

Financial System

Dyrehaugen Web Notebook

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1

Finance



The finance sector is dancing to any music that makes money for the moment.

Finance is not production, but it seems to be involved in every aspect of it.

Indeed, under conditions of financial capital abundance, finance operates not so much as “a system for the allocation of resources” than as “a weapon by which the claims of wealth holders are asserted against the rest of society”.

Piketty himself gets into some murky waters because his “Marshallian apparatus” sees capital “more as a stock of accumulated savings rather than a claim on future output”.

Finance is a way to separate foolish retail investors from their hard-earned savings.

Finance is useful. Financialisation, on the other hand, describes a situation in which ordinarily non-financial activity is seconded into service for finance. When finance escapes its marketplace, it is because it has been allowed, or even solicited, to do so. (Part 2 of this paper has detailed the reasons for, and

effects of, financialisation.) Definancialisation, then, refers to the process of restoring ordinary non-financial activity so that it can operate normally, and removing dysfunctional social dependencies on finance. Percy (2021) Universal Basic Prosperity: Sustainable prosperity for the 21st century

Finance is both dumb and dangerous. It is dumb because it can only read numbers, unable to understand, much less assess, difficult social problems or complex business or engineering strategies. And it is dangerous because the people at the helm of financial institutions think they are smarter than they are, which leads them to assume that they should steer the ship.... Financialization has become so deeply rooted that we seem to have unlearned politics. By blindly relying on price tags, we have deprived ourselves of the skills for building consensus and developing effective strategies that avoid imposing the greatest costs on people whose lives are not “priced in.” No one benefits more from this calamity than finance. But those returns cannot last indefinitely. (Katharina Pistor)

2

Monetary System

INET

The last three or four decades have seen a remarkable evolution in the institutions that comprise the modern monetary system. The financial crisis of 2007-2009 is a wakeup call that we need a similar evolution in the analytical apparatus and theories that we use to understand that system. Produced and sponsored by the Institute for New Economic Thinking, this course is an attempt to begin the process of new economic thinking by reviving and updating some forgotten traditions in monetary thought that have become newly relevant.

Three features of the new system are central:

1. Most important, the intertwining of previously separate capital markets and money markets has produced a system with new dynamics as well as new vulnerabilities. The financial crisis revealed those vulnerabilities for all to see. The result was two years of desperate innovation by central banking authorities as they tried first this, and then that, in an effort to stem the collapse.
2. The global character of the crisis has revealed the global character of the system, which is something new in postwar history but not at all new from a longer time perspective. Central bank cooperation was key to stemming the collapse, and the details of that cooperation hint at the outlines of an emerging new international monetary order.
3. Absolutely central to the crisis was the operation of key derivative contracts, most importantly credit default swaps and foreign exchange swaps. Modern money cannot be understood separately from modern finance, nor can modern monetary theory be constructed separately from modern financial theory. That's the reason this course places dealers, in both capital markets and money markets, at the very center of the picture, as profit-seeking suppliers of market liquidity to the new system of market-based credit.

Students may wish to purchase my book The New Lombard Street, How the Fed Became the Dealer of Last Resort (Princeton 2011), which is also meant to be complete in itself, as a backstop for the videos.

INET (2023) The Economics of Money & Banking (Course)

3

Index Providers

Fitchner

A silent revolution is happening in investing. It is a paradigm shift that will have a profound impact on corporations, countries and pressing issues like climate change. A silent revolution is happening in investing. It is a paradigm shift that will have a profound impact on corporations, countries and pressing issues like climate change. In 2019 there was a watershed in the history of finance. In the United States, the total value of actively managed funds was surpassed by passive funds. Globally, passive funds crossed US\$10 trillion (£7.7 trillion), a five-fold increase from US\$2 trillion in 2007.

This seemingly unstoppable ascent has two main consequences.

First, corporate ownership has become concentrated in the hands of the “big three” passive asset managers: BlackRock, Vanguard and State Street. They are already the largest owners of corporate America.

The second consequence relates to the companies that provide the indices that these passive funds follow. When investors buy index funds, they effectively delegate their investment decisions to these providers. Three dominant providers have become increasingly powerful: MSCI, FTSE Russell and S&P Dow Jones Indices.

A silent revolution is happening in investing. It is a paradigm shift that will have a profound impact on corporations, countries and pressing issues like climate change. Yet most people are not even aware of it.

In a traditional investment fund, the decisions about where to invest the capital of the investors are taken by fund managers. They decide whether to buy shares in firms like Saudi Aramco or Exxon. They decide whether to invest in environmentally harmful businesses like coal.

Yet there has been a steady shift away from these actively managed funds towards passive or index funds. Instead of depending on a fund manager, passive funds simply track indices – for example, an S&P 500 tracker fund would buy shares in every company in the S&P 500 in order to mirror its overall performance. One of the great attractions of such funds is that their fees are dramatically lower than the alternative.

In 2019 there was a watershed in the history of finance. In the United States, the total value of actively managed funds was surpassed by passive funds. Globally, passive funds crossed US\$10 trillion (£7.7 trillion), a five-fold increase from US\$2 trillion in 2007. ¿Le gusta lo que lee? ¿Quiere más?

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With trillions of dollars migrating to passive funds, the role of index providers has been transformed.

In the past, index providers only supplied information to financial markets. In our new age of passive investing, they are becoming *market authorities*. Deciding who appears in the indices is not just something technical or objective. It involves some discretion by the providers and benefits some actors over others. By determining which players are included on the list, setting the criteria becomes an inherently political activity.

The three dominant index providers’ income mainly derives from the funds replicating their indices, since they have to pay royalties for the privilege. MSCI, FTSE Russell and S&P Dow Jones will increase their role as *a new kind of de facto global regulators*.

This tightly interlinked group of three giant passive fund managers and three major index providers will largely determine how corporations tackle climate change. The world is paying little attention to the judgements they make, and yet these judgements look highly questionable. If the world is truly to get to grips with the global climate crisis, this constellation needs to be far more closely scrutinised by regulators, researchers and the general public.

Fitchner in The Conversation

Petry

Since the global financial crisis, there is a massive shift of assets towards index funds. Rather than picking stocks, index funds replicate stock indices such as

the S&P 500. But where do these indices actually come from? This paper analyzes the politico-economic role of index providers, a small group of highly profitable firms including MSCI, S&P DJI, and FTSE Russell, and develops a research agenda from an IPE perspective. We argue that these index providers have become actors that exercise growing private authority as they steer investments through the indices they create and maintain. While technical expertise is a precondition, their brand is the primary source of index provider authority, which is entrenched through network externalities. Rather than a purely technical exercise, constructing indices is inherently political. Which companies or countries are included into an index or excluded (i.e. receive investment in or outflows) is based on criteria defined by index providers, thereby setting standards for corporate governance and investor access. Hence, in this new age of passive asset management index providers are becoming gatekeepers that exert de facto regulatory power and thus may have important effects on corporate governance and the economic policies of countries.

Index mutual funds have been available since the late 1970s and the first ETFs have been launched in the early 1990s. However, investors shunned them for a long time. But after the global financial crisis growth of index funds has accelerated massively.

An unprecedented money mass-migration from active to passive funds, which is rational as most actively managed funds are unable to beat broad market indices over longer time periods but charge high fees.

One crucial, yet largely unstudied element of this new era is that index funds effectively delegate their investment decisions to index providers. Index providers are the firms that create and maintain the indices on which passive funds rely and to which asset managers have to pay fees if they use them.

Similar to passive asset management, which is dominated by the ‘Big Three’ of BlackRock, Vanguard, and State Street (Fichtner et al., 2017), the global index provider industry is very concentrated. Just three firms, MSCI, S&P Dow Jones Indices (DJI) and FTSE Russell, hold a combined market share of almost 80%.

While global index revenues totaled a record US\$2.7 billion in 2017, their profit margins that stand out as exceptionally high. MSCI reports an operating margin of over 60% for its index segment in 2018. Index providers operate in an oligopolistic industry, which has high barriers to competition.

During the last decade the big index providers have had much higher growth than most other financial companies, especially banks.

Index providers today occupy a position of growing private authority, with decision-making and standard-setting capabilities that are consequential in the global political economy. In the past, their indices primarily served informational purposes. An index such as the S&P 500 or the Nikkei was primarily a numerical representation of a particular stock market. Indices served as bench-

marks against which analysts could gauge the performance of stocks. While the decisions of index providers had some impact on actively managed funds, the rise of passive investing transformed their role in a significant way. Today, they de facto steer capital with their indices as inclusions of firms or countries to an index can lead to inflows of billions of US\$ while exclusions can cause large quasi-automatic outflows. Constructing indices is therefore not a purely technical exercise. Index providers have significant discretion in devising their methodologies.

The methodology of the pivotal S&P 500 index was changed at least eight times between 2015 and 2018. Underlying their seemingly technical exercise are decisional discretion and normative assumptions about ‘good’ corporate governance and ‘free’ markets. Index providers therefore play a role as standard-setters: their notions on what constitutes good corporate governance at the level of the firm and a favorable investment environment at the level of (national) markets helps or hinders firms and countries in attracting capital, essentially deciding what is investment-worthy in global financial markets. This combination of standard-setting and legitimate decision-making power means that index providers have gained a position of private authority in capital markets with profound politico-economic consequences. Today index providers have become important counterparts for states.

Index providers increasingly are to equity markets what credit rating agencies are to bond markets, crucial ‘coordination service firms’ that exercise private authority and effectively set standards for the behavior of other firms and even countries

Their new authority was not delegated from the public sphere, but gradually emerged as part of a transformation of the index provider industry – from primarily supplying information about markets to becoming private authorities that are able to set standards on corporate governance and steer international capital flows.

Take for example FTSE Russell, S&P DJI and MSCI’s emerging market indices; the index providers’ recent decision to include countries such as China and Saudi Arabia to their indices is expected to result in a ‘seismic shift’ of over US\$120 billion in active and passive fund flows by 2020.

Indices act as ‘prisms’ through which fund managers view the investible world.

Financial market indices are far from objective.

They represent ‘deliberate decisions’ made by index providers as every index is a managed portfolio whose composition is decided by the respective index provider.

While these simplified numerical representations might seem objective and technical, they are actually based on complex and (often contested) normative values. Moreover, processes of index production are inherently subjective activities.

Standard-setting is always political.

Distance Governance

Indices and indicators have a governing effect on those that are being evaluated, incentivizing the individuals, companies or states that are being assessed to comply with the norms underlying those numerical representations, as better performance has positive ideational and material effects, enabling a form of ‘governance from a distance’

Critical gatekeepers that exert de facto regulatory power.

The emergence of private authority through the retreat of the state, which provided a space for private actors such as firms to exercise authority.

Questions such as the public regulation of index providers.

Private authority is inherently relational, produced and reproduced through ongoing interactions between the authority and non-authorities, where the formers’ decisions are considered as legitimate by the latter

Rather than coercion or self-interest, legitimacy is a ‘normative belief by an actor that a rule or institution ought to be obeyed’ and is based on how the authority is ‘perceived’ by non-authoritarian actors. Rather than coercion or self-interest, legitimacy is a ‘normative belief by an actor that a rule or institution ought to be obeyed’ and is based on how the authority is ‘perceived’ by non-authoritarian actors.

Three conditions for index provider authority. First of all, technical expertise to construct an index is a necessary – but not sufficient. Second condition; crucial for index provider authority is their brand recognition, or more specifically the trust that the international investment community puts in their brands. ‘Authority is socially constructed’ and is ultimately based on trust, which in turn is based on reputation. The big three index providers are ‘brand managers’ : ‘at the end of the day, those products are homogeneous and exchangeable. It’s like water, there are small differences why Evian is more expensive [...]. Those are minimal differences, but the price tags are very different! A third condition that underpins index provider authority lies in a set of net-work externalities that reinforce the authority of the major index providers. As first movers they have in effect ‘captured’ different national (e.g. S&P 500 or FTSE 100) and regional (Euro Stoxx 50) market segments with their indices. These network externalities entrench the authority that leading index providers derive from their brands. With these three conditions in place, index providers have become private authorities in financial markets.

The authority of rating agencies developed within and was enabled by changing socio-economic structures, i.e. the growth of capital markets and the decline of banks as allocators of credit, which created a demand for rating agencies’ services for the functioning of the then disintermediated structure of finance.

Authority is best understood as an effect of these circumstances, rather than as an entity or a characteristic of an actor or institution' and 'its existence is therefore not functional, [...] but always contingent on time, place, and circumstance.

Indices had at least some influence on asset managers as an deviation from the relevant index could be conceived as a kind of risk management metric. However, indices only loosely anchored the asset allocation as most fund managers had the discretion to choose both the degree of replicating the index as well as the time period for doing so.

Changed fundamentally with the rise of passive investing in the mid-2000s. Index providers began to influence capital flows in an immediate and comprehensive way. Being a central component of the index funds ecosystem conferred them – gradually and only as a side-effect of their business model – a position of growing private authority in financial markets.

The money mass-migration towards passive investments, which significantly increased the nascent authority of index providers as evermore funds directly tracked their indices. Whereas in the past indices only loosely anchored fund holdings around a baseline, now they had an instant, 'mechanic' effect on the holdings of passive funds, 'steering' capital flows. Increasingly, investments were not actively managed by fund managers but passively invested into index mutual funds and ETFs

This makes sense as the vast majority of actively managed funds have not been able to beat benchmark indices over longer periods of time, while charging substantially higher fees than index funds.

In order to track the performance of 'the market', passively managed funds replicate stock market indices such as the S&P 500 or the MSCI World. Rather than trying to generate 'alpha' and outperform the market by picking stocks, these passively managed funds aim to generate 'beta', simply replicating the performance of specific stock markets while minimizing fees.

By investing in an index, passive investors delegate decision-making about where to invest to index providers. Index investing thus represents a form of 'delegated management' and every discretionary decision by index providers has a 'flow through effect on the investor's portfolio'

A substantial proportion of equity funds that officially are actively managed funds (and therefore charge higher fees than index funds) but actually do not deviate much from their benchmark indices. This is referred to as 'closet indexing' or 'index hugging', and it is estimated that in the EU between 5-15% of all equity funds could fall into this category (ESMA, 2016). Therefore, the rise of passive management also increases the authority of index providers vis-a-vis active management because by steering evermore passive capital index decisions now mechanically move ever larger parts of the markets, creating a 'pull effect' that actively managed funds need to follow

Hedge funds and sovereign wealth funds (SWFs) generally have low degrees of replicating indices (one exception is the Norwegian SWF, which almost invests like a global ESG 5 index fund) and are fully discretionary to follow any index modification.

Indices no longer merely measure markets. They move them.

Far from simply providing information on ‘the market’, index providers now offer a variety of customized branded products, by either tweaking existing benchmarks or repackaging proprietary trading strategies into indices which enable the functioning of (passive) asset management capitalism.

The relationship between index providers and asset managers is intriguing. On the one hand, asset managers depend on the large index providers to create their products that are attractive to investors. On the other hand, they have an interest to reduce the fees they have to pay for using indices. In theory, there are two ways for competition to emerge in the index industry: through new index providers and through self-indexing by asset managers. However, both have so far not been able to break the oligopolistic market structure.

It is further difficult for challenger indices to gain benchmark status as network externalities entrench the authority of the big index providers.

Index providers not only decide to include particular firms, they also make decisions on in- and exclusions of entire markets, steering capital with important politico-economic implications for states.

While many indices are strictly rule-based and thus only influence companies indirectly, some indices – including the S&P 500, the world’s most-tracked index – have committees that make discretionary, less rule-based decisions. While the majority of inclusions is rather mechanical and influence is indirect, it is not uncommon that index decisions target individual firms to set a ‘precedence’ on a particular issue that then gets incorporated into existing methodologies.

It has become standard practice for the majority of key global stock indices to use only the market capitalization of firms for calculating the weight of companies. Market capitalization primarily derives from the (future) profits of corporations. Even though that has changed somewhat in the last decades, profit maximization is still not the exclusive goal of corporations from countries such as France, Germany and Japan.

‘reluctant regulators’

‘We’re not activists. We’re setting the minimum standards that investors generally will accept, and our role is to build consensus amongst that investor community as to what that minimum standard should be’.

The three big index providers are therefore best seen as consensus-building agents that aggregate their own interests with those of asset managers from developed economies, i.e. mainly from Anglo-American countries.

Index providers have become de facto private standard-setters over corporate governance.

By reclassifying individual countries, index providers effectively redraw the borders of markets. Index providers set out the criteria that decide which countries are ‘investment-worthy’.

Index providers decide whether to include countries into their indices and whether to classify them as ‘frontier’, ‘emerging’ or ‘developed’ markets.⁸ By additionally putting countries on watchlists for such inclusions, exclusions or reclassifications, index providers create incentives for states to comply with their rules.

MSCI in effect controls the definition of which countries are “emerging markets. Criteria are set out in MSCI’s Market Classification Framework, comprising three elements: economic development; size and liquidity; and investor access. Economic development is not crucial as a criterion, neither are the size and liquidity requirements (only 2-5 companies need to meet minimum requirements). Investor access is the dealmaker/breaker for country classifications, and it is on this that most indexing decisions are based

While index decisions about company inclusions are often more indirect and not targeted at individual companies, in the case of country reclassifications index providers take a much more proactive role. As the following cases demonstrate, these decisions have enormous consequences for states and their national stock markets.

MSCI has a quasi-regulatory function – ‘even though MSCI is not a regulator, companies need to abide, to respect their rules’.

Petry (2021) Steering Capital (pdf)

4

Hedge Funds

Decarbonization needs rules to penalise shadow banks' carbon lending

In the midst of a global crisis, the hedge fund has prospered. The top fifteen hedge-fund managers earned an estimated \$23.2 billion last year, according to Bloomberg. Chase Coleman, the forty-five-year-old founder of Tiger Global Management, led the way, hauling in more than three billion for himself. The Financial Times took a more democratic view of the phenomenon, noting that the top twenty “best-performing hedge fund managers of all time” had provided more than sixty-three billion dollars for their investors during the coronavirus-driven market turmoil, “making it the industry’s best year of gains in a decade.”

Given the supremacy of hedge funds, it was both satisfying and terrifying to observe the recent boom and bust in the value of GameStop, a run driven by small-time speculators. Several hedge funds lost extraordinary amounts of cash—as in billions and billions of dollars—on financial derivatives.

Those who work at hedge funds are diligent about keeping who they are and what they do obscured behind a wall. Secrecy is intrinsic to the job description—for a hedge is a wall.

Kaufman in New Yorker: History of Hedge

4.1 Hedge Central Banks

Braun (twitter)

Let's create a Chinese wall between sovereign bond issuers and the central bank. Wait who's up there taking bonds from the issuers and throwing them at the central bank at a profit whose social value is 0? Oh no they're hedge funds.

WSJ 210510

Hedge Funds Face Backlash From Europe in Bond Market Spain, France and Italy have moved to curb orders from hedge funds to avoid demand for new bonds from appearing inflated.

European governments are acting to limit hedge funds' participation in the market for new sovereign-bond issuance, following a surge in demand from the firms.

The pushback was prompted by unusually large orders placed by hedge funds for new bonds, which can then potentially be sold—sometimes within hours—to the European Central Bank for a profit, bankers, investors and a government official said. Order books, which track demand for new bonds and help determine the prices, have ballooned since hedge funds began to pile into this trade.

The debt-management offices of Spain and Italy have placed caps ranging from €500 million to €1 billion, equivalent to \$608 million to \$1.2 billion, on orders from hedge funds for bonds directly issued by countries in the primary market, according to bankers who worked on the deals. France has also limited order sizes, an official said.

Millennium Management, Brevan Howard, DoubleLine, Tenarion Capital Management and BlueBay Asset Management are among the hedge funds that have been active in the primary market for sovereign bonds in recent months, according to bankers. Some hedge funds have put in orders for as much as €3 billion of bonds in a single offering, which is far more than they can realistically buy, the bankers said.

Large investment firms, pension funds, insurers and banks' treasury departments are usually the biggest buyers of government bonds in the primary market. Countries issuing bonds typically seek to avoid investors with a short-term horizon. That is because hot money flowing quickly in and out of their debt can make prices volatile and potentially drive away other buyers, which could increase their borrowing costs.

Hedge funds became bigger players in Europe's sovereign-bond market after the ECB last year put forward a program to buy as much as €1.85 trillion of debt to backstop credit markets and have stepped up their activity in 2021. The central bank only purchases government bonds in the secondary market, creating an opportunity for investors to buy bonds directly from the governments and sell them to the ECB.

In October, the first issuance of European common debt attracted an unprecedented €233 billion in orders, according to the European Commission. That was the most ever in records dating back to 2003. Around 80% of the bids were from hedge funds, according to a banker who worked on the deal. The commission, which is the executive arm of the European Union, ultimately raised €17 billion.

Hedge funds have sought to turn profits from central-bank stimulus programs previously. The Federal Reserve's Troubled Asset Relief Program during the

2008-09 financial crisis drove distressed-debt investors to snap up assets such as mortgage-backed securities and U.S. bank debt cheaply and sell them to the Fed. The corporate-bond market in Europe is another area where this trade happens, as the ECB also buys investment-grade corporate debt to support the market.

WSJ

5

Index Funds

Financial markets need indices. There are over three million of them, according to the Index Industry Association.

Planet Tracker (2021) Sustainability-Driven Disruption (pdf)

5.1 ETF

Fitchner (Tweet)

Global passive assets hit \$15tn as ETF boom heats up

The relentless growth of index funds is on picture! This growth is concentrating power in the hands of giant asset managers such as BlackRock, Vanguard but also in index providers like MSCI.

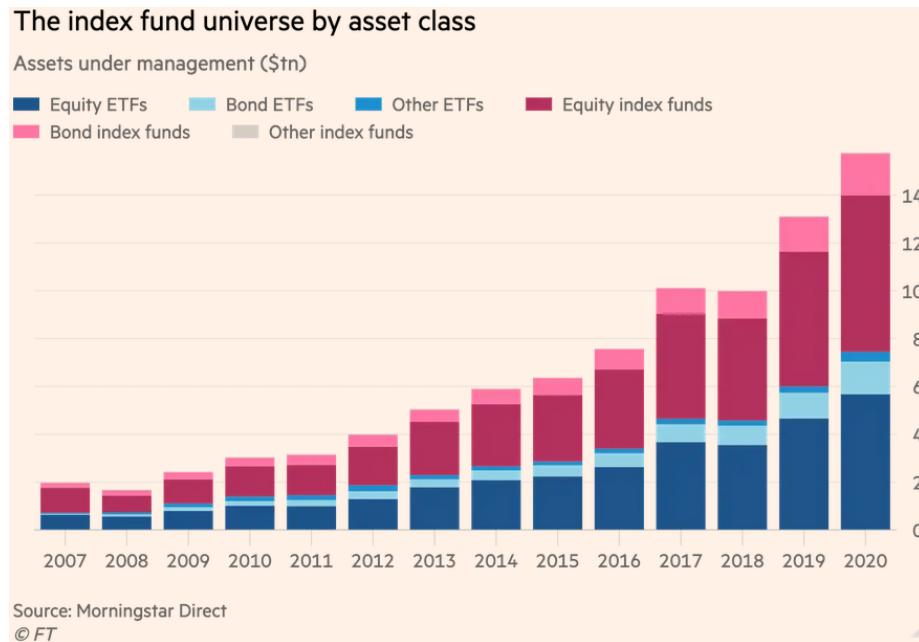


Figure: FT

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Assets under management in exchange traded funds are eclipsing traditional index-track

ETFs stood at \$7.71tn under management at the end of last year — narrowly behind index mutual funds at \$7.76tn — according to data compiled for the FT by the Investment Company Institute.

Since then, ETFs are likely to have nosed ahead thanks to powerful inflows this year. Comprehensive global data comes with a lag, but consultancy ETFGI calculates that assets under management in ETFs stood at \$8.33tn at the end of March.

The ascent of ETFs past their older cousins reflects the speed at which they have reshaped the investment industry.

“People are increasingly building entire investment strategies using only ETFs. The choices you have vastly outstrip what you have in traditional index funds,” said Todd Rosenbluth, head of ETF and mutual fund research at CFRA.

Traditional passive mutual funds accept investor money or redemptions at the end of each day, whereas ETFs, first invented two decades later in the 1990s, trade like stocks on an exchange, letting investors hop in and out whenever they want.

The pandemic-triggered market upheaval of March 2020 failed to dent their growth, with bond ETFs now also quickly gaining ground among investors who were pleasantly surprised by their resilience in the turmoil.

Not everyone in the industry has been thrilled by the dramatic rise of ETFs. Some critics worry they lead investors to overtrade, which harms returns and exacerbates the volatility of markets.

Jack Bogle, the founder of Vanguard, introduced the first index mutual fund for ordinary savers, but was infamously hostile to ETFs and disliked when his old company entered the industry after he retired. However, he conceded before he died in 2019 that ETFs had changed “not only the nature of indexing, but also the entire field of investing”.

Others argue that the flexibility of ETFs means securities that would normally be unavailable to ordinary investors — such as complex derivatives — can be easily packaged and sold to everyone without any restrictions.

FT

5.2 Big Three

Fitchner Abstract

Since 2008, a massive shift has occurred from active toward passive investment strategies. The passive index fund industry is dominated by BlackRock, Vanguard, and State Street, which we call the “Big Three.” We comprehensively map the ownership of the Big Three in the United States and find that together they constitute the largest shareholder in 88 percent of the S&P 500 firms. In contrast to active funds, the Big Three hold relatively illiquid and permanent ownership positions. This has led to opposing views on incentives and possibilities to actively exert shareholder power. Some argue passive investors have little shareholder power because they cannot “exit,” while others point out this gives them stronger incentives to actively influence corporations. Through an analysis of proxy vote records we find that the Big Three do utilize coordinated voting strategies and hence follow a centralized corporate governance strategy. However, they generally vote with management, except at director (re-)elections. Moreover, the Big Three may exert “hidden power” through two channels: First, via private engagements with management of invested companies; and second, because company executives could be prone to internalizing the objectives of the Big Three. We discuss how this development entails new forms of financial risk.

5.2.1 The age of asset management capitalism

Fitchner Memo

In the early 1930s, Adolf Berle and Gardiner Means famously coined the phrase

of the “separation of ownership and control,” meaning that there were not any more blocks of ownership large enough to wield effective control over U.S. publicly listed corporations.⁸ The dispersion of corporate ownership that Berle and Means observed empirically represented a markedly changed situation compared to the first decades of the twentieth century, when most large corporations had been owned and controlled by banks and bankers—what Rudolf Hilferding referred to as *Finanzkapitalismus* (finance capitalism).⁹ Dispersed ownership however entailed that instead of the owners, it was the managers and directors who wielded control. This, in turn, led to the recognition of the principal-agent problem that underlies modern corporate governance theory: Given their collective action problem, how can the suppliers of capital (principals) ensure that the managers (agents) act in their best interests? In response to this question, corporate governance regulation has progressively shifted towards a more powerful position for shareholders. The extent to which the separation of ownership and control took shape has been a debate ever since. Nonetheless, there is an overwhelming consensus that since the second half of the twentieth century corporate ownership in the United States is by and large fragmented and dispersed.

Early signs of a fundamental change in the organization of corporate ownership emerged in the late twentieth century. Useem signaled the growing importance of mutual funds in the early 1990s and argued that we have moved from shareholder towards investor capitalism.¹¹ After the turn of the century and more than seven decades after Berle and Means, Davis went a step further and argued that the rapid rise of assets invested by actively managed mutual funds in equity markets and the ensuing re-concentration of corporate ownership led to a “new finance capitalism.”¹² Davis found that by 2005 active mutual funds had accumulated 5 percent blockholdings in hundreds of publicly listed U.S. companies. Being the single largest shareholder thus gave the biggest mutual funds—such as his running example Fidelity—potential power over the corporate governance of these listed companies by means of dominating corporate elections.

However, despite this great potential power, actively managed mutual funds at that time did not seek to influence corporate decision-making. Davis mentions three reasons for this. First, he points out that owners holding more than 10 percent of voting rights are considered as “insiders,” which significantly restricts their trading possibilities. Second, actively managed mutual funds are faced with potential conflicts of interest because the firms they are invested in are often also their clients. Particularly eminent is this where mutual funds are large providers of pension fund management for corporations. This curbs the willingness of funds to pursue shareholder activism.¹³ Third, and more general, shareholder activism is always costly—and the costs are borne only by the activist, while the benefits are enjoyed by all shareholders. Hence, Davis concluded that “networks of concentrated yet liquid ownership without control seem to be the distinctive feature of the new finance capitalism.”¹⁴ Davis pointed out that this observed new finance capitalism is historically unique, but also cautiously concluded that its durability remains to be seen. One decade later, we can safely conclude that the re-concentration of corporate ownership

was not a temporary market anomaly, but a fundamental reorganization of the system of corporate governance. However, the period 2005–15 is also one of significant transformation of the new finance capitalism.

A remarkable feature of the passive index fund industry is its high level of concentration. In the ETF segment, the market shares in December 2016 have been 37 percent for BlackRock, 18.5 percent for Vanguard, and 15.5 percent for State Street, respectively.²⁰ Hence, together these three firms stand for a stunning 71 percent of the entire ETF market; all other ETF providers have market shares below 3.3 percent. Data about market shares in index mutual funds are not publicly available, but it seems clear that Vanguard dominates this segment with probably at least 75 percent market share.

BlackRock, Vanguard, and State Street dominate the passive index fund industry. Together they manage over 90 percent of all Assets under Management (AuM) in passive equity funds.

Although the Big Three have in common that they are passive asset managers, they are quite different in their own corporate governance structures. BlackRock is the largest of the Big Three—and represents the biggest asset manager in the world. At mid-2016, BlackRock had U.S. \$4.5 trillion in assets under management.²³ BlackRock is a publicly listed corporation and thus finds itself under pressure to maximize profits for its shareholders. Vanguard—with U.S. \$3.6 trillion in assets under management in mid-2016—is currently the fastest growing asset manager of the Big Three. In 2015, the group had inflows of U.S. \$236 billion, the largest annual flow of money to an asset managing company of all-time.²⁴ The main reason for the high growth of Vanguard is that it has the lowest fee-structure in the entire asset management industry. Vanguard is mutually owned by its individual funds and thus ultimately by the investors in these funds. Consequently, the group does not strive to maximize profits for external shareholders but instead operates “at-cost,” which allows Vanguard to offer the lowest fees in the industry. Vanguard pioneered passive investing by creating the “First Index Investment Trust” in 1975, however this investment approach was attacked as “un-American” at the time.²⁵ State Street is slightly smaller than BlackRock and Vanguard, but still one of the largest global asset managers. In mid-2016, it had U.S. \$2.3 trillion in assets under management.

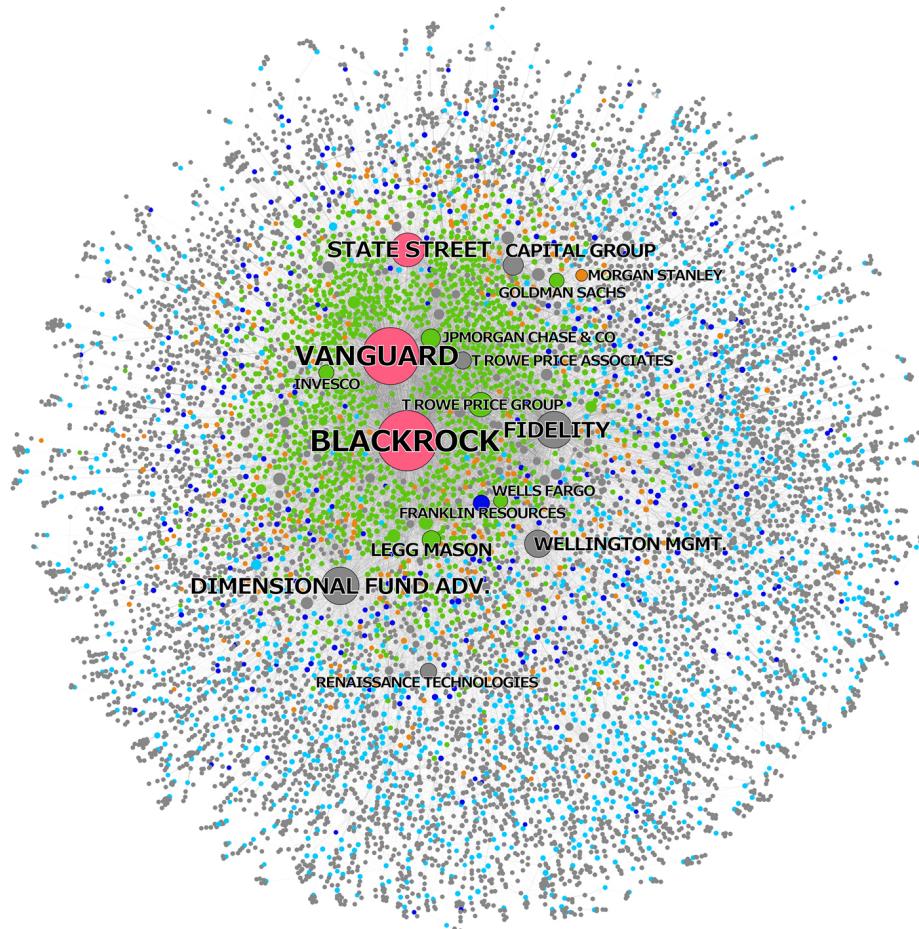
A passive investment strategy leads to the question of why passive investors would be interested at all to concern themselves with corporate governance at the level of individual firms. If a fund holds—for instance—500 stocks the risk of any individual stock will be irrelevant. Indeed the incentive structure of passive index fund managers is such that they are rewarded more for keeping the costs low than for improving firm governance.

The decentralized attribution of ownership in separate funds and ETFs may hamper a centralized voting strategy in at least two ways. BlackRock for instance has more than 200 mutual funds and equity ETFs as well as several closed end equity funds and hedge funds—all of which could have positions in a

particular firm. These portfolios may have different interests when it comes to shareholder vote. Even more differences occur because BlackRock holds some shares in short positions. Any vote that helps the long positions in BlackRock will hurt the short positions. So which way will BlackRock vote? These decentralized ownership structures may also hamper the ability to systematically use the voting power at all as it demands a serious coordination effort on behalf of the asset managers.

The risks of individual stocks are largely irrelevant to their business model.

While active investors can and will sell shares when they observe or anticipate diminishing (future) returns, passive investors are generally “stuck.” This means that their main interest is not short or medium term value creation, as is the case for most investors. Instead, their main interest is in long-term value creation.



Asset management capitalism and new financial risk

Stealth Socialism

The recent rise of the Big Three has already led to serious concerns that “it cannot be good for capitalism.”⁵⁹ A first and major concern is that a further increasing market share of passive index funds could impair efficient price finding on equity markets, as the proportion of actively traded shares would continue to shrink. This concern already led some to polemically argue that because passive funds take active fund managers out of the role of allocating capital, the outcome is “stealth socialism.”⁶⁰ One of the most outspoken regulators concerning this topic is Andrew Haldane from the Bank of England. In a speech in 2014, he argued that we have potentially entered the “age of asset management” due to enormous growth of assets under management in the last decades and the relative retreat of banks after the global financial crisis.⁶¹ He sees indications that passive investing could increase investor herding and thus lead to more correlated movements of markets. In this way, passive index funds could intensify the pro-cyclicality of financial markets.

A second concern regarding increased risk relates to the practice of securities lending. Passive asset managers regularly lend out shares to short-sellers to generate additional income. According to Cetorelli, BlackRock has increased its securities lending operations significantly in recent years. Indemnification of securities on loan by BlackRock more than tripled from U.S. \$40 billion in 2012 to over U.S. \$130 billion in 2014, while for State Street the value was even U.S. \$320 billion one year before.⁶² Such securities lending—like most activities of large passive asset managers—seems to be unproblematic in good times, but could impair liquidity significantly in times of serious market stress. These developments have led global regulators to examine whether large asset managers, such as BlackRock, should be labeled “systemically-important financial institutions.” On the other hand, concerns about reduced liquidity due to passive investment strategies may be moderated by the observation that ETFs themselves have become the object of active trading strategies.

The active trading of passive index funds may have far reaching consequences. When passive index funds do indeed become the main building blocks for active investment, we are confronted with a fundamental reorganization of contemporary corporate governance. Because the voting rights reside with the asset managers who supply the passive index funds, and because the passive index fund industry is concentrated in the hands of the Big Three, this effectively means that the separation of ownership and control may potentially come to an end. After all, the active investors who trade with the passive building blocks no longer have access to the voting rights. And the Big Three accumulate the voting rights without much concern for short-term considerations. What is more, their interests are not restricted to the well-being of any particular firm. As mentioned, passive index fund managers arguably have little interest in fierce competition between their co-owned corporations, because this constitutes a zero-sum (or even negative-sum) game for them. Rather, they have industry or market-wide interests. Such developments may lead to a situation where the large owners of corporate businesses have limited incentives to engage with firm-level corporate governance beyond fulfilling their fiduciary obligations.

Fitchner Conclusion

Since 2008, an unprecedented shift has occurred from active towards passive investment strategies. We showed that the passive index fund industry is dominated by BlackRock, Vanguard, and State Street. Seen together, these three giant, passive asset managers already constitute the largest shareholder in at least 40 percent of all U.S. listed companies and 88 percent of the S&P 500 firms. Hence, the Big Three, through their corporate governance activities, could already be seen as the new “de facto permanent governing board” for over 40 percent of all listed U.S. corporations.⁶⁵

An original and compressive mapping of blockholdings revealed that in the United States the market for corporate control shows unprecedented levels of concentrated corporate ownership. The Big Three occupy a position of “structural prominence” in this network of corporate governance. We furthermore found that while the proxy voting strategies of the Big Three show signs of coordination, they by and large support management. However, BlackRock, Vanguard, and State Street may be able to influence management through private engagements. Moreover, management of co-owned companies are well aware that the Big Three are permanently invested in them, which makes it possible that through this “disciplinary” effect they may internalize some common objectives of the passive index managers. On balance, we find significant indications that the Big Three might be able to exert forms of power over the companies held in their portfolios that are hidden from direct inspection.

When Vanguard pioneered its index fund concept in the mid-1970s it was attacked as “un-American,” exactly because they held shares in all the firms of an index and did not try to find the companies that would perform best. Therefore, the new tripartite governing board of BlackRock, Vanguard, and State Street is potentially conflicting with the image of America as a very liberal market economy, in which corporations compete vigorously, ownership is generally fragmented, and capital is generally seen as “impatient.”⁶⁶ Benjamin Braun has argued that passive investors may, in principle, act as “patient” capital and thus facilitate long-term strategies.⁶⁷ Hence, the Big Three have the potential to cause significant change to the political economy of the United States, including through influencing important topics for corporations, such as short-termism versus long-termism, the (in)adequacy of management remuneration, and mergers and acquisitions.

We reflected on a number of anticompetitive effects that come with the rise of passive asset management, which could have negative consequences for economic growth and even for economic equality. As well, we signaled how the continuing growth of ETFs and other passive index funds can create new financial risk, including increased investor herding and greater volatility in times of severe financial instabilities. The ongoing rise of the Big Three and the concomitant fundamental transformation of corporate ownership today clearly warrants more research to examine their impact on financial markets and corporate control—in the United States but also internationally.

Fitchner (2017) Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk

5.3 Shareholder Democracy

Sommer

Control of most public companies — that is, the wealthiest organizations in the world, with more revenue than most states — will soon be concentrated in the hands of a dozen or fewer people.

In the near future, giant index funds, those low-cost investments that have helped millions of people to build nest eggs, will gain “practical power over the majority of U.S. public companies.” That nightmarish vision originated in a prescient 2018 paper by John Coates.

Index funds, which simply track the market and make no attempt to outperform it, are so effective and cheap, he said, that they have become the investment vehicle of choice for trillions of dollars of assets. Yet under current rules, it is the index fund executives, not the millions of people who invest in them, who have the power to cast proxy votes.

That lack of proxy voting capability leaves vast numbers of investors out of the equation, and gives corporations inordinate power.

When major fund companies receive compensation from corporations, they tend to side with corporate management even more frequently than usual.

The fundamental cure would be to take proxy voting power away from the fund companies and put it in the hands of millions of fund shareholders.

Sommer (2021) Future True Shareholder Democracy

The Problem of Twelve

Coates Abstract

Three ongoing mega-trends are reshaping corporate governance: indexing, private equity, and globalization. These trends threaten to permanently entangle business with the state and create organizations controlled by a small number of individuals with unsurpassed power. The essay focuses on indexation. After providing background, the essay describes the rise of and reasons for indexation, noting that “passive” indexed investing takes a variety of forms. Data on indexation are presented — with the bottom line that indexation has progressed farther than most realize, because foreign ownership, institutional indexation, and “closet” indexation are often neglected by observers. Index providers’ incentives, resources, and methods are reviewed, with an emphasis on the how such providers have greater practical importance than simpler analytical approaches might suggest. The essay ends with an outline of policy options, and preliminary analyses of which seem likely to address the “Problem of Twelve” — the

likelihood that in the near future roughly twelve individuals will have practical power over the majority of U.S. public companies.

Coates (2019) The Problem of Twelve (pdf)

5.4 Direct Indexing

Planet Tracker

An oligopoly of major index providers – MSCI, FTSE Russell, S&P Dow Jones and Bloomberg – are being challenged by innovative competitors. The index ‘majors’ are some of the most powerful players in the financial markets. If the drive towards self-indexing continues – and financial institutions have been positioning themselves for such a move – investors of all types will be able to choose from a much wider range of products. The sustainable investor could be the catalyst for this change, providing them with the opportunity to invest in line with their personal principles, rather than taking the templates on offer. And for the braver ones, direct indexing is becoming more widespread. As for the corporates, being included in a popular sustainable index could provide them with a cost of capital advantage. Things are looking up for sustainable investors and sustainable companies

The index production landscape is evolving to meet the demands of sustainability-based investment products. Declining fund fees, rising competition in index production and demand for greater consumer choice have all arrived at the same time as the upswing in sustainable investing.

There are four main index providers for ETFs – MSCI, FTSE Russell, S&P Dow Jones and Bloomberg. There is also another tier of index providers across asset classes which are challenging this oligopoly. These include CRSP, Morningstar, Quantigo and Solactive.

Solactive sells ‘tailormade’ solutions as well as being ‘dedicated to developing customized indices’. Growing competition also exists from industry participants, including asset managers and investment banks, that create their own indexes’

MSCI reveals dependency on the largest financial institutions with BlackRock accounting ‘for 11.0% of our total revenues’.

Two interesting examples of notable increases in index demand: fixed income and ESG (environmental, social and governance). In 2019, fixed income indices rose 7% year-on-year, driven by Europe, the Middle East and Africa (EMEA). ESG indices rose by 14% across both equities and fixed income. The IIA snapshot for 2020 reveals continued growth in fixed income indices of 7% but a leap in ESG demand by 40%.

ESG investing is ‘the growth opportunity of the century’.

If we then move the trillions of dollars of money away from traditional indexes

into these more sustainable or ESG-based indexes, that's going to shape finance in a substantial way.

Testing further customisation with STOXX iStudio, which provides the customer with the tools to build their own index. This suggests Deutsche Börse is willing to become a disruptor.

So, are the index majors caught between a rock and a hard place? If they provide ever more customisation, they undermine the profitability of their existing business model, especially in relation to their most popular indices – e.g. S&P 500, FTSE 100, MSCI World etc. But there's a further issue. Will increasing customisation, driven by sustainable demand, lead to greater regulatory scrutiny? Some regulators have already expressed concerns. In 2018, the EU Benchmark Regulation (BMR) was introduced amid fears about the accuracy and integrity of indices used as benchmarks in EU markets, following the LIBOR scandal. BMR imposes requirements for organizations that provide, contribute data to and reference financial benchmarks.³⁰ To further complicate the issue, regulators will need to ensure that the largest Asset Managers, which may sit on Advisory Boards of the Index Providers or provide advice, are unable to exert influence over the formulation of indices.

Index providers are viewed as data publishers by the SEC, rather than investment advisers. Should there be a regulatory distinction between broad indices and the customised varieties?

Presently, it appears that only financial institutions and ultra-high net worth individuals (UHNWIs) are reaping the full customisation benefits. Many retail investors are left with limited options when using the fund platforms of the major financial institutions.

Perhaps the most exciting development for supporters of sustainability and ESG strategies may be an unintended consequence. If corporate management teams become convinced that the inclusion of their company in an index is one of the most important drivers of a share price, then there could be a scramble by executives to adopt more sustainable and ESG strategies, in order to win access to these indices and possibly lower their cost of capital. A race to the top that would be welcomed by many.

Planet Tracker (2021) Sustainability-Driven Disruption (pdf) Press Release

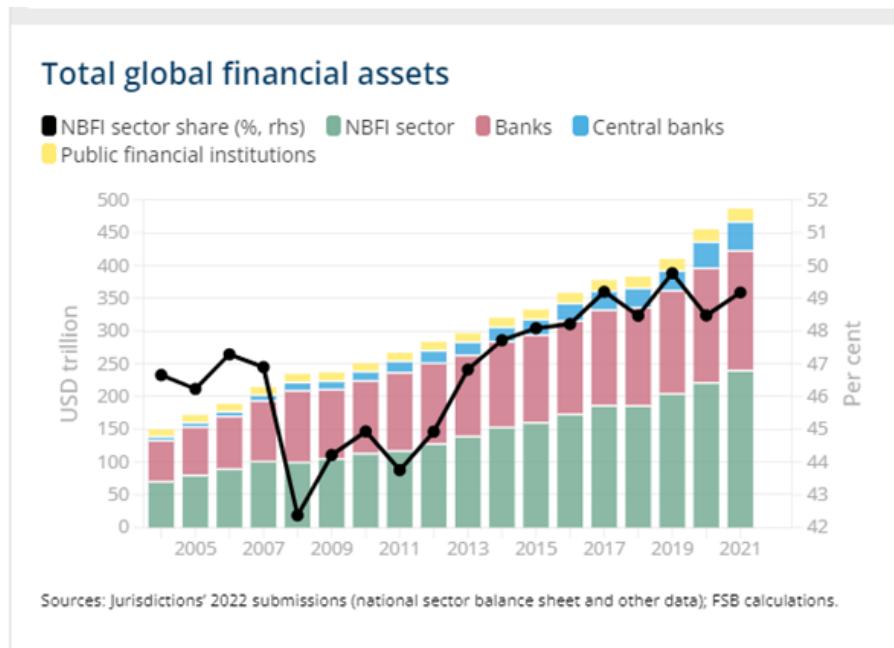
6

NBFI Non-Bank Finanical Institutions (Shadow Banks)

Michael Roberts

The new risk that has ‘popped out’ is with non-bank financial institutions (NBFI), comprising investment funds, insurance companies, pension funds and other financial intermediaries. These are sometimes called ‘shadow banks’. NBFI now account for 50% of global financial services assets and they are pretty much unregulated.

34 6. NBFI NON-BANK FINANCIAL INSTITUTIONS (SHADOW BANKS)



Within the euro area, the growth of the NBFI sector accelerated after the global financial crisis, doubling since 2008, from €15 trillion to €31 trillion. The share of credit granted by NBFIIs to euro area non-financial corporates increased from 15% in 2008 to 26% at the end of last year. Overall, the NBFI sector assets are now around 80% relative to the size of the banking sector.

And here is the problem. NBFIIs are prone to the risk of sudden ‘de-leveraging’ when asset prices suddenly change and become volatile. This is nothing new and is in the nature of such speculative capital. And the collapse of any large NBFI will spill over into the banking system in general. The examples are numerous: the collapse of the hedge fund Long Term Capital Management as a result of showed how financial stress in a highly leveraged NBFI can transmit directly to the large banks at the heart of the financial system

Banks are directly connected to the NBFI sector entities via loans, securities and derivatives exposures, as well as through funding dependencies. I quote the ECB: “*Funding from NBFI entities is possibly one of the most significant spillover channels from a systemic risk perspective, given that NBFI entities maintain their liquidity buffers primarily as deposits in banks and interact in the repo markets with banks.*”

A recent report by the Bank of England concluded that: “shadow banks operate alongside commercial banks to securitize risky individual loans and hence produce standardised asset-backed securities. Investors perceive these securities, free of any idiosyncratic risk, to be nearly as safe as traditional bank deposits, and consequently purchase them. That, in turn, allows banks to expand lending

by charging lower spreads. ...In periods of stress, however, the “nearly” qualification turns out to be crucial and the imperfect substitution between securities and deposits grows apparent. Securities suddenly command a higher premium, enough to curtail the capacity of shadow banks to engage in securitization. This spills over to commercial banks: no longer able to offload part of their portfolio at the same price, they resort to increasing spreads on consumers and businesses alike...as spreads shoot up, credit becomes dearer. Indebted households must cut back on goods and housing purchases. Indebted firms must cut back on capital purchases. Employment, consumption and investment fall, causing a recession. Thus, a drop in investor confidence—we call it a market sentiment shock—produces strong and positive co-movements among the main macroeconomic variables, credit quantities, and asset prices, as well as countercyclical movements in household and business credit spreads.”

In short, ‘shadow bank’ speculative lending is very liable to lead to a breakdown in credit, spreading to the wider banking sector and then into the real economy, triggering a crash. Non-banks’ leverage “can potentially threaten financial stability

In essence, nothing has changed since Marx wrote in Volume 3 of Capital that: *“if the credit system appears as the principal lever of overproduction and excessive speculation in commerce, this is simply because the reproduction process, which is elastic by nature, is now forced to its most extreme limit. A crisis must inevitably break out if credit is withdrawn.”*

[Roberts (2023) Hiding in the shadows]<https://thenextrecession.wordpress.com/2023/10/02/hiding-in-the-shadows/>)

36 6. *NBFI NON-BANK FINANCIAL INSTITUTIONS (SHADOW BANKS)*

7

Private Equity

Feygin

Wagner Group as violent PE-firm

Wagner's success has been in providing a complete package of "authoritarian support services" in the larger context of the many tools of the broader Concord Group. Concord not only provides trigger pullers but other forms of psychopaths like "political technologists" to rig elections and consultants to get your image clean in the West. The other advantage to the Concord Group's agglomeration effect is it lets other lines of business finance long-term assets that Wagner acquires in exchange for its services, like gold mines, oil fields, etc. These are cheaper than paying them with cash because, as Keynes teaches us, cash now (especially for a poor FX-constrained and politically isolated emerging market) is usually dearer than cash later.

For people coming out of finance or any related economically-based discipline, something of a lightbulb might be going off. The Concord Group might be one of history's top five most violent private equity firms. What it does is essentially the same as a PE firm but with way more guns (as far as we know). Concord Group has a limited partner (LP)– the Russian state. In a PE firm, an LP is the investor in the project. An LP signs a contract with the PE firm, making them a partner in a venture without management rights but with rights to a portion of the profit generated by a deal. As a partner, the LP is obligated to provide the PE firm (termed general partner) cash to help finance an acquisition. This provides the GP with a lot of free leverage and optionality, thereby letting them buy out assets at a lower cost of financing.

In theory, these would be underperforming firms taken private, improved through some genius (layoffs) or agglomeration effects (combining firms), and then placed back for sale on the public market for a profit. This sometimes happens, especially if the PE firm has a specialized focus. For example, there

are some very successful stories of PE firms run by talented engineers and managers in the automotive parts and oil and gas sector buying up lots of small, independent firms that were failing and combining and restructuring them into more efficient vertically integrated operations. However, most of the time, PE firms will use their leverage advantage to buy a firm relatively cheaply, make its financials look better, and then sell it in a relative but not absolute value play. This is one of the better outcomes. A worse one is when the PE firm uses a lot of financial engineering to load a company up with debt and then bankrupt it and write it off for profit – if you've seen *Goodfellas*, this is the legal version of the “bust out” scheme they run on the bar. If you are an outsider interested in an introduction to these issues, the book to read is Eileen Applebaum and Rosemary Batt's *Private Equity at Work: When Wall Street Manages Main Street*.

Concord did something like this. Basically, the Russian state was Prigozhin's LP in the sense that it gave him access to leverage. Prigozhin was Putin's Chef, having started in food sales and restaurants. Concord continued that line of work, receiving lots of state contracts for catering and food services but not delivering the services to anything near the standard (delivering spoiled food to high schools and the military, for example). These contracts gave Concord a lot of cash to invest in troll farms and mercenaries, which were the real payoff to the state for the cash. In turn, with these services and liquidity, Concord could go to various unsavory governments and offer their services, not for cash but for assets like gold mines and oil fields. Concord could then do a value play where these assets were acquired for a relatively low cost to their yield, even if the yield isn't great. By having the Russian state behind them ready to issue liquidity (and other hard-to-access resources like heavy weapons, trained commandos, and anti-air defenses), they could keep rolling over the funding as needed and enter new opportunities. It's a classic PE play!

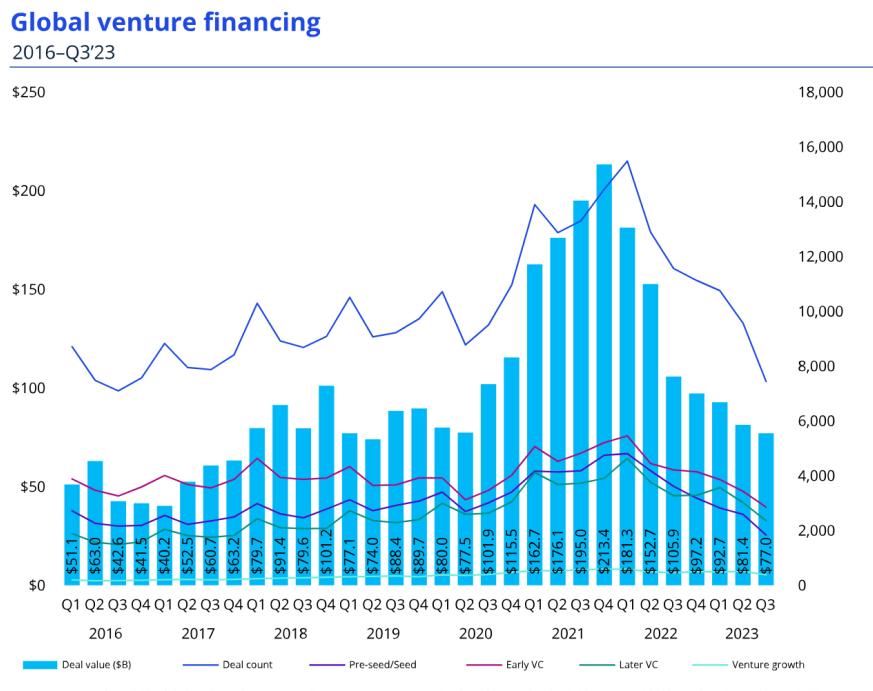
feygin (2023) Wagner Group, Private Equity, Historiography

8

Venture Finance

Tooze

Capital is less and less flowing to startup innovation:



For the seventh quarter in a row, venture activity continued to subside in Q3

2023. Both venture financing volume and aggregate deal value worldwide hit tallies once again in line with the boom period observed in the early 2020s. All that said, it is important to note that subsiding from record tallies is to be expected in market cycles, especially given the array of shocks that economies and global financial systems have endured over the past three years and counting. In addition, there are signs of a moderation in the pace of slowing investment, i.e., a plateau may be in the offing. When additional data is collected, aggregate deal value could be closer to Q2's tally than current figures suggest. Moreover, deal-makers seem to be further adapted to all the multiple volatile factors that have slowed the pace of investment thus far, while financing metrics are moderating to levels that may be more doable for many fund managers. It remains to be seen if a plateau does emerge, but there are at least some promising indicators.

Toozé (2023) Declining Investment

KPMG (2023) Q3'23 Venture Pulse Report – Global trends

9

Vulture Funds

Roberts

It is the obscure Hamilton Bank that is opposed to any agreement and instead is demanding full repayment on its holding of Sri Lankan bonds. Hamilton is what is called a ‘vulture’ fund, buying up the ‘distressed debt’ of poor country governments at rock bottom prices and then pushing for full repayment at par (the original bond issue price), using the blackmail of refusing to agree to any ‘restructuring’. These vulture hedge funds specialise in sniffing out vulnerable sovereign bonds, amassing a blocking stake, waiting patiently for a broader restructuring to take place, and holding out for full repayment once a country has secured debt relief from other creditors. It’s called being a “holdout”.

The most infamous and successful example of this strategy was by Paul Singer’s Elliott Management which managed to extract \$2.4bn out of Argentina in 2016 from the right-wing Macri government. In paying Elliott off, Macri was then able to get the biggest ever IMF fund deal in history, designed to ensure that government’s position in office for a long time – although that payout was squandered and the Macri government fell. The debt crisis goes on in Argentina.

Suing a sovereign for non-debt payment can be a justified and lucrative business.

Hamilton is demanding \$250m in bond repayment and interest from the Sri Lankan government. The US court has intervened on behalf of the US government and other creditors to stop Hamilton getting its pound of flesh, at least until there is a general restructuring deal that Hamilton will be forced to go along with.

Even if Hamilton is thwarted and a deal with creditors is reached, Sri Lanka will still be burdened by a huge debt liability that can only be ‘serviced’ by cuts in the already low living standards of 22m Sri Lankans. The IMF has already indicated it will encourage austerity in Sri Lanka – reducing spending

and increasing taxes. Sri Lanka did not seek IMF debt relief in the 1990s or early 2000s for that reason. But now it is either Hamilton or the IMF.

Roberts (2023) Sri Lanka's debt trap and the vultures

10

Institutional Investors

10.1 Pension Funds

Braun

Rather than financing entrepreneurs and fostering growth, pension money has “[inflated] capital markets in which unproductive takeover and corporate restructuring activity flourishes, while industrial production and employment activity stagnate.”

At the same time, their capital feeds an asset management sector geared toward capitalizing an ever-increasing share of economic activity, thus expanding the universe of investable assets.

It is “never noticed” by advocates of market provision “that financial markets are not large enough to support welfare transfers.”

Invariably, therefore, the supply of pension savings in search of investment outstrips demand for financing from the non-financial sector (firms, households, government). This mismatch means that pension capital contributes to asset price inflation and to declining yields in established, “conservative” asset classes, which in turn gives pension funds a strong incentive to lobby state and federal governments to allow them to move into high-risk investment strategies and asset classes. In this effort, they will invariably be supported by the asset management sector.

Pension funds’ asset composition has steadily moved from public, local, and development-oriented investments to more private, global, and predatory investments.

In a system in which financial return is structurally linked to predation, exercising labor power through capital stewardship is doomed to fail. Unlocking the progressive promise of labor’s capital requires a macro-financial regime that

strictly regulates finance and that allows for greater economic democracy. The public would play a much greater role in credit creation and allocation, labor's capital would be uncoupled from the for-profit asset management sector, and employee equity funds and other forms of mutual ownership would institutionalize profit-sharing and co-determination at the firm level.³⁵ On the transition path to such a "real utopia," funded pensions appear as an obstacle rather than a stepping stone because they create a sequencing problem—things would have to get worse for labor's capital before they get better for labor.

Braun (2021) Fueling Financialization: The Economic Consequences of Funded Pensions (pdf)

10.2 ESG 2.0

Segal

How Institutional Investors Encourage Corporations Bad Behavior

Wittingly or unwittingly, pensions and endowments' investment strategies aid and abet activities that make the financial system more fragile.

The growing scale of institutions and the large amounts of money they need to deploy into high-risk investments is leading to consolidation among asset managers, higher global debt levels, short-term corporate behavior, and market instability.

Institutions' investment strategies are in conflict with environmental, social, and governance goals to which they are increasingly committing.

Pension funds, insurance companies, sovereign wealth funds and others need to deploy large amounts of capital efficiently because they themselves are so big.

Institutions' only option in many cases is to put billions of dollars to work in the largest public and private companies, Rothenberg explained. That results in companies, for example, taking on unsustainable amounts of debt.

There are incentives to layer on debt, much of which is supplied by capital markets and the shadow banking sector.

Ironically, institutional investors want to integrate ESG into their process, but they also contribute to corporate consolidation and huge debt burdens. Institutional investors are essentially contributing to some of their own problems in the way they allocate capital to leveraged loans, high-yield loans, collateralized loan obligations and other higher risk products.

All of this adds to global systemic risks. Unchecked increases in corporate debt result in increased systematic market risk that boomerangs back to investors and their portfolios Existing approaches like Modern Portfolio Theory and ESG or impact investing frameworks don't focus on these potentially negative effects.

Perversely, as major central banks globally respond to the current crisis with rock bottom interest rates and new rounds of quantitative easing (QE), investors and companies are further incentivized to increase their exposure to high-risk debt and inflated asset valuations — a situation that leaves society and markets vulnerable to a rise in interest rates or other unplanned challenges

Segal - Comment - Institutional Investor

Rothenburg

Many of our existing ESG and impact investing frameworks focus on issues at the portfolio company level, but they do not take into account potential negative impacts from capital structures and investors' influence in shaping them. Asset allocation strategies can be in conflict with ESG objectives.

The conflict materializes in various interconnected ways, particularly from institutional investors' role in increasing global debt levels and fund manager and corporate consolidation.

For long-term, diversified institutional investors, or “Universal Owners” of the market, these dynamics eventually translate into lower financial returns. For workers and communities, these dynamics translate into greater precarity and inequality.

Potential solutions focus on diversifying asset allocation to more regenerative investment structures and asset classes, building an enabling environment through adjustments to team incentive structures, performance reviews, benchmarking and valuation methodologies, and field-building.

Over the past decades, institutional investors have migrated up the risk-return spectrum to asset classes with higher yields. Investor allocations to private equity (PE), venture capital (VC), private debt (PD), high yield bonds (HYBs), leveraged loans (LLs), and collateralized loan obligations (CLOs), for instance, have been growing steadily in response to a number of trends. *While such shifts in asset allocation may suit near-term goals, such as meeting actuarial targets, this institutional allocation to higher risk asset classes has also meant increased global debt burdens, corporate and fund manager consolidation, and risk across capital structures, resulting in fragility for companies, the real economy, and the stability of financial markets. The resulting risks are therefore shared not only by investors, but also governments, workers, and communities alike.*

To optimize leverage ratios, companies may prioritize debt servicing or distributions to investors at the expense of worker payrolls and benefits. Infrastructure and social infrastructure investments — such as power, water, roads, hospitals, nursing homes, housing, and cybersecurity — might be structured in such a way that provides access to end-users at unaffordable prices, or of poor quality, in order to meet investor return expectations and therefore attract capital. Weak capital structures increase the risk of restructurings or bankruptcies that are detrimental for stakeholders, such as workers. Stakeholders have increasingly raised concerns about high leverage, coined “financial engineering,” particularly

in the PE asset class, for such reasons.⁵ Yet studies produced over the past decades, inspired by PE, praise the discipline of debt, and due to a number of additional factors, high leverage ratios are no longer confined to the PE asset class and are prolific across public equity markets, as well.

In practice, the negative impacts of weak capital structures are typically being addressed piecemeal through company-by-company interventions that focus on corporate operations, like a game of whack-a-mole; but key roots of the problem — the investment structures themselves — are left unaddressed.

The unintended negative consequences of highly levered investments have been underexplored when it comes to ESG and impact investing frameworks and practice. Matters relating to investment structures, capital structures, leverage ratios, earnings calculations, valuation methodologies, benchmarking approaches, and resulting asset allocation and portfolio construction are not typically within the realm of ESG-related responsibilities.

Too much leverage is dangerous for all stakeholders. While leverage looks like a neutral, bilateral accelerant, it actually reduces financial resiliency at the very times when it might be most needed.

Systemic inequality has been shown to result in economic decline.

Neither Modern Portfolio Theory (MPT) nor ESG or impact investing frameworks currently include a focus on potential negative impacts stemming from investment structures.

Corporate debt burdens and leverage ratios are historically high, covenants are light, and defaults and bankruptcies are being held at bay by government support (e.g. through fiscal and monetary policy) – which is also funded by debt, though at the sovereign level.

Corporate funding dynamics have changed since the Global Financial Crisis (GFC), when banks came under heavy regulation that caused them to restrict lending to smaller clients. Capital markets, or the Non-bank Financial Intermediary (“NBFI” or “Shadow Banking”) sector, has stepped in to fill this void.

The financial assets of the NBFI sector amounted to \$200.2 trillion in 2019, accounting for nearly half of the global financial system in 2019, up from 42% in 2008

How Did We Get Here?

For the past two decades, institutional asset owners have significantly shifted their overall asset allocation strategy. Private markets – including PE, PD, VC, infrastructure, and real estate - as well as LLs, CLOs, and HYBs, have become much larger percentages of overall portfolios. There are a number of reasons for these changes, including, but not limited to, ongoing declines in interest rates by major global central banks, dynamics related to funding ratios of institutional investors such as pension funds, growing interest in the illiquidity premium of private markets, benchmarking practices, investor dissatisfaction with public

markets, and increased opportunity for NBFIs to provide financing following banking regulations resulting from the GFC. 16 Private capital assets under management (AUM) in 2019 was approximately US\$6.5 trillion, an increase of over US\$4 trillion over the past ten years.

Private Equity (PE)

Investor demand is now so high for PE that many are concerned that the asset class is becoming crowded with capital.

Consolidated capital flows stems from the institutionalization of capital. Markets have evolved from being dominated by individual investors to having a large presence of institutional investors. Institutional investors now hold over 40 percent of global market capitalization of listed companies.

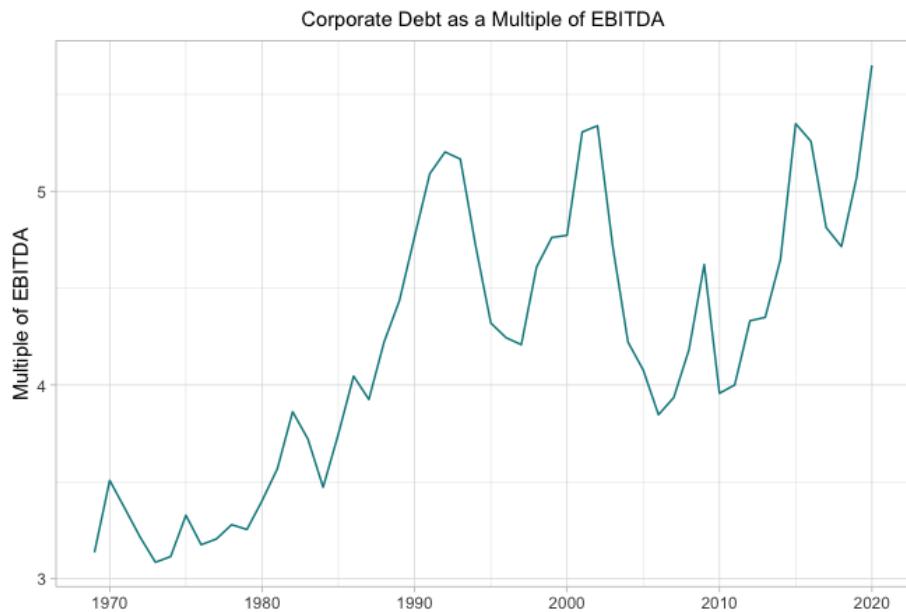
Institutional investors have sizable portfolios and must invest billions if not trillions of dollars. With such large chunks of capital to put to work, they often find it challenging to invest in smaller fund managers, smaller companies, and niche investment strategies due to a number of factors, such as transaction costs.

Even when small deals perform well, which data suggests that they often do, they are hard to justify because they do not meaningfully move the needle in terms of overall portfolio returns.

A well-documented negative impact of consolidated capital flows to larger fund managers is that smaller, emerging, and innovative fund managers can be starved of capital.

Institutionalization of Capital

The consolidation of capital among institutional investors is a double-edged sword. On the one hand, institutions offer individual investors professional money management with multi-disciplinary staff and robust internal infrastructure capable of constructing well-diversified portfolios. Size and scale can also allow large allocators to influence corporate governance of portfolio companies, as well as negotiate more attractive terms with fund managers. It is arguable that fees overall are reduced through these dynamics, and strong ESG practices can be better advocated for. On the other hand, since large institutions need to put significant amounts of capital to work, they often allocate to the largest managers and companies, thereby resulting in consolidation of power, profit, influence, and opportunity among a shrinking pool of asset managers and companies. 53 In order for large institutional investors to act as responsible Universal Owners and effectively manage systematic risk, it will be critical for them to evaluate their asset allocation practices for unintended negative consequences that not only impact the real economy, but also markets and their long-term portfolios.



This high-risk debt is not limited to private companies. A recent Forbes article highlights how, “some of the biggest firms in the United States... have binged on low interest debt. Most of them borrowed more than they needed, often returning it to shareholders in the form of buybacks and dividends. They also went on acquisition sprees.”

From the corporate perspective, historically cheap credit due to low interest rates is attractive, particularly when combined with the current tax deductibility of interest expense, studies suggesting that highly leveraged capital structures do not negatively impact stock prices, and arguments that debt adds discipline to corporate management. Yet debt and common uses of funds can increase risk for other stakeholders. M&A has been shown to contribute to corporate consolidation which can stifle SMEs, innovation, suppliers, the quality and affordability of goods and services, labor's bargaining power, and diversification for institutional investors. There is significant literature that explores negative impacts of share buybacks in public companies, given the links with high executive compensation and that cash paid to executives and shareholders can deter from reinvestment in the company, the quality of goods and services, and the workforce. In PE-backed companies, high leverage from acquisitions and dividend recapitalizations can push companies to cut costs related to quality jobs and jeopardize the quality and affordability of goods and services.

As central banks around the world doubled down on low interest rates and QE, investors responded by increasing portfolio allocation to higher risk and yielding asset classes.

The combination of QE and low interest rates with corporate consolidation and

high inequality may well be creating challenges to long-term economic growth, as well as introducing potential drivers of instability for aggregate demand.

Rothenberg (2021) ESG 2.0 - Measuring & Managing Investor Risks Beyond the Enterprise-level (pdf)

11

Capital Markets

11.1 Bond Market

Toozie

“If Tuesday was market chaos, Wednesday was chaos on a trampoline on drugs”

Katie Martin on the bond-market mincing machine:

Global bond markets have been through a mincing machine in the past few weeks, inflicting pain on everyone from retail investors to insurance companies. Alarmingly, it is not obvious why. But the competing schools of thought work something like this:

Theory one is that the supposedly big brains of the investment world have been spectacularly wrongfooted by the ascent in global interest rates and are scrambling to catch up. Central banks are cementing their view that rates will be higher for longer, while slower-moving investors have been wronger for longer. Something had to give, and this will all balance out and blow over soon.

Theory two is that we are at the foothills of a catastrophic reckoning with the fiscal incontinence and addiction to low rates that had taken hold over the previous few decades, and we should brace for a serious challenge to the global dominance of the dollar and US government bonds’ centrality in financial markets. This will not blow over soon.

Source: FT (paywall)

Toozie (2023) Treasury market chaos, giant profits in food, Ethiopia’s failed state-building & the EV race

ECB Euro Area Yield Curve

S&P Eurozone Sovereign Bond Index

Investopedia on Yield Curves

11.2 Stock Market

Fix

When stocks go up, the vast majority of people see their share of income (and wealth) *decline*.

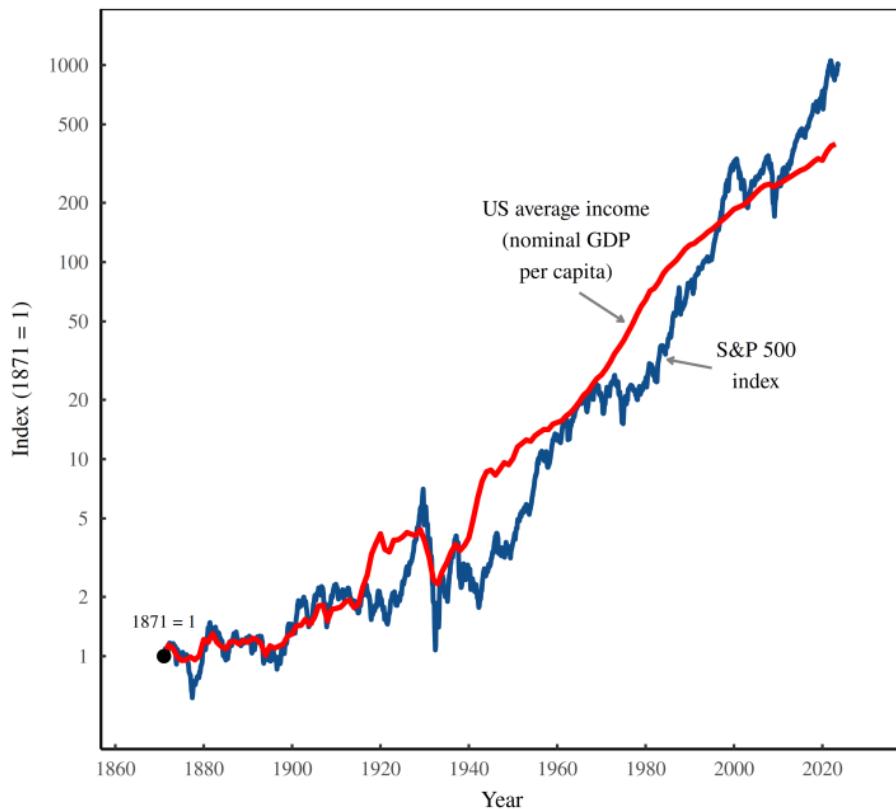


Figure: US stock returns in context. This figure shows how the S&P 500 index (a measure of US stock prices) has risen relative to US nominal GDP per capita. (Note the log scale on the vertical axis.) Over the long haul, the race is quite evenly matched. But during the short term, the competition goes in cycles. Sometimes the stock market wins. Other times GDP wins.

Jonathan Nitzan and Shimshon Bichler have done fascinating work studying how the stock market performs relative to average wages.

When we compare stock-market gains to GDP per capita, we're effectively watching a financial race between two hypothetical people. That race has a cyclical

pattern.

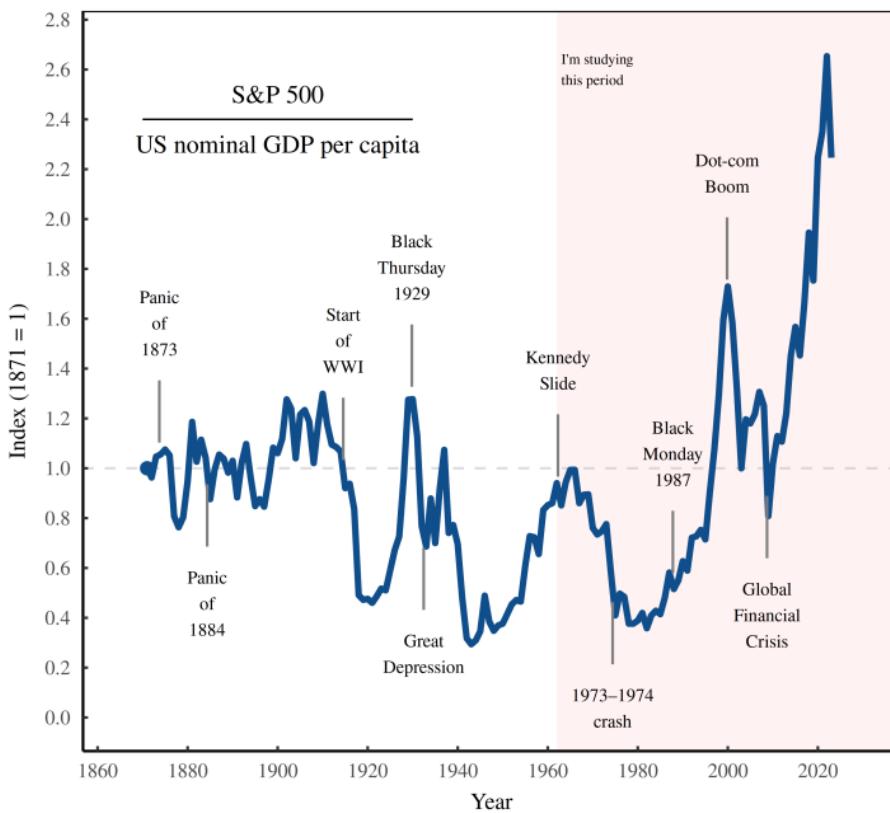


Figure: A race into uncharted territory. This figure plots the ratio between the S&P 500 index and US nominal GDP per capita. For much of the last century and a half, the race was fairly equal. But in the 21st century, stocks have taken a commanding lead over GDP.

Investment is at an all-time high relative to GDP. But if the past is any indication, there's nowhere to go but down.

Top percentiles saw their income share rise.

The message is clear: a rising stock market doesn't benefit everybody. In reality, one person's gain is another person's pain.

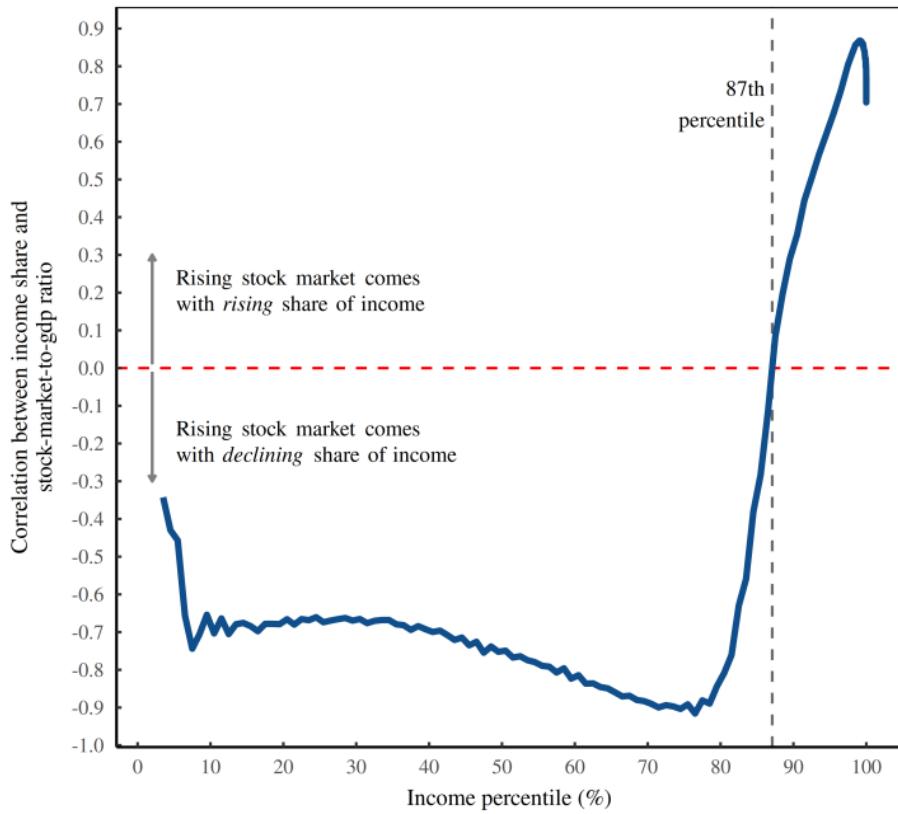


Figure: Stock-market pain and gain as a function of income percentile. This figure illustrates how income gets redistributed as stocks go up. For each US income percentile (plotted on the horizontal axis) I measure the correlation between income share and the stock-market-to-GDP ratio. The blue curve shows how this correlation varies as a function of income percentile. For the vast majority of Americans (the bottom 87%) the correlation is negative, meaning stock-market gains harm their share of income. It's only among the top decile where things turn positive.

In the United States, the stock market takes wealth (and income) from the many and hands it to the few.

Fix (2023) When Stocks Go Up, Who Benefits?

11.3 China

Petry Abstract

Since 2009, China's capital markets have developed and internationalized to an unprecedented degree, which has contributed to a lot of debates on China's

rise and its implications for the global financial order. Contributing to these debates, this article analyses the development of capital markets in China and their integration into global finance between 2009 and 2019, focusing on three aspects: how Chinese capital markets are developing domestically; how they are integrating with global markets; and how Chinese capital markets are internationalizing, i.e. expanding abroad. Thereby, the article analyses the crucial role of securities exchanges who as organizers of capital markets are powerful actors that exercise considerable influence over these markets and their development. This empirical investigation reveals that while they share some characteristics with ‘global’ capital markets, Chinese capital markets function quite differently. The article argues that China’s state-owned exchanges facilitate the development of state-capitalist capital markets – capital markets that follow an institutional logic derived from China’s state-capitalist economic system. Rather than giving in to a neoliberal rulebook, China’s capital markets represent an alternative to, resist and challenge the norms, principles and procedures of the contemporary global financial order. While different capital markets share some characteristics, they are institutionally embedded, and these institutional settings facilitate different institutional logics that underpin and inform the functioning of markets. Instead of viewing capital markets as homogeneous entities, the article therefore proposes to investigate a ‘varieties of capital markets’ that are shaped by different institutional logics.

Petry Memo

In 1989, capital markets did not exist in China. Fast forward three decades, China’s capital markets have become the second largest equity markets, second largest futures markets and third largest bond markets globally.

While China’s markets had been virtually closed from the outside world for decades, especially since the global financial crisis (GFC) 2007–2009, they have become connected to both regional and global financial markets ‘at an unprecedented pace’.

This growing Chinese significance in global finance is also expressed by the internationalization of the renminbi, how their investments change financing patterns, China’s growing role in development finance and global financial governance, and with the Belt-and-Road Initiative (BRI).

The rapid growth of China’s capital markets takes place within the context of a global financial order (GFO) based on neoliberal principles of open, lightly-regulated, internationally-integrated financial markets, guaranteed and facilitated by US power. Scholars are therefore debating whether China is a status quo power integrating into the GFO, a reforming power, a revisionist power challenging this (neo)liberal, US-dominated financial order or whether global finance is itself adapting to accommodate China.

This discussion is linked to broader debates on state capitalism, where some policy makers fear that China will not play by the neoliberal rulebook on which the contemporary global (financial) order is based.

In these debates, state capitalism is often defined in juxtaposition to capital markets, the epitome of liberal capitalism.

By linking state capitalism, capital markets and the neoliberal GFO, this article contributes to these debates, seeking to make a twofold contribution. Empirically, the article analyses the post-GFC reform and opening process of China's capital markets between 2009 and 2019. This empirical investigation reveals that capital markets in China function significantly different from 'global' markets. While many Western commentators argue that 'proper' capital markets do not exist in China, this article argues that such assessments actually reflect the neoliberal bias that Western views of markets exhibit, thereby shedding light on the contested politics between different types of capital markets championed by China and the US. Theoretically, the article therefore proposes to re-evaluate common global political economy (GPE) conceptions of capital markets: instead of viewing these as uniform entities, in opposition to the state and interlinked with the concept of neoliberalism, to look at an institutionally embedded 'varieties of capital markets'.

In China one can observe the development of *state-capitalist capital markets* as Chinese capital markets are intricately linked with state institutions and play an active role in facilitating national development goals. The article examines the crucial role of China's (stock and derivatives) exchanges as important actors who organize markets in a way that facilitates state-capitalist logic, shaping capital market dynamics and directing market outcomes towards state objectives, both within China and internationally. The capital markets organized by China's exchanges thereby provide an alternative to, resist pressures to conform with, and even challenge the neoliberal capital markets that underpin the GFO. In other words, no matter how deep the reforms, Chinese capital markets will not converge with global markets but rather maintain their distinct character.

As such, the capital markets underpinning the GFO facilitate and perpetuate existing power relations and hierarchies within global capitalism. State capitalism is often defined as the anti-thesis of such governance through markets, as the state's predominance over markets and impairment of 'free' market mechanisms. Proponents of liberal, free markets argue that there might be state capitalism in China, but not 'true capitalism'.

Moving beyond the fact that states and capitalism have historically been in an intimate relationship, state capitalism literature focuses on a more recent empirical phenomenon – the increasing intensity of government direction and steering in economic processes, especially in emerging markets.

In contrast to earlier forms of state-led economic development in the late-19th (US, Germany) and mid-20th century (Stalinism, fascism, developmental states), contemporary state capitalism relies less on prohibitive tariffs (first wave) or centralized command structures (second wave) but more on market-based economic coordination which, however, is controlled, steered or influenced by the state.

State capitalism highlights ‘the essentially capitalist nature of the [socio-economic] system’ where markets are important but ‘the state plays a very large role’ through intervening into the economy and state-ownership.

While the Chinese state has recognized the usefulness of market-based mechanisms for economic coordination, ‘free’ markets are seen as something not quite to be trusted, endogenously crisis-prone, socially unproductive and leading to a loss of control over the economic system if not strictly regulated. The state rather engages in a ‘pragmatic use’ of markets, managing markets for specific policy goals.

State-owned banks are the main actors in China’s financial system. State capitalism is often understood in juxtaposition to capital markets, the epitome of liberal capitalism. However, capital markets have become more important in China since the GFC.

In GPE literature, states and markets have long been analysed as opposing institutions prevailing over or constraining each other’s actions. While the role of states in promoting capital markets has been well-documented and more recently a focus has emerged around ‘governing through financial markets’, capital markets and their organization are often conceptualized as uniform, and divergencies between markets and the sources of these differences are seldom the focus of GPE analyses.

In the comparative capitalism literature, state and market are also defined as mutually exclusive for economic coordination within national economies.

Especially with regard to the financial system, either the state facilitates credit provision, mainly through state-owned and policy-banks, or market relations fulfil this role. Markets are coordination mechanisms that result from certain institutional arrangements – but capital markets themselves are often conceptualized as homogenous, with little internal variegation.

If not all markets are equal, they might produce different outcomes and socio-economic effects. What is missing is a better understanding of the differential organization of capital markets.

In contrast to the premise that markets are uniform, following the likes of Keynes and Polanyi, economic sociology has shown that markets are ‘embedded in distinct sets of social and political institutions’. Markets are social phenomena that are embedded in and influenced by man-made institutional arrangements. How and by whom markets are organized matters. For capital markets, this function is mainly fulfilled by securities exchanges. Instead of mere institutions/platforms on which market transactions take place, exchanges are powerful actors in their own right who actively organize and shape capital markets. ‘Power often depend[s] on control over key financial infrastructures’ that enable the functioning of financial markets.

Exchanges are such actors whose business is to organize, create and control their infrastructural arrangements. Rather than investors who are active within

markets, as infrastructure providers exchanges play a more architectural role for capital markets. By deciding the ‘rules of the game’ and acting as gatekeepers in capital markets, deciding who gets in, what is traded and how trading is conducted, exchanges are crucial in shaping capital markets.

But both capital markets and exchanges are embedded and shaped by their institutional environment. These institutional configurations create a particular contextual “logic” or rationality of economic action. Every economy consists of a set of institutions which create distinct patterns of constraints and incentives that shape and channel actors’ behaviours (Zysman, 1994: 245–246). Hence, given the existing institutional structure, a particular institutional logic emerges that is distinct from other institutional contexts. So, while functionally all capital markets are characterized by market-based mechanisms of coordination between buyers, sellers and investors, applying the concept of institutional logic to capital markets reveals how the institutional embeddedness of markets and market organizers shapes these markets, leading to different market dynamics and outcomes.

Consequently, how exchanges (i.e. market organizers) are governed and which constraints and incentives they face matters. In the West, exchanges are publicly traded companies that have to make profitable business decisions to increase shareholder value; they are situated within an institutional setting informed by a neoliberal institutional logic.

Six global exchange groups (GEGs) dominate global capital markets: accounting for 50% of exchange industry profits, futures trading volume and stock market capitalization globally.

The ostensible purpose of these capital markets that underpin the neoliberal GFO is to achieve ‘efficiency’ by enabling the generation of (private) profit, which is achieved by the principles of ‘free markets’ and ‘free flows of capital’ that should be responsible for allocating economic resources without state intervention.

The underlying neoliberal institutional logic that informs the functioning of these markets depoliticizes those markets, proposes a (‘supposed’) separation between state and capital markets, and puts a significant degree of trust and power in the collective agency of private (financial) capital actors to achieve ‘efficient’ outcomes by maximizing (private) profit. While the state is not absent, its priority is enabling private profit creation instead of other socio-economic outcomes, cementing the power of private finance capital.

Merely adopting market-mechanisms (e.g. capital markets) does not make China neoliberal. While market-based finance emerged as an important economic governance tool in China (Gabor, 2018), Chinese capital markets function fundamentally different than neoliberal capital markets. This is because exchanges and capital markets are situated within a very different institutional context – that of state capitalism. The institutional logic of China’s state capitalism is not simply one of command-and-control but a combination of top-down

state coordination and bottom-up market competition.

China's capitalism 'relies on a unique duality or dialectic whereby state-capitalist features are balanced by [. . .] a variety of hybrid institutional arrangements' (also, Sum, 2019). Chinese capital markets also follow this institutional logic. Bottom-up you have millions of profit-driven speculating investors that create manias, panics and crashes like in any capital market. But while profit creation for private finance capital is the primary underlying principle in neoliberal markets, importantly, in China, the state intervenes into capital markets to steer them into 'productive' tracks that facilitate state objectives. The defining difference between neoliberal and state-capitalist logic is not the existence of markets per se but rather the principles that underlie market organization (profit creation vs state objectives) and the actors that dominate/shape these markets (private finance capital vs state institutions).

While investors act as entrepreneurs, 'certain levers of state control remain intact'. As the organizers of capital markets, exchanges remain strictly in government control. These 'infrastructural arrangements [are important] because this is where you can control the market'.⁵ The exchanges are also deeply embedded in the *nomenklatura system*; doing a good job as senior exchange manager (i.e. directing markets towards state policies) is important for party officials to eventually get promoted to higher positions. 'The financial industry can therefore justifiably be treated as an integral part of the political system'. In contrast to being 'marketized', exchanges in China are rather 'politicized'. Therefore, capital markets can be understood as a site where the authorities exercise 'statecraft [through] financial control'.

Chinese exchanges organize markets by designing market infrastructures that aim to shape market behaviour by monitoring, regulating and managing the behaviour of market participants and direct market outcomes towards the accomplishment of state objectives, both within China and abroad. Rather than neoliberal, the capital markets organized by China's state-owned exchanges should hence be conceptualized as *state-capitalist capital markets*.

Neoliberal or state-capitalist, they are both capital markets populated by profit-driven investors and prone to speculative dynamics. However, what can be observed is that in China, a fundamentally different way of thinking about, managing and governing capital markets has emerged, as these markets are permeated by but also reproduce the institutional logic of Chinese state capitalism.

1. Chinese exchanges develop markets that represent a *distinct alternative* to neoliberal capital markets.
2. China's integration into global finance through its exchanges (largely) conforms with state-capitalist logic, demonstrating their resistance to conform with neoliberal capital markets.
3. Chinese capital markets not only resist but also challenge US-dominated neoliberal capital markets.

The growing importance of market-based finance in China does not represent a shift towards neoliberalism but rather a perpetuation of Chinese state capitalism through financial means.

In 2017, Xi Jinping noted that the tasks of China's financial sector were above all '[to] better serve the real economy! Markets are organized to facilitate these policies.

The partially contradictory nature of state-capitalist institutional logic. On the one hand, the state aims to control financial instability, and on the other hand, it has interwoven social stability with capital market participation which in turn potentially decreases financial stability

The exchanges' system of risk monitoring and management is used in a delicate balancing act between allowing retail investors to participate in markets but also reduce the volatility that they bring into markets, professionalize/educate them and protect them from themselves and more sophisticated investors.

China has an ambiguous relationship with foreign investors. As one interviewee stated, 'it's absolutely a love and hate story, they love the money, love the stability, hate giving up control. . . and hate it if foreign investors want to dominate the terms'.

Foreigners are not allowed to freely participate in Chinese markets but only if they establish local entities, so-called wholly foreign-owned enterprises (WFOEs). 36 As several interviewees noted, setting up WFOEs to trade in capital markets is accepted by the authorities – because they are registered in China, subject to Chinese laws, funds/profits cannot be easily repatriated, and they can be monitored and controlled by the Chinese exchanges. One called China a 'façade of an open market'.

'Step by step there is a whole market infrastructure emerging' that connects China with the outside world. 50 But while China is increasingly integrating with global finance, international investors have to play according to Chinese rules. Attempts to shape market behaviour and steer market outcomes are maintained by China's exchanges, following China's state-capitalist logic of organizing capital markets, and demonstrating China's resistance to conform with neoliberal capital markets underpinning the GFO.

In their current form, global markets are not perceived as fair but as being stacked against Chinese interests, rather benefitting Western private financial actors. Similar to RMB internationalization, the internationalization of China's capital markets is part of the state's strategy to change the rules of the game in global finance or at least to create a level-playing field that does not disadvantage China.

This case study hence highlights the need to re-evaluate the conceptual toolbox with which we analyse global finance. In political economy literature, capital markets are often viewed as homogeneous entities, an analytical category different from/contrary to 'the state', and capital market development is often

linked to a neoliberal policy paradigm. However, as the findings of this article demonstrate, conceptually capital markets (and exchanges) should be analysed separate from neoliberalism.

Petry (2020) Same but different (pdf)

12

Financial Crises

12.1 Diversification

The 2008 financial crisis was triggered, in part, by extreme interconnectivity among financial institutions, making diversification impossible.

Crona (2021) The Anthropocene reality of financial risk (pdf)

13

Defi -Decentralized Finance

Zhao

At the last peak in Jan 2018 the total market cap of crypto – i.e. all the crypto money in circulation – stood at \$770 million. Today that number is \$2.6 trillion! The most significant driver of this growth has been institutional onboarding. To highlight a few OG crypto-native market makers: Alameda Research now trades >\$5B in cryptos daily, GSR trades >\$4B daily, Genesis Trading's institutional lending desk processed \$36B loans in Q3 2021, etc... Their success caught the attention of “traditional” big market makers: Jump Trading, Tower, HRT, Susquehanna, Jane Street, and the latest addition as of Jan 11, 2022... Cita-last-straw-del.

“But why do we want institutions in DeFi?” you may wonder. “Isn’t the whole point to decentralize and give power to the people?”

Yes. Of course. But 1) markets need liquidity and 2) what does it actually mean to give power to the people? It was never the existence of hedge funds and banks in traditional markets that was the problem. It was that traditional markets rigged the game, giving hedge funds and banks hidden privileges and special access totally unknown to retail traders.

Like the fact that non-accredited investors <\$1M net worth can’t invest in startups or buy secondaries in private deals. (Whereas, anyone can buy any crypto project’s token in DeFi.)

Like the fact that if retail traders wanted to buy options or oil futures, the minimum trade size is 100 shares’ worth and 1,000 barrels’ worth, respectively. (Whereas, assets trade in infinitely fractionable increments in DeFi.)

Like the fact that retail traders can’t directly market-make on the traditional exchanges: CME, NYSE, NASDAQ, etc. (Whereas, on crypto exchanges like

FTX, Binance, Coinbase, etc. retail traders can quote and execute trades programmatically using the exact same APIs as professional firms.)

If DeFi is our second chance to build a new financial system free of structural biases and bureaucracy, then we need to massively accelerate institutional adoption to get there.

Three ways that institutional activity directly lifts crypto markets:

1. It increases liquidity, which means tighter spreads, lower slippage, and huge executional improvements.
2. Each new initiate injects huge chunks of capital into the system, many billions in lifetime value (e.g. when Microstrategy bought 125,000 BTC, now worth >\$5B).
3. It creates memes and marketing (e.g. when SBF rekt Coinmamba over \$SOL at \$3; when Su Zhu pumped/pumps \$AVAX).

Three ways that institutional activity indirectly lifts crypto markets:

1. Wild returns from market inefficiencies continue to lure the biggest IQs from TradFi to crypto (e.g. Jane Street = “HR department at FTX”?)
2. Market makers continue to be the biggest bootstrappers of new DeFi projects (e.g. Alameda is the biggest liquidity provider for Serum, QCP is the biggest liquidity provider for Ribbon Finance)
3. Funds trading market-neutral strategies (e.g. basis trade) must constantly borrow assets, pushing up lending rates which trickle down to retail in the form of “juicy yields.”

Since March 2020, Fed Chairman JPow has injected \$5.4 trillion dollars of stimulus checks into circulation, ballooning M2 supply by 34%! That’s one-third of all US dollars in existence! Printed in the last 22 months! The result?

Yield on stock market: 100%

Yield on Bitcoin: 400%

Yield on DeFi: 69420%

Ok fine JK on that DeFi number. But the point is: during COVID 2020, every DeFi project alive suddenly realized “Hey, I too can pull a JPow! I too can print magic Internet monies, call them ‘reward tokens’ in lieu of ‘stimmie checks,’ then give them out to users based on how much they use my product!!”

Yield as CAC (customer acquisition cost). What could go wrong?

Lending platform Compound Finance was one such pioneer in “liquidity mining,” i.e. rewarding liquidity providers/lenders and liquidity takers/borrowers with a new magic internet coin called \$COMP. As the value of \$COMP appreciated, the return on lending and borrowing (i.e. “yield”) rose dramatically. And differently for each underlier (e.g. ETH, DAI, WBTC, USDT, USDC) based on supply and

demand so that users were incentivized to keep switching between borrowing and lending different tokens to optimize yield.

This was such a successful customer acquisition hack that suddenly every AMM and every lender started doing it.

That was when Yearn Finance created a smart aggregator of all other yielding platforms to take care of the fund routing optimization headache.

Once again it got too easy to make money.

DeFi degens started dumping out of staking and dumping into swap pools (why stake your \$ETH for 7% APY when you could be making 50% on Yearn??). There was just no way to compete for users' wallet share. And that's when Lido Finance realized, "Why ask people to choose between staking and lending when you can tell them to do both! Let them have their cake and eat it too!" Lido then invented "liquid staking," i.e. rewarding stakers with 1 stETH for every 1 ETH staked, such that users can then chuck their stETH as collateral for more borrowing and more lending.

What could possibly go wrong? As long as new stimmie-checks and institutional capital continue pouring into crypto, as long as inflation narratives keep driving the next marginal buyer into crypto, as long as markets remain greedy, nothing could go wrong. Just like, as long as the US dollar stays a reserve currency, nothing could go wrong. Keep printin'!

So after all that, where is DeFi headed now? What other unsolved problems—what other untapped growth hacks—remain on the yellow brick road to financial Emerald City?

(a) TradFi Distribution Channels:

The next 1 Billion users on DeFi will look nothing like the first 10 million early adopters. Crossing the chasm to onboard the "early majority" will require deeper integrations into traditional finance distribution channels: credit unions, traditional brokerages (e.g. Paxos-IBKR, Robinhood), 401-K and IRA plans (e.g. AltoIRA), modern wealth managers / robo advisors (e.g. Wealthfront and Betterment), expansion into non crypto-specific indices (e.g. ARKK), deeper inclusion into enterprise treasuries (beyond Microstrategy, Square, Tesla), etc.

(b) Prime Brokerage and Cross-Chain Margining for Retail:

DeFi today is notoriously capital-inefficient. If Alice buys 1 BTC long on Uniswap, and sells 1 BTCPERP short on FTX, the two platforms each don't know about her positions on the other. So FTX will ask her to post much higher collateral than the correlation between BTC and BTCPERP necessitates. This sucks for Alice (and all retail traders who don't have access to prime brokerage services) because she could otherwise use the excess collateral to earn yield elsewhere.

(c) Options Market:

Trading volumes for BTC and ETH options grew 443% in 2021, yet 95% of that volume remains on Deribit. Why? Until Pyth, Dexs could not auto-update margin requirements at a fast enough frequency to prevent systemic nonlinear liquidation events. Plus, protocol-level computational ceilings limited the ability to price-update across the full options chain (dozens of strikes and dozens of tenors per token). Furthermore, the crypto-degen appetite for 100x leverage had already found satiation in trading perps while up-only markets blinded even conservative traders from any region below $Y_{\text{return}} = 0$. So the use case of options as hedging instruments and portfolio insurance largely fell on deaf ears. All of this should change in 2022.

(d) Crypto Exchanges Acquiring TradFi Brokers:

In traditional finance, broker-dealers are separate entities from exchanges. Operationally, they are the sales & marketing and customer acquisition arms of the exchanges. But in crypto, the trading stack is vertically integrated. (Imagine if Robinhood, Citadel, and BOX had a massive merger into one single behemoth... that's basically FTX today.) It makes tons of strategic sense for the large crypto exchanges to go on massive shopping sprees and buy out TradFi broker dealers for (i) their retail customer base and (ii) their deep embeddings with corporate HR systems to deliver employee equity compensation (e.g. Schwab, Fidelity).

In the end, all arrows point to a DeFi \leftrightarrow TradFi convergence as we build upward and onward, standing on the scaffolds of old fiat market structure. “So we beat on, boats against the current, borne back ceaselessly into the past.”

Comment by Micheal M: I've read your articles but I still genuinely don't understand what problem all this is meant to be solving. Integration into 'TradFi' just sounds like a way for the early adopters to keep the bottom from falling out of assets that will run out of buyers by entangling them so heavily in the regulated financial system that the government will be forced to buy digital currencies to protect regular citizens who have made ill-advised purchases. The 'anarchy' seems absolutely horrible for everyone except early adopters.

Zhao (2021) A DeFi crash course for normies: Crypto markets since 2017

14

Digital Currencies

14.1 Crypto Currencies

Diehl

1. The technology does not solve a real problem.

The crypto project has had 13 years to try and find a problem to solve. It has not found one.

The real world has fundamental constraints that make the technology unworkable, whenever it has to interact with the outside world the benefits of decentralization disappear and the solutions end up simply recreating slower and worse versions of processes and structures that already exist.

Despite that, for the last thirteen years these projects have done nothing but scam people by creating synthetic asset bubbles for gambling and destroying the environment. There are fundamental limitations to the scalability of blockchain-based technologies, and every use case is better served by another simpler technology, except for crime, extralegal gambling, and sanctions evasion. Taken as a whole the technology has no tangible benefits over simply using trusted parties and centralized databases.

Crypto coins are simply speculative gambling products that only create a massive set of negative externalities on the world. It is introducing artificial volatility into markets untethered to any economic activity and creates an enormous opportunity cost where the only investment opportunity is as an economically corrosive synthetic hedge against all productive assets. This is not innovation, this is technical regression and flirtation with ecological disaster in a time when we cannot afford to gamble our planet's fate on pyramid schemes and dog memes.

2. So called “cryptocurrencies” aren’t actually currencies, and cannot fulfil the function of money.

Money exists to exchange for goods and services in an economy. It is created to mediate the exchange of goods so that we have a common unit of account we can trade instead of bartering goods directly. Money needs to have a reliable and stable value compared to a domestic basket of common goods and services, in order to achieve that the supply of the money needs to be controlled by a monetary authority which can expand or contract the supply according to market fluctuations.

A dynamic money supply is a fundamental necessity for a modern economy. A small amount of inflation discourages hoarding and incentivizes investment into productive enterprises which grow the economy and produce prosperity. Conversely a static fixed money supply encourages hoarding, and is inflexible in times of crisis because it does not allow intervention. Economies do not stabilize themselves and require active intervention to curb recessions.

In an environment in which multiple currencies can commingle there is a perverse incentive to create counterfeit currency or to create parallel currencies. Counterfeit currencies dilute trust in commerce, create counterparty risk and catalyze crime. Parallel currencies introduce exchange risk and create artificial barriers to commerce. The optimal solution within any economic region is to thus have a single currency with a single authority to control the supply, protect against counterfeiting and lower barriers to commerce by discouraging other systems through creating demand. The only possible entity that can fulfil this role is the State and it creates demand for a single currency by requiring citizens to extinguish their obligations to the state in that currency. A single currency and single monetary authority is the inevitable role of the state because of its singular monopoly on taxation and justice.

Historically commodity-based money (so called “hard money”) was based on backing by metals and was used extensively in the 18th and 19th century. Instead of vesting power in democratic controls, it instead vested power in non-elected international parties who could source, mine and mint metals. Under a gold standard, inflation, growth and the financial system were all less stable due to trade imbalances. This led to frequent recessions, larger swings in consumer prices and perpetual banking crises. When these events occurred in one part of the world, the distress would be transmitted more quickly and completely to others and thus created a politically unstable, unequal and more violent world. We saw this in the Gilded Age of the 1870s to 1920s in which hard money created a world of massive wealth inequality, thus ultimately leading up to the speculative market manias that lead to the Great Depression. The United States ultimately devalued its currency with the policies of the New Deal which slowly decoupled the dollar’s dependence on gold and which led to an era of economic growth and prosperity. Conversely Europe largely did not engage in these corrective policies and this era saw the rise of populist strong men and fascists who promised to correct the wealth inequality of the common man, and ultimately plunged the continent into the most violent period in human history.

Money is always going to be inseparable from politics. As much as libertarians

want to believe that value should be determined by a God-given order independent of the will of men, they cannot escape the logical and historical contradictions at the heart of this idea. The fixed-supply ideas of deflationary coins like Bitcoin fundamentally misinterpret the properties of fiat money as bugs when they are in fact features. The crypto project contains unresolvable logical and economic contradictions in its stated purpose. State controlled money embeds control and accountability for fiscal stability and market intervention in the democratic process where it inevitably and rightly belongs.

3. The history of private money is one of repeated disasters that destroy public trust.

Even playing devil's advocate and assuming cryptocurrency could function as money—which they can't—we come up against the hard limitation that every-time private money has been tried in history it creates a form of corporate feudalism coupled to a toxic environment that encourages fraud and discourages commerce. The lessons of history are quite clear on this issue because the United States flirted with such a system back in the Free Banking Era from 1837 to 1863. In this time period there were hundreds of private entities that went about issuing their own private bank notes allegedly created one-for-one with state bonds.

The problem with these so-called wildcat banks is that their reserves were not always verifiably backed and were thus subject to runs on the bank in which customers could not access their funds. The second issue is that unlike public money which is universally accepted at par, the wildcat bank notes had a massive secondary exchange market where notes from different banks would not trade at par. A dollar note from Wyoming bank could be worth \$0.60 to a note from a Nebraska bank and these values would fluctuate depending on market conditions. As a merchant this would make business rather complicated as you would be forced to purchase goods in one set of notes, accept notes from customers and give change in a different set of notes. This was great for bankers who had access to non-public information and could arbitrage these notes for their own profits, but for the average person it was a terribly predatory and exploitative system. Private bank notes are a needlessly complicated, risky and inefficient way to run an economy and this was remedied by the National Bank Act of 1863. It was a truly terrible idea.

History tends to rhyme with itself, and today we are flirting with the same bad ideas of the past. Except now instead of wildcat banks we have wildcat tech platforms with the same aspirations. They don't want to interface with public money, they want to become issuers of private money themselves. A fully vertically integrated form of company scrip that they issue to their investors, employees and customers to create not just a walled garden, but a walled garden where every path has a toll booth. The elephant in the room that no venture investor in these projects wants to talk about is that creating private money, just like in the wildcat banking era, is a license to print money by creating markets for these coins/notes with massive position and information asymmetries baked

into the design. These kinds of private money regimes are just as exploitative today as they were in the 1800s, and the so-called “web3” notion of embedding this form of institutionalized corruption as a first class structure into the internet is a terrible idea that ignores the lessons of history.

4. Crypto assets are all unregistered securities.

When we logically deconstruct the crypto narrative by tossing out the phoney populism and cult-like structure of faith in economic absurdities, we end up with an inescapable conclusion that fits firmly within our existing regulatory framework. Crypto assets are simply unregistered securities on ventures whose stated aspiration is to develop technology to become digital wildcat banks. They’ve just synthesized their corporate equity and alleged notes into one financial product.

Cryptocurrencies aren’t currencies and have no mechanism to ever become currencies. They are effectively unregulated securities where the only purpose of the products is price appreciation untethered to any economic activity. The only use case is gambling on the random price oscillations, attempting to buy low and sell high and cash out positions for wins in a real currency like dollars or euros. Crypto cannot create or destroy real money because unlike a stock there is no underlying company that generates income. So if you sell your crypto and make a profit in dollars, it’s exactly because someone else bought it at a higher price than you did. So every dollar that comes out of a cryptocurrency is because a later investor put a dollar in. They are inherently zero-sum by design, and when you take into account the casino (i.e. exchanges and miners) taking a rake on the game then the entire structure becomes strictly negative-sum. For every winner there are guaranteed to be multiple losers. It’s a game rigged by insiders by hacking human psychology.

For cryptocurrency to have any real utility, the volatility needs to cool off. If that were to happen, there would be little reason for the public to speculate on cryptocurrency prices, given that there would no longer be the potential for massive returns. The smart money exits, the liquidity disappears and the bubble collapses. This is the fate of all cryptocurrencies, and we see this reflected in the simple fact that the median return on all these thousands of flash-in-the-pan coins is zero.

The argument laid out in this article is a quite complicated edifice, and requires a large amount of knowledge at the intersection of several fields of study that, quite frankly, the public should not have to concern themselves with learning to safeguard themselves against fraud. Public money should just work for most people without them having to be concerned with the details. This is ultimately where cryptocurrencies tap into the ignorance, desperate faith in technical solutionism and political resentment of the public and weaponize it for the aims of these libertarian private money charlatans to engorge themselves. These guys aren’t building a new financial system, they’re just lining their own pockets.

History repeats itself first as tragedy and then as farce. The wild economic

oscillations of yesterday's gold standard is today's dog meme mania. Human nature is remarkably invariant through the ages and if we don't learn the lessons of history then we're doomed to repeat the mistakes of past generations. This time around If we're very lucky then crypto assets simply end in a market crash and a series of progressive New Deal-like reforms to our financial system. If we're unlucky then they accelerate the expansion of a shadow financial system used to enrich the already wealthy, increase wealth inequality to historically unprecedented levels, decrease faith in democracy and further fan the flames of populism. These trends ultimately converge to leave humanity's fate to the wild oscillations of market manias, charismatic demagogues and strong men who promise to save us from ourselves. And we've seen how that story ends.

Diehl (2021) The Case Against Crypto

14.2 CBDC - Central Bank Digital Currencies

At a minimum, CBDC has the potential to replace the traditional role of notes and coins in circulation. However, CBDC also creates the possibility that additional services provided through digital technology can be added. At the global level, CBDC can ease the burden and costs of transacting in different currencies, thereby facilitating, if not encouraging, cross-border payments.

This paper addresses three main issues: Should the data-gathering activities of central banks be separated from other central banking activities? Do current governance arrangements, limited to G20 economies, constrain the introduction of CBDC? And how is central bank autonomy impacted, or our understanding of the concept influenced, by the creation of CBDC?

Too few legal mechanisms are in place to argue that the world is ready for the widespread adoption and use of CBDC.

It is difficult to argue that a central bank should be responsible for the data generated thanks to a CBDC; this may overburden central banks. Any privacy or related legislation should clearly outline the responsibilities of the central bank in this regard. In principle, a CBDC brings us close to the world of "helicopter money." 1 Therefore, the list of limitations on lending provided by a central bank needs to be revisited and the location of accountability for digital interventions by a central bank clearly spelled out.

At a time when the concept of fiduciary duty (i.e., acting in the best interests of another party, especially when it is a foreign country) is in retreat, it is conceivable that roadblocks to the spread of digital currencies will increasingly emerge.

Siklos (pdf)

15

FinTech

Hendershott

FinTech has demonstrated tremendous power in fundamentally changing how the financial market is run.

Technologies have spawned finance innovations since the early days of computer applications in businesses, most recently reaching the stage of disruptive innovations, such as mobile payments, cryptocurrencies, and digitization of business assets. This has led to the emerging field called financial technology or simply FinTech. In this editorial review, we first provide an overview on relevant technological, pedagogical, and managerial issues pertaining to FinTech teaching and research, with a focus on market trading, artificial intelligence, and blockchain in finance. And then we introduce the articles appearing in this special section. We hope that our discussions of potential research directions and topics in FinTech will stimulate future research in the fields of information systems and finance toward making their unique marks in the FinTech evolution and the associated business and societal innovations.

Hendershott (2021) FinTech as Game Changer

16

Global Payment Infrastructure

Brandl Abstract

Despite the narrative of a globalized economy, there is no effectively working global payment system. Although there is an infrastructure that allows the transmission of data about global payments, the movement of actual money is executed indirectly, making it an incalculable endeavor. The reason is that money is not simply data, but a complex bundle of rights closely tied to the nation state. In the absence of infrastructure that reliably links payments with guarantees of the nation state, intermediaries that facilitate global payments are forced to create trust in a different way. This is only possible by occupying a highly centralized and therefore powerful position. In this article, we investigate which actors were historically able to hold such a position and how these actors are challenged by digitalization. We suggest that there are three models of payment infrastructure provision. Bank-based systems were dominant until the 1980s, but in the following decades, a second model emerged: the provision of financial infrastructure by global companies. Since the early 2000s, we see a third model: the entrance of tech-driven companies in the payment sector. We conclude that digital technologies will not necessarily solve the problems, but might in fact exacerbate them.

Brandl Memo

The difficulties in making cross-border payments leads us right into the heart of questions about the substance of modern money and the role of nation states in its production. Ingham (2004) describes money as a private-public partnership. The object of this partnership is a constant struggle between three main groups of actors: governments, the people (the taxpayers), and rentiers and their banks. At the core of this conflict lies the question, ‘What counts as money at all?’ since

this question is crucial for the contemporary distribution of wealth

In this article, we claim that financial infrastructure is a mostly ignored² but crucial component of the puzzle of ‘what counts as money’, since only this infrastructure can execute the private-public partnership in everyday life. Such infrastructure ensures that the guarantees provided by the nation state in its own currency area are not mere promises; it links these promises to day-to-day payments in commercial bank money. This material underpinning linking payments with the promises of the nation state is absent in the global context and, therefore, cross-border payments have a very different nature than domestic payments.

Through the absence of infrastructure that reliably links payments with the guarantees of the nation state, intermediaries that facilitate global payments are forced to create trust in a different way. In this article we will show how these preconditions lead to the development of powerful intermediaries in the global payment industry that are able to dictate the conditions of cross-border payments.

Only through infrastructures can the promise of the nation state be linked across time and space.

Financial infrastructures might seem to be a monolithic bloc, they are actually provided by a broad range of actors and institutions. The main difference is between those focusing on the settlement of payments and those focusing on the settlement of securities.

The provision of infrastructures for payments, which is regarded as part of the critical infrastructure of a nation state equal to that of energy, water supply, food and agriculture, healthcare or transportation and is, therefore, closely linked to political regulation.

The expectation of the stability of the value of money has a temporal and a spatial dimension.

Money in capitalist societies is much more than data; it is a bundle of rights related to expectations about temporal and spatial value stability that are tied to guarantees provided by the nation state.

The generation of trust that ensures stable monetary value has at least two dimensions: temporal and spatial.

Scholars of economic history have extensively studied the establishment of national currencies. Four motivations drove the early nation states to create territorial currencies: (1) the creation and fostering of domestic markets; (2) the desire to control the domestic money supply; (3) the wish to link currency with fiscal policy; and (4) the strengthening of national identity. The process of the establishment of national currencies, however, did not go as smoothly as expected. The declaration of a currency as legal tender by a nation state does not

preclude the existence of another currency. Consequently, currency or monetary pluralism is regarded not as an exception but as a characteristic of modern currency systems.

Alongside their critique of a single uniform national currency, anthropologists in particular have long studied the plurality of economic spheres and currencies and the difficulties of transferring values from one sphere to the other. This is true not only for tribal society but also for modern capitalist societies.

Infrastructure: the link between the temporal and spatial dimensions of money.

One major component of the Fed was the establishment of the Gold Settlement Fund, which enabled the member banks to settle their reciprocal claims with central bank money. The costs of shipping gold between the various banks were reduced to zero, and therefore payments at par became possible.

Markets as one of the fundamental institutions of capitalism function precisely because fragmented actors come together to compete. However, these decentralized encounters are based on a (financial) infrastructure that must be as frictionless as possible, i.e. centralized.

The first challenge in setting up financial infrastructure is consequently that competing companies must establish institutions that are able to uphold their trust in one another. Second, all actors involved must jointly provide the technological infrastructure capable of handling such a complex operation and enforce universal standards such as accounting systems. The problems that typically arise in this context are similar to those that generally come up in the provision of public goods: on the one hand, suboptimal incentive structures, which systematically lead to undersupply in the case of the private provision of a public good; and on the other hand, the occurrence of strong network effects which reinforce concentration tendencies.

Traditionally, the advice for industries with these tendencies has been that the state should be responsible for their provision. However, unlike other industries with a similar structure, such as telecommunication providers or providers of public utilities, the provision of financial infrastructure was only occasionally managed solely by the nation state.

why does the primarily private provision of infrastructure work in the finance sector, while it fails in other industries? One key reason for this might be that payment infrastructure can be provided as a club good such that non-paying actors can be excluded. It is important to understand that this 'club' of commercial banks that provide infrastructure is deeply dependent on the close cooperation between private actors and state actors that provide oversight over the financial infrastructure as well as settlement infrastructures, which connect the privately provided infrastructures.

The private-public partnership that constitutes modern money is executed through public infrastructure, which is reliably linked to the infrastructure of networks of commercial banks. These infrastructures, which are run by central

banks, are able to link day-to-day payments with the guarantees of the nation state by providing an infrastructure that allows banks to settle their reciprocal claims with central bank money.

The trust of all participants in payment infrastructures that emerge naturally in the domestic context is built on the basis of the fact that central bank money is the safest possible asset; for cross-border transactions this trust has to be produced by other means.

Clearing houses act as central counterparties (CCP), which means that they assume guarantees for their members in the event of default. To be able to do this properly, the clearing houses require large commitments from their members, usually in the form of reserves deposited with the central bank. In addition, the members are often subject to the regulations of the central counterparty (Interview 14). In this way, the central counterparties not only minimize the individual members' risk, but also reduce the systemic risk of the entire financial sector by homogenizing the individual credit risks, as all members are jointly liable for losses.

The transformation of one money into another money is not a simple and frictionless process. This is especially true for cross-border payments, since money is not only data but a bundle of rights that is tied to the guarantees of the respective nation state. This bundle of rights cannot be exchanged as such, since the essence of global transactions is that they leave the borders of the nation state. The only possibility is, therefore, that a powerful intermediary is able to bridge this gap.

Credit card companies, as well as other companies such as the Society for Worldwide Interbank Financial Telecommunication (SWIFT), do not supersede the nationally based infrastructures; rather, they are deeply dependent on them. SWIFT, a company that emerged from the association of commercial banks, provides an infrastructure for banks to send and receive messages about financial transactions.

Credit card companies provide international clearing arrangements, which means they provide the data that allows settlement, but the actual movement of money is carried out by a few major settlement banks. The role of these banks cannot be underestimated. For example, the entire settlement process for Visa (the largest credit card company) is done by Chase Manhattan Bank, which technically becomes a correspondent bank or handles the transactions through its subsidiaries.

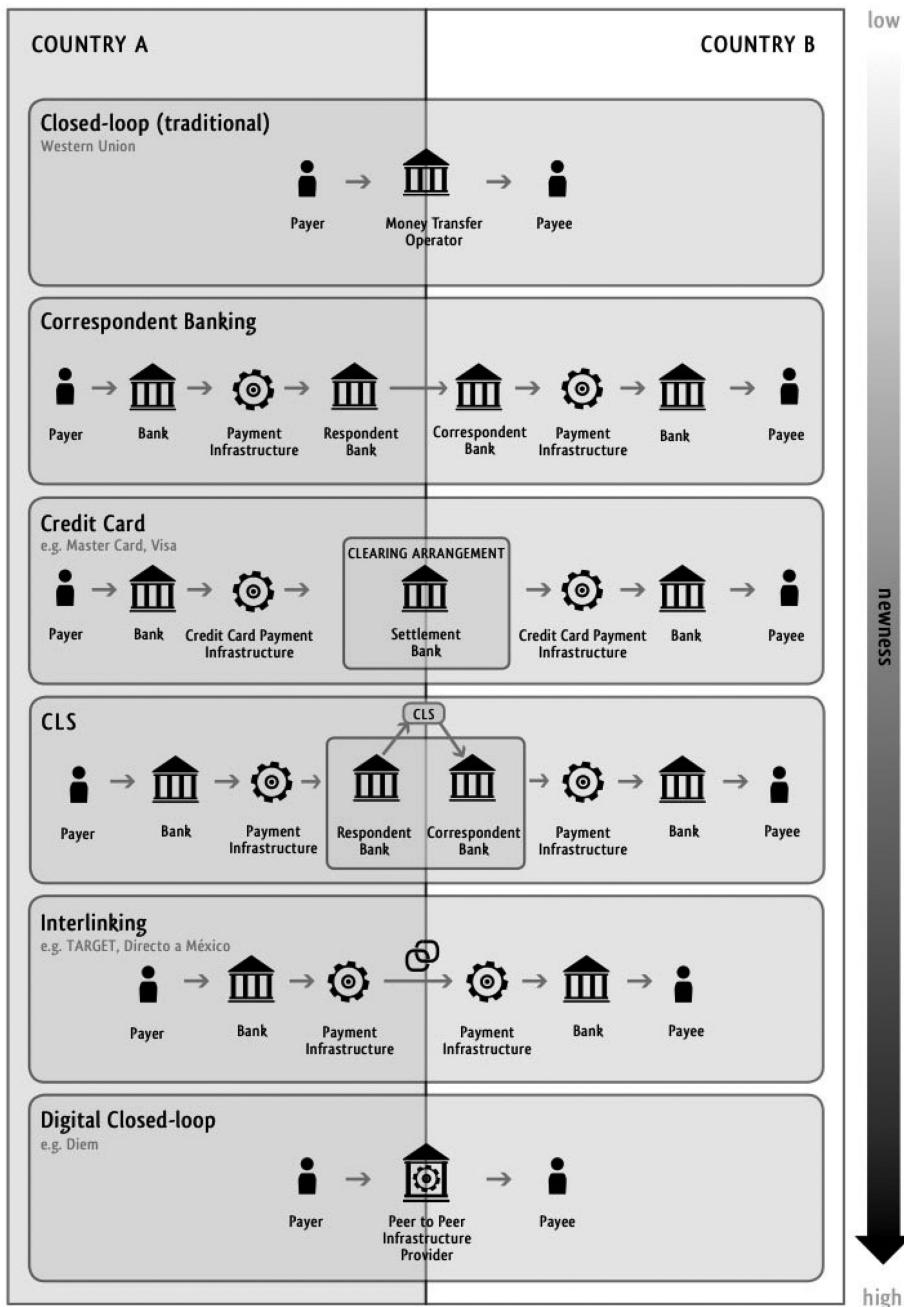


Figure: Cross-border Payments

Banks handle their international transactions via correspondent banks or via their subsidiaries. Correspondent banking is a bilateral agreement between two

banks in different countries by which one of them provides services to the other by holding an account (*nostro* or *vostro* account) owned by the respective other bank. These agreements enable the respondent bank in Country A to participate in the payment systems of Country B. There are only a few major banks that provide these services globally.

while the settlement of domestic transactions is typically done with central bank money (the safest possible asset), the settlement of FX transactions involves commercial bank money.

The time lag between a currency payment and receipt of the currency being bought creates a risk exposure for the selling party: the risk that the delivery is late (liquidity risk) or in the worst case does not occur at all (credit risk). Although these types of risk also exist in domestic transactions, the risk that goes along with FX transaction settlements is higher.

This service comes with a price: the provision of infrastructure by an oligopoly of private companies.

Since the late 1990s, at least two innovations have enhanced the speed and lowered the cost of cross-border trades between the countries of the Global North. To reduce the risk exposure of cross-border payments, a network that consists of around 70 financial institutions established a settlement system (see Figure 1) for cross-border payments: CLS (continuous linked settlement). While the settlement provided by central banks is done with central bank money, the settlement in the CLS system is executed by the CLS Bank with a ‘payment vs. payment’ system that reduces the risk exposure for the involved parties. However, CLS only settles in 17 currencies⁸ of countries of the Global North as well as some emerging economies. FX transactions with minor or exotic currencies are still only possible via correspondent banks, and therefore even more incalculable and hence expensive.

Traditional closed-loop systems (or money transfer operators) such as Western Union have their own proprietary, quite opaque network of banks, exchange bureaus, post offices, and other intermediaries – like retail outlets, cell phone centers, travel agencies, drug stores, and gas stations – to deliver remittances.

In the Eurozone and a few other regions,¹⁰ we see a second innovation emerging from attempts by nation states to bridge the national financial infrastructures and build interlinking models (see Figure 1). In the context of the integration of the European capital market, one major step was the harmonization of the providers of financial infrastructure, which was done through TARGET 2 (Trans-European Automated Real-time Gross Settlement Express Transfer System) that was implemented between 2006 and 2017. The core of the Target system is a platform which allows all central banks of the euro system to settle their euro payments in real time. The Single Shared Platform is operated by the three major central banks: France (Banque de France), Italy (Banca d’Italia) and Germany (Bundesbank). Although the Bank for International Settlements (Bech et al., 2020) sees great promise for the interlinking model, global

companies continue to dominate infrastructure provision.

In the European Union (EU), we see a massive regulatory push to disaggregate the value chain of the payment sector by promoting digital technology (Interviews 11 & 16). This process is closely tied to the revision of the 2015 directive on payment services (PSD2), which aimed to open up the market for payment services. The core of this directive is that banks are required to grant other providers access to their customers' account data. As a result, the business models of the providers of digital payment systems were strengthened. The initial aim behind this initiative was to challenge the cartel of credit card companies from the European side (Stiefmüller, 2020). Guaranteed access to consumer data should foster competition in the market for payment services and should at best trigger the foundation of a European equivalent to PayPal. This initiative of the European Commission was almost exclusively motivated by competition law and supply-side concerns, but comes with a price tag: the limitation of data protection and the potentially related violation of privacy (Stiefmüller, 2020, p. 299). The exclusion of data protection concerns in the PSD2 directive is presumably due to fact that the EU regulators want to establish an economic area that can compete with the US to spawn innovation.

Both trends, the wave of digitalization in the financial sector and the regulatory push to promote these digital technologies, made the financial sector attractive for new types of players: startups and, of course, big tech companies such as Apple, Amazon and Facebook. The payment sector is particularly interesting for these companies because it produces highly attractive raw material: transactional data.

Platformization of financial transactions: The big tech companies aim to integrate payment systems in their platforms to gain access to this highly valuable transactional payment data and to increase the time customers stay on their platforms. However, the key question is whether this development affects the oligopolistically provided financial infrastructure that now executes global payments.

The first company working this way on the front end was PayPal, founded in 1998.¹² It was over a decade later when the large wave of startup formations in the payment sector began. As of 2021, the most successful actors in this field are startups such as Klarna or iZettle¹³ as well as the big tech companies that provide financial services such as Apple Pay and Google Pay.

We know from the example of the credit card companies that the market of payment providers develops strong network effects and, therefore, the further consolidation of the market is very likely.

In addition to tech-driven companies that provide financial services without becoming banks themselves, we can identify a second, much more radical strategy: the (almost) complete detachment of financial services from banks via the establishment of closed-loop systems. Although digital closed-loop systems emerged only recently, the principle is much older. More traditional remittance compa-

nies such as Western Union work on the same principle but require a physical presence in every jurisdiction. By contrast, digital closed-loop systems are based on digital currencies which are created by the networks themselves. The first attempt to establish such a digital closed-loop system for cross-border payments was made by Ripple. On the basis of distributed ledger technology¹⁴ Ripple creates its own currency (XRP), which is used for settlement.

Digital closed-loop systems are able to provide infrastructure that is able to move money. However, rather than actual currencies that are legal tender, these systems move their own digital currencies that eventually have to be exchanged in the currency of the respective country.

The risks associated with digital, proprietary closed-loop systems are evident. First, since these systems were established outside the highly regulated state–bank nexus, the lack of supervisory oversight might fail to identify shortcomings in risk management. The second concern is much more fundamental. Digital closed-loop operations may drive fragmentation through non-compatible payment systems within an economy.

While Ripple's ultimate goal is to revolutionize the global interbank market by convincing banks to join the Ripple network, we see initiatives from the big tech companies in the US to establish digital closed-loop systems for end users. In one of the best-known examples, Facebook founder Mark Zuckerberg announced plans to launch the digital currency Diem (originally called Libra) in cooperation with other companies.

Although Diem is based on a blockchain, it differs significantly from other cryptocurrencies such as bitcoin. In contrast to the majority of the existing cryptocurrencies, Diem is based on a permissioned blockchain, where only accepted members can participate. A second important difference is that the Diem blockchain does not create new value. Instead, the value on the Diem blockchain is fixed to that of existing currencies (so called stablecoins), and all values are fully backed by money that is deposited into Diem Reserve. The Reserve exclusively relies on high-quality liquid assets or assets that can be easily converted into high-quality liquid assets.

Although China is outside of the scope of our analysis it is important to note that while most projects of western tech companies are still under development, these capabilities are already developed in China and other Asian countries. For example, a handful of companies in China, such as Alibaba's Alipay or Tencent's WeChatPay, provide digital infrastructures that link social media, commerce and banking, which work almost independently from banks. Next to these initiatives in the private sector, the efforts of China's central bank to provide a digital payment version of China's fiat currency – the Renminbi – are much further developed than comparable projects in the U.S. or Europe.

The vast majority of attempts by tech-driven companies to transform the payment industry only affects the front end of banking and therefore leaves the role of major banks untouched.

The power of this club of major banks does not affect all actors in the same way. Powerful actors such as global companies are able to establish private solutions to bypass this problem via corporate treasury functions through their subsidiaries.

So far, digital technology, especially blockchain, has not challenged the concentration of power in only a few major players that are able to provide global financial infrastructure; instead it appears to strengthen existing intermediaries.

The resistance of the banking sector to disruptive changes driven by digital technology shows that the establishment of financial infrastructure is not as simple as the big tech companies might have thought. Banks and their organically grown infrastructures seem to have some advantages that cannot be easily copied by tech-driven companies. The reason for this might point to the characteristics of infrastructure, which are not purely technological arrangements, but as such evolving socio-technical systems which combine human and non-human elements for the provision of key functions in global finance.

Infrastructures are never neutral; they maintain the power relationships which are inscribed in their construction.

Only powerful actors are able to build up enough trust to settle reciprocal claims with commercial bank money or, in the case of CLS and Ripple, with tokens they have created by themselves.

The attempts of central banks to introduce digital central bank currencies might lead in the right direction. For example, the introduction of the Digital Euro might open up the possibility for participants outside of the EU to have access to central bank money. This would mean a big step in creating a global infrastructure that is actually able to move money and not only data. The consequences of an increase in euro-denominated assets outside of the EU, on the other hand, are completely unpredictable at this point. It is, therefore, not clear if this step is really desirable or whether it would ultimately break the exclusivity of the current infrastructure and make cross-border transactions more frictionless and less costly for everyone.

Brandl (2021) The exclusive nature of global payments infrastructures: the significance of major banks and the role of tech-driven companies

17

Financial Repression

Napier

Financial repression means stealing money from savers and old people slowly. Investors in government debt are the ones who will be robbed slowly.

Financial repression means engineering an inflation rate in the area of 4 to 6% and thereby achieving a nominal GDP growth rate of, say, 6 to 8%, while interest rates are kept at a lower level.

We are moving from a mechanism where bank credit is controlled by interest rates to a quantitative mechanism that is politicised.

The power to control the creation of money has moved from central banks to governments. By issuing state guarantees on bank credit during the Covid crisis, governments have effectively taken over the levers to control the creation of money. Of course, the pushback to my prediction was that this was only a temporary emergency measure to combat the effects of the pandemic. But now we have another emergency, with the war in Ukraine and the energy crisis that comes with it. There is always going to be another emergency, which means governments won't retreat from these policies. This is the new normal.

For the government, credit guarantees are like the magic money tree: the closest thing to free money. They don't have to issue more government debt, they don't need to raise taxes, they just issue credit guarantees to the commercial banks.

By controlling the growth of credit, governments gain an easy way to control and steer the economy. Credit guarantees are only a contingent liability on the balance sheet of the state. By telling banks how and where to grant guaranteed loans, governments can direct investment where they want it to, be it energy, projects aimed at reducing inequality, or general investments to combat climate

change. By guiding the growth of credit and therefore the growth of money, they can control the nominal growth of the economy.

Given that nominal growth consists of real growth plus inflation, the easiest way to do this is through higher inflation. Engineering a higher nominal GDP growth through a higher structural level of inflation is a proven way to get rid of high levels of debt. That's exactly how many countries, including the US and the UK, got rid of their debt after World War II. Of course nobody will ever say this officially, and most politicians are probably not even aware of this, but pushing nominal growth through a higher dose of inflation is the desired outcome.

We'll see consumer price inflation settling into a range between 4 and 6%. Without the energy shock, we would probably be there now. Why 4 to 6%? Because it has to be a level that the government can get away with. **Financial repression means stealing money from savers and old people slowly.** The slow part is important in order for the pain not to become too apparent.

We today have a disconnect between the hawkish rhetorics of central banks and the actions of governments. Monetary policy is trying to hit the brakes hard, while fiscal policy tries to mitigate the effects of rising prices through vast payouts. Who wins? The government.

Central banks are powerless - They're impotent. This is a shift of power that cannot be underestimated. Our whole economic system of the past 40 years was built on the assumption that the growth of credit and therefore broad money in the economy was controlled through the level of interest rates – and that central banks controlled interest rates. But now, when governments take control of private credit creation through the banking system by guaranteeing loans, central banks are pushed out of their role.

What you have learned in market economics in the past forty years will be useless in the new world. For the next twenty years, you need to get familiar with the concepts of political economy.

Napier (2022) We Will See the Return of Capital Investment on a Massive Scale

18

Imperialism and Financialism

18.1 Dollar Empire

Johnson Memo

The world economy is structured by countries with competitive export sectors and trade surpluses, like Germany and China, who exhibit underconsumption and excess savings; the US's debt-fueled economy receives these savings through its domination of global financial markets. The dynamic strengthens the power of global finance at the expense of wages and living standards.

Johnson

18.2 Capital as Power

Bichler & Nitzan Memo

Over the past century, the nexus of imperialism and financialism has become a major axis of Marxist theory and praxis. Many Marxists consider this nexus to be a cause of worldly ills, but the historical role they ascribe to it has changed dramatically over time. The key change concerns the nature and direction of surplus and liquidity flows. The first incarnation of the nexus, articulated at the turn of the twentieth century, explained the imperialist scramble for colonies to which finance capital could export its 'excessive' surplus. The next version posited a neo-imperial world of monopoly capitalism where the core's surplus is absorbed domestically, sucked into a 'black hole' of military spending and financial intermediation. The third script postulated a World System where surplus is imported from the dependent periphery into the financial core. And

the most recent edition explains the hollowing out of the U.S. core, a ‘red giant’ that has already burned much of its own productive fuel and is now trying to ‘financialize’ the rest of the world in order to use the system’s external liquidity. This paper outlines this chameleon-like transformation, assesses what is left of the nexus and asks whether it is worth keeping.

Our aim is to highlight the historical development of the nexus of imperialism and financialism, particularly the loose manner in which it has been altered – to the point of meaning everything and nothing.

The paper comprises two parts. The first part examines the different schools. It traces the transmutation of the nexus – from its first articulation in the early twentieth century, to the version developed by the Monopoly Capital school, to the arguments of dependency and World Systems analyses, to the thesis of hegemonic transition. The second part offers an empirical exploration. Focusing specifically on the hegemonic transition hypothesis, it identifies difficulties that arise when the theory meets the evidence and assesses their significance for the century-old nexus.

Empire and Finance

The centralization of capital altered the political landscape. Instead of the night-watchman government of the laissez-faire epoch, there emerged a strong, active state. The laissez-faire capitalists of the earlier era saw little reason to share their profits with the state and therefore glorified the frugality of a small central administration and minimal taxation. But the new state was no longer run by hands-off liberals. Instead, it was dominated and manipulated by an aggressive oligarchy of ‘finance capital’ – a coalition of large bankers, leading industrialists, war mongers and speculators who needed a strong state that would crack down on domestic opposition and embark on foreign military adventures.

The concentrated financialized economy, went the argument, requires pre-capitalist colonies where surplus capital can be invested profitably; and the cabal of finance capital, now in the political driver’s seat, is able to push the state into an international imperialist struggle to obtain those colonies.

At the time, this thesis was not only totally new and highly sophisticated; it also fit closely with the unfolding of events. It gave an elegant explanation for the imperial bellicosity of the late nineteenth century, and it neatly accounted for the circumstances leading to the great imperial conflict of the first ‘World War’.

Monopoly Capital

In the brave new world of oligopolies, the emphasis on non-price competition speeds up the pace of technical change and efficiency gains, making commodities cheaper and cheaper to produce. But unlike in a competitive system, where market discipline forces firms to pass on their lower costs to consumers, under the new circumstances, cost reductions do not translate into falling prices. The

prevalence of oligopolies creates a built-in inflationary bias that, despite falling costs, makes prices move up and sometimes sideways, but rarely if ever down.

This growing divergence between falling costs and rising prices increases the income share of capitalists, and that increase reverses the underlying course of capitalism. Marx believed that the combination of ever-growing mechanization and ruthless competition creates a tendency of the rate of profit to fall. But the substitution of monopoly capitalism for free competition inverts the trajectory. The new system is ruled by an opposite ‘tendency of the surplus to rise’.

The early theorists of imperialism, although using a different vocabulary, understood the gist of this transformation. And even though they did not provide a full theory to explain it, they realized that the consequence of that transformation was to shift the problem of capitalism from production to circulation (or in later Keynesian parlance, from ‘aggregate supply’ to ‘aggregate demand’). The new capitalism, they pointed out, suffered not from insufficient surplus, but from too much surplus, and its key challenge now was how to ‘offset’ and ‘absorb’ this ever-growing excess so that accumulation could keep going instead of coming to a halt.

Black Hole: The Role of Institutionalized Waste

Until the early twentieth century, it seemed that the only way to offset the growing excess was productive and external: the surplus of goods and capital had to be exported to and productively invested in pre-capitalist colonies. But as it turned out, there was another solution, one that the early theorists hadn’t foreseen and that the analysts of Monopoly Capital now emphasized. The surplus could also be disposed off unproductively and internally: it could be wasted at home.

‘Waste’ denoted expenditures that are necessary neither for producing the surplus nor for reproducing the population, and that are, in that sense, totally unproductive and therefore wasteful. These expenditures absorb existing surplus without creating any new surplus, and this double feature enables them to mitigate without aggravating the tendency of the surplus to rise.

Use high military spending as a way to secure the internal stability of U.S. capitalism.

The magnitude of military expenditures has no obvious ceiling: it depends solely on the ability of the ruling class to justify the expenditures on the grounds of national security. Similarly with the size of the financial sector: its magnitude expands with the potentially limitless inflation of credit. This convenient expandability turns military spending and financial intermediation into a giant ‘black hole’.

Spearheaded by U.S.-based multinationals and no longer hindered by inter-capitalist wars, argued the theorists, the new order of monopoly capitalism has become increasingly global and ever more integrated. And this global integration, they continued, has come to depend on an international division of labour,

free access to strategic raw materials and political regimes that are ideologically open for business. However, these conditions do not develop automatically and peacefully. They have to be actively promoted and enforced.

Military spending comes to serve a dual role: together with the financial sector and other forms of waste, it propels the accumulation of capital by blackholing a large chunk of the economic surplus; and it helps secure a more sophisticated and effective neo-imperial order that no longer needs colonial territories but is every bit as expansionary, exploitative and violent as its crude imperial predecessor.

Dependency

The imperial powers relentlessly and systematically undermined the socio-economic fabric of the periphery, making it totally dependent on the core. And when decolonization finally started, the periphery found itself unable to take off while the capitalist core prospered. At that point, there was no longer any need for core states to openly colonize and export capital to the periphery. Using their disproportionate economic and state power, the former imperialist countries were now able to hold the postcolonial periphery in a state of debilitating economic monoculture, political submissiveness and cultural backwardness – and, wherever they could, to impose on it a system of unequal exchange.

This logic of dependent underdevelopment was first articulated during the 1950s and 1960s as an antidote to the liberal modernization thesis and its Rostowian promise of an imminent takeoff.

Whereas earlier Marxist theorists of imperialism accentuated the centrality of exploitation in production, dependency and World-Systems analysts shifted the focus to trade and unequal exchange. And while previous theories concentrated on the global class struggle, dependency and World-Systems analyses spoke of a conflict between states and geographical regions.

Red Giant: An Empire Imploded

‘Financialization’ is no longer a panacea for the imperial power. On the contrary, it is a ‘sign of autumn’, prime evidence of imperial decline.

Finance (along with other forms of waste) helps the imperial core absorb its rising surplus – and in so doing prevents stagnation and keeps accumulation going. But there is a price to pay. The addiction to financial waste ends up consuming the very fuel that sustains the core’s imperial position: it hollows out the core’s industrial sector, it undermines its productive vitality, and, eventually, it limits its military capabilities. The financial sector itself continues to expand absolutely and relatively, but this is the expansion of a ‘red giant’ – the final inflation of a star ready to implode.

The process leading to this implosion is emphasized by theories of hegemonic transition.

The maturation of a hegemonic power – be it Holland in the seventeenth century, Britain in the nineteenth century or the United States presently – coincides with the ‘over-accumulation’ of capital.

This over-accumulation – along with growing international rivalries, challenges and conflicts – triggers a system-wide financial expansion marked by soaring capital flows, a rise in market speculation and a general inflation of debt and equity values. The financial expansion itself is led by the hegemonic state in an attempt to arrest its own decline, but the reprieve it offers can only be temporary. Relying on finance drains the core of its energy, causes productive investment to flow elsewhere and eventually sets in motion the imminent process of hegemonic transition.

The United States benefited from being able to control, manipulate and leverage this expansion for its own ends. The growing severity of recent financial, economic and military crises suggests that this ability has been greatly reduced and that U.S. hegemony is now coming to an end.

End of Nexus?

‘Financialization’ has not worked for the hegemonic power: despite the alleged omnipotence of its Wall Street-Washington Complex, despite its control over key international organizations, despite having imposed neoliberalism on the rest of the world, and despite its seemingly limitless ability to borrow funds and suck in global liquidity – the bottom line is that the net profit share of U.S.-listed corporations has kept falling and falling.

Of course, this isn’t the first time that a monkey wrench has been thrown into the wheels of the ever-changing nexus of imperialism and financialism. As we have seen, over the past century the nexus has had to be repeatedly altered and transformed to match the changing reality. Its first incarnation explained the imperialist scramble for colonies to which finance capital could export its ‘excessive’ surplus. The next version talked of a neo-imperial world of monopoly capitalism where the core’s surplus is absorbed domestically, sucked into a ‘black hole’ of military spending and financial intermediation. The third script postulated a World System where surplus is imported from the dependent periphery into the financial core. And the most recent edition explains the hollowing out of the U.S. core, a ‘red giant’ that has already burned much of its own productive fuel and is now trying to ‘financialize’ the rest of the world in order to use the system’s external liquidity. Yet, here, too, the facts refuse to cooperate: contrary to the theory, they suggest that the U.S. ‘Empire’ has followed rather than led the global process of ‘financialization’, and that U.S. capitalists have consistently been less dependent on finance than their peers elsewhere.

Bichler & Nitzan (2012) Imperialism and Financialism (pdf)

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The Wall Street Consensus

Washington Consensus and structural adjustment is good for you,
especially if it helps you avoid US bombing!

Gabor

The Wall Street Consensus is an elaborate effort to reorganize development interventions around partnerships with global finance. The UN's Billions to Trillions agenda, the World Bank's Maximizing Finance for Development or the G20's Infrastructure as an Asset Class update the Washington Consensus for the age of the portfolio glut, to 'escort' global (North) institutional investors and the managers of their trillions into development asset classes. Making development investible requires a two-pronged strategy: enlist the state into risk-proofing development assets and accelerate the structural transformation of local financial systems towards market-based finance that better accommodates portfolio investors. Ten policy commandments forge the 'de-risking state'. They create a safety net for investors in development assets, protecting their profits from demand risks attached to commodified infrastructure assets; from political risks attached to (progressive) policies that would threaten cash flows, including nationalization, higher minimum wages and, critically, climate regulation; and from liquidity and currency risks. These risks are transferred to the balance sheet of the state. The new 'development as de-risking' paradigm narrows the scope for a green developmental state that could design a just transition to low-carbon economies.

De-risking Wall Street

'....we have to start by asking routinely whether private capital, rather than government funding or donor aid, can finance a project. If the conditions are not right for private investment, we need to work with our partners to de-risk projects, sectors, and entire countries'. (Jim Yong Kim, World Bank Group President (2017))

Washington Consensus

Anchored in the work of John Williamson (1990, 1993), the Washington Consensus outlined ten policy areas that would set countries on firm market foundations, under a ‘holy Trinity’ of macroeconomic *stabilization* through lower inflation and fiscal discipline; *liberalization* of trade and capital flows, of domestic product and factor markets; and *privatization* of state companies.

Financial globalization sets the particular context in which ‘international development’ is pursued in the 21 st century. The new development mantra, spelled out in the *Billions to Trillions* agenda, the World Bank’s *Maximising Finance for Development*, or the G20 *Infrastructure as an Asset Class*, aims to create investable development projects that can attract global investors and orient their trillions into financing the SDG (Social Development Goals) ambitions.

For instance, at the 2017 launch of the Maximising Finance for Development, the World Bank promised global investors \$12 trillion in market opportunities that include “transportation, infrastructure, health, welfare, education”, minted into bankable/investible projects via public-private partnerships (PPPs). These are long-term contractual arrangements through which the private sector commits to finance, construct and manage public services as long as the state, with multilateral development bank support via blended finance, shares the risks to guarantee payment flows to PPP operators and investors.

This shift in the development agenda can be conceptualized as the Wall Street Consensus, an emerging *Development as Derisking* paradigm that reframes the (Post) Washington Consensus in the language of the Sustainable Development Goals, and identifies global finance as the actor critical to achieving the SDG.

Financialisation of development - strategies to ‘escort’ financial capital into derisked asset classes.

In the age of institutional investors and asset managers that move capital across border via portfolio flows, (subordinated) financialisation is no longer confined to the balance sheet of banks and non-financial corporations, but becomes a state-mediated project of constructing new development asset classes.

The WSC is an attempt to re-orient the institutional mechanisms of the state towards protecting the political order of financial capitalism – against climate justice movements and Green New Deal initiatives.

Development as derisking starts with the question ‘how to make projects bankable’, or how to construct investible development asset classes.

Making development ‘investible’ requires a two-pronged strategy: (a) enlist the state into derisking development asset classes, to ensure steady cash flows for investors and (b) re-engineer local financial systems in the image of US market-based finance to allow global investors’ easy entry into, and exit from, new asset

classes. Thus, Wall Street Consensus marks a new moment in capitalist accumulation, from what David Harvey (2003) termed ‘accumulation by dispossession’ to accumulation by de-risking.

The state building project in the Wall Street Consensus is more ambitious than the Post-Washington Consensus tolerance of the state as corrector of market failures, through regulation and poverty alleviation (Öniş and Senses, 2005). The derisking state creates a safety net for the holders of development assets, protecting their profits from demand risks attached to infrastructure assets; from political risks attached to policies that would threaten cash flows, including nationalization, higher minimum wages and, critically, climate regulation; and from bond liquidity and currency risks. These risks are transferred to the balance sheet of the state.

The practice of de-risking goes back to the developmental state, but its politics changed. The developmental state ‘de-risked’ domestic manufacturing in priority, mainly export, sectors through industrial policies (Wade, 2018). It was successful where it had the capacity to discipline local capital (Öniş, 1991), to govern market failures through evolving institutional structures (Haggard 1990, 2018) and to generate elite support for the developmental state as a political project (Mkandawire, 2001). In its modern version, the entrepreneurial state adopts a “mission-oriented” market-shaping approach that shares the risks and returns with highly-innovative private industries (Mazzucato 2016). In contrast, the WSC state de-risks development asset classes for global institutional investors without the embedded autonomy of the developmental state (Evans, 1991). It lacks an autonomous strategic vision, unless ‘more infrastructure’ can be described as such, and has fewer tools to discipline global finance.

The WSC downplays the risks of the macro-financial order it seeks to impose. It engineers financial globalization that increases vulnerability to volatile capital flows.

In prioritizing market access, the Grand Bargain with private finance protects bondholders from participating in debt renegotiations or debt service suspension that poor and emerging countries require when under they come under the pressure of large shocks such as the COVID19 pandemic or extreme climate events. It threatens developmental policy space by narrowing the scope for a green developmental state that could design a just transition to low-carbon economies, where the burden of structural change does not disproportionately fall on the poor.

If the Washington Consensus was a coordinated campaign for the global diffusion of market-led policies, then the WSC coordinates a new modality of state governance focused on derisking.

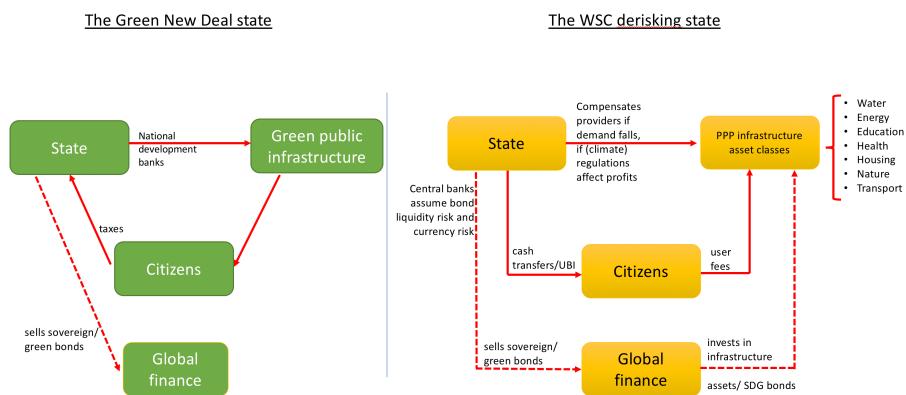
Development is narrated as a matter of closing funding gaps through partnerships with (global) institutional investors, while development interventions are defined as policies that create risk buffers to render development projects ‘investible’.

The inclusion of institutional investors - from pension funds to insurance companies and sovereign wealth funds – and asset managers as critical stakeholders upgrades the derisking renewables strategy into a full-blown, ambitious ‘development as derisking’ paradigm. It reflects the political economy of macrofinancial reform in high-income countries after the global financial crisis.

Worried primarily by the ‘global banking glut’, that is, excessive cross-border global bank lending, high-income countries tightened global banking rules while simultaneously promoting market-based finance, a ‘resilient’ form of shadow banking dominated by institutional investors and their asset managers. The growing footprint of these ‘new powerbrokers of modern capital markets’ reflects the weakening capacity of the state to tax multinational corporations and high-net worth individuals (that pour their cash into institutional investment vehicles) and to provide traditional welfare to its citizens via public health, pensions, education (prompting them to turn to asset-based welfare via pension funds and insurance companies), often under the pressure of fiscal austerity discourses. These political forces together have created a portfolio glut. Mirroring the ‘banking glut’ of the pre- 2008 period of financial globalisation, generated by a handful of global banks, the portfolio glut is also characterised unprecedented concentration of capital in the hands of a few global asset managers such as Blackrock.

The *portfolio glut* is studied in the capital flow management literature through Rey’s (2015) global financial cycle, the idea that financial globalisation creates a trade-off between monetary policy autonomy and free capital flows, rendering middle-income and poor countries vulnerable to US dollar financing conditions.

It creates demands for a new ‘*derisking*’ mode of governance for states in the Global South.



In the derisking mode of governance, the state designs a menu of sector-specific policy and financial derisking measures to encourage PPPs, accepts that this

involves the commodification of infrastructure via user-fees but puts in place cash transfers/universal basic income schemes to mitigate the potential exclusion of the poor from these services. That the derisking state does distributional politics through cash transfers paradoxically accommodates calls for rethinking welfare politics as wage labour becomes increasingly precarious. Cash transfers enable the poor to access commodified public services, and where these are not large enough, the state steps in to guarantee cash flows to investors.

Thus, development is not simply one-side defined by the political economy of capital, but more specifically, by financial capital seeking to expand to new areas, for which it colonises the infrastructure of the state. Financial capital no longer just drags the poor into the embrace of the market, but also the state.

The derisking state can thus be understood as a project that seeks to extend the infrastructural dependence of the state on finance – and thus the infrastructural power of the latter – from its two traditional domains of monetary and fiscal policy to other arenas of the government.

Derisking is not just about the transfers of risks to the state. It is also about exercising infrastructural power to prevent (regulatory) risks from materialising.

Derisking involves the central bank taking on its balance sheet bond liquidity and currency market risks.

The legal battles to code capital into development asset classes requires the state to take risks from the private sector onto its balance sheet, in a clandestine reorienting of public resources that maintains the ideological commitment to ‘fiscal responsibility’.

The WSC state assumes demand risk in user-fee based (social) infrastructure and political risk that future governments might (re-)nationalize commodified infrastructure or introduce tighter regulations, ranging from labour laws to climate regulations that would affect profitability.

Uruguay’s PPP law, passed by the Mujica government in 2011, caps the total direct and contingent liabilities generated by PPPs for the state to 7% of the previous year’s GDP, and fiscal transfers to private operators to 0.5% of previous year’s GDP.

The fiscal costs of protecting investors from demand volatility will rise rapidly as extreme climate events accelerate. Indeed, the climate crisis creates political and demand risks that institutional investors need de-risking for.

The WSC protects investors against the political risks associated with green developmental states. The green developmental state would prioritise the reorientation of finance towards low-carbon activities. This requires a public taxonomy of green/dirty assets that overcomes the shortcomings of private ESG ratings, and policies to penalize dirty assets (through capital requirements or haircuts)²¹. Yet in the Wall Street Consensus framework, such policies would classify as political risks, and require the state to compensate their holders.

In its strategy to mutate climate risks into political and demand risks, private finance may have found an important ally. Central banks conceptualize the immediate impact of tighter climate rules regulation that increase the cost of funding or dramatically change asset values as *transition risks*. The faster the low-carbon transition, it is argued, the higher the potential that transition risks affect financial stability, thus binding central banks in political trade-offs that privilege incremental green regulatory regimes and accommodate greenwashing, however urgent the climate crisis. Indeed, when central banks prioritize transition risks, they effectively rely on private finance to drive the climate agenda, with their coordinating role focused on subsidizing green assets, via so-called ‘green quantitative easing’.

In seeking to enlist central banks in the political coalitions against biting climate regulation, the Wall Street Consensus constrains the green developmental states directly, by making it liable for transition risks that can be framed as political and demand risks, and indirectly, by reducing the public resources and central bank support for Green New Deal programs that can effectively manage transition risks. The de-risking state and the green developmental state can hardly co-exist, particularly within market-based financial structures.

Derisking market-based finance (formerly known as shadow banking)

The turn to private finance as vehicle for sustainable development requires a change in financial structures to accommodate the portfolio glut. It makes shadow banking, understood as the production (via securitization) and financing (via wholesale funding and derivative markets) of tradable securities, the desirable structure for financial systems across the Global South. Indeed, the WSC consolidates several global initiatives to restructure bank-based financial systems into market-based finance or shadow banking, where institutional investors can easily purchase local bonds (securities), including infrastructure-backed securities, and finance as well as hedge their securities positions via repos and derivative markets. Structural policies shift from developmental states’ concern with the productive structure, to the financial system.

The Financial Stability Board announced in 2015 that its new priority would be to transform shadow banking into resilient market-based finance, which it defined as securities, derivatives and repo markets.

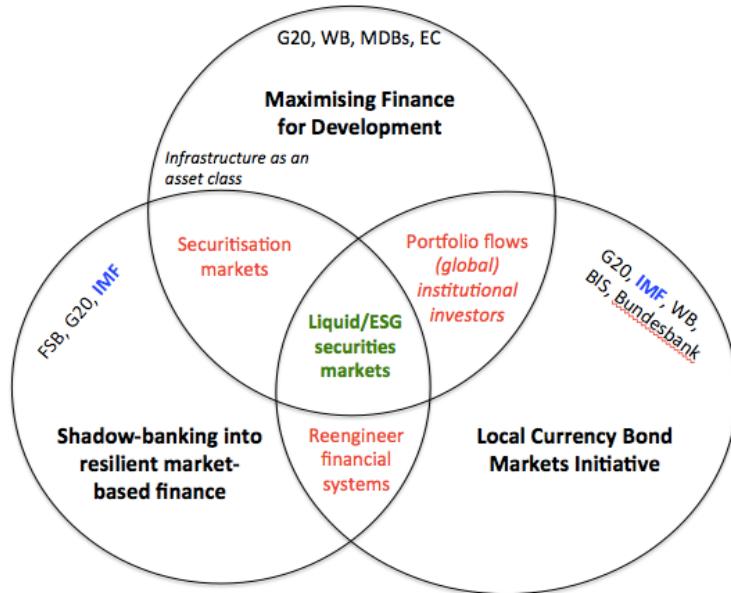


Figure: The turn to securities markets/market-based finance in international development

In sum, the organizational promoters of the Wall Street Consensus championed in a multiplicity of global regulatory spaces the idea that financial structure change is critical to attract the portfolio glut.

The securitization of infrastructure loans would create both highly rated, low-return tranches suitable for conservative pension funds/asset managers and lower-rated, higher return tranches suitable for risk-driven investors. It would also accelerate lending to infrastructure projects, constrained by Basel III rules for banks.

Since market-based finance is more systemically vulnerable than traditional bank-based systems, the Wall Street Consensus assigns a triple de-risking role to central banks: in bond markets and currency markets as market-makers of last resort, and, forced by the inevitable consequences of green washing, as climate rescuers of last resort, for assets left devalued by extreme climate events. Some derisking interventions, particularly in government bond markets, are at odds with the ideological premises of central bank independence. Thus, the process of implicating central banks in upholding the institutional basis of the derisking-centred accumulation regime is incremental. It builds on crises such as the COVID19 pandemic to normalize new derisking practices.

Greenwashing, like any other regulatory arbitrage, eventually confronts its archi-

tects with the systemic problems it feeds – extreme climate events will devalue carbon-intensive assets and greenwashed assets. The political logic of the Wall Street Consensus calls for central banks to rescue the holders of last resort for carbon-intensive assets (Jahnke, 2019), to risk-proof their portfolios, taking on its balance sheet the consequences of systemic greenwashing.

‘Development aid is dead, long-live private finance!’

Conclusion

The Wall Street Consensus re-imagines international development interventions as opportunities for global finance. In the new ‘development as derisking’ paradigm, institutional investors and asset managers are able to influence, if not altogether shape, the terms on which poor countries join the global supply of ‘SDG’ securities. Multilateral development banks lead the efforts to design the “de-risking”/subsidies measures that seek to protect global investors from political risk or the demand risk associated with privatized public services.

Equally important, this is a state-building project that puts in place the institutional basis for a new regime of derisking as accumulation. The state comes under pressure to institutionally codify risk-proofing arrangements, guaranteeing private financial profits in the name of aligning sustainable projects with the preferred risk/return profile of institutional investors. This includes adopting the US model of private pensions and insurance to create local institutional investors. The tendency toward concentration in the asset management sector (to exploit economies of scale and scope) may result in Global North asset managers absorbing the funds of poor countries’ institutional investors and making allocative decisions on a global level.

In pushing for financial system change, development as derisking threatens to render obsolete the old developmental banking model that put finance in the service of well-designed industrial strategies. Development banks join the efforts of constructing and derisking development asset classes. This is a political choice. Developmental banking can arguably better serve a sustainability agenda because banks can easier include, monitor and enforce safeguard policies in long-term relationships with customers. Most countries with a successful experience of industrialisation relied on public development banking as a critical pillar of industrial policies (Naqvi et al, 2018). Public development banking allowed the developmental state to derisk via long-term loans to industrial sectors identified as strategic by an industrial policy aimed at promoting the international competitiveness of local firms.

This re-engineering of financial systems in the Global South, threatens the space for alternative development strategies, and for a green developmental state. Government capacity to design autonomous policies, in many poor countries severely eroded by structural adjustment, will be further eroded by pressures to allocate scarce resources to creating the conditions for private development finance.

Part I

Appendices

Appendix A

About



Dyre Haugen and Dyrehaugen is Webian for *Jon Martin* - self-owned Globian, Webian, Norwegian and Canarian with a background from industrial research policy, urban planning and economic development consulting on global, regional and urban scales. I am deeply concerned about the (insane) way humanity (i.e. capitalism) interfere with nature. In an effort to gain insights in how and why this happens stuff is collected from around the web and put together in a linked set of web-sites. The sites are operated as personal notebooks. However, these days things can be easily published to the benefit of others concerned with the same issues. But be aware - this is not polished for presentation or peer-reviewed for exactness. I offer you just to have a look at my ‘work-desk’ as it appears in the moment. Any comment or suggestion can be mailed to dyrehaugen@gmail.com You can follow me on twitter as @dyrehaugen. Thanks for visiting!

Appendix B

Links

Current Dyrehaugen Sites:

- rcap - On Capitalism (loc)
- rclm - On Climate Change (loc)
- recs - On Economics (loc)
- rfin - On Finance (loc)
- rngy - On Energy (loc)
- renv - On Environment (loc)
- rsts - On Statistics (loc)
- rurb - On Urbanization (loc)
- rvar - On Varia (loc)
- rwsd - On Wisdom (loc)

Blogs:

- rde - Blog in English (loc)
- rdn - Blog in Norwegian (loc)

Discontinued:

- jdt - Collection (Jekyll) (loc)
- hdt - Collection (Hugo) (loc)

Not listed:

- (q:) dhe dhn jrw56
- (z:) rcsa rpad rstart

Appendix C

NEWS

C.1 230319 Silicon Valley Bank

Tooze

One of the underlying frailties of the global banking system right now, are the unrealized losses on bonds incurred by banks as a result of central banks hiking interest rates to combat inflation. As interest rates have gone up, bond prices have gone down. This is bad news, if billions in depositor-withdrawals force you to sell the bonds thus “realizing” the loss. But, if you are not in dire straits, if you are not selling off your portfolio in fire sales, where do you run if the financial world seems to be falling apart (again)? The safe place to run to is ... yup ... government bonds. They are safe. The market is liquid. Plus, they are cheap right now!

So, a crisis that was triggered in part by bond prices going down, led investors to run into bonds and drive prices back up. A panglossian friend of the markets might say that this is the self-equilibrating invisible hand at work. This is not how it felt last week.

Tooze (2023) Chartbook #203 Banking crises, states of exception & the disappointment of sovereignty - a roundup of last week

C.2 211118 OCC Nominee fight

The Prospect

“She does not see banks as the clients of the OCC.”

After several months, President Biden has finally chosen a nominee to head the Office of the Comptroller of the Currency (OCC), a key financial regulatory post. It’s Saule Omarova, a Cornell professor and critic of financial overreach.

Omarova immediately faced a flood of criticism from the banking industry, described as “radical” and “Biden’s most polarizing pick for a top financial regulatory job.”

Thus far, Omarova has been primarily condemned for musing in an academic paper last year about how individual bank accounts at the Federal Reserve could replace private deposits. The U.S. Chamber of Commerce on Tuesday announced their “strong opposition” to Omarova for precisely this reason.

THE CHOICE OF OMAROVA breaks sharply with precedent for the traditionally bank-friendly office. Established by Abraham Lincoln as a branch of the Treasury in 1863, the OCC is the main regulator for federally chartered banks, overseeing roughly two-thirds of total assets in the U.S. banking system. The agency is self-financed through the inspection fees it charges the banks it oversees, a funding mechanism critics of deregulation have identified as a conflict of interest.

The history of the OCC over the past half-century gives those critics abundant evidence that the agency operates as a bank advocate masquerading as a prudent regulator.

[The Prospect \(2021\) Wall Street’s Attacks on Biden Nominee Are a Red Herring](#)

C.3 210421 GFANZ: Low Carbon Banking

Banks and financial institutions with more than \$70tn assets have pledged to cut their greenhouse gas emissions and ensure their investment portfolios align with the science on the climate.

In the initiative, chaired by Mark Carney, the former governor of the Bank of England, 160 companies, including 43 banks from 23 countries, will set targets to cut the carbon content of their assets by 2030, in line with an overall goal of net zero emissions by 2050.

The forum, the *Glasgow Financial Alliance for Net Zero*, aims to encourage the financial sector to divert investment towards low-carbon infrastructure and technologies, and to discourage high-carbon investments, ahead of Cop26, the vital UN climate talks to be hosted by the UK in Glasgow this November.

Janet Yellen, the US Treasury secretary, and John Kerry, the US special presidential envoy for climate, are backing the alliance.

GFANZ [will be] the gold standard for net zero commitments in the financial sector. The alliance would not allow banks to “greenwash” their commitments.

However, since the signing of the Paris agreement in 2015 banks have poured at least \$3.8tn into fossil fuel financing.

The financial system is fuelling environmental breakdown on a catastrophic scale, and what we really need is for central banks to play their roles as regulators

and take concrete action to prevent all of the firms they oversee from making investments that are incompatible with governments' climate targets.

Banks signing up to GFANZ would be required to show "credible plans" for reducing their investment in high-carbon assets, but would not face a deadline for exiting fossil fuel investment. Advertisement

Officials said there would be no blanket requirements for companies to stop financing coal, for instance, and banks would be allowed to make their own judgments on the carbon content of their portfolios, on a case by case basis.

Guardian

C.4 210406 Biodiversity and Financial Stability

NGFS and INSPIRE launch a joint research project on 'Biodiversity and Financial Stability'

A growing number of central banks and supervisors have recognised the need to extend their focus from climate change to the challenges of addressing the implications of broader nature-related risks and the conservation of nature and biodiversity. Doing this will involve understanding the impact of finance on the provision of key ecosystem services as well as the consequences of biodiversity loss for financial stability.

Companies are highly dependent on the services that ecosystems provide, but may at the same time have a harmful impact on the environment. The financial risks that stem from a loss in biodiversity are a serious threat to the financial sector that urgently require better understanding by policy makers and regulators to which the new NGFS/INSPIRE Study Group will provide an important contribution.