.<sup>83</sup>

Many analysts express this observation; that a ‘crisis of capitalist accumulation’ stimulated the transition of the economy into a state of financialization. The general concept, as expressed by Lazonick (2010) is that a failure of the American ‘business model’ to remain competitive and profitable in the face of global competition and internal stagnations led to an abandonment of industrial reinvestment as a growth paradigm. A shift towards short-termism via financial operations was the sensible reorientation, even if it engendered increasing instability.

From the early 1980s to the early 2000s, the period of aggressive financialization, financial profits exploded as a proportion of total profits. The sharp rise of financial profits during these two decades was marked by pronounced cycles, and came to an end with the profound crisis of 2007–09. Indeed, the bubble that preceded the crisis can be seen as a frantic attempt to boost financial profits following the peak of 2003.<sup>84</sup>

This brief history displays a transition in which the financial sector, gradually ‘warming up’ through the accumulation of stable profits, expanded its social posture, increasing its economic power at an accelerating pace in response to economic stagnations in other sectors and systems. Although it was a degradation of the accumulation regime which enabled the ‘period of aggressive financialization’ beginning in the 1980’s, we can observe that the origins of the process began in the ‘run of good times’ between the end of World War 2 and the 1960’s, in the sense that financial profits began to expand in relation to total profits.

The financial sector was expanding its economic gains at the expense of others sectors in terms of productivity. An increase in gross corporate debt over the post-1970’s

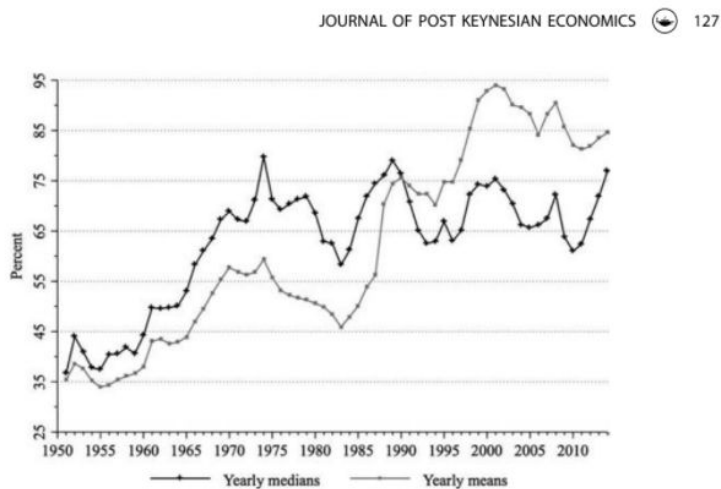
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<sup>83</sup> Lapavistas and Mendiata-Munoz, 5

<sup>84</sup> Lapavistas and Mendiata-Munoz, 5

period has been cited as a definitive characteristic of the financialization of non-financial corporations, and flow of funds data clearly document rising corporate leverage.<sup>85</sup>

### Debt relative to Capital Stock, 1950-2014



**Figure 3.** Debt relative to the capital stock, 1950–2014. *Source:* Author's calculations based on data from Compustat.

86

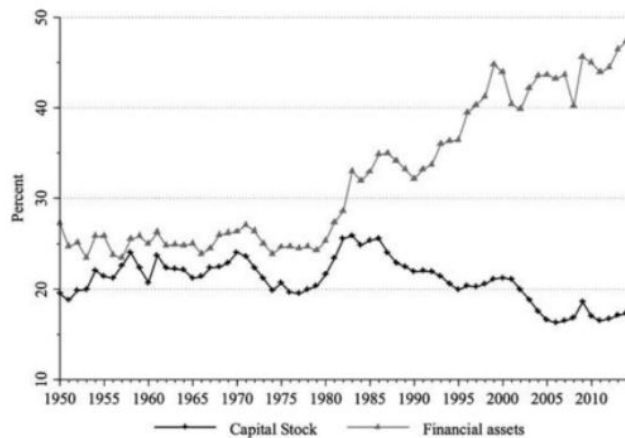
This figure illustrates the long trend of corporate debt (obligations) increasing relative to (productive) capital stock, a process which has been ongoing since the 1950's but demonstrates increasing fluctuation after the 1980s.

### Capital Assets and Financial Assets relative to Median Yearly Sales, 1950-2014

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<sup>85</sup> Davis, 126

<sup>86</sup> Davis, 127



**Figure 1.** Capital and financial assets relative to sales yearly medians, 1950–2014. *Source:* Author's calculations based on data from Compustat.

**Table 1.** Portfolio composition, relative to sales (yearly medians, %).

|                        | 1950  | 1960  | 1970  | 1980  | 1990  | 2000  | 2010  | 2014  |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Capital stock          | 19.48 | 20.72 | 24.07 | 21.62 | 21.92 | 21.24 | 16.96 | 17.32 |
| Financial assets       | 27.18 | 25.00 | 26.31 | 25.35 | 32.13 | 43.91 | 44.95 | 47.42 |
| Cash/short-term assets | 12.94 | 7.02  | 4.22  | 3.47  | 4.07  | 6.61  | 13.13 | 12.76 |
| Receivables            | 10.30 | 11.93 | 15.34 | 14.79 | 15.42 | 16.27 | 13.96 | 13.67 |
| Advances               | 0.46  | 0.36  | 0.55  | 0.11  | 0.00  | 0.00  | 0.00  | 0.00  |
| Other assets           | 1.13  | 1.41  | 2.27  | 2.28  | 4.78  | 8.14  | 7.04  | 7.78  |

*Source:* Author's calculations based on data from Compustat.

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This figure provides a visualization of the detachment of capital stock from financial assets within the balance sheets of American firms, indicating a growing divorce between financial instruments and the productive capital. Capital stock, being the tangible assets which contribute materially to the production process, can be a proxy for 'real' production, in contrast to financial assets, which are objects representing financial obligations, claims on assets, and money-things.

Stockhammer explains that this expansion of financial operations and systems has ironically not contributed to investment. In fact there has been a declining trend in firm investments as a proportion of operating surpluses since the 1970's<sup>88</sup>. Lazonick describes the growing practice of 'stock buybacks' as being largely responsible for this trend; companies have increasingly spent their retained earnings from operations on repurchases of their own financial assets, rather than investments in tangible capital. He describes how "in the years prior to the financial crisis" many major corporations and

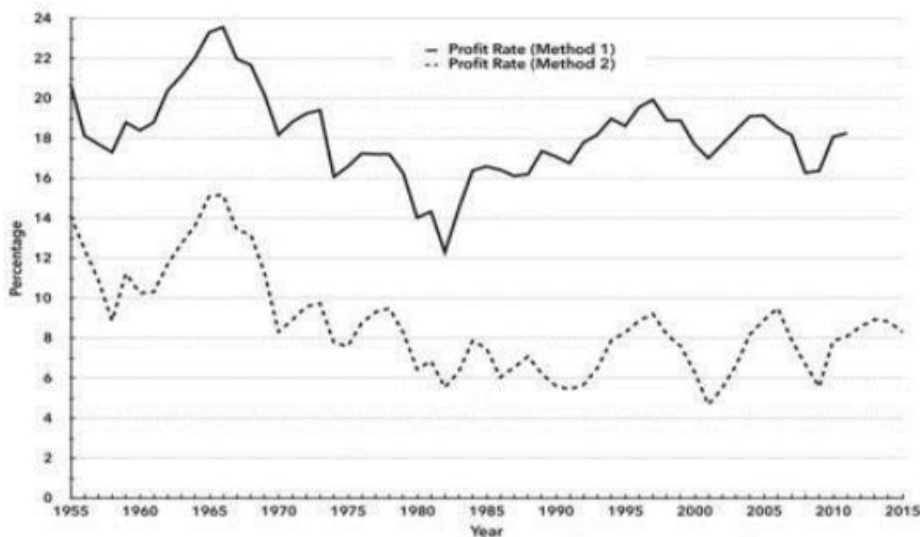
<sup>87</sup> Davis, 199

<sup>88</sup> Stockhammer, 190

financial institutions spent hundreds of billions of dollars on the repurchase of their own stocks<sup>89</sup>, often in excess of their operating income.

Meanwhile the general US profit rate has been either declining or stagnating since a peak in the 1960s, in a time period corresponding to the increase in private financial profits and operations. For a capitalist economy, this is not good; the ‘profit rate’ stagnating over time indicates a fundamental failure in the accumulation process, even if gains are being registered in net sales (GDP) and equity evaluations (stock markets).

Chart 2. U.S. Profit Rate (Method 1) and U.S. Profit Rate (Method 2), 1955–2015



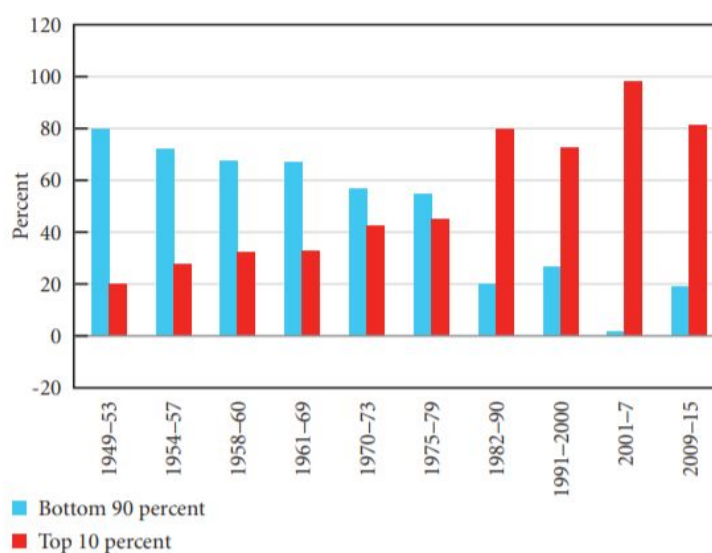
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<sup>89</sup> Lazonick, 697 - 698: “Among the biggest stock repurchasers in the years prior to the financial crisis were many of the banks that were responsible for the meltdown and were bailed out under the Troubled Asset Relief Program (TARP). They included Citigroup (\$41.8 billion repurchased in 2000–07), Goldman Sachs (\$30.1 billion), Wells Fargo (\$23.2 billion), JP Morgan Chase (\$21.2 billion), Merrill Lynch (\$21.0 billion), Morgan Stanley (\$19.1 billion), American Express (\$17.6 billion), and U.S. Bancorp (\$12.3 billion). In the eight years before it went bankrupt in 2008, Lehman Brothers repurchased \$16.8 billion, including \$5.3 billion in 2006–07. Washington Mutual, which also went bankrupt in 2008, expended \$13.3 billion on buybacks in 2000–07, including \$6.5 billion in 2006–07. Wachovia, ranked thirty-eighth among the Fortune 500 in 2007, did \$15.7 billion in buybacks in 2000–07, including \$5.7 billion in 2006–07, before its fire sale to Wells Fargo at the end of 2008. Other major financial services companies that did substantial repurchases beginning in 2000, before they ran into financial distress in 2008, were AIG (\$10.2 billion), Fannie Mae (\$8.4 billion), Bear Stearns (\$7.2 billion), and Freddie Mac (\$4.7 billion). By spending money on buybacks during boom years, these financial corporations reduced their ability to withstand the crash of the derivatives market in 2008, thus exacerbating the jeopardy they created for the economy as a whole.”

<sup>90</sup> Lapavitsas and Mendieta-Munoz, 6

The American economy has become highly antisocial and degraded in the same time period that finance has succeeded and expanded so richly, probably as a systemic reaction to declining productivity and profit rates. Much of the wealth generated from the capital accumulation process is increasingly siphoned off by a small minority of the population. This creates a situation where the majority experience a socioeconomic decline while a small fraction of the population register unprecedented gains in terms of the accumulation of capital and the evaluation of assets.

**Figure 2** Households' Share of Average Income Growth: 1949–2015 Expansions (including capital gains)

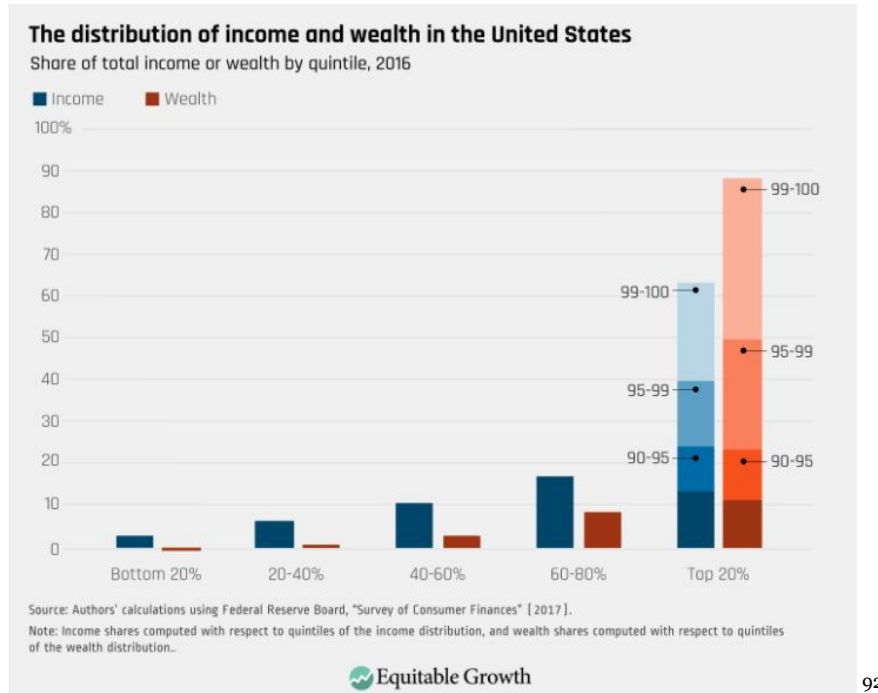


Sources: Author's calculations based on Piketty/Saez data and NBER

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This graph by Tcherneva (2017) indicates the gradual 'over time' process by which the top 10% of income-earners have been capturing larger portions of national income. The process has been ongoing since the 1950s, but its most extreme severity corresponds to the post-70's shift to financialization. The distribution of wealth as derived from the capital-accumulation process has reached a point of extreme stratification:

<sup>91</sup> Pavlina R. Tcherneva (2017). "Inequality Update: Who Gains When Income Grows?" Levy Economics Institute.



92

It is notable from this graph that the top 20% of Americans are the only quintile with a wealth share in excess of income share. This is undoubtedly related to the many rising contract-costs and asset-inflations levied on the American population. Within such a structure of obligatory extraction via financial contracts, the meager income shares (cash flows) of the bottom 80% are increasingly funneled into payments to lenders, insurance, real estate, utilities, and financial servicing entities.

Furthermore, the declining trends in investment have led to a widespread degradation of infrastructure: roads, drinking water, waste management, bridges, schools, energy networks, and transportation have all been in a continual period of decline, even as the financial system whose development circuits might otherwise invest in such capital assets have expanded in size and scope.

<sup>92</sup> Figure from:  
<https://equitablegrowth.org/the-distribution-of-wealth-in-the-united-states-and-implications-for-a-net-worth-tax/>



Table 1 ASCE's 2013 Report Card for America's Infrastructure

| <b>Water &amp; Environment</b> |    | <b>Transportation</b> |    |                        |
|--------------------------------|----|-----------------------|----|------------------------|
| Dams                           | D  | Aviation              | D  | <b>A = Exceptional</b> |
| Drinking Water                 | D  | Bridges               | C+ | <b>B = Good</b>        |
| Hazardous Waste                | D  | Inland Waterways      | D- | <b>C = Mediocre</b>    |
| Levees                         | D- | Ports                 | C  | <b>D = Poor</b>        |
| Solid Waste                    | B- | Rail                  | C+ | <b>F = Failing</b>     |
| Wastewater                     | D  | Roads                 | D  |                        |
|                                |    | Transit               | D  |                        |
| <b>Public Facilities</b>       |    |                       |    |                        |
| Public Parks & Recreation      | C- | <b>Energy</b>         | D  |                        |
| Schools                        | D  | Energy                | D  |                        |

Source: American Society of Civil Engineers.

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Therefore investments have shrunk away from infrastructure, fixed capital, and income growth. The economy cannot be said to be working on behalf of the majority population. Here is a discussion of the consequences of financialization, citing Zwan's survey:

One of the important consequences of the recent developments is 'that financial gains are not reinvested in the firm's productive facilities but distributed to shareholders through dividend payouts and share buybacks' (Zwan 2014: 107). The owners and directors do not have the long-term interest and stability of their firm in mind but mainly the value of their shares. The question that the author poses is similar to the one that occupied Hilferding some hundred years ago: Are we witnessing the victory of the rentier? (Zwan 2014: 105).<sup>94</sup>

Lazonick provides a highly detailed analysis of the shift in American 'business models'; the newer model representing business in the age of financialization, in terms of both the timescale and the operational principles:

<sup>93</sup> Mazzucato and Wray, 4. America's infrastructure had continued its trend of degradation 6 years into the recovery from the debt-deflation crisis of 2008

<sup>94</sup> Schiller, 144

*Table 1*  
**Strategy, Organization, and Finance of  
 the Old- and New-Economy Business Models**

|                   | <i>Old-Economy Model</i>   | <i>New-Economy Model</i>  |
|-------------------|--|---|
| Strategy, product | Growth by building on internal capabilities; business expansion into new product markets based on related technologies; geographic expansion to access national product markets. | New firm entry into specialized markets; sale of branded components to system integrators; accumulation of new capabilities by acquiring young technology firms.                                |
| Strategy, process | Corporate R&D labs; development and patenting of proprietary technologies; vertical integration of the value chain, at home and abroad.  | Cross-licensing of technology based on open systems; vertical specialization of the value chain; outsourcing and offshoring.  |
| Organization      | Secure employment: career with one company; salaried and hourly employees; unions; defined-benefit pensions; employer-funded medical insurance in employment and retirement.     | Insecure employment: interfirm mobility of labor; broad-based stock options; nonunion; defined-contribution pensions; employee bears greater burden of medical insurance.                       |
| Finance           | Venture finance from personal savings, family, and business associates; NYSE listing; payment of steady dividends; growth finance from retentions leveraged with bond issues.    | Organized venture capital; initial public offering on NASDAQ; low or no dividends; growth finance from retentions plus stock as acquisition currency; stock repurchases to support stock price. |

Source: Lazonick, *Sustainable Prosperity in the New Economy?* 17.

The ‘old-economy model’ described by Lazonick is the economic model many people may still conceptualize as being ‘the way business is done’, and certainly is more widely viewed as a stable and healthy paradigm. The contemporary shift is, in most ways, a major downgrade. The new-economy model involves a shift away from long-termism, relationship-based finance, labor empowerment, and internal reinvestment. These institutions, despite instilling stability into the economy, simply do not register short-term gains to the same degree that financialized operations can.

We can see that these organizational developments correspond to a few intertemporal trends: (1) a detachment of financial assets from fixed capital, (2) a continual expansion of private indebtedness<sup>95</sup>, (3) a large and continuing transfer of wealth away from the majority of the population and into the hands of a small group of

<sup>95</sup> Data in [section 2.2](#)

wealthy capital-controllers and (4) a general trend of increasing instability, short-termism, complexity, and burdens levied on the population.

We should therefore use the rentier model to analyze finance as it operates in American capitalism, for two reasons: firstly there is the theoretical aspect; the process by which bank credit is a legal tool which establishes contracts of obligatory cash flows into the future. Secondly there is a growing urgency to be critical of the real system; the empirical and analytical evidence suggesting an increasingly unhealthy and extractive system-pattern of American finance.

The behavior of finance is inextricable from the functioning and welfare of the whole socioeconomic system. This is because the financial system of a capitalist economy is as an explanation for the general economic structure of accumulation:

A capitalist economy can be described by a set of interrelated balance sheets and income statements.

The liabilities of the balance sheet are commitments to make payments either on demand, when a contingency occurs or at specified dates.

Assets on a balance sheet are either financial or real and they yield receipts either as the contract is fulfilled, as some underlying productive process generates incomes, or as they are sold or pledged.<sup>96</sup>

Now, we are in a state of multipronged crisis, a situation inflamed by the COVID19 pandemic but long-simmering in its financial dimensions. The urgency of critical assessment is dialed up with each passing year, as problems go unsolved and in fact entrench themselves institutionally:

As the time of writing (May–June 2020), we are witnessing, simultaneously, a health crisis, an economic crisis, and (in most countries) a state capacity crisis. Last but not least, a crisis of global governance as well.<sup>97</sup>

Therefore, the development of a ‘financialized’ system of accumulation, displayed in firm balance sheets, income distributions, infrastructure degradations, and operational practices, should be analyzed as responsible for the current economic situation, which is not good.

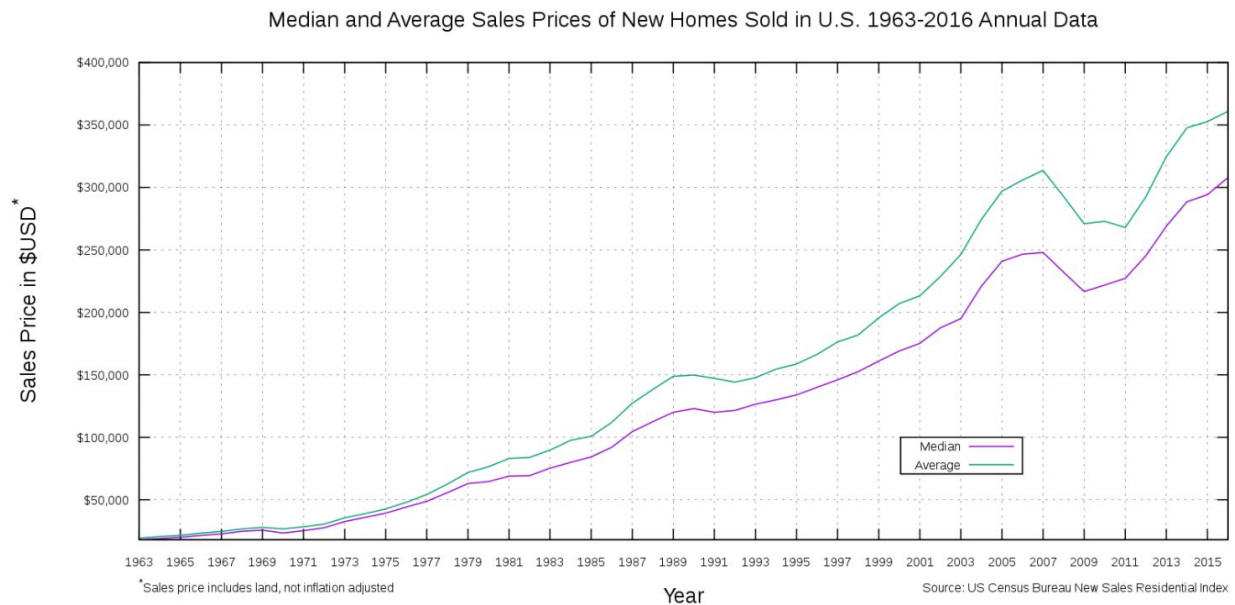
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<sup>96</sup> Reconstituting the United States Financial Structure, 12

<sup>97</sup> Burlamaqui and Filho, 2

## 2.2 Structure of the ‘Bubble Economy’

We know that the GFC was triggered by a ‘housing bubble’, which is a debt ‘superstructure’ consisting of inflated assets which derived their value (derivatives) from the housing-debt of homeowners (mortgage-backed securities). This bubble was created through a debt-issuance pattern of expansionary, innovative, profit-seeking behavior. Consider that housing prices have been inflating since the 1960’s, interrupted only by the 2007-8 crisis but rebounding shortly after:



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Hudson (2010) explains that the financialization process has transited the economy from an accumulation regime of industrial capital to a ‘financialized bubble’ oriented around the inflation of capital and asset prices as the primary dynamic of capital accumulation.

A Bubble Economy is based on debt leveraging in search of “capital” gains. In as much as real estate is the economy’s largest sector and land its largest component, these gains are headed by rising site value. The annual rise in land prices has far outstripped growth in national income since the late 1960s, becoming the driving force in today’s financialized mode of “wealth creation.”<sup>99</sup>

<sup>98</sup> US Census Bureau; ‘New Sale Residential Index’

<sup>99</sup> Hudson (2010), pg. 4

The problem with such bubbles is that once underway, asset-price inflation becomes the only way to sustain the debt burden... The problem is that carrying charges on this debt divert income away from being spent on consumption and investment.”<sup>100</sup>

We can see this accumulation process illustrated in the increasing costs and concurrent financial obligations associated with (1) the real-estate market which Americans must participate in if they hope to attain a permanent accessing to housing, (2) the educational certificates increasingly necessary to participate in the job market, and (3) inordinately expensive healthcare services and medications.

Prospective buyers must devote more and more of their working life to pay off the debts needed to buy a home, automobile, education or health care. That is the essence of debt deflation.<sup>101</sup>

We can note that private indebtedness has been increasing continually over time, for the past 70 years:

Since the 1950s, total private debt as a percentage of GDP has grown consistently: It passed 100 percent in the early 1980s; accelerated leading up to the financial crisis that started in 2007, when it peaked at over 170 percent; and then decreased to just below 150 percent by 2019.<sup>102</sup>

#### Private Loans and Debt Securities, Nonfinancial Sectors, 2019:Q1<sup>103</sup>

|                   | Percent (%) of GDP | Billions of \$ |
|-------------------|--------------------|----------------|
| Businesses        | 74                 | 15,588         |
| Households        | 74                 | 15,612         |
| - Home Mortgages  | 49                 | 10,356         |
| - Consumer Credit | 19                 | 4,000          |
| - Other           | 6                  | 1,257          |
| Total             | 148                | 31,200         |

<sup>100</sup> Hudson (2010), 7

<sup>101</sup> Hudson (2010), 7. Hudson’s description of an asset-inflation economy driven by debt-bubbles correspond to the conditions of financial instability established in section 1.3.

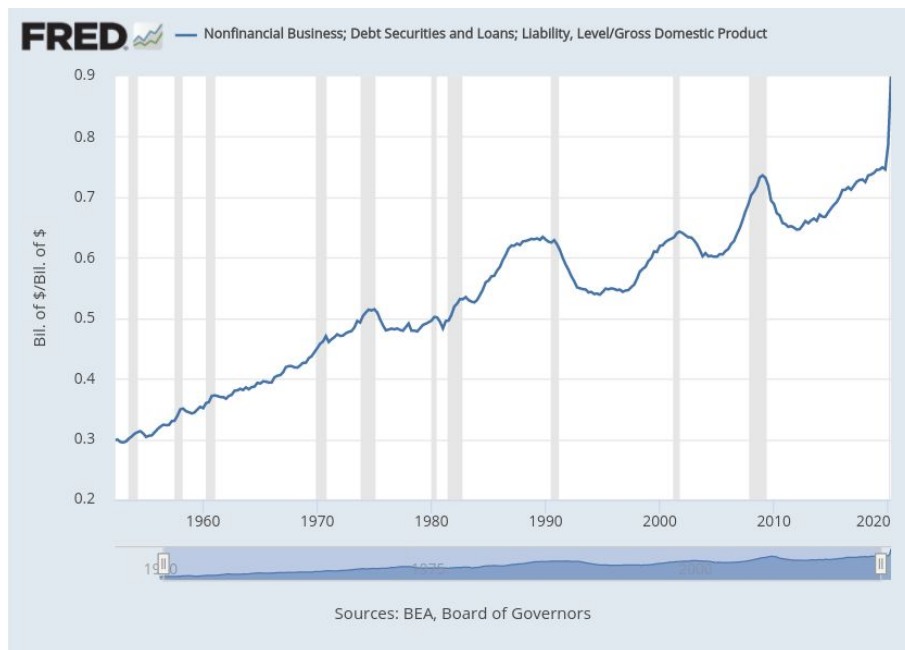
<sup>102</sup> Perkis (March 2020) “Making Sense of Private Debt” (my emphasis)

<sup>103</sup> My figure, based on data provided by Perkins (2020), Federal Reserve Bank of St. Louis

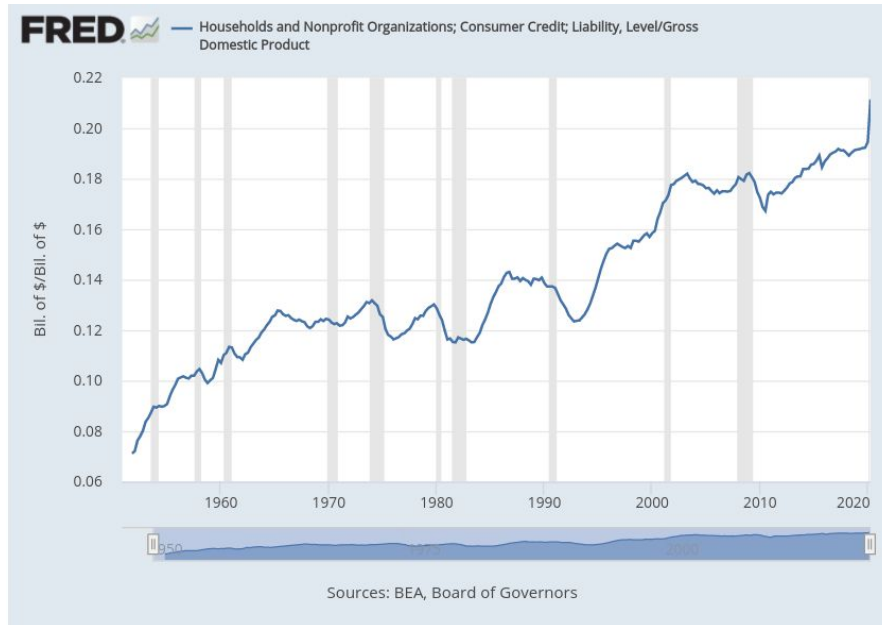
Consider that a liability structure is a system based on the relationships between creditors and their debtors. These relationships extend into the future and possess a fluctuating degree of stability, that stability being a function of the capacity of the debtors to repay their obligations.

GDP being a metric of investment-output, we can infer a relationship in which private debt levels exceeding GDP - as began in the 1980's, and continuing ever since - might represent a form of aggregated ponzi finance, in the sense that gross investment-output sales are of a smaller quantity than the net payment obligations levied onto the private sector by financial contracts.

#### Nonfinancial Business, Debt Securities and Loans; Liability/GDP 1950s-2020



#### Consumer Credit, Liability/GDP 1950s-2020



This debt-structure expansion corresponds to a long-term inflation of equity markets and increases in GDP, meaning more sales, more consumption, more purchases, and therefore more accumulation as registered in inflating equity prices. These private debts are financial contracts in which credit is provided to the real economy in exchange for claims on future income streams.

The process is destabilizing because its dynamics induce unhealthy liability structures:

the investments put into place during an investment boom are often of low value relative to their costs. As a result liability structures cannot be serviced by the cash flows these investments can generate as capital assets and collapse of the price level of assets is likely to ensue. A sharp break in the price level of assets leads to institutional failures as well as a collapse in the aggregate volume of investment. Speculation, the activities Keynes identified with Wall Street, makes business cycles, including the sporadic deep depression cycles... the normal result of the economic process<sup>104</sup>

The engine of this system is bank credit:

Banks appeared to have created a postindustrial mode of wealth creation by issuing enough credit to keep bidding up property prices – and to keep the boom going by lending yet more against collateral rising in value.<sup>105</sup>

<sup>104</sup> Reconstituting the United States' Financial Structure, 10-11

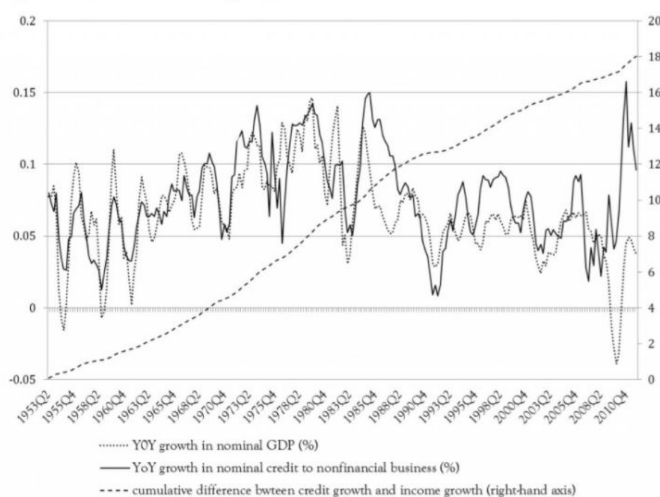
<sup>105</sup> Hudson (2010), 7

Bezemer and Hudson explain the connection between this system of wealth creation - now the general accumulation regime - and the evolution of financialization:

it was precisely [the] period from the mid-1980s to 2007 that saw the fastest and most corrosive inflation in real estate, stocks, and bonds since World War II. Nearly all this asset-price inflation was debt-leveraged. Money and credit were not spent on tangible capital investment to produce goods and non-financial services, and did not raise wage levels <sup>106</sup>

The authors provide a visualization of “how credit decoupled from income”:

Figure 1. How Credit Decoupled from Income



Source: Created by the authors from the Federal Reserve's Flow of Fund "Z" tables. Series are smoothed using the STATA hp filter.

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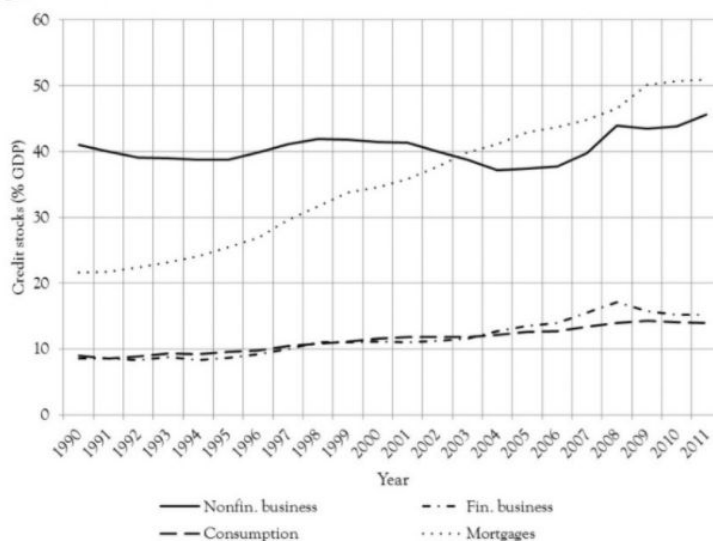
As credit shifted away from the expansion of incomes and investments, it was instead funnelled into mortgages:

<sup>106</sup> Bezemer and Hudson, 746

<sup>107</sup> Bezemer and Hudson



Figure 3. Debt Shift, or How Bank Credit Was Biased Toward Household Mortgages



Source: Bezemer, Grydaki, and Zhang (2016).

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In this figure, we can see the process since the 1990's in which credit stocks as a percentage (%) of GDP has increasingly been funneled into real-estate, exhibiting a 'bias' to the detriment of productive enterprise.

Palley (2008) provides a good summary of how this system of accumulation instrumentalizes bank credit to inflate asset-prices:

Asset prices are bid up by a host of measures, including higher profits, savings by the super-rich that are directed to asset purchases, borrowing to buy assets, and such institutional changes as the shift from traditional defined benefit pension plans to defined contribution—such as 401(k)—pension plans. Consumption is maintained by lower household savings rates and by borrowing that is collateralized by higher asset prices.<sup>109</sup>

It is in the interest of financial institutions, who seek continual profits from the accelerating success of their financial operations, that overall levels of indebtedness increase. This is not true in the aggregated long term, as Minsky explains, but in the short term each new 'paper' is a new source of profit, even multiplying profit, if new financial assets can be alchemically engineered from the initial anchor of the debt-contract. This why long-term, responsible finance has become increasingly

<sup>108</sup> Bezmer and Hudson, 755

<sup>109</sup> America's Exhausted Paradigm, 13

untenable: it is bad for daily business, even if it is necessary for aggregated structural integrity. Minsky in the late 1980's explained the structural process by which the financial sector can 'feed itself' from inputs of financial contracts as established by banks:

The development of the money market funds, the continued growth of mutual and pension funds and the emergence of the vast institutional holdings by offshore entities provide a market for the instruments created by securitization<sup>110</sup>

Thus the structure of the economy is inflationary to the benefit of financial institutions and those with meaningful asset ownership, and negatively impactful for the rest of the population. The continual issuance of financial contracts as claims on future income streams has concurred with a long-term economic stagnation in terms of income flows to the majority population, gradually increasing the payment obligations levied on the American population without much development in exchange. Stories like this one are common:

The home health aide in Penfield, N.Y., has spent the past several months stretching the \$12.89 an hour she earns to cover her mortgage and utilities.

Now with barely 25 hours of work a week and bills piling up, Barber, 60, worries the federal government will resume withholding 12 percent of her paycheck for a past-due student loan.<sup>111</sup>

We see in this example a multi-pronged extraction apparatus levied against a woman making \$13 an hour. She is financially obliged to pay the bank, the utility companies, and the student-loan issuer, all out a wholly inadequate cash flow. This is one story among many, in a broader situation commonly identified as a student loan 'crisis':

Some 44 million Americans collectively hold over \$1.6 trillion in student debt. And these numbers are growing.

College is more expensive — and important — than ever before. And that dichotomy puts students in a difficult situation: do they risk going into debt they can't pay back or miss out on the benefits of a college degree?

During the 2008 recession, many opted to go back to school and gain new skills. However, since then, the cost of a four-year college degree increased by 25% and

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<sup>110</sup> Minsky, "Securitization", 3

<sup>111</sup> Washington Post, Looming end to student loan payment moratorium raises fears among defaulted borrowers (my emphasis)

student debt increased by 107% and many are less sure if college will be the solution to riding out a recession this time around.

Today, more than 30% of student loan borrowers are in default, late or have stopped making payments six years after graduation.<sup>112</sup>

Student loans are only a fraction of the liability structure: mortgages are the biggest chunk. Health insurance, which is a unique cost levied only on Americans among those citizens of the wealthy capitalist nations, subordinates healthcare services to an obligatory payment system. This is in addition to taxes, auto loans, and any credit lines which might necessary for business enterprise.

The rentier system is extra cruel because it subjects those with decreasing abilities to pay to increasingly harsh obligations. Besides being punitive and regressive, this system increases the posturing through which the general liability structure occupies a 'ponzi' position.<sup>113</sup> Albo (2001) argues that the effect on the American working-class is quite negative:

the unemployment figures conceal as much as they reveal: the growth of involuntary part-time work, underemployment, and contingent work all serve to increase labor reserve pressures impacting on labor effort and the rate of exploitation. Amazingly the new economy has spelled the end of the forty-hour week. Americans now work longer hours daily, weekly, and yearly, than workers in any of the other advanced capitalist states.<sup>114</sup>

The result is an economy in which capital assets are inflating while the wages, infrastructure, and tangible investments are declining. A new kind of stagflation:

Health care now absorbs 18 percent of the GDP. If you look at the other costs, if you're a wage earner, 15 percent of your income right off the bat goes to Social Security and medical insurance. You have regular taxes, anywhere from about 20 percent. You have mortgage debt that is up to about 40-43 percent of average income. At least that's what the U.S government is willing to guarantee when

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<sup>112</sup> CNBC, <https://www.cnbc.com/2020/06/12/how-student-debt-became-a-1point6-trillion-crisis.html> (my emphasis)

<sup>113</sup> Consider this point from Business Insider; Knueven (2020): "The size of your down payment: Like many other types of loans, a mortgage requires a down payment. If you don't have a 20% down payment for the house you're purchasing, you'll add to the cost of your monthly mortgage payment with private mortgage insurance, or PMI. The higher your down payment, the lower your mortgage will be each month"

<sup>114</sup> Albo, "Neoliberalism from Reagan to Clinton". (This was written in 2001 and the inequality figures have gotten worse in some aspects.)

bankers make a loan. You have other loans; you have student debt to pay for an education in order to get a job, you have automobile debt to get to the job.<sup>115</sup>

Recall that a financial structure which demands more payments than the productive sphere or households can generate can only grow through a debt-bubble: the issuance of new debts to continually prevent a debt-deflation on previously-issued obligations.

the “organization of investment markets” determines whether speculation or enterprise is dominant in an economy. In Keynes theory it is important that financial markets be structured so that the financing of enterprise dominates.<sup>116</sup>

Following Minsky’s structural claim regarding the speculative/enterprising dichotomy of capitalism, we can cite Gronow (2020) for a description of the contemporary ‘organization of investment markets’. We can argue that speculation in the extreme is the dominant posture:

In the capital markets, large institutional investors such as pension funds needed new investment targets and were able to diversify their portfolios by buying bonds based on securitized assets of various kinds. By facilitating securitization, banks were able to serve their clients while at the same time circumventing international banking regulations, such as capital adequacy requirements, that would otherwise limit the amount of money banks could advance in the form of loans. This was further encouraged by the slackening of the distinction that had previously separated commercial banks from savings banks<sup>117</sup>

The organizational structure of investment markets, being increasingly subordinated to the logics and principles of financialization, therefore establishes an economy of speculation, grown through the inflation of asset prices, while those large majorities of the population without access to capital ownership or premier credit-lines absorb the social and economic burdens.

This evolution of dynamics corresponds to the financialization of the American economy: particularly the increasingly ‘internal’ investments of the financial sector and the detachment of financial assets and instruments from tangible investments in wages, fixed capital, and infrastructure. Here is Hudson’s summary of the situation:

financialization squeezes out an economic surplus not by employing labor to produce commodities for sale at a markup but by getting labor and industry into

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<sup>115</sup> Hudson, “2020 Election Preview”.

<sup>116</sup> The Capital Development of the Economy and The Structure of Financial Institutions, 18

<sup>117</sup> Gronow, 131, citing Leyshon and Thrift (2007: 100–101)

debt. It extracts a financial surplus in the form of interest, not profits on production and sales.

finance capitalism uses this surplus to extend yet new interest-bearing loans, not to invest in tangible capital formation. When income is insufficient to pay bondholders, financial managers extract revenue by carving up and selling off assets. Such zero-sum (or even negative-sum) transfer payments do not promote growth but polarize the distribution of wealth in ways that dry up the domestic market for consumer goods and investment goods. <sup>118</sup>

### **2.3 Operations within the Bubble Economy**

The operational systems of our financialized economy, in which the inflation of asset-prices has superceded fixed-capital investment as the primary process of capital accumulation, are extremely complicated, even for those involved<sup>119</sup>. Gronow explains the abstraction necessary for the system to be legitimized:

Because the objects of trade sold and bought in the financial markets are bonds or securities... one could imagine that all that is expected from the participants is, in addition to having some initial capital at their disposal, that they have internalized the abstract logic and dynamics of the self-accumulation of capital. <sup>120</sup>

Financialization has, by design, made finance increasingly complicated and sophisticated as a longerm industrial-reorganization:

Goldman Sachs now holds a bank charter, even though Goldman operates more like a hedge fund than like a traditional banker... the biggest banks [often] take positions that pay off when customers fail. They also originate many assets to sell - earning fees rather than relying on interest and principle payments... Further, a bigger part of their asset portfolio consists of trading assets - where profits depend on asset price appreciation, rather than income flow <sup>121</sup>

On the eve of the 2007 crash, we no longer had any sharp distinction between investment banking and commercial banking... there was a handful of behemoth financial institutions that provided the four main financial services: commercial

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<sup>118</sup> Transition from Industrial Capitalism to a Financialized Bubble Economy, 28

<sup>119</sup> From Gronow, 130: "The complexity of these bonds, or bundled together assets in widely different categories of risks, meant that investors were not able to evaluate and measure their exposure to a particular asset. They were unable to analyze the 'correlation structure' of their portfolio (cf. Carruthers 2013: 541–242). According to Lang and Jagtiani (2010: 139), complex portfolios made it impossible to determine its subprime exposure in the CDO [collateral debt obligation] portfolio 'with-out looking through each of the bonds.' Therefore, the complexity and the risk of the products was widely underestimated"

<sup>120</sup> Gronow, 128

<sup>121</sup> Wray (2015), "Minsky on Banking" Pg. 19

banking (short-term finance for business and government), payments services... investment banking (long-term financing for firms and governments), and mortgages<sup>122</sup>

Davis (2016) dissects the balance sheets of American corporations to explore this growing complexity:

“The category of “other” financial assets grows substantially... since the early 1980’s. Unfortunately, the documentation explaining what is included in “other” assets is severely limited... Kripnner (2012, p.55) cites in listing [from business press media] “an array of new financial instruments [held on firm balance sheets] - money market funds, ‘stripped’ treasuries, Euromarket and Carribean offshore dollar markets, foreign currency instruments, and portfolios composed of options and futures contracts” as well as “stock market investments... investments in a company’s own securities, minority interest in unconsolidated subsidiaries, stock issuance costs, and restricted stock.”<sup>123</sup>

These hard-to-classify assets categorized blankly as ‘others’ have been expanding “at the aggregate level... unidentified financial assets constitute the largest component of financial asset growth in the flow of funds data”<sup>124</sup>. Thus we have a wide degree of ambiguity undergirding the operations of finance, in terms of logics, organization, and asset compositions. Yet for all that we do not know, we do know that financial operations have become increasingly advanced, accelerated, and technologically powerful. Here is a quick history of financialization since the late 1990s:

the dot-com boom... was soon followed by the real estate boom, followed in turn by a commodities boom. All three of these speculative excesses required finance, and each was fueled by innovative instruments and practices.

The dotcom boom relied largely on the new-issue market, in which stocks were sold for start-up companies with no history on which to base the values of the firms. Standards were gradually lowered until firms with no prospective revenues but high costs could float equities at astronomical prices. Leveraged buyouts allowed management and the owners of upstarts like AOL to cash out as they took over profitable, venerable firms like Time Warner.

When that euphoria finally came to an ignoble end, managed money moved into real estate. Here, the preferred financial instrument was the securitized mortgage product, essential for the “originate and distribute” model that could ignore risk while unserviceable debt drove the biggest real estate boom in U.S. history.

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<sup>122</sup> Minsky on Banking, 22

<sup>123</sup> Davis, 121

<sup>124</sup> Davis, 120-121

But securities were not limited to the real estate market—everything from student loans to credit card receivables to auto finance was securitized and bought by highly leveraged pension funds and hedge funds. Even as that began to unwind, managed money moved into commodities, using futures markets to fuel another record run-up of prices—this time, prices of food and energy. Analysts are just now beginning to turn their focus to those excesses.<sup>125</sup>

Financial institutions sift through productive entities; websites, land, housing, and commodities, with the general objective engineering new financial instruments and assets which can be sold for inflated markups or held in pools for the managed accumulation of capital.

Complexity is not a byproduct of this process but an integral element of the accumulation regime; the reason is that complexity engenders the very dynamics by which the bubble-economy reproduces itself and generates profits: systemic diversification, delineation of services, obfuscation of financial relationships, and the manipulation of financial contracts and assets. Consider the practice of shadow banking, a major driving force behind financialization and economic instability; even the name speaks to dynamic of ‘planned complexity’:

A major driver in the growth of the shadow banking system has been the transformation of the largest banks since the early-1980s from low return on equity (RoE) utility banks that originated loans and held them until maturity, to high RoE entities that originate loans in order to warehouse and later securitize and distribute them.

By leveraging up through securitization, the bank could increase their RoE, apparently without risk. The problem was that in the process banks were fabricating new assets with dubious quality just for the sake of increasing their balance sheets (Adrian and Shin 2009a, p. 12)...

their underwriting capacity was undermined as they relied more and more on rating agencies and collateral values in the loan process. funds rose rapidly in the 1980s, from under \$100 billion in 1980 to almost \$2 trillion by 2000 (Gorton and Metrick 2010, p. 6). By the end of 2008, their size had doubled to almost \$4 trillion! They offer a bank-like product and almost instant access while pretending to be as safe as bank deposits.<sup>126</sup>

In terms of the ‘operations’ of the bubble economy, there are simply too many overcomplicated processes by which financial entities and intermediaries can profit

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<sup>125</sup> “Securitization”, pg. 2-3 (Wray’s forward)

<sup>126</sup> Moe, 37-30

from cash flows, evaluated capital, debt-commodities, engineered assets, and contracts of obligation. The important point is that this financialized economy, established as being broadly negative and harmful to the real economy, is a ‘planned’ system, not a free market but rather a highly structured organizational apparatus.

The systems and structures are so complex that they cannot be operationalized without a vast network of advanced information technology. Digital networks are undoubtedly central to the operations and structures of modern capitalism. Schiller (2014) describes how financial institutions latched on to developments in IT for the expansion of their profit-seeking programs<sup>127</sup>. An extensive degree of planning and inter-institutional cooperation defined these developments. This is what it means for an accumulation regime to be a ‘regime’, as opposed to an organically evolving market. Consider these accounts:

Financialization was animated by and reliant on burgeoning network systems: in 2008 financial services companies constituted the United States’ second-largest sectoral source of demand for ICTs... \$46.7 billion, or 18.4 percent of all annual spending by nonfarm U.S. businesses on information and communications technology equipment and software.<sup>128</sup>

NASDAQ cooperated with the New York Stock Exchange to establish a jointly owned subsidiary—the Securities Industry Automation Corporation, or SIAC—in 1972. With clearance and settlement responsibilities, SIAC managed a network serving 290 member firms, which employed 1.5 million miles of carrier circuits supplied by five terrestrial and three satellite carriers. Looking forward from 1977, SIAC anticipated a bright future for innovation of networked financial services.<sup>129</sup>

Financial institutions quickly recognized that information technology offered a temporary solution to the intertemporal question of capital accumulation: ‘how can we make more money faster?’ This is not hyperbole:

Citigroup announced an agreement to incorporate access to IBM’s supercomputer, Watson, “to rethink and redesign the various ways in which our customers and clients interact with money.”... “Financial institutions engaged in

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<sup>127</sup> Schiller, 48, quoting the ABA: "The American Bankers Association... envisioned a more comprehensive upgrade of the circuits of finance capital. declared the ABA in 1968, would require “more and more extensive and more and more effective communications—between bank branches and their head office, between affiliated banks and their holding com-pany, between banks and their correspondents, between banks and the Federal Reserve System and other Government agencies, and between banks and their depositors, borrowers, and other customers.”

<sup>128</sup> Schiller. 43

<sup>129</sup> Schiller, 49



high-velocity trading are speed demons,” explained an analyst: “They claim that shaving off just a few milliseconds of connectivity between two trading locations can earn them tens of millions of dollars a year—so they’re willing to pay extra for the fastest path.”<sup>130</sup>

The development of this system can be read in the same way that Marx (1848) described the industrial expansion of European capitalism into new territories, new sectors, and new industrial focuses like shipping and commerce. He argued that “[capital owners] cannot exist without constantly revolutionising the instruments of production, and thereby the relations of production, and with them the whole relations of society”<sup>131</sup>.

Consider these systems:

U.S. Federal Reserve Wire System Clearing House Interbank Payments Systems (CHIPS, formed in 1970); the Society for Worldwide Interbank Financial Telecommunications (SWIFT, formed in 1973); and the big credit card networks. By the end of the 1970s, tens of billions of dollars traversed these systems each day<sup>132</sup>

All of this of course was to no benefit but those in an institutional position to benefit from a newly-developed manipulation of monetary networks:

This allowed financial officers to consult the latest information, and then to transfer funds instantaneously via Chase’s network to “ensure full utilization of money,” as Chase boasted. “Telecommunications,” reported a Chase executive, “has entered a period of explosive growth”<sup>133</sup>

By 2006, J.P. Morgan boasted an information technology staff of twenty thousand and a \$7 billion annual IT budget... “[a] clutch of quants with PhDs have been hired to create algorithmic models that speed up trading.”<sup>134</sup>

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<sup>130</sup> Schiller, 55 (my emphasis)

<sup>131</sup> From Marx’s “Manifesto of the Communist Party”, Chapter 1. I would argue that this description is analogous, if not directly applicable, to contemporary finance: “Meantime the markets kept ever growing, the demand ever rising. Even manufacturer no longer sufficed. Thereupon, steam and machinery revolutionised industrial production. The place of manufacture was taken by the giant, Modern Industry; the place of the industrial middle class by industrial millionaires, the leaders of the whole industrial armies, the modern bourgeoisie. Modern industry has established the world market, for which the discovery of America paved the way. This market has given an immense development to commerce, to navigation, to communication by land. This development has, in its turn, reacted on the extension of industry; and in proportion as industry, commerce, navigation, railways extended, in the same proportion the bourgeoisie developed, increased its capital...the modern bourgeoisie is itself the product of a long course of development, of a series of revolutions in the modes of production and of exchange

<sup>132</sup> Schiller, 48

<sup>133</sup> Schiller, 48

<sup>134</sup> Schiller, 50

This expansionism of financial infrastructure and operations begs the question of what exactly is being done with all this technology and capacity. Consider the process of a private equity firm's usual operations as an example of what financialization does to the productive economy:

- (1) "Private equity firms typically finance the acquisition of an asset with investors' funds that are used as leverage for the accumulation of debt necessary to complete the acquisition"
- (2) "Morgan (2009) explains, what occurs is the "capture of the rights to the returns on large assets based on a proportionately small equity commitment" (230–31)"
- (3) The asset is duly "sweated," which is to say that it is used as leverage while the new owners sell off that which can be profitably sold, engineering further debt whose favorable tax treatment yields further returns to the investors
- (4) "Normally, within 10 years, the asset is sold, leaner but not necessarily fitter, with many previous claim holders (including pension savers) finding themselves significantly poorer, but with little legal recourse"<sup>135</sup>

Keaney provides this summarizing conclusion of what the process does to a particular productive asset or structure:

the nominally productive asset, instead of being nurtured and allowed to grow, is instead denatured and thereafter left to sink or swim, having served its purpose as a vehicle for the financial engineering that enables the profit-making of the investors<sup>136</sup>

Here is an explanation of the system by "Henry McVey of Morgan Stanley":

these funds usually plan to own companies for no more than five years and their main focus is on maximising cash flow to meet interest payments and to pay down debt. Capital expenditure is a hindrance . . . whereas in the past firms engaging in leveraged buy-outs actually had to know something about the business they were buying into, today they can earn huge returns by merely getting rid of the excess cash on the balance sheet.<sup>137</sup>

Growow cites Espisoto for an updated account of how contemporary financial markets securitize capital assets. Minsky's skeletal model still remains accurate, although titles and scales have evolved. The distinction between 'paper issuers' who manufacture

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<sup>135</sup> Keaney, 48

<sup>136</sup> Keaney, 48-49 (my formatting)

<sup>137</sup> Kincaid, citing *The Economist*, "The New Kings of Capitalism" (2004) - special report

financial contracts and ‘investment bankers’ who securitize the debts has become more complex and delineated as financial markets have innovated and scaled up operations:

(1) First, the originating bank bundles together a large number of loans, often several thousand, even up to tens of thousands, in the form of a pool that is transferred to a third party, a legal entity known as a special purpose vehicle (SPV).

(2) The SPV then issues an asset-backed security (ABS), or a financial security having many of the same properties as a traditional bond. The SPV centrally processes the flows from the initial loans (interest and repayment a principal) and redirects them to the owners of the ABS

(3) Any type of loan can be securitized in this way: mortgage loans, business loans, leveraged-buyout debt, consumer loans, credit-card overdrafts, and so on. Once repackaged, such assets are as a rule bought and sold by pension funds, insurance companies, and large corporations. They have ceased to be illiquid.

(4) this is only possible with the help of often quite complicated legal arrangements and mathematical-statistical instruments of calculation.<sup>138</sup>

We should also not forget, as clarified in Minsky’s description of the ‘ladder’ of securitization, that all these expansions and accelerations relied upon the growing indebtedness of the entire society:

“This titanic buildup of networked finance had pushed debt onto every social institution and packaged it in a staggering variety of instruments... The “chains of potential contagion,” as Hugo Radice put it, “reached to the furthest corners of global finance.” Leverage— debt—was the fuel for this fire, and debt was, quite literally, everywhere”<sup>139</sup>

We can see that the system is maladaptive; larger volumes of speculative or otherwise ‘unpayable’ debts force the economic structure into a position of accelerating deviation and instability<sup>140</sup>. The argument of this section in particular is that the real behaviors and systems of finance indicate an embracing and expansionism of this ‘mode’ of capital accumulation; the system of increasing speculation and predation through private financial operations.

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<sup>138</sup> Gronow, 130 (my formatting)

<sup>139</sup> Schiller 51

<sup>140</sup> Financial Instability Hypothesis, pg. 7: “For Ponzi units, the cash flows from operations are not sufficient to fulfill either the repayment of principle or the interest due on outstanding debts by their cash flows from operations.... Such units can sell assets or borrow. Borrowing to pay interest or selling assets to pay interest (and even dividends) on common stock lowers the equity of a unit, even as it increases liabilities and the prior commitment of future incomes... In contrast, the greater the weight of speculative and Ponzi finance, the greater the likelihood that the economy is a deviation amplifying system.”

The financial sector focuses its energies into speculation and the expansion of the capacity to speculate and extract rents. Financial institutions, if asked to engage in healthy, moderated debt-issuances, will be tasked with an objective that is fundamentally incompatible with their modus operandi. Financial markets are investors markets. Gronow explains the significance of this to the capital accumulation regime:

Financial markets admittedly differ from the markets of consumer goods in many ways as far as their sellers and buyers are concerned. They are investors' markets, where the explicit goal of all the market actors is to make a profit, thus accumulating more capital... the meaning of the action of the economic actors in these markets is formal rationality understood in terms of monetary accounting"<sup>141</sup>

Keynes in the 1930's discussed the process by which this kind of economic structure directs energy into unstable expansionism:

“the financial system... might direct its efforts toward creating short-term profits generated by rising asset prices (speculation) rather than toward profits generated by productive activities that create income flows”<sup>142</sup>

We are certainly seeing this occur now; the emphasis of finance is on acceleration and expansion, for the general objective of an inflating posture of short-term gain. To the degree that structural complexity, technological capacity, and predatory operations facilitate this process, we can observe the general pattern of financialization.

## **2.4 Institutionalizing the Bubble**

Hudson argues that the ‘economic distortion’ of financialization has occurred because of the ‘planning’ of banking and financial institutions. For this reason it is politically difficult to alter the institutional structure of the economy in a way which would deviate from the profit-seeking interests of finance, even if certain changes might dramatically improve the quality of life for most Americans.

This kind of economic distortion is largely the result of relinquishing planning and the structuring of markets to large banks and other financial institutions. In the name of “free markets” the economics profession has celebrated the shift of planning and tax policy to the financial sector, whose lobbyists have rewritten the

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<sup>141</sup> Gronow, 127

<sup>142</sup> Mazzucato and Wray, quoting Keynes

tax code and sponsored deregulation of the checks and balances put in place in the Progressive Era a century ago.<sup>143</sup>

As Hudson argues, the American government has “become the property bubble’s ultimate enabler(s)”<sup>144</sup>. When economies structured around asset-inflations collapse in debt-deflations, inevitably, the Big Bank must step in to save them. Although necessary for maintaining the integrity of the financial structure, these rescues often appear to take the form of handouts:

Central banks led by the U.S. Federal Reserve reacted [to the GFC] by flooding the financial system with liquidity. If they had not done so, in the opinion of economist Martin Wolf, “we would surely have suffered a second Great Depression.” ... as of March 2009, the U.S. central bank had committed \$7.7 trillion to preserving the status quo...

The man charged with overseeing the government’s rescue program declared that it “had been designed by Wall Street, for Wall Street . . . an unprecedented trillion dollar playground for fraud and self-dealing.”<sup>145</sup>

The Fed has succeeded in preventing the collapse of the debt superstructure by continually pumping liquidity into the system. Minsky emphasized in the 1990s that bailouts were no longer the paramount focus of economic stabilization, but rather the prevention of recurring deflations.<sup>146</sup> The catastrophe of the 2008 crisis indicated a total failure of the financialized growth model. Had the debt-deflation unfolded unabated, it would surely have instigated a depression and a downfall of the financial sector in its current organization. The Federal Reserve intervened to prevent this:

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<sup>143</sup> Hudson (2010), 33

<sup>144</sup> Hudson (2010), pg. 30. Here is his specific argument to demonstrate the claim: “Ostensibly created simply to give liquidity to mortgages (which traditionally were held by the banks that originated them), the semi-public Federal Home Administration (FHA), Federal National Mortgage Association (FNMA) and Freddie Mac became the largest buyers, packagers and ultimate guarantors of U.S. mortgages, buying them up as fast as banks and mortgage brokers could issue them – some two-thirds of all U.S. home mortgages. These government-sponsored agencies then sold bonds backed by these mortgage holdings to institutional buyers who trusted that the government would stand behind them regardless of how poor the underlying quality of mortgages were. This was analogous to the Federal S&L Insurance Corp. (FSLIC) bailing out risk-taking institutional depositors in S&Ls two decades earlier, in the 1980s. FNMA and Freddie Mac bonds amounted to \$5.3 trillion, as much as the entire publicly held U.S. Government debt.”

<sup>145</sup> Schiller, 53

<sup>146</sup> Minsky, “Reconstituting the United States’ Financial Structure: Some Fundamental Issues”, pg. 7: In a particular Keynesian view the 1990-1991 crisis of the Savings and Loans and the banking system is the result of a tendency, over protracted periods of good times, for indebtedness and asset prices to outrun the ability of cash flows to validate debt contracts and asset prices. The current problem is not how to bail out the deposit institutions but how to prevent asset values and profit flows from falling so far that investment collapses

Each time a financial innovation was tested by a crisis, the Fed and other major central banks intervened to validate it... in the US, the government (whether the Treasury or one of many governmental agencies) stands behind one-third of all privately issued liabilities<sup>147</sup>

This system being ‘institutionalized’ means that it exists beyond a state of market organization; the previous section discusses the extensive planning within the private sector of finance. We can also see that the financial sector is connected heavily to representative government:

The banks that contributed so much to causing the crisis are largely intact, and banking insiders have steered US economic policy with great continuity over the terms of the Clinton, second Bush, and Obama administrations. Bush’s Treasury Secretary, Hank Paulson, a former Goldman Sachs chief executive, was replaced by Timothy Geithner, who, as chief executive of the Federal Reserve Bank of New York, coordinated the Targeted Asset Relief Program with Paulson, and who, as Treasury Secretary, did everything in his power to prevent radical overhaul of the banks, possibly even to the point of insubordination (Suskind 2011, 378).

Geithner’s eventual replacement as Treasury Secretary in 2013 was Jack Lew, a veteran of Citigroup who was already, prior to Obama’s taking office, the preferred candidate for chairman of the National Economic Council but vulnerable to congressional scrutiny, given his rewards amid catastrophic failure (Suskind 2011, 147–48)<sup>148</sup>

This is often referred to as ‘regulatory capture’, in reference to the penetration of financial operatives into major positions of public-sector power. We can observe that this phenomenon is in fact the norm in American democracy.

The banking system is managed top-down by the Federal Reserve, the semi-independent Central Bank of the United States. Hudson describes the historical relation between the Federal Reserve and private banking, the point being that this history explains the current functioning of the Fed:

the leading bankers sought to use the [1907] crisis as an opportunity to grab power for Wall Street, away from the Treasury. In this sense, the Fed was founded in large part to take monetary control away from Washington’s elected officials and appointees, and privatize the supply of money and credit.

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<sup>147</sup> Mazzucato and Wray, 23-24

<sup>148</sup> Keany, 58

its place in the U.S. financial and economic structure is to allocate credit, primarily to serve Wall Street financial interests. That explains the insistence on the financial class here and abroad in insisting on an “independent” central bank. It means that instead of serving the public interest, it serves the interests of the banking class.<sup>149</sup>

As for the judicial apparatus - the courts and lawyers who shape the daily composition of American law, Pistor (2019), in her book *Code of Capital*, explains in great detail the process by which modern American legal firms manipulate the economy to legitimize and engineer financial assets, essentially ‘writing the rules’ of modern capital accumulation as defined by abstracted financial instruments, to the benefit of capital-controllers and the financial sector.

All of this is to briefly describe an institutional structure which makes systemic reform, or even a ‘creative destruction’, impossible. The representative government aligns the rules and administrations in favor of private finance. The Central Bank, institutionally separated from the representative government, functions now as a continual refinancing mechanism for private finance<sup>150</sup>, acting as the ‘lender of last resort’ to a capital-asset inflation economy.

the Federal Reserve’s low-interest-rate policy succeeded in jump-starting the economy by spurring a housing price boom, which in turn sparked a construction boom. That boom became a bubble, which burst in the summer of 2007. What is important about this history is that the economy needed an asset price bubble to restore full employment, just as it had needed the stock market and dot.com bubbles to restore full employment in the 1990s.<sup>151</sup>

The Federal Reserve is not doing this out of malice or incompetence. In fact as an institution it understands, politically and operationally, that an attempt to rein in investment levels by withholding liquidity access will be responsible for asset-price collapses and output declines.

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<sup>149</sup> Hudson (2012), “Federal Reserve System”

<sup>150</sup> ‘Reconstituting the United State’s Financial Structure’, pg. 14: “Among these financial organizations are those which have assets that are longer in duration than their liabilities: these organizations always need to refinance their positions. Such organizations depend upon the normal functioning of various markets, including dependable fall-back markets in case the usual refinancing channels break down or become too expensive. The Central bank is the ultimate fall-back refinancing market”

<sup>151</sup> Palley (2009), 27

The Federal Reserve is now being blamed by many for the bubble, but the reality is that it felt compelled to lower interest rates for fear of the economy falling back into recession.<sup>152</sup>

Palley (2020) argues that the Federal Reserve is subordinated to the political interests of the owners and controllers of capital. The primary interest of these entities within a 'bubble economy' is the continued inflation of capital assets which are expected to generate significant profits or income flows.

If this is true - and its basic supposition of a power dynamic subordinating politics to capitalism aligns with the institutional structure laid out thus far - it explains the commitment of the Fed to low interest rates. Minsky explained that interest rates correspond negatively to the market value of capital assets:

In a capitalist economy capital assets exist which are expected to yield services to production for some time in the future. The market value of such capital assets can [be] raised if Federal Reserve moves lower long term interest rates. However unless business profit flows are sustained mere monetary policy is ineffective. The likelihood for a further decline in expected nominal value of profit flows cannot be ruled out given the extent of excess capacity: this is particularly true of commercial real estate.<sup>153</sup>

This point by Minsky echos the current situation, in that business profit flows appear unable to 'keep up' with the rising value of capital assets. Monetary policy has shown itself to be incapable of influencing functional development; the fiscal policy which might achieve such improvements largely flounders at the congressional level.

We will conclude this section with a brief acknowledgment of the 'financial literacy' concept, which is far more insidious than it sounds. It is particularly relevant because it indicates the narrative that is being pushed on the general population to 'explain' why so many people struggle to pay their bills, are buried in debts, and lack economic opportunities:

The Council for Economic Education describes itself as "Investing in Our Children's Future: Incorporating personal finance and economic education in our nation's schools."<sup>154</sup> The argument put forth is that children must be educated from an early age in the doctrines of neoclassical economics (not mentioned but clearly the

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<sup>152</sup> Palley (2009), 27

<sup>153</sup> The Capital Development of the Economy and the Structure of Financial Institutions, pg. 21

<sup>154</sup> <https://www.councilforeconed.org/>



paradigm) and individual finance. The reasoning is that this educational process will, on an *individual* level, address and alleviate the negative situations we have described thus far in the paper.

The CEE has an ‘economic literacy quiz’ on their website<sup>155</sup>, which advertises the lessons they teach to children across America. Question 13 explains that “The stock market is an example of an institution within our economy that exists to help people achieve their economic goals.” I answered question 14 incorrectly:

**14. When a person rents an apartment, who benefits from the transaction?**

- Only the person renting the apartment.
- Only the landlord.
- Both the person renting the apartment and the landlord.
- Don't know.

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The correct answer on the website is “both the person renting the apartment and the landlord”. Why do children need to know this? It is not clear. Perhaps it is important, from a young age, that America’s young conceptualize the relationship between financial obligee and obliger as mutually beneficial. The following organizations form a ‘partial list donors’ who have helped established this educational enterprise:

### Sponsors [\[ edit \]](#)

The following is a partial list of donors to the Campaign for Economic Literacy. Each has donated at least 100,000 US Dollars to the Campaign.

|  |   |   |
|--|---|---|
| <a href="#">3M Foundation</a>                                | <a href="#">Allstate Insurance Company</a>    | <a href="#">American Express Foundation</a>           |
| <a href="#">Ameritech</a>                                    | <a href="#">AT&amp;T</a>                      | <a href="#">Bank of America Charitable Foundation</a> |
| <a href="#">Business Roundtable</a>                          | <a href="#">Carson Group</a>                  | <a href="#">Thomas J. Holce Investments</a>           |
| <a href="#">HSBC – North America</a>                         | <a href="#">International Paper</a>           | <a href="#">Ewing Marion Kauffman Foundation</a>      |
| <a href="#">The Calvin K. Kazanjian Economics Foundation</a> | <a href="#">The McGraw-Hill Companies</a>     | <a href="#">Merrill Lynch</a>                         |
| <a href="#">The Moody's Foundation</a>                       | <a href="#">Mortgage Bankers Association</a>  | <a href="#">NASDAQ Educational Foundation</a>         |
| <a href="#">State Farm Insurance Companies</a>               | <a href="#">The John Templeton Foundation</a> | <a href="#">United States Department of Education</a> |
| <a href="#">UPS Foundation, Inc.</a>                         | <a href="#">The Vanguard Group</a>            | <a href="#">Verizon Foundation</a>                    |
| <a href="#">Wells Fargo</a>                                  | <a href="#">Worth Media</a>                   |   |

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<sup>155</sup> <https://www.councilforeconed.org/economic-literacy-quiz/>

<sup>156</sup> <https://www.councilforeconed.org/economic-literacy-quiz/>

<sup>157</sup> [https://en.wikipedia.org/wiki/Council\\_for\\_Economic\\_Education](https://en.wikipedia.org/wiki/Council_for_Economic_Education)

The Council of Economic Education, despite their proliferation throughout American schools and after-school programs, is only one institution within a broader cultural matrix of FIRE-sector propaganda. The concepts expressed on the website - and the donor list - should make this clear.

This cultural matrix itself is a pillar within the broader structure of financialization, which also enjoys support from the government, the central bank, economics departments, media outlets, and everyday citizens.

Financial literacy is a relatively new concept, and undoubtedly a pillar of the financialization process as explained by Zwan<sup>158</sup>; the evolution of such a concept - now being pushed onto children across America - forms yet another link in the chain of financialized capitalism's vast and complex institutional support-structure. The benefit of indoctrinating children to the market-logic of neoclassical economics is obvious enough; what is less clear is how helpful ones 'financial literacy' even is:

In the wake of the 2008 financial crisis and its aftermath of austerity, financial literacy education has been widely propounded around the world as a remedy for rising personal debt levels (Arthur 2012, 2014; Alsemgeest 2015; Xu and Zia 2012). Yet the enthusiasm for such education, which usually takes the form of workshops, pamphlets and other materials, and school curricula, is misplaced. There is inconclusive evidence to suggest that financial literacy education actually produces significant and consistent economic results in people's lives (see Alsemgeest 2015; Bruhn, Ibarra, and McKenzie 2013; Willis 2008, 2011). More broadly, financial literacy education tends to reinforce and reify conventional, neoliberal approaches, attitudes, and ideologies toward debt, credit, finance, and money (Arthur 2012; Martin 2002, 2015). Generally speaking, most such materials and approaches posit debt and financial hardship as individual responsibilities that can be overcome by education, planning, and perseverance. In this sense, they fundamentally obscure the systemic, structural, and social factors that shape personal financial experiences under neoliberal global capitalism<sup>159</sup>

Therefore the argument - which seeks to bind together all aforementioned aspects of the 'institutionalized' bubble economy - is that this economic structure is not a 'free market'. It is a highly planned, centrally administered, and diversified apparatus which behaves

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<sup>158</sup> Zwan, 112

<sup>159</sup>[https://read.dukeupress.edu/cultural-politics/article/13/3/348/133010?casa\\_token=0VPL8EHkxaoAAAAA:qV2xYCPziceCV9ACKSYS4L5bg9d\\_YqGK\\_aiv5kQC0pbF-XNovXON6Gb8ifWmcs9mCm13hag](https://read.dukeupress.edu/cultural-politics/article/13/3/348/133010?casa_token=0VPL8EHkxaoAAAAA:qV2xYCPziceCV9ACKSYS4L5bg9d_YqGK_aiv5kQC0pbF-XNovXON6Gb8ifWmcs9mCm13hag)

in a domineering fashion throughout American society. The emphasis at any given point is always on ensuring the success, proliferation, and expansion of private financial operations, for the purpose of accumulation and financial-sector profit. This situation must be analyzed as a crisis, and a deeply corrupted one at that, for the simple reason that the destructive nature of private finance in America, which has wrought so much measurable harm to the population, appears incapable of being righted or adjusted.

In the previous crisis, in the US... both processes (crisis and recovery) had their epicenter in finance and were led by financial institutions. The financial restructuring process had a big role for central banks but also had ample room for their hand-picked private “financial dealers.” J. P. Morgan and Bank of America provide the best example for the US.<sup>160</sup>

For this reason, the paper concludes with a rejection of the possibility of reforming private finance as it relates to capitalist accumulation. The argument is that there is only one overarching solution: the severing the capital development process from the operations of private finance.

## **2.5 Summary of Chapter 2:**

The contemporary system of capitalism in America can be described as a financialized ‘bubble economy’ which involves historical, structural, and institutional aspects. The general process has involved an abandonment of the Fordist growth regime and its ‘managerial’ (regulationist) support structure, in favor of an economy in which the inflation of capital and financial assets is the primary mode of accumulation. We can identify these core aspects of the financialized economy:

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<sup>160</sup> Burlamaqui and Filho, 17

- (1) Debt-issuance is the primary 'anchoring' of value, meaning that committed cash flows from investment financing (contracts of obligation) are the primary resource to be engineered and managed for the purposes of inflating asset prices
- (2) Vastly overcomplicated operations multiply the sectoral diversity and servicing aspects of the financial system, thereby employing an excess volume of analysts, activities, and opportunities to realize new profits, fees, or asset engineering .
- (3) The system is deeply 'planned' and operationalized through advanced technology and inter-organizational cohesion. The degree of intentional structuring invalidates the concept that finance is a 'free market', and instead indicates that it is administratively planned - albeit privately controlled.
- (4) A major institutional apparatus comprised of the representative government, the Federal Reserve, the legal system, and a cultural propaganda-scheme emphasizing 'personal responsibility' enables and perpetuates this system.

## **Conclusion**

The paper has described two processes involving capital accumulation. The first is the general system of investment financing through which capitalist societies develop resources and accrue profits. The second is the recent evolution of financialization, in which private financial operations and systems have commandeered the general economy to their own benefit, and largely to the detriment of society.

We can conclude therefore that ‘capital accumulation’, being the process by which capitalism distributes its resources and energies based on a stratified control structure and a financial system of cash flows, must be structured in such a way that an orderly system of accumulation can continue within the very complicated structure of modern society. The modern ‘structure’ of this system is defined by financialization and a growth model of asset-price inflation, in which rising costs are associated with expensive capital assets and growing portfolios held by financial institutions and ‘money managers’.

This system is predicated upon an economy of obligation, which is enforced by legal contracts related to debts, insurance, real-estate, and financial exchanges. In this sense the fundamental dynamic addressed in chapter 1 - the exchange of ‘present money’ for ‘future money’ which initiates liability relationships and accompanies the development of capital, is still the core system undergirding contemporary capitalism. The financialization process is defined as an extra-extractive, malformed outgrowth of this process, in the sense that financial institutions have increasingly exploited this obligatory payment dynamic for penetrative operations into the real economy.

To the extent that obligatory payment schemes are driving the accumulation process we can observe an increasing instability and degradation of American society, a situation in which the majority population has experienced repeated financial crises, a long term socioeconomic stagnation, a retreat of government away from public services, widespread political discontent, the weakening of labor power, an unaddressed ecological crisis based on the current structure of productive capital, a disturbing and expanding ‘police state’, a deadly pandemic impacting America worse than any nation on earth, and growing burdens associated with mortgage debts, property rents, health insurance, automobile debts, student loan debts, utility contracts, and a psychological pressure to be personally responsible for one’s increasingly fragile and immobile financial situation.

Not to be negative, but the situation is not good. There are numerous solutions which might address and alleviate some of these problems: restructuring the oligopolistic tax codes, breaking up structures of corporate consolidation, guaranteeing public employment through a Federal program, empowering labor elements, targeting regulatory capture and corruption, criminalizing legal forms of corruption such as

lobbying and campaign contributions, reorienting government expenditures away from excess militarism in favor of social services, making healthcare a public service, large-scale debt cancellations, reducing inflation in regard to medications, hospital services, real estate, and education, ‘democratizing’ money, investing in infrastructure, investing in public transportation, socializing investment via public and community banking, degrowth targeting industrial overproduction, replacing fossil fuels with green energy, workplace democracy, etc. etc.

There is no shortage of solutions to address the problems of our society. What is truly in ‘deficit’ is the political capacity or will to do anything meaningful on behalf of the American people. Therefore the ‘question’ or the ‘problem’ of economics today is not how to develop resources or how to improve the market society through targeted policies; the question rather is how the logical steps which can obviously benefit society might be actualized within such a corrupted and myopic political structure.

For this reason, the paper concludes with the argument that the system of capital accumulation through private finance is unhealthy and exploitative. To the degree that investment financing is necessary for the creation of resources in a socioeconomic system, this process should be socialized, meaning that its systems and powers should be severed from privatized, profit-seeking institutions and instead structured around community banks, socially-conscious public financing, and credit unions.

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