A Historical-Institutional Balance-Sheet Approach to Financialization in the United States

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That all persons in the time of their health and youth, while they are able to work and spare it, should lay up some small inconsiderable part of their earnings as a deposit in save hands, to lie as a store in a bank, to relieve them, if by age or accident they should come to be disabled or incapacitated to provide for themselves; and that if God bless them, that neither they nor theirs come to need it, the surplus may be employed to relieve such as shall. (Daniel Defoe, *An Essay on Projects*, 1697)

*In the case of most payments, for example, wages and salaries, income paid out measures the flow of money or goods to individuals directly. But in the case of interest and dividends, especially the former, we had to measure under income paid out not only payments made directly to individuals as such, but also receipts of interest and dividends by savings organizations, which may be treated as associations of individuals for the purpose of better management of their property incomes. Among such associations are life insurance companies, foundations, savings banks, and savings departments of commercial banks, building and loan associations. The volume of property income received by these organizations in 1929 may be estimated as running between 2.5 and 3.0 billion dollars.

(Bureau of Commerce, *National Income Accounts*, 1934: ix)

Changes in the value of assets that are not handled in a professional capacity arise as a reflection of a change in net income… The inclusion of gains and losses yielded by such changes in asset values would therefore be either a duplication, since it would amount to counting both a change in net income and the change in capitalization of that income, or a distortion of the national income estimate as a measure of the economic system's end-product. (*ibid*. p. 5)

Abstract

Historical-institutional analysis reveals both long-term conceptual and ideological causes of financialization and, since 2010, the emergence of counter forces in the US. Theoretical confusions between the categories of financial balance sheets and the categories of national income and production produced two errors of conceptual stretching: of banks into financial firms and of financial claims into assets and money. This led to the double-counting of income on assets, selection bias from loading on the dependent variables of financial balance sheets, and misinterpretation of sectoral and national accounts. An ideological veil of finance thereby caused, and concealed, a massive wedge of financial inefficiency, one that began long before the critical junctures of the 1970s and proceeded through different mechanisms than understood to date. Financialization has compounded inequality, concentrated the industries of banking and finance, and centralized monetary authority. This increased policy capture, perverse incentives, moral hazard, and political *fait accompli*, especially through brinkmanship amid crisis from 2007-9 and, again, during the Covid 19 pandemic. Data from the *National Income and Product Accounts* (NIPAs, 1929-2021), the *Financial Accounts of the United States Z1 Reports* (1945-2022), and the *Integrated Macroeconomic Accounts* (IMAs, 1960-2021), and other sources, help clarify the causes and consequences of financialization. However, after 2010, the data also reveal three counter forces: declining marginal returns to the rise of finance; the emergence of Polanyi-like social reactions of self-defense against the commodification of banking, personal savings, and money; and a back to the future return to traditional banking and the monetary moralities of American political economy and development.

Introduction

The first epigram to this paper, from Daniel Defoe's *An Essay on Projects* (1697), indicates how the monetary moralities of savings and savings banks date to the Enlightenment and, indeed, long before (Butzbach and Mettenheim, 2014). The second and third quotes are taken from Simon Kuznet's introduction to the 1934 constitution of American national economic accounts (Bureau of Commerce, 1934), a document prepared by the National Bureau of Economic Research (NBER), commissioned by the US Senate to better understand the calamities of the Great Depression (Rockoff, 2020). The major schools of economics since 1945 came to ignore both the monetary moralities that Defoe so eloquently anticipated and Kuznet´s two warnings. This has produced widespread misunderstandings about the savings of citizens, the counting of assets, banking and finance, and public policy. By going back to the original meanings and measures of modern American political economy and national accounts, the rise and fall of finance can be traced, from 1929-2021, in the *National Income and Product Accounts* (NIPAs). The NIPAs make it possible to increase the number of observations and broaden historical perspective. However, the NIPAs also indicate how conceptual stretching,[1] double counting, and mis-aggregation compromise studies that are based on the quite different, *financial balance sheet data*, subsequently compiled for the *Financial Accounts of the United States Z1 Reports* (since 1945) and the *Integrated Macroeconomic Accounts* (IMAs, since 1960).

Kuznet's first warning was not to confuse the institutions designed to manage other people's money with financial firms. His second warning was to avoid double-counting changes in the value of assets in sectoral and national accounts. With these warnings in mind, retracing the remarkable historical statistics on the US economy reveals how a *veil of finance* was created by two mistakes, a veil that *wedged* financial inefficiency (Brunner, 2018) into the portfolios of American households, nonfinancial businesses, and the federal government. However, declining marginal returns, social reactions of self-defense against commodification, massive federal government guarantee of private money creation (Gorton, 2020), and a back to the future return to traditional monetary moralities and banking methods combined, after 2010, to reverse the rise of finance in the US.

To elaborate this argument, this paper traces continuity and change in the balance sheet portfolios of each American social sector (households, finance, business, and government),[2] in the Z1 Reports since 1945 and the IMAs since 1960. Historical institutional analysis helps pull back the ideological veil of finance that wedged massive inefficiencies between the savings of citizens, the management of business, and the functions of government. A rich and varied literature on financialization has emerged around the world (Mader et al, 2020). However, these two

[1] On conceptual stretching, see: Sartori (1971). On the related matter of essentially contested character of concepts, see: Collier et al (2006) and Gallie (1955).

[2] The data on households includes nongovernmental organizations assisting households. The data on financial business includes, since 2001, separate samples for depository institutions, insurance companies, pension funds, other financial business, and monetary authority. The data on nonfinancial business enterprises includes unincorporated proprietary enterprises and corporate businesses. Separate data is reported for the federal, and state and local, governments.

conceptual and theoretical confusions (of finance with banking, and between financial claims and nonfinancial assets) have, since 1945, come to bias all major schools of economics. Including, ironically, post-Keynesian endogenous money approaches (Wray, 2013; 1992) and critical political economy studies of financialization (Mader et al, 2020; Hein et al, 2016; 2015).

These two confusions - *of banks with financial firms and of financial claims with nonfinancial assets* - produced egregious fallacies of conceptual stretching, compounding errors of double counting, the mis-aggregation of data, and selection bias by loading on the dependent financial balance sheet variables. To counter these mistakes, this paper increases the number of observations back in time and recovers the original meanings and measures behind American historical statistics. A series of anomalies and provisos arise, not only for studies of financialization, but also for theories of central banking, contemporary banking theory (Berger et al, 2010), financial intermediation theory (Bhattacharya et al, 2004), and, indeed, the dominant schools of economics, all of which beg, thereby, core questions about politics.

This is not to reinvent the wheel. Nor is it unorthodox. Since Adam Smith, the balance sheets of banks and financial institutions were understood to be "other people's money." The 1934 constitution of national economic accounts in the US was founded on this core idea. The veil of finance became such a pervasive ideology because of performative confusions between the basic categories of liabilities and financial claims that are declared on *financial balance sheets*, and the quite different basic categories of income and production aggregates. The original meanings and measures in the NIPAs make it possible to exploit the remarkable data, and research, on the US economy since 1929 to recover the classic modern monetary moralities of American political economy and development.

The 1934 Constitution of National Accounts and the Ideological Veil of Finance

The major schools of economics after 1945 redefined the savings of individuals as money and banks as financial firms. This disregarded the clear warnings of Kuznets in the 1934 constitution of national income accounts. In classic and modern political economy (and the design of US national accounts), it was seen as imperative to separate the savings of individuals (and the wide variety of institutions built organically, over time, to collectively manage the savings of individuals) from the quite different financial claims of commercial banks, investment banks, and other financial institutions. Especially wholesale claims traded on financial markets.

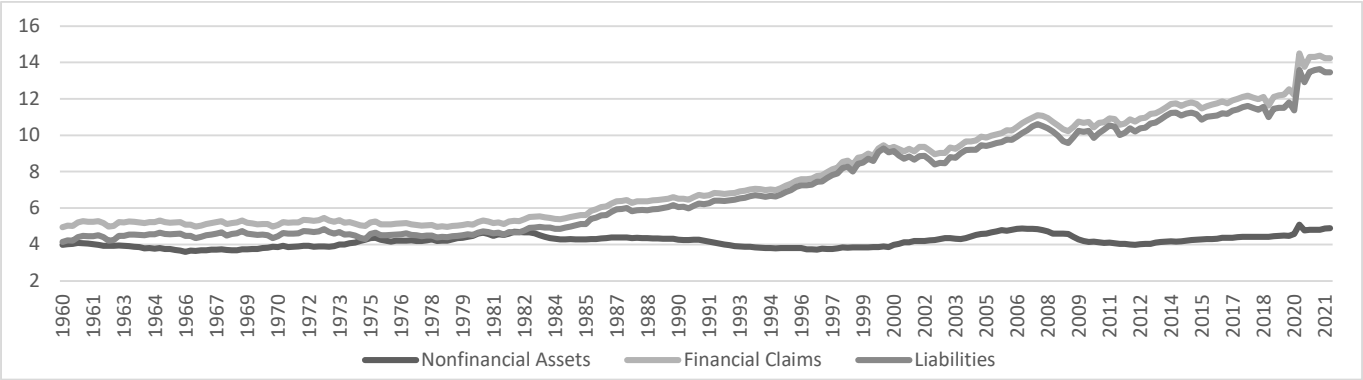
These two redefinitions - of savings as money and of banks as financial firms - run counter to the original intent and clear design of US Government historical statistics. This includes both the NIPAs and the official data sources on banking and finance (Census Bureau, 1975; BGFR, 1959; FDIC, 1956; OCC, 1931). Comparison of the traditional historical statistics on income, banking, and finance with the data subsequently elaborated to measure the portfolios of liabilities and financial claims held by US social sectors reveals 1) the conceptual stretching of commercial banking to include savings accounts; 2) the redefinition and double counting of personal income as the income of financial business; 3) the redefinition of banks from institutions that *balance* deposit-taking and loan-making into financial firms that, supposedly, *produce and trade assets*; and 4) the conceptual stretching of monetary aggregates from the traditional modes of personal savings and investments to include wholesale financial claims (that are often murky, untradable, and unpriceable). These four changes of theory and concept became ideologies that caused, and concealed, the rise of finance, the financialization of inequality, and a wide range of other phenomena.

However, limits and counter forces to the rise of finance also emerged in the US, especially during the fifteen years since the onset of financial crisis in 2007. Theories and concepts from political economy help explain, not only the rise of finance, but also the *declining marginal returns* to financialization, the emergence of *social reactions of self-defense* against the commodification of personal savings, banking, finance, credit, and money, and a *back to the future movement* based on classic modern monetary moralities and conceptions of banking (Mettenheim, 2013). These ideas from the classical economists (and Karl Polanyi and E.P. Thompson), help explain why the evidence after 2010 differs, so fundamentally, from the evidence before 2007. Events since the Covid 19 pandemic are very recent. However, further redefinition of monetary aggregates by the Federal Reserve (on December 17, 2020), the turn to massive government income policies, and the two trillion-dollar bailout of institutional money market funds (through direct cash infusions from the US Treasury General Account, quickly swapped for repurchase agreements), all suggest new permutations of financialization. The implications for politics are manifold because big banks and big government run counter to the most fundamental principles of American political and economic thought.

Turning to the empirical evidence is in order. To begin at the most aggregate level, a first view of financialization may be obtained by tracing the total value of nonfinancial assets, financial claims, and liabilities as multiples of the US GDP from 1960-2021 (See Figure 1). Although often referred to as financial *assets*, this paper

uses, instead, the more accurate term of financial *claims*. This helps avoid the confusions, flagged herein, between the items reported on financial balance sheets (that net to zero), and other core concepts of political economy such as nonfinancial assets and money. Until 1980, the total value of financial claims (and liabilities), hover around 5 times the US GDP. After 1980, these values increase, reaching 9 times GDP by 2000, then 11 times GDP by 2008, and 15 times the US GDP in 2021. This is the basic thesis of financialization. Karl Brunner describes this as the *wedge of finance* (Brunner, 2018). What explains this *fourteen-fold* wedge between financial balance sheets and the US GDP?

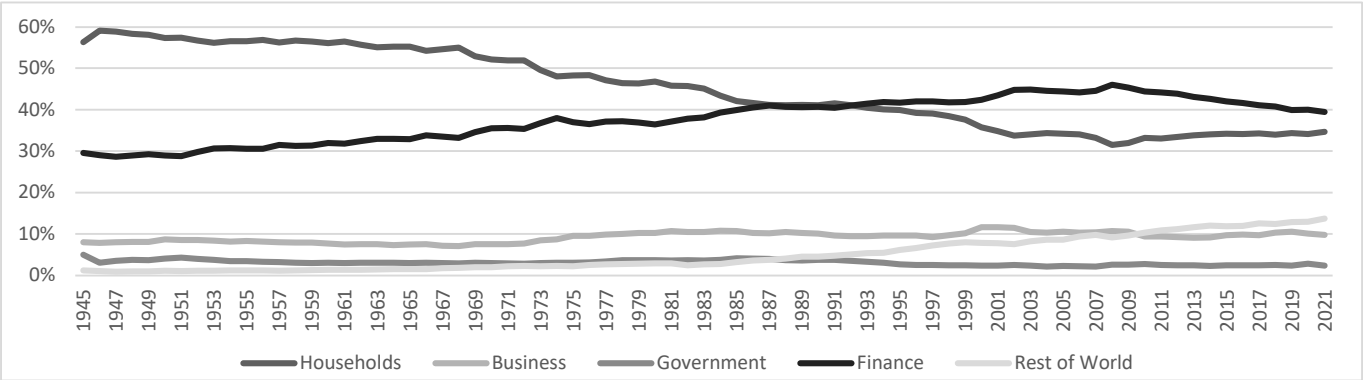
Figure 1: Nonfinancial Assets, Financial Claims, and Liabilities as *Multiples* of US GDP, 1960-2021



Source: US Department of Commerce Bureau of Economic Analysis, Integrated Macroeconomic Account (BEAs) and National Income and Product Accounts (NIPAs), latter for GDP base.

To proceed, it is best to *disaggregate* the total value of financial claims in the US into the percent shares held by each social sector from 1945-2021 (See Figure 2). The largest variance is the decline of household shares, by one half, from 59-29 percent 1947-2008 (notably, however, increasing to 35 percent by 2021). The financial sector share, in an opposite trend, increased from 29-46 percent from 1951-2008 (but lost share thereafter to 39 percent by 2021).[3] The decline of households and the rise of finance run counter to many economic literatures, most notably the core ideas behind contemporary banking theory and financial intermediation theory. Belief in the efficiency of financial markets led these approaches to reject traditional, classic, and modern theories of banks (as deposit-taking loan-making institutions) with new views of *banks as financial firms*, now supposedly able to manage risk and manufacture financial assets (claims) on financial markets. This confuses the concepts and categories of national income and production accounts with the very different concepts behind financial balance sheets. It also confuses the basic principles of banking with the basic principles of nonfinancial business management.

Figure 2: Social Sector Shares of US Financial Claims, percent total 1945-2021



Source: Federal Reserve Z1 Reports.

The belief in the efficiency of financial markets has been widely checked (Malkeil, 2003), especially since the financial crisis of 2007-8. Nonetheless, a separate theoretical idea continues to inform contemporary banking theory, financial intermediation theory, empirical studies of the sector, and much of public debate and policy in the US. The idea is that banks and financial institutions, notwithstanding market failures, may nonetheless exploit the efficiencies of financial markets. From this perspective, it is best to replace the traditional, classic, and modern ways of banking; that of balancing portfolios of deposits, loans, and investments, while holding capital in reserve. This has been

[3] Unfortunately, the lack of granular data for the construction of matrices impedes analysis of "from whom to whom."

described as the pursuit of market-based banking (Howarth, et al, 2016) and is the core idea behind contemporary banking theory (Wilson et al, 2010; Bhattacharya and Thakor, 1993). Evidence and theory from the US suggest otherwise. The data in Figure 2, and further evidence presented below, do indeed indicate the rise of market-based banking. Until 2010. After 2010, change occurs in the very opposite direction, indicating a back-to-the-future return to traditional banking.

The percent shares of nonfinancial business, government, and the rest of the world vary less from 1945-2021 and will be dealt with shortly. The variance in Figure 2 is composed largely of the decline of households and the rise of finance. This is the second basic thesis of financialization. To draw out the implications for American political economy and development, it is necessary, with all due respect, to deal with many economic literatures. The arguments elaborated in this paper may be summarized as follows.

1) The massive accumulation of financial claims and liabilities by US banks and financial institutions is incompatible with core (but not all) ideas in contemporary banking theory and financial intermediation theory. Instead of *disintermediation* bringing the efficiency of financial markets to consumers, market failures (or commodification) produced, instead, a massive wedge of inefficiency or *reintermediation*.[4]

2) The continued compounding of financial claims and liabilities by US banks, despite the decline of interest rates to near zero, is consistent with the endogenous mechanisms described in post-Keynesian approaches to money. With a major proviso: Financial claims *are not money*.

3) This proviso turns on a basic, performative fallacy of conceptual stretching that leads to the mis-aggregation of financial claims alongside the traditional aggregates of savings as other peoples' money. Three misconceptions about money creation ensue. The first misconception is that financial claims (financial assets) are money. If the value of an item nets to zero, then it is not money. The second misconception is that financial claims are privately created, rather than sustained, subsidized, guaranteed, and/or accommodated by government, especially since the 2007-8 financial crisis in the US. The third misconception about money creation involves the double counting of financial claims (and liabilities); once as changes in valuation and, once again, as the resulting increase or decline in personal or corporate income. These misconceptions have induced a litany of errors in public policy and bank management.

4) A historical-institutional approach helps avoid another basic methodological problem: That the large numbers on financial balance sheets tend to bedazzle researchers into loading on the dependent variable (Geddes, 1990). This produces selection bias. This haunts problem-oriented analysis because focusing on a problem often leads researchers to overestimate its dimensions. This can rarely be overcome by using the standard techniques of statistical and experimental controls because the phenomena at hand, such as financialization, inequality, brinkmanship during economic crises, and policy capture usually involve too many variables and too few cases. In these situations, the use of qualitative methods such as focused, small n comparisons, case studies, and conceptual analysis is required.

5) The political origins of the rise of finance in the US may, in fact, be found in neo-conservative politics, the turn to monetarism and high interest rate policies in 1979, and the deregulation of banking and credit markets (Krippner, 2011; 2005; Duménil and Lévi, 2004). However, a) the exceptional policy measures from 2007-2009, b) the reregulation of banks during the 2010s, c) the adaptation of Basel Accord regulations, and d) fundamentally different trends in financial markets, banking, monetary policy, and politics since 2010 have changed financialization in the US.

6) Economic aggregates notoriously ignore differences of social class. The Distributional Financial Accounts of the United States (DFAs), launched in March 2019, extrapolate the FDIC triennial Consumer Finance Survey data from 1989-2021 according to quintiles by income, net worth, age, race, and education. Analysis of the DFAs suggests that the veil of finance increased inequality in the US far more than wage and income differentials. Two problems arise here. First, economic approaches focus on the capitalization of personal income (Saez and Zucman, 2016). However, this is, precisely, one of the conceptual mistakes that caused financialization. Second, substantial household *deleveraging* after 20009 (especially by the poorest quintile in the DFAs), suggest the importance of credit channels as determinates of both social exclusion *and inclusion* (matters at the heart of political development theory).

In sum, this paper begs to differ with six major economic literatures: corporate finance theory, contemporary banking theory, financial intermediation theory, modern- and endogenous-money theory, and, to a lesser degree, theories of financialization in critical political economy and recent approaches to inequality. To proceed carefully, transparently, and with all due respect, it is best to go back to the beginning, to the basic differences between national income and production accounts and financial balance sheet accounts.

[4] For example, households held 100 percent of mutual fund shares and 94 percent of corporate equities in 1946. By 2000, banks and financial institutions had increased their shares from zero to 44.3 percent of mutual fund shares and from six to 47 percent of corporate equities (Mettenheim, 2022: 28-9).

A comparison of US social sector balance sheets in 1960 and 2020 helps explain both the wedge of financialization in Figure 1 and rise and decline of the financial sector in Figure 2. Each US social sector (households, business, finance, government, and the rest of the world) is once again displayed in Table 1. The dollar value (and percent share), of nonfinancial assets, financial claims, and liabilities held by each social sector in 1960 and 2020 are displayed first. Three indicators then illustrate the basic mistakes that became such pervasive financial ideologies. The first indicator is net worth (nonfinancial assets plus financial claims minus liabilities). The second indicator is leverage, the ratio of liabilities over nonfinancial assets (Sgambati, 2019). The third indicator is financialization (the ratio of financial claims over nonfinancial assets). Empty cells are reported for the rest of the world because nonfinancial holdings abroad are not counted in balance sheet data (the denominator is therefore lacking to measure leverage or financialization). The geometric increase of current dollar values and the large variance across social sector shares suggest a variety of phenomena.

Table 1: US Social Sector Balance Sheets in 1960 and 2020

1960	House-holds	Proprietary Business	Corporate Business	Finance & Banking	Federal Govt.	State & Loc. Govt.	Rest of World	Total
Nonfinancial assets	737.6	434.7	609.7	16.9	205.2	204.4		3,244.6
% total	22.7%	13.4%	18.8%	0.5%	6.3%	6.3%		100.0%
Financial claims	1,577.8	34.6	180.5	899.8	47.4	37.2	36.9	2,814.2
% total	56.1%	1.2%	6.4%	32.0%	1.7%	1.3%	1.3%	100.0%
Liabilities	224.6	993.7	598.8	899.8	387.9	128.6	65.5	3,298.9
% total	6.8%	30.1%	18.2%	27.3%	11.8%	3.9%	2.0%	100.0%
Net worth	2,090.8	-524.4	191.3	16.9	-135.3	113.0	-28.5	
Leverage	0.10	2.12	0.76	0.98	1.54	0.53		
Financialization	2.14	0.08	0.30	53.15	0.23	0.18		
2020								
Nonfinancial assets	43,529.0	15,577.1	25,898.1	2,170.4	3,734.0	12,412.8		147,536.7
% total	29.5%	10.6%	17.6%	1.5%	2.5%	8.4%		100.0%
Financial claims	104,938.0	6,727.8	24,315.8	122,919.4	4,665.2	3,892.8	39,843.1	307,302.0
% total	34.1%	2.2%	7.9%	40.0%	1.5%	1.3%	13.0%	100.0%
Liabilities	17,123.5	51,269.7	75,486.2	126,257.0	26,555.0	8,327.9	26,386.0	331,405.2
% total	5.2%	15.5%	22.8%	38.1%	8.0%	2.5%	8.0%	100.0%
Net worth	131,343.5	-28,964.8	-25,272.2	-1,167.2	-18,155.9	7,977.7	13,457.1	
Leverage	0.12	2.30	1.50	1.01	3.16	0.51		
Financialization	2.41	0.43	0.94	56.63	1.25	0.31		

Source: IMAs.

However, the point here is to explain how the veil of finance produced the wedge of financialization. This may be described as a series of steps. The first step is that banks and financial institutions accept deposits from individuals or other entities.[5] This transforms other people's money into both a financial claim of the original individual or institution that deposited the money and a liability of the bank or financial institution that accepted the deposit. The second step is that banks and financial institutions loan or invest other people's money. This transforms the liabilities of banks and financial institutions into further financial claims (Schumpeter, 2016). Logically, the same holds for all social sector financial balance sheets. However, unlike other sectors,[6] the balance sheet portfolios of US banks and financial institutions (column four) *net to zero*, in theory, and near zero in the historical statistics (because equity is not counted as a liability here).

The sleight of hand is to count financial claims as assets, and/or money, without considering the related liability. This violates the core idea of financial balance sheets, runs against the original design and rules of aggregation in US national accounts, and stretches, in error, the traditional definitions of assets and money. The theory of efficient markets, the obsessive pursuit of reduced mathematical equations, the naturalization of economic science, and extreme biases toward the private sector all contributed, as well, to the veil of finance. However, the conceptual stretching of money to include financial claims is a separate, far less recognized, and more important cause of financialization.

[5] Wholesale banking and finance differ, but the same point holds: Financial claims, unlike nonfinancial assets, net to zero once liabilities are counted. Financial balance sheets always have two entries: financial claims *and* liabilities. Several theories of banking, finance, and money claim otherwise, but this is precisely the error in discussion.

[6] Proprietary (noncorporate) business is the exception, precisely because the assets of unincorporated firms are entirely owned.

This may become clearer upon considering the redefinitions of monetary aggregates in the US. Until 1971, the money aggregates used by the Federal Reserve Board of Governors were the following (Anderson 2003; Anderson and Kavajecz, 1994):

M1 = currency and demand deposits at commercial banks.

M2 = M1 + commercial bank savings and small time-deposits.

M3 = M2 + deposits at mutual savings banks, savings and loans, and credit unions.

M4 = M2 + large time deposits.

M5 = M3 + large time deposits.

The M1 category captured two traditional definitions; of money as currency and of bank reserves as the cash retained by banks to cover risk. M2 captured the stock of personal savings at commercial banks, while M3 captured the stock of household savings that had been accumulated at socially oriented banks. M4 and M5 captured the traditional wholesale function of banks (maturity transformation) with the category of large time-deposits; M4 for commercial banks, M5 for mutuals, savings and loans, and credit unions.

All these categories implied a clear separation of savings, banking, and financial markets. This also left the "off-balance sheet" operations of banks and shadow banking operations (of banks and nonbank financial entities) precisely that: *off* balance sheets and *outside* monetary aggregates.[7] The following revisions to monetary aggregates "endogenized" these financial claims.

First, in 1980, the Federal Reserve unilaterally decided to stop reporting the M4 and M5 aggregates. Then, in 2006, the Federal Reserve further reduced and redefined monetary categories as follows:

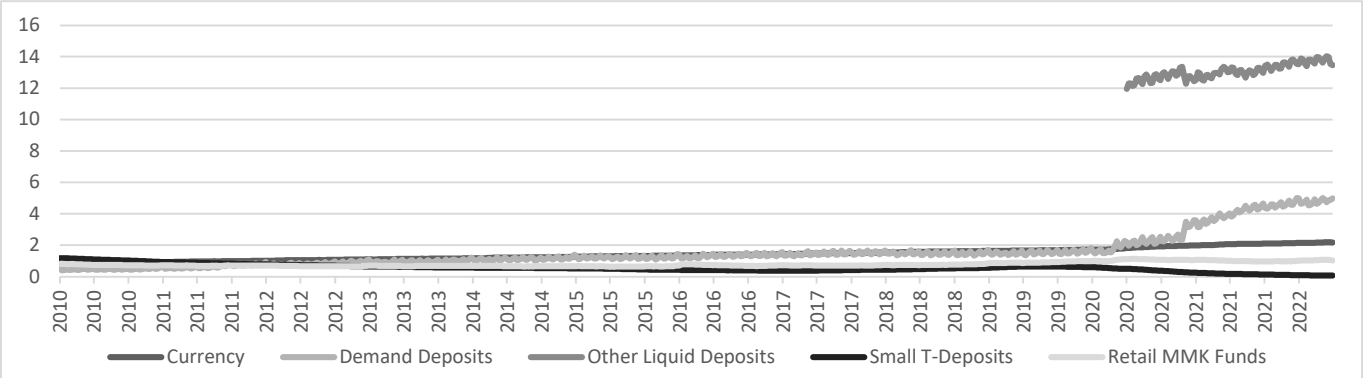
M1 = currency and demand deposits at commercial banks.

M2 = M3

M3 no longer reported

In 2006, the Federal Reserve System also ended reporting of repurchase agreements and Eurodollars, while the traditional categories of large denominations of time-deposits and institutional money market mutual funds became a memorandum item in Z1 releases. Governor Ben Bernanke subsequently defended these revisions because "M3 failed to convey additional information about economic activity not already embodied in M2 and has not played a role in the monetary policy process for many years." (Bernanke, 2012).

Figure 3: Inclusion of "Other Liquid Deposits" (primarily Money Market Funds) in M1 Aggregate, $trillion



Source: St Louis Federal Reserve Statistics.

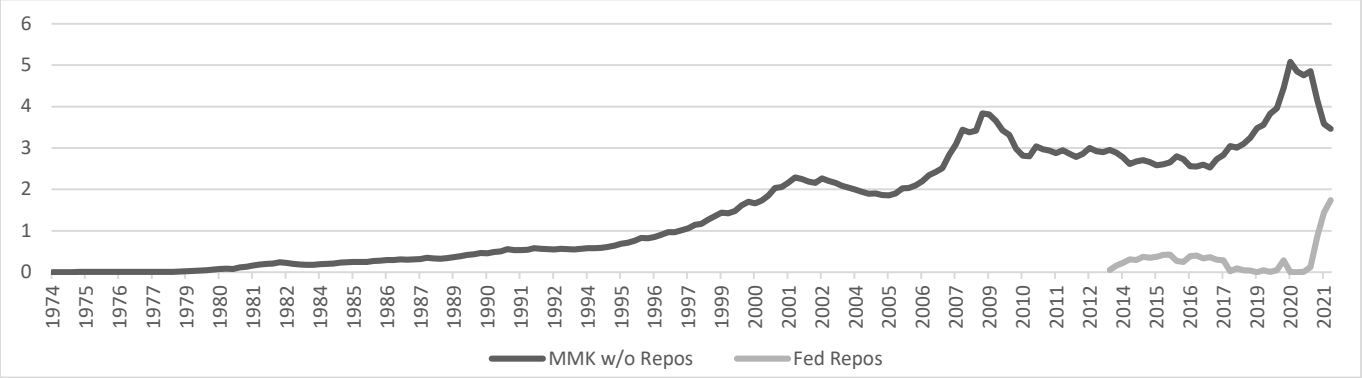
During the Covid 19 pandemic, the Board of Governors of the Federal Reserve once again revised the core aggregates of money, with the same justification - that the old categories had become irrelevant (See Figure 3). On December 17, 2020, the Federal Reserve published several changes to M1, the most relevant being the inclusion of the category of "other liquid deposits" that included *wholesale money market fund holdings*.[8] Figure 3 displays the consequences of this conceptual stretching by displaying the composite parts of the new M1 monetary aggregate. The addition of "other liquid deposits" increased the total value of the M1 money aggregate by *$11.9 trillion* (from

[7] Shadow banking and nonbank financial institutions are beyond the scope of this paper. See Mettenheim, 2022: 246-291

[8] The BGFR press release is as follows: "Recognize savings deposits as a transaction account by combining the H.6 statistical release items "Savings deposits" and "Other checkable deposits" and report the resulting sum, "Other liquid deposits," as part of the M1 monetary aggregate. Provide components of the monetary aggregates at a total industry level as opposed to presenting the breakdown of components by commercial banks and thrift institutions. Report only data used to construct the monetary aggregates, thereby *eliminating the release of data on institutional money funds* and memorandum items on U.S. government deposits and deposits due to foreign banks and foreign official institutions." (BGFR, 2020) (emphasis added).

$5.5 trillion). In 2022, the total value of M1 was thereby "stretched" to reach $21.7 trillion, with $13.5 trillion composed of "other liquid deposits."

Figure 4: Money Market Fund Financial Claims and Federal Reserve Repurchase Agreements, 1974-2021, $trillion



Source: St Louis Federal Reserve Statistics (Treasury Department Financial Research Office, 2022).

The insertion of the wholesale financial claims of money market funds alongside the traditional monetary aggregates composed of personal savings is an egregious example of conceptual stretching. Moreover, since 2013 and, especially, since January 2021, the financial claims of institutional money market funds are increasingly composed of US Treasury Repurchase Agreements. Figure 4 displays the trillion-dollar value of institutional money market fund financial claims (without repurchase agreements) alongside the value of triparty repurchase agreements held by these funds. By October 2021, the value of repurchase agreements with Treasury had increased to $1.7 trillion; a third of wholesale money market fund claims. These "other liquid deposits" are liquid only because of the massive granting of Federal Reserve Repurchase Agreements, whereby the Treasury supplies collateral to guarantee that money market funds may access, interest free, the overnight auctions conducted by the FOMC.[9]

The redefinition of money has indeed helped make the monetary moralities of traditional aggregates, in the words of the Federal Reserve, "no longer relevant." However, the *irrelevance* of the savings of citizens becomes so if, and only if, government policy accepts, accommodates, and guarantees the exorbitant financial claims of, in this case, institutional money market funds. Unfortunately, this appears to be the case, producing a further wedge of finance (of *$13.45 trillion*) that was inserted alongside the $4.97 trillion of demand deposits, $2.17 trillion in currency, $1.02 trillion in retail money market funds, and $690 billion in small time deposits. This massive central government support for a select number of financial firms runs counter to nearly all traditions of American political economy and development. From Madisonian, to populist, federalist, democratic, and, especially, liberal precepts about free markets. However, before turning to the implications for politics, a closer look at the evidence is in order.

A Historical-Institutional Approach to Social Sector Portfolios

Disaggregating the data from the NIPAs, Z1 Reports, and IMAs reveals further anomalies and provisos about each social sector from 1960-2021. Most indicators suggest far longer-term processes, or a return to levels that obtained in the 1960s, or tendencies in the very opposite direction than expected by theories of financialization and the economic approaches discussed above. The first example is that the levels of household debt and financial claims at the end of the time series (2021) return to the levels reported at the beginning of the IMAs data (1960s) - if considered proportionally. It follows that the argument of this paper about the conceptual causes behind the veil of finance also apply to the increase of household inequality in the US. The capitalization of income and the financialization of wealth are driven by conceptual stretching, double counting, loading on the dependent variable, and mis-aggregation. The acceptance of the financialized (or capitalized) data makes it difficult to explain how financial causes, rather than income and wage differentials, increased inequality.

Moreover, the data change after the financial crisis of 2007-8. The evidence since 2010 is compelling; A very substantial *deleveraging* and a very substantial *reduction of household debt* appear in both the aggregate data from the IMAs and Z1 Reports and, perhaps most surprisingly, in the DFAs data disaggregated by social class. Indeed, compared to the richer quintiles as defined in the DFAs, the poorest quintile of Americans deleveraged and reduced debt *the most* during the 2010s – if considered proportionally.

[9] At zero interest rates, violating Walter Bagehot´s classic rule for money policy and rendering irrelevant the traditional benchmark for monetary policy in the US, the interest rates charged by the FOMC for Fed Funds in overnight markets.

Second, two changes in the US banking system stand out over the last decades (Mettenheim, 2022; DeYoung, 2010). One side of US banking, that of wholesale finance and investment banking, experienced an extreme concentration into four large bank holding companies.[10] The cumulative result of decades of mergers and acquisitions has produced four very large bank holding companies with dominant shares across financial industries, most notably in the riskiest and most problematic such as financial derivatives,[11] off-balance sheet activities, and shadow banking.[12]

However, since 2010, a far different trend appears, especially in the other side of the US banking system (the large number of smaller local and regional banks and depository institutions): A back to the future return to traditional deposit-taking, loan-making, and the setting aside of capital against risk (the latter largely at the twelve regional Federal Reserve banks). Both tendencies (excessive concentration at four banks and a back to the future return to traditional banking) counter the core expectations about deregulation, disintermediation, and market-based banking – expectations shared by critical and positive theorists.

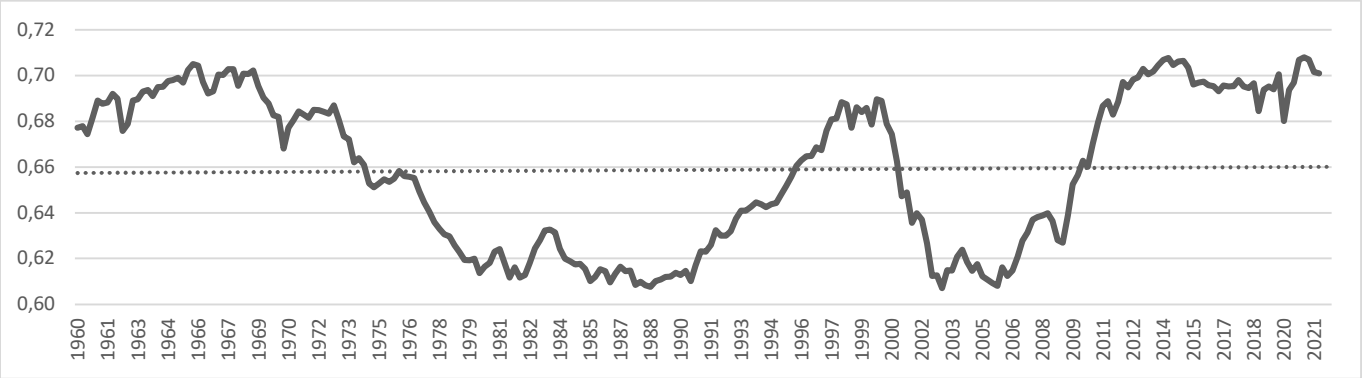
Third, regarding nonfinancial business, the data suggest the hollowing out (or maturing) of American corporations. However, proprietary business enterprises indicate far lower levels of financialization than incorporated firms. And *one half* of the observed increase of financialization in American corporate businesses is due to the *internationalization* of their operations (because, again, nonfinancial assets abroad are not counted in balance sheet data).

Finally, government balance sheets indicate an unprecedented centralization and financialization of monetary authority in the Federal Open Market Committee (FOMC) and Treasury. However, two developments run counter to this trend. First, as noted, American banks have increased, massively, their deposits at regional Federal Reserve Banks since 2017. This has reinforced the traditional, federalist, bank-centered, regional credit channels of monetary policy, as originally intended by the Federal Reserve system. Second, since the 1960s, notable increases in federal government social policy expenditures (and in the budgets and balance sheets of state and local governments) run counter to claims about the downsizing of government and social policy reversals in studies of financialization and American political economy. These anomalies and provisos merit further attention.

Households

This paper began with the observation that the largest variance in the IMAs data is the decline of household shares of financial claims from 1960-2021. This is a serious anomaly for economic approaches that expected the liberalization of banking and finance to bring more efficient services to consumers. However, the patterns of continuity and change in American household portfolios also differ from central ideas about financialization. First, on aggregate, the financialization of US households is far from linear and, indeed, just barely positive from 1960-2021. Instead, the value of financial claims in household portfolios (as a ratio of total household assets), peaked *four times*,

Figure 5: Household Financial Claims as a Ratio of Total Household Assets, 1960-2021



Source: IMAs

[10] Or six, depending on the financial industry. The big four are JP Morgan, Citigroup, Bank of America, and Goldman Sachs. These four conglomerates hold between 85-95 percent of financial derivatives and dominant shares of investment banking activities. Including Wells Fargo and Morgan Stanley, six banks dominate most wholesale banking activities. See OCC Quarterly Reports on Bank Derivatives and Trading Activities, FDIC Call Reports, and FFIEC data on Globally Significant International Banks.

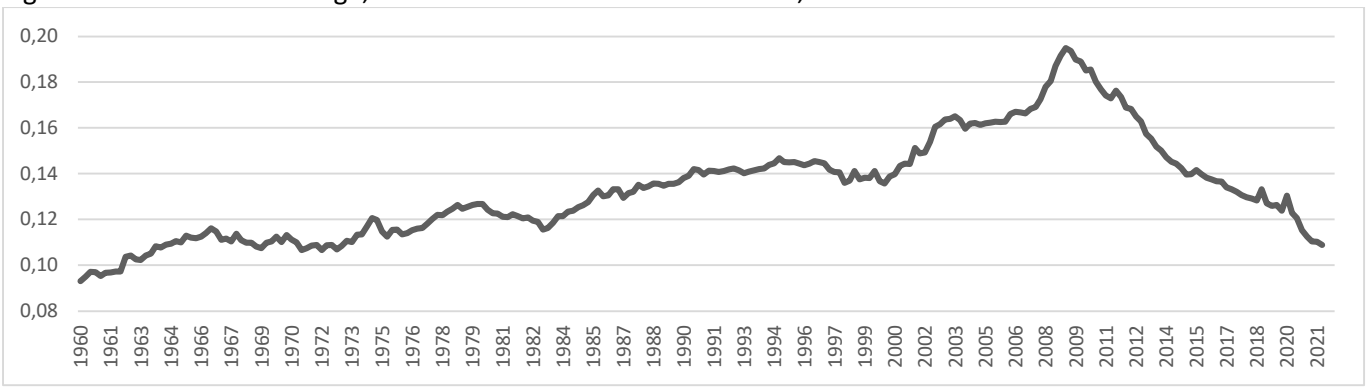
[11] On derivatives, see: Funk and Hirschman (2014).

[12] On these industries, see: Mettenheim (2022: 246-291).

once in the mid-1960s, once before the dot.com market crash in 2000, and twice again in 2014 and 2021. Moreover, the ratios between 0.68-0.71 at the end of the time series (during the 2010s) returned to the very same level that obtained before 1970 (See Figure 5).

The second anomaly for theories of financialization is the substantial decline of US household leverage after 2009 (See Figure 6). Indeed, the trend is at odds with two claims. First, the appreciably linear, long-term rise of leverage among US households since 1960 belies the idea that financialization was caused, primarily, by fundamental changes circa 1980. Second, the *deleveraging* of household debt since 2009 is marked, such that the 0.11 ratio of liabilities over total assets at the end of the time series in 2021 returns close to the 0.09 level at the beginning of the data in 1960.

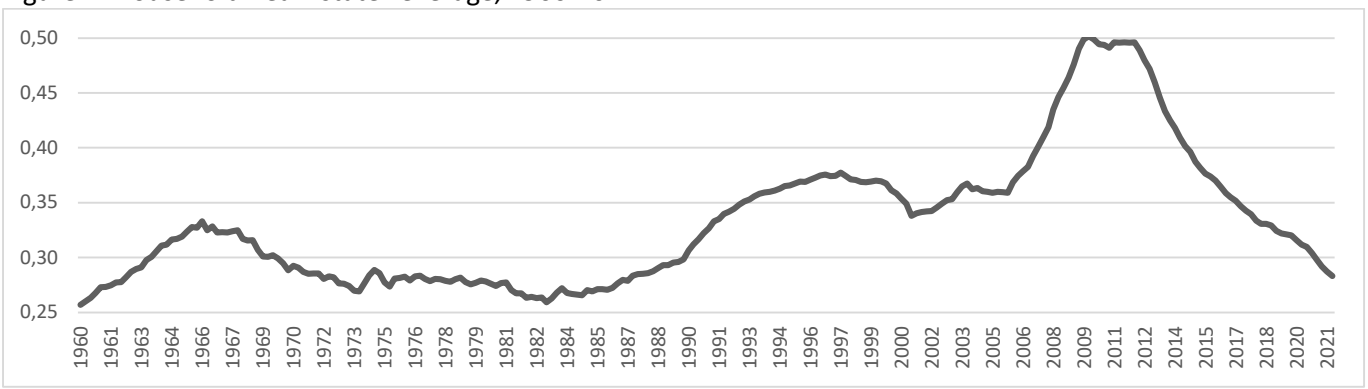
Figure 6: Household Leverage, Ratio of Liabilities over Total Assets, 1960-2021



Source: IMAs

To corroborate these findings, a third indicator of financialization, the leverage of household real estate holdings, is displayed in Figure 7. This data from the IMAs also suggests substantial deleveraging since 2009, such that the ratio of mortgage debt to the value of real estate owned by US households declines from 0.5 in 2009 to 0.28 in 2021, once again close to the level at the outset of the time series (0.26 in 1960).

Figure 7: Household Real Estate Leverage, 1960-2021

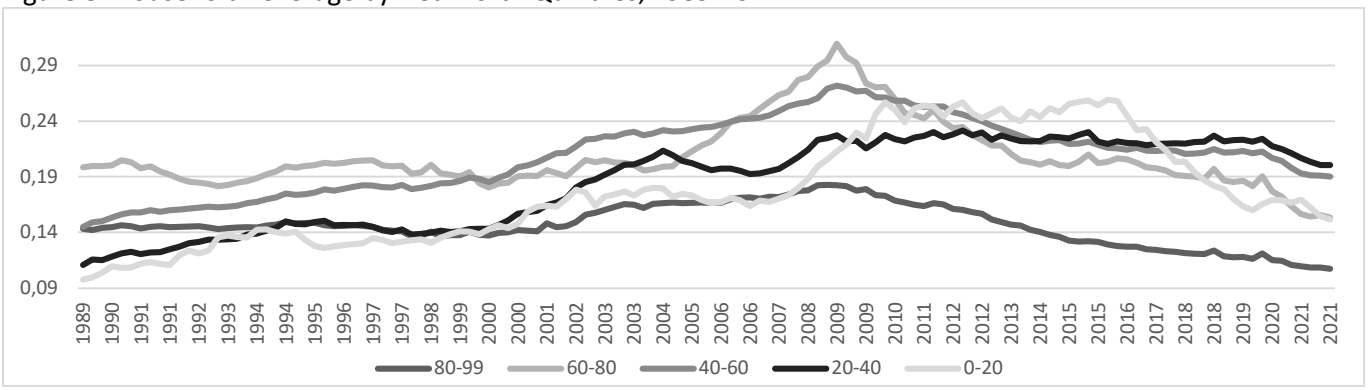


Source: IMAs, Table S.3.q Households and Nonprofit Institutions Serving Households

These aggregate trends may conceal fundamental differences across social classes. Figure 8 (on the following page) therefore disaggregates the balance sheet data on US households by net worth quintiles as reported in the DFAs. The DFAs split household samples into the bottom fifth (0-20 percent), next fifth (20-40 percent), 40-60 percent, 80-99 percent, and the top one percent according to net worth (total assets minus liabilities). This permits comparison, by social class, of household leverage (Figure 8), the evolution of net worth (Figure 9), and the respective social class shares of total assets held by US households (Figure 10). The DFAs also provide a focus on intra class trends, such as the net worth of the poorest 20 percent of Americans (See Figure 11). These figures suggest further anomalies for theories of financialization with implications for studies of American political economy and development.

First, the DFAs data from 1989-2021 suggest that all social classes reduced financial leverage substantially after 2009 (See Figure 8). Indeed, the most variance obtains for the lowest quintiles. Low interest rates and access to credit increased household debt: after 2000 and through the financial crisis of 2007-8 and recession that followed. However, after 2009, substantial deleveraging and debt reduction ensued.

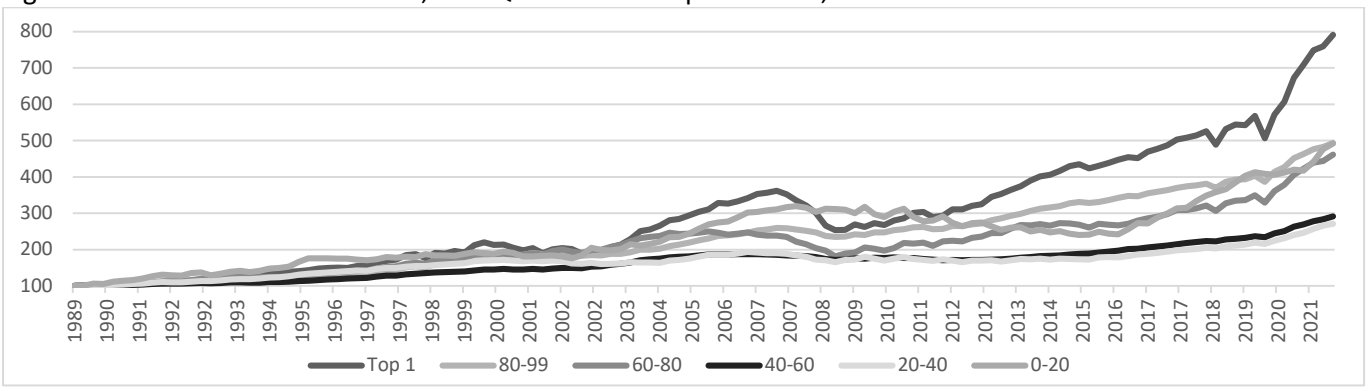
Figure 8: Household Leverage by Net Worth Quintiles, 1989-2021



Source: DFAs, Net Worth. Note: The top 1 percent is omitted to focus on the variance in the remaining categories.

Another view of US households by social class nonetheless suggests the very unequal accumulation of capital by upper classes. By setting the net worth of each quintile to 100, the unequal accumulation of net worth stands out. However, the variance is not in linear in accord with wealth quintiles. For example, the two peaks in the accumulation of net worth for the poorest quintile (0-20 percentile) *outpace* all other quintiles from 2009-11, while retaining the second largest levels from 2005-10 and, once again, in 2021.

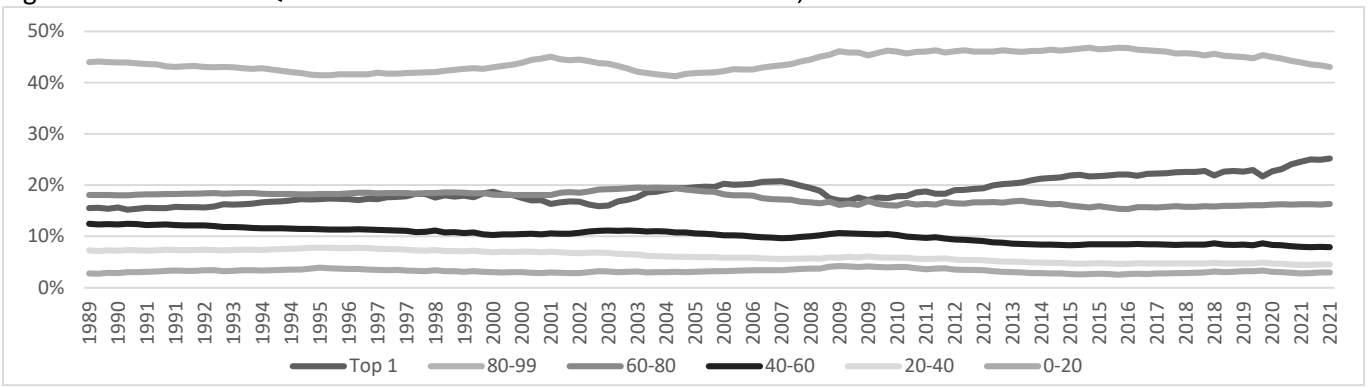
Figure 9: Real Individual Net Worth, DFA Quintiles and Top 1 Percent, 1989-2021



Source: DFAs, Net Worth. Note: Interpolated quarterly data Indexed to 3rd quarter 1989 levels by the consumer price index.

A third view of US households by net worth quintiles indicates the different macroeconomic weight of social classes. This has significant implications for public policy. The financialization of US household wealth means that 40-45 percent of total household assets are held, not by the top 1 percent, but by the next 19 percent (See Figure 10). The wealth effects of changing asset prices (and the double counting of these changes) imply large macroeconomic effects. Instead of traditional Keynesian demand management through income policies, the richest 19 percent of Americans have become, from this perspective, the principal policy lever for demand management *through the new channels tapped by monetary and credit policies*. And at a level that remains largely constant, between 41-47 percent, of the total assets held by US households from 1989-2021.

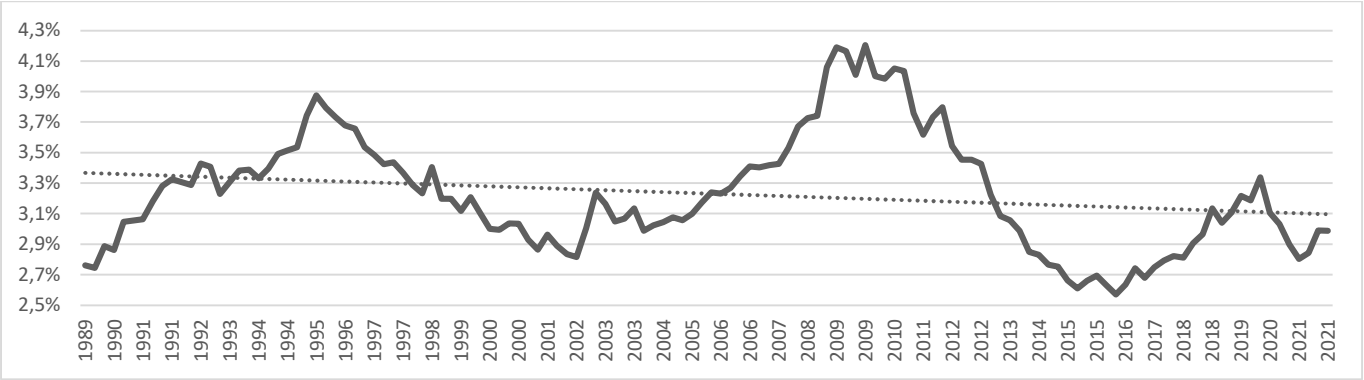
Figure 10: Net Worth Quintile Shares of Total US Household Assets, 1989-2021



Source: DFAs, Net Worth

However, the large weight of the upper classes does not imply linear impoverishment for those worst off. A closer look at the evolution of the small share of the poorest quintile of American households, according to net worth, suggests three cycles from 1989-2021, rather than a linear tendency. The poorest quintile of households increased their share of total household assets during three periods: From 2.7-3.9 percent 1989-95, once again from 2.8-4.2 percent from 2002-9, and once again from 2.6-3.3 percent during the 2016-20 period. This implies large wealth effects, that turn on the changing valuations of balance sheet portfolios, also obtain for those worst off. This also implies that the new channels of social exclusion, *and inclusion*, produced by financialization provide new levers for public policy.

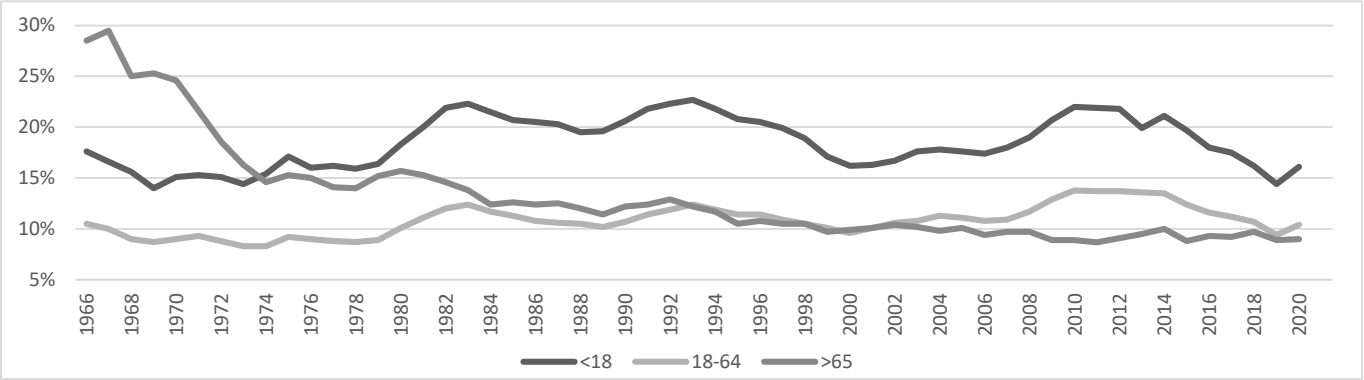
Figure 11: Poorest New Worth Quintile, Share of Total US Household Assets, 1989-2021



Source: DFAs

To check these findings in the balance sheet data, a look at data from the US Census Bureau Current Population Survey (CPS) is in order. Figure 12 displays the percent of Americans classified as in poverty according to three age groups, under 18 years of age, between 18-64 years of age, and over 65 years of age. Three periods of variance stand out. First, the decline of poverty for those over 65 years of age occurs, first notably in the years following the launch of Medicaid and Medicare, but also at a continuous gradual pace thereafter. The next largest variance is the substantial increase of poverty among youth from 1968-1974 and 2006-2010. However, the number of Americans below the age of 18 in poverty decreases substantially after 2012, reaching 14 percent at the end of the time series (equal to the lowest level in the data reported for 1969).

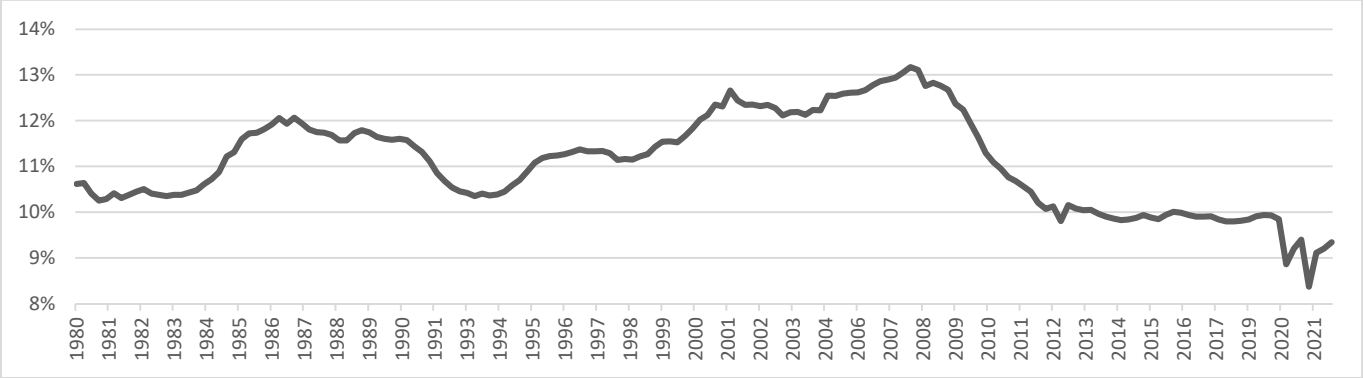
Figure 12: Percent of Americans Classified as in Poverty by Three Age Groups, 1966-2020



Source: Census Bureau. Current Population Survey. *2021 Annual Social and Economic Supplement*. Table 3. Poverty Status of People by Age.

A final check on these findings may be obtained in further data on US household debt. Figure 13 displays the value of US household debt as a percent of personal income from 1980-2021. Household debt does indeed increase from around 10.5 percent of personal income from 1980-1983, to peak at 13.1 percent in 2008. However, thereafter, the level of debt declines to remain around 10 percent of personal income from 2012-2020, whereupon levels decline further during the first and fourth quarters of 2020. The importance of income policies during the Covid 19 pandemic will be dealt with shortly. The point here is that change during the 2010s, according to several data sources, occurred in the very opposite direction expected by theories of financialization and, indeed, many studies of the US and other advanced economies that emphasize the inexorable rise of household debt.

Figure 13: US Household Debt as Percent of Personal Income, 1980-2021



Source: St Louis Federal Reserve Statistics. Note: Financial Soundness Indicator, Households; Debt Service and Principal Payments as a Percent of Income, Level, Percent, Quarterly, Not Seasonally Adjusted

In sum, historical perspective suggests that the patterns of household financialization that obtained before 2007 changed dramatically thereafter. To explore the implications of household deleveraging and debt reduction since 2010, the following sections review further anomalies and provisos in the data on other social sectors. Beginning with the second largest variance – the rise and fall of finance.

Banks and Financial Institutions

The data reported in Figure 2 at the outset of this paper indicated an alligator shaped inversion of the rise of finance after 2009. This section disaggregates this variance and compares the data on the US financial sector in the NIPAs with the financial balance sheet data on the sector in Z1 Reports and the IMAs. Again, one of the central claims of contemporary banking theory, financial intermediation theory, and empirical studies of banks is that the traditional, classic modern ways of banking (deposit-taking and loan-making while holding capital in reserve) has given way to more efficient, market-based banking and the production and sale of financial assets. Two appendices display the principal financial claims and liabilities of US commercial banks. First as measured from 1973-2022 by the categories of the Federal Deposit Insurance Company (FDIC). Second as measured by the Federal Reserve Bank of New York (FRBNY) "Banking Condition Reports" since 1991. Several differences stand out. However, both sources clearly indicate two periods of bank change in the US. The first period, until 2007, is consistent with the claims of contemporary banking theory, financial intermediation theory, and expectations about the liberalization and deregulation of the industry (both critical and positive). The data, until 2007, do indeed suggest a transition to market-based banking.

However, since 2010, the evidence differs. The direction of change is reversed. This implies a back to the future return to traditional deposit-taking, loan-making, and the holding of far greater reserves against risk – in the form of bank deposits at the twelve Regional Federal Reserve Banks (far more, and in different ways, than required by Basel III capital reserve accords which also redefine bank reserves, in error, as liquid financial market liabilities). Given the importance of these findings, Appendix 3 reports further data by replicating a study of community banking published by the FDIC in 2012 (with data through 2019). Comparison of the structure and performance of US banks by size confirms the trends observed in the FDIC and FRBNY data. After 2010, a back to the future turn away from market-based banking holds, in 20 of 27 measures, for all sizes of banks, small, medium, large, and the very largest.[13]

This section also taps the original meanings and measures behind the official data on banking in the US. The first national criteria for historical statistics on banking were elaborated by the OCC in 1931, followed by the FDIC upon its creation in 1934. The third was elaborated by the BGFR in 1959. Of special note are the in-depth balance sheet tables published as part of the bicentennial edition of *Historical Statistics of the United States* (Census Bureau, 1975), with data from the 18th century through 1970. The categories of these official sources reflect the traditional views of banking and monetary moralities in the US. The data indicate how American banks and financial institutions grew organically, one deposit, one loan, and one investment at a time – across the two centuries covered by these official sources. This makes it possible to increases the number of observations and compare epochs. This also makes it possible to recover the core ideas of classic and modern political economy that came to be ignored by the major schools of economics after 1945.

[13] The size thresholds and information on samples are reported at the end of the appendix.

In a broader sense, this method of analysis may be described as a historical transaction cost approach to the gradual accumulation of balance sheet portfolios by banks and financial institutions. In this regard, the Polanyian approach to political economy and the vast literatures on market failures in financial intermediation theory *converge*. They converge in seeing banks and financial entities as institutions designed to ameliorate market failures (or the consequences of commodification). However, instead of supposing equilibria and then working through market failures, a historical-institutional approach infers backward from historical statistics to explain how banks and financial institutions ameliorated transaction costs, agency costs, asymmetric information, and the very many market failures that obtain in banking, credit, and finance.

Two trends in the data are key. First, the balance sheets of banks and financial institutions *continue to balance* throughout the long periods of time covered by these sources. This runs counter to the expectations of both contemporary banking theory and critical approaches to banking and financialization.[14]

Second, the variance in terms of the principal financial claims and liabilities of banks also runs counter to these expectations. The largest variance in the data on US commercial bank financial claims from 1973-2022 is the increase of mortgages. The value of mortgages held by banks increase from 16-39 percent of total assets from 1973-2008. However, thereafter, the percent share of mortgages in bank portfolios decline to 23 percent by early 2022. The second largest variance is the increase of Treasuries, from 15-22 percent from 1973-1994, then declining to 11 percent by 2008. However, thereafter, the value of Treasury securities held by banks increase to 23 percent of total assets by 2022. The third largest variance is that of cash assets.[15] From 1973-1981, cash assets fluctuate between 13-15 percent of US commercial bank financial claims, then decline steadily, fivefold, to three percent in second quarter 2008. However, thereafter, banks increase cash asset holdings to peak at 21 percent in 2014 and 2021.

The next three types of financial claims vary less, but also present anomalies for theories of financialization. The category of other assets, including trading assets, increased from five to 16 percent from 1973-2008. However, thereafter, this share declines to nine percent. Securities decline in a more linear trend, from 12 percent to near five percent from 1973-2022. Finally, consumer loans also decline from 15-8 percent of total bank assets from 1973-2022. In sum, all these trends bely widely accepted generalizations about bank change and financialization. Instead of transition away from traditional deposit-taking, loan-making, and reserves held independently (or on the asset side of bank balance sheets), the trend is in the opposite direction. Especially after 2008.

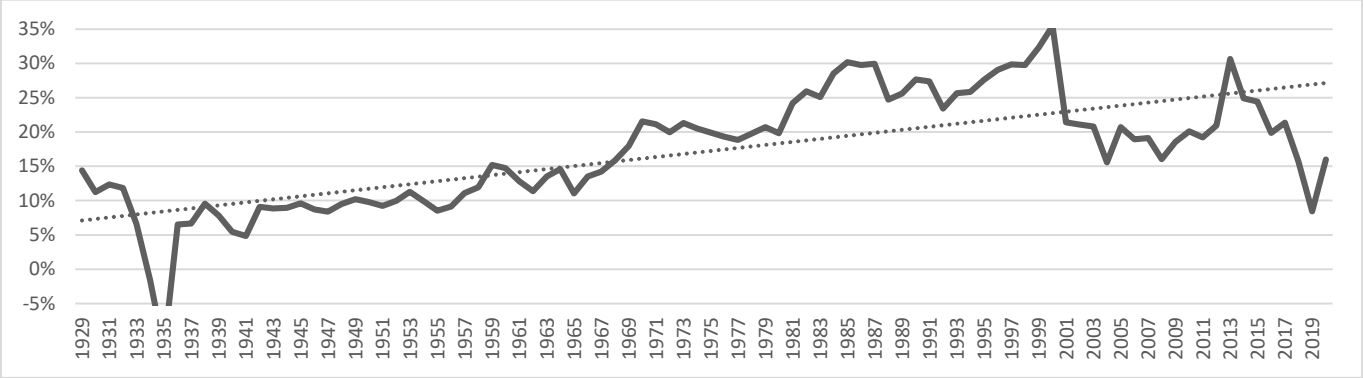
The data on US commercial bank liabilities provides further evidence of a back to the future return to traditional banking portfolios. The expected transition toward market-based banking was seen to involve a shift away from deposits by individual consumers toward interbank borrowing and financial market funding. Deposits fluctuate around 80 percent of total commercial bank deposits from 1973-2004, then decline to 70 percent by 2009. However, thereafter, deposits return to *92 percent* of total US commercial bank liabilities; around 10 percent above levels at the beginning of the time series in the 1970s. Borrowings do increase from one percent in 1973 to reach *42 percent* in 2009. However, thereafter, the value of borrowings declines to *three percent* of total bank liabilities in 2022. Finally, the residual category of other liabilities (that include trading liabilities such as derivatives and other murky financial transactions), does indeed increase from around five to 14 percent of total bank liabilities from 1973-2009. This is consistent with claims about a transition to market based banking. However, thereafter, the value of other liabilities decreases to *four percent* of the total, precisely at the level reported at the outset of the time series in 1973.

In sum, evidence of transition away from traditional banking does exist prior to the financial crisis of 2007-8. However, after 2009, all the major categories of financial claims and liabilities on bank balance sheets reverse course. This suggests a trend *away* from market-based banking and back to traditional deposit-taking, loan-making, and reserve holding. This runs counter to contemporary banking theory, financialization theory, and studies of market-based banking that shared expectations, positive and critical, about bank change.

To check these findings, consideration of further data on bank performance and structure from the FDIC from 1984-2021 is in order. In 2012, the FDIC published a study of Community Banking. The data from 1984-2010 appeared consistent with the general claims of contemporary banking theory and financial intermediation theory. The evidence indicated a shared trend toward market-based banking. However, replication of 27 key ratios of bank structure and performance through 2020 suggest a profound reversal of this trend after 2010. Of the 27 FDIC indicators of bank structure and performance, 20 suggest a trend away from market-based banking, while 7 report trends not directly relevant or ambiguous (See Appendix 4).

[14] Off balance sheet operations and shadow banking remain beyond the scope of this paper. See Mettenheim, 2021, chapter 4.
[15] The Federal Reserve H.8 category of cash assets "Includes vault cash, cash items in process of collection, balances due from depository institutions, and balances due from Federal Reserve Banks."

Figure 14: Finance Share of Net US Corporate Profits, 1929-2020

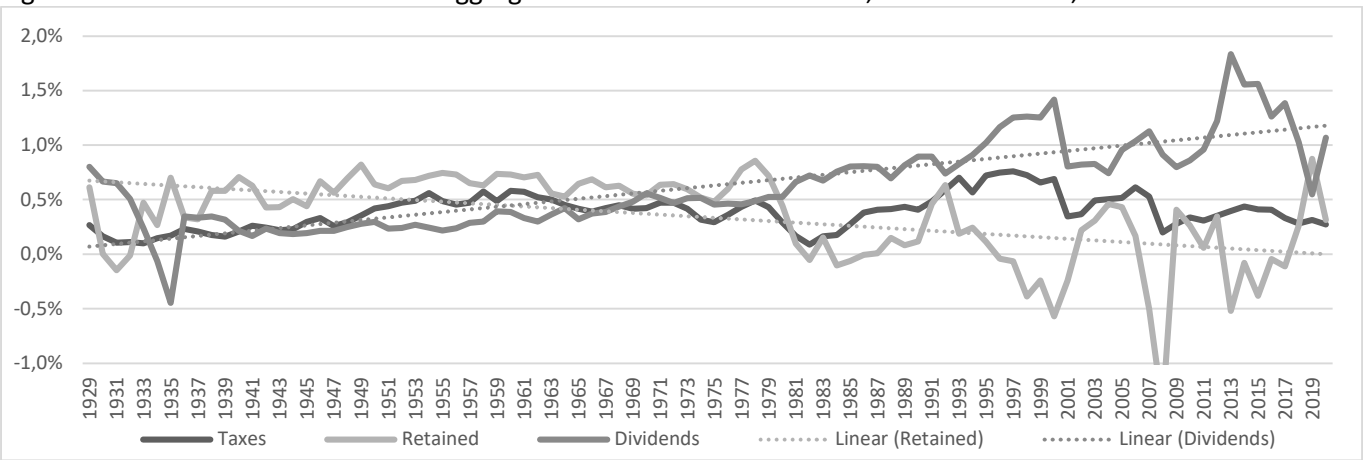


Source: NIPAs. Note: four changes in industry classification exist. However, this tends to overestimate the rise of finance because other service industries are split from the sector sample.

These findings may also be checked with the data on the US financial sector as measured in the traditional National Income and Product Accounts (NIPAs). The first indicator at the center of debates about financialization is the tendency of profits. The tendency of financial sector profits is displayed in Figure 14 as the percent share of net US corporate profits produced by financial industries from 1929-2020. The general tendency does indeed increase. However, after peaking at 35 percent of total US corporate net profits in 2000, the share of finance declined thereafter, remaining at 16 percent in 2020.

Disaggregation of this data suggests the validity of a central concern in the literature on financialization about the hollowing out of business enterprises, both nonfinancial and financial. Figure 15 displays the value of dividends, taxes paid, and retained profits as a percent of average annual assets for the US financial sector from 1929-2020. The largest variance is the substantial increase of dividends paid. After a sharp decline during the early 1930s, the value of dividends paid increases, first gradually from around 0.2-1.5 percent until the dot.com crisis in 2000, then peaking at 1.8 percent of assets in 2013. The indication of hollowing out is the opposite trend for retained profits. Retained profits remain around 0.6 percent until 1979, then decline considerably, to -0.6 and -1.6 in 2000 and 2008. However, alternative explanations of this increase suggest further study of this phenomena is required (Kahle and Stulz, 2020), and that the claims of critical political economy may be overstated.

Figure 15: Financial Sector Profits Disaggregated: Dividends & Taxes Paid, Retained Profits, 1929-2020



Source: NIPAs

In sum, the evidence from financial balance sheets, 27 indicators of bank performance and structure, and the tendency of financial sector profits suggests that the financialization of US banking did indeed occur during the decades before the financial crisis of 2007-8. However, thereafter, most of the indicators point in the opposite direction. Instead of a transition to market-based banking as expected by contemporary banking theory and financial intermediation theory (and feared by critical approaches), the opposite ensued. Since 2010, American banks have returned to traditional deposit-taking, loan making, and reserve holding. Before examining how this has changed the politics of monetary policy, a look at the evidence from the nonfinancial business sector is in order.

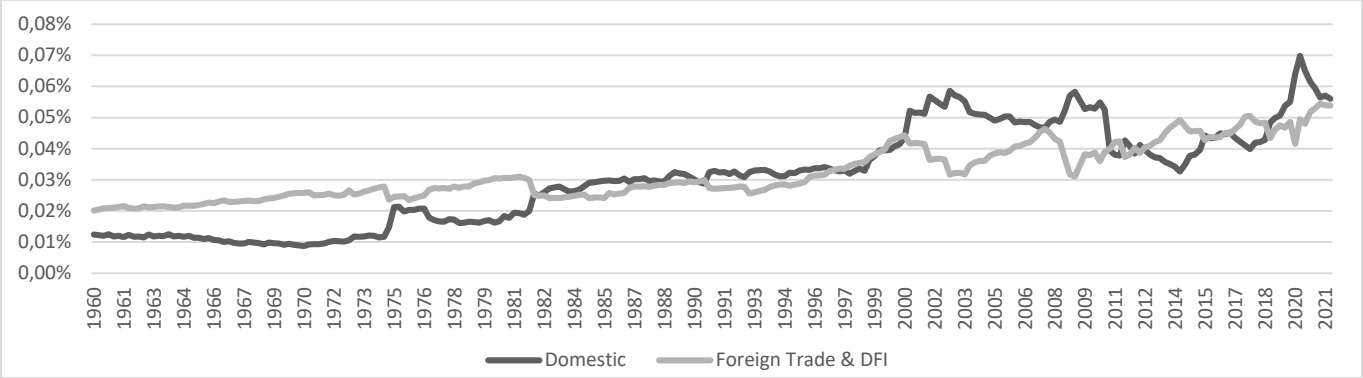
Nonfinancial Business

A central claim in the literature on financialization is that nonfinancial business enterprises have become financialized (Butzbach, 2022). This section exploits the historical statistics on nonfinancial business in the US to present two arguments. First, the official data sources in the US NIPAs (1929-2021), Federal Reserve Z1 Reports (1945-2021), and IMAs (1960-2021) split the data on US business into two categories, noncorporate and corporate. This permits statistical control provides an alternative model for nonfinancial business. Proprietary businesses are found to be far less financialized.

The second argument is that the internationalization of American business since 1945 leads to the overestimation of financialization. In the NIPAs, Federal Reserve Z1 Reports, and the IMAs, the foreign operations and holdings of American business enterprises are, by definition, *entirely financial* and classified as part of relations between the US and the rest of the world. This means that the foreign operations of US corporations explain roughly one half of the increase in the value of financial claims reported by nonfinancial corporations from 1945-2021 (see Figure 16). The increase in the value of financial claims held by US businesses abroad does not imply a switch from nonfinancial assets to financial claims. Instead, this occurs due to the lack of data (and far different legal status) of nonfinancial assets held abroad.

Another observation about Figure 16 is in order. The vertical axis reports the value of foreign and domestic financial claims of US corporations in increments of *tenths of a percent* of US GDP. Compared to the fifteen-fold levels of GDP reported in Figure 1, and the far larger shares of financial claims held by American households and financial institutions reported in Figure 2, the financialization of nonfinancial business in the US seems far less important. Indeed, the centrality of nonfinancial business in debates about financialization is another example of private sector bias in economic and political analysis.

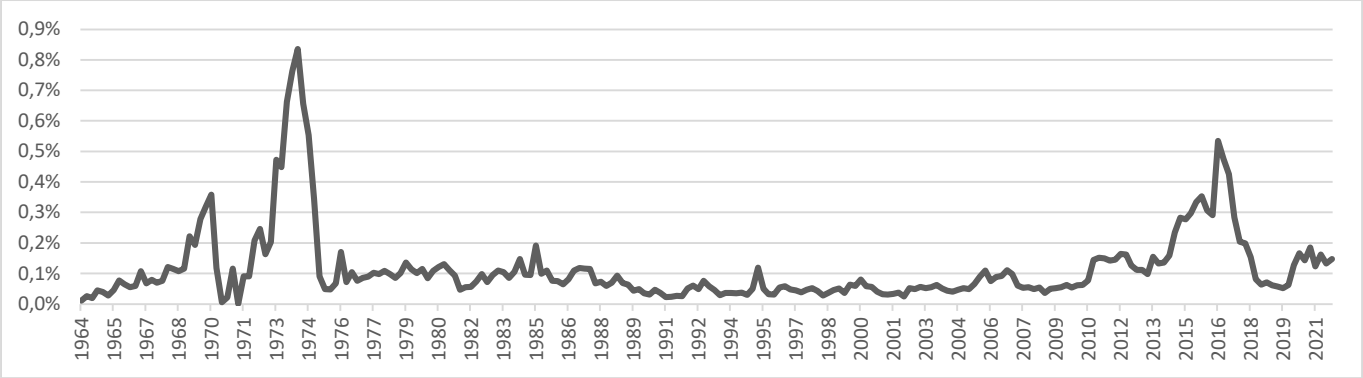
Figure 16: Domestic and Foreign Financial Claims of Corporate (nonfinancial) Business, % US GDP 1960-2021



Source: IMAs, Table S.5.q Nonfinancial Corporate Business

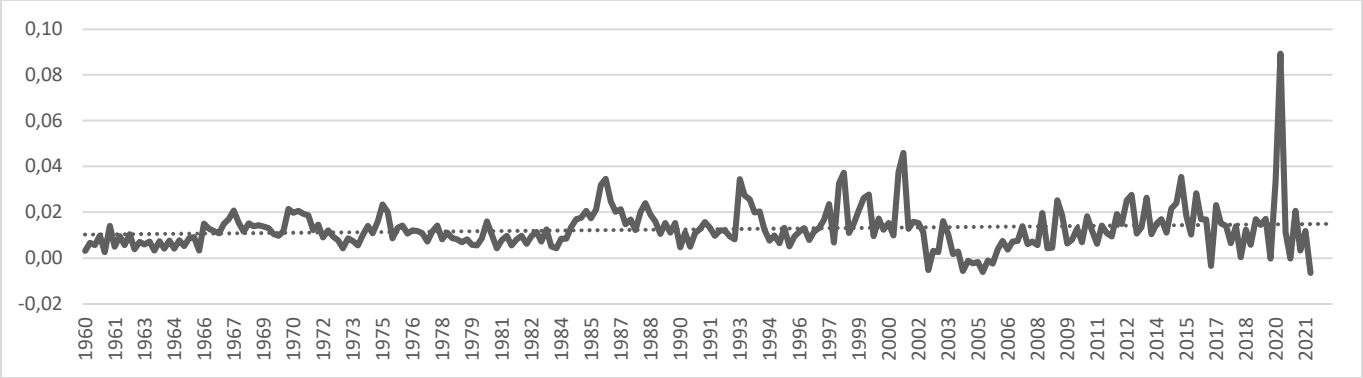
Two specific claims about the financialization of nonfinancial business in the US merit attention (Braun, 2020; Evans, 2016). The first is that stock buybacks increased substantially as part of financialization since 1980. Increasing the number of observations back in time suggests two anomalies here. The first is that corporate stock buybacks, as a percent of US GDP from 1964-2021 present three peaks (See Figure 17). The first peak occurred in 1970, the second peak in 1974, and the third peak, in 2016, involved less than half the value reported for 1974.

Figure 17: Corporate Stock Buybacks as Percent GDP, 1964-2021



Source: Z1 from St Louis Federal Reserve Statistics.

Figure 18: Net Corporate Bond Issues, percent GDP 1960-2021

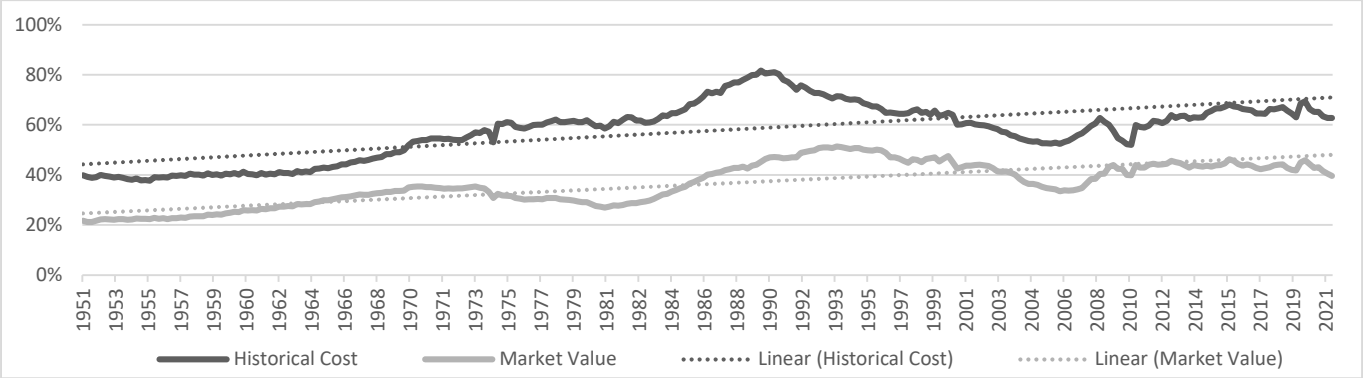


Source: BEA IMAs

A second, related claim about financialization is that stock buybacks have reduced the net issue of corporate bonds traditionally used to finance business (Figure 18). The data suggest a more complex picture. Comparing the periods before and after the financial crisis of 2007-8 suggests substantial volatility, and declines during the years before the crisis. The volatility before 1980 is clearly lower. And the negative values are of interest, However, the outlier of 0.09 percent of US GDP in 2020, and the upward trend to 2016, counsel against strong claims that net corporate bond issues have declined due to financialization.

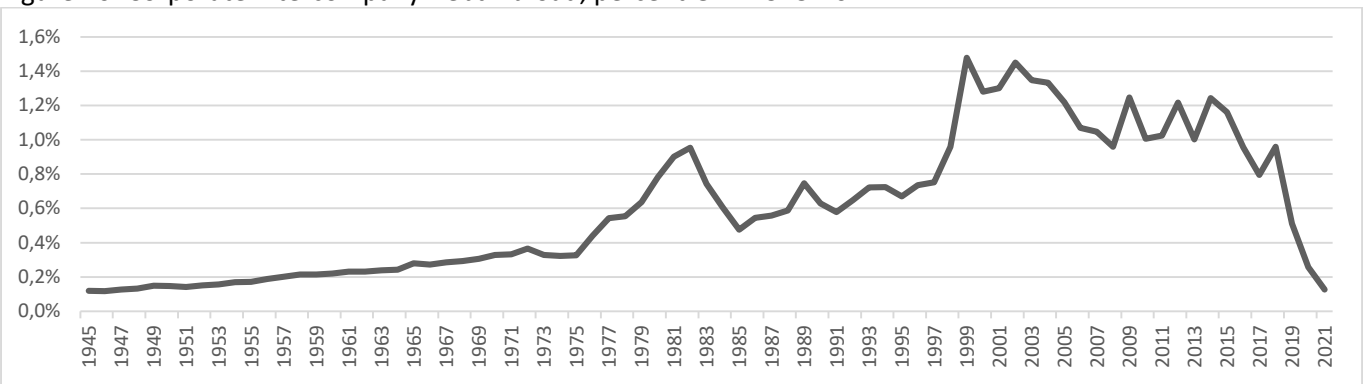
A third comparison also tempers claims about the financialization of business. Figure 19 displays the value of corporate debt as a percent of the value of firms from 1951-2021 according to two measures, first as measured in terms of historical cost and, second, as measured in terms of market value. From this perspective, financialization may be seen as the gap between the two measures. This gap increases from 1951-1990 (and upticks after 1980), but not thereafter.

Figure 19: Corporate Debt as Percent Historical Cost and Market Value of Firms, 1951-2021



Source: St Louis Federal Reserve Statistics.

Figure 20: Corporate Intercompany Debt Abroad, percent GDP 1945-2021



Source: St Louis Federal Reserve Statistics. Note: Nonfinancial Corporate Business; U.S. Direct Investment Abroad: Intercompany Debt (Market Value), Level, Millions of Dollars, Annual, Not Seasonally Adjusted

Finally, the use of foreign affiliates by American corporations to avoid taxes through intercompany debt transactions abroad is a central concern about financialization. Figure 20 displays the value of American intercompany debt abroad from 1945-2021. Like many of the indicators explored in this paper, the trend changes, here since 2000 and, especially, since 2018.

In sum, the evidence from the US runs counter to strong claims about the financialization of nonfinancial business. Moreover, the bias toward shareholding corporations in critical political economy and studies of financialization downplays the importance of an alternative paradigm; proprietary businesses that remain off stock markets. And the absence of data on the nonfinancial assets of American businesses abroad overestimates financialization. Furthermore, many of the trends emphasized in studies of critical political economy and financialization either disappear during the 2010s or run in the very opposite direction. Finally, the number of dollars on the financial balance sheets of nonfinancial corporations may seem large. However, if considered proportionally, the small shares and low variance in this data (taken as a percent of US GDP or in comparison to the balance sheets of households and the financial sector), imply that selection bias compromises strong claims about the financialization of American business. Unfortunately, the bias toward the shareholding model of corporate business also seems to skew attempts to understand financialization in critical political economy.

Monetary Authority

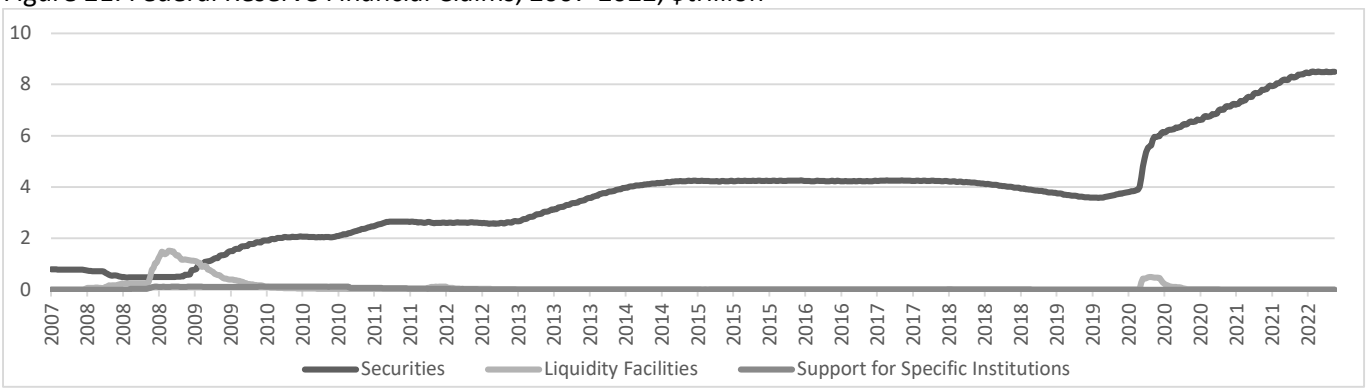
Contrary to the centralization of monetary authority in economic theory, European history, and in central banks abroad, the separationism and federalism of American political development shaped many competing agencies and branches and levels of government that share responsibility for monetary policy. Since the classic works of Alexis de Tocqueville, James Bryce, and Max Weber, the paradigms of American political science have improved understanding of the different path of American political development involving the separation of powers, federalism, and the critical elections (Key, 1955) and party realignments (Burnham, 1970) that periodically expanded the scope of conflict (Schattschneider, 1960) and redefined the parameters for public policy. The critical junctures of monetary authority in the US follow this periodization precisely: In the populist turn of Andrew Jackson against national banking in 1832; in the Bank Act and creation of the OCC amid Civil War in 1863; in the elite, reformist, regional, and private-bank design of the Federal Reserve in 1913; and in the Glass-Steagall Act, the FDIC, and other initiatives as part of the New Deal, many that remain in place until today (Hoffman, 2001).

From this perspective, the centralization and financialization of monetary policy since the late 1970s is an anomaly at odds with the core principles of American politics. The reregulation of banking and finance during the 2010s is beyond the scope of this paper (Mettenheim, 2022: 211-38). However, two phenomena reinforced the centralization and financialization of monetary policy in the US after the financial crisis of 2007-8: A turn to quantitative easing at near zero interest rates and the massive, direct, discretionary central government support for a select number of bank conglomerates. This appears to have produced, once again, widespread political opposition to the excessive power of big government and big banks.

Contrary to the note-issuing, flagship national banks of monarchies (and centralized republics) in Europe (and in Colonial and early America until 1832), policies of free banking and paper money in the US during the 19th century devolved authority to state governments and free market ideologies. Three national banks did indeed shape the periods of independence and early state building. However, the closing of the First National Bank of the US by Andrew Jackson in 1832 reduced the power of Bank President Nicholas Biddle and devolved monetary authority to the states. Decades later, the worst of times enabled Abraham Lincoln to pass the 1863 Bank Act and create the OCC, the first federal regulatory agency for the sector. Decades later, the Federal Reserve system was elaborated in response to the 1907 financial crisis and embodied the elite-centered reformism of the third American party system of 1896-1932. The critical election of 1932 and the party realignments of the New Deal produced a regulatory framework left largely in place through the 1970s. From the 1950s through the 1980s, a series of incremental improvements expanded the regulatory capacity of what came to be 13 federal government agencies responsible for monetary policy.[16] This proceeded alongside both the gradual liberalization of banking and credit markets, as well as two fundamental changes in 1979 emphasized in theories of financialization; the turn to monetarism and the rise of neo-conservatism (Krippner, 2011; 2005; Dúmenil and Lévi, 2004).

[16] For example, in 1959 Call Reports expanded bank reporting requirements, in 1966 data on bank branch offices and other operations improved, in 1968 the Truth in Lending Act improved loan contract transparency, as did the 1975 Home Mortgage Disclosure Act. In 1977 Community Reinvestment Act sought to redress redlining, while the 1984 Uniform Bank Performance Reports expanded Call Reports data from banks and financial institutions.

Figure 21: Federal Reserve Financial Claims, 2007-2022, $trillion

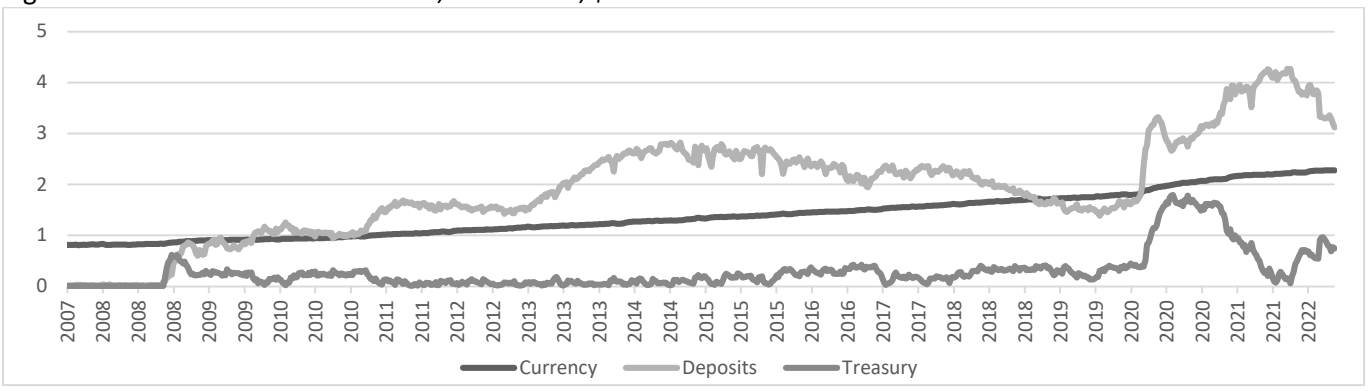


Source: Federal Reserve, Factors Affecting Reserve Balances. Available on: https://www.federalreserve.gov/monetarypolicy/bst_recenttrends_accessible.htm

The point here is that the centralization and financialization of monetary policy in the US run counter to the fundamental principles of American political economy and development: of free markets, of the separation of powers and federalism, and of the original intent and design of the Federal Reserve System. The data suggest three periods of expansion in Federal Reserve balance sheets since 2007. Figure 21 displays the principal financial claims of the Federal Reserve from 2007-22. Figure 22 displays the principal liabilities.

The first increase in Fed balance sheets was sudden, during 2008, as the Fed supported banks during the financial crisis. The second increase, during the 2010s, was more gradual and is described, at the Fed, as a process of quantitative easing followed by the pursuit of policy normalization (the liquidation of assets acquired from banks). The third increase in financial claims at the Fed occurred because of massive policy responses to the economic shocks of the Covid 19 pandemic. Federal Reserve balance sheets thereby *thrice* doubled in size, first from near one to over two trillion dollars from 2007-2010; then from two to over four trillion dollars during the 2010s, then from near four to over eight trillion dollars from 2020-22. The trajectory of Federal Reserve liabilities is similar, increasing from one to two trillion dollars, two to four trillion, and four to near seven trillion dollars (See Figure 22).

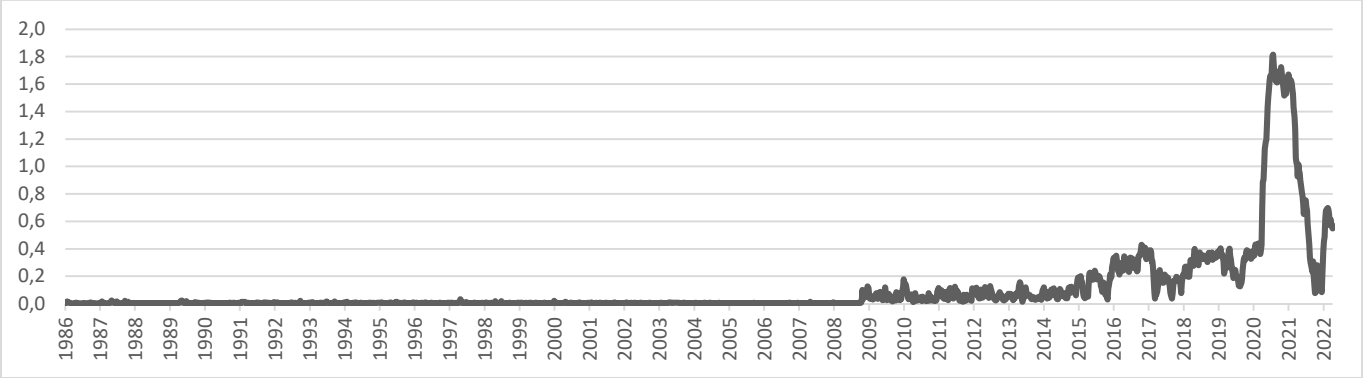
Figure 22: Federal Reserve Liabilities, 2007-2022, $trillion



Source: Federal Reserve, Factors Affecting Reserve Balances. Available on: https://www.federalreserve.gov/monetarypolicy/bst_recenttrends_accessible.htm

In sum, liberalization of banking and finance in the US since the 1970s produced not only excessive industrial concentration, but also the non-liberal reality of massive central government support to a select number of banks and financial firms. Moreover, policies during the Covid 19 pandemic involved direct, discretionary funds from the US Treasury General Account (See Figure 23). Unlike the emergency bailouts through dedicated entities during the 2007-2008 financial crisis, and unlike the use of repurchase agreements to reduce Fed support for banks during the latter 2010s, the direct, discretionary support of banks by the FOMC with funds from the Treasury General Account was a novelty. Moreover, third party repurchase agreements were used to unwind this direct support. These policies run diametrically opposite to American political traditions, the regional bank-credit channels traditionally used by the Federal Reserve, and end the illusion that monetary policy may manage the economy with a light touch.

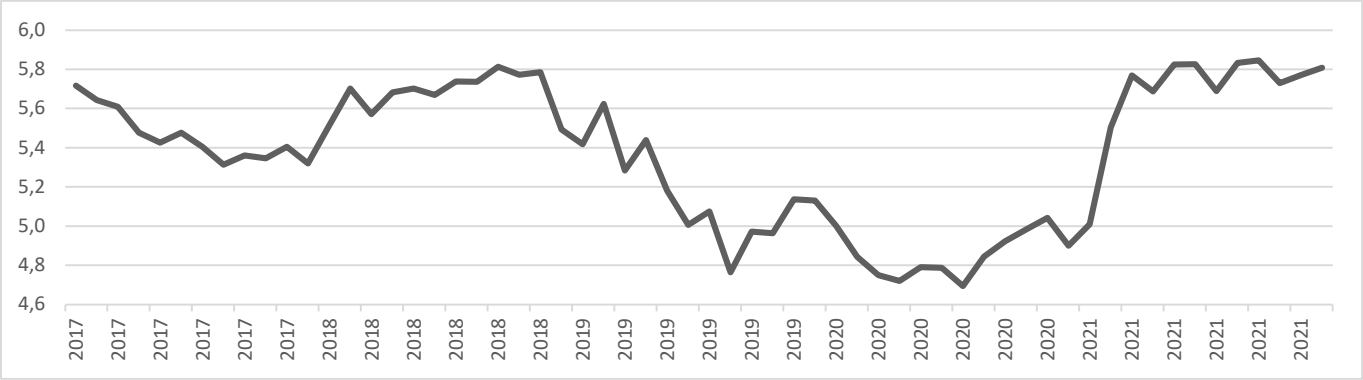
Figure 23: US Federal Reserve Liabilities to US Treasury General Account, 1986-2022



Source: St Louis Fed Statistics. Deposits with F.R. Banks, Other Than Reserve Balances: U.S. Treasury, General Account: Week Average, Billions of U.S. Dollars, Weekly, Not Seasonally Adjusted

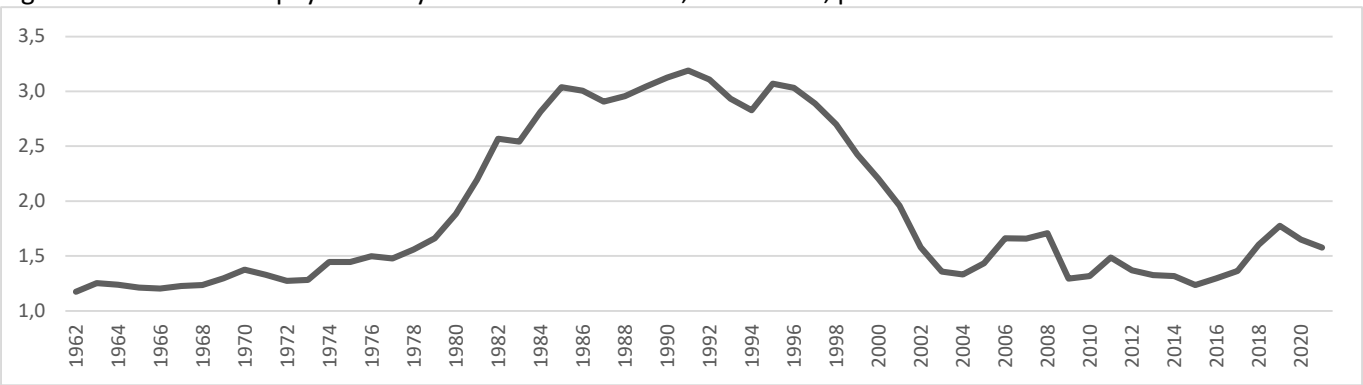
Although the number of dollars on Federal Reserve balance sheets are very large, the deep markets and very low interest rates for US public debt makes these policies far less intrusive than one may suppose. Figure 24 displays the average length of outstanding securities traded on the Federal Reserve System Open Market Account (SOMA) holdings of domestic securities. The average length of outstanding securities decreased from 5.8-4.7 years, starting in early 2019 and bottoming in July 2020. Thereafter, the average length of outstanding securities returned to the pre-2019 levels at around 5.8 years. This indicates a substantial comparative advantage for public policy based on the global flight to safety that accompanies shocks and crises, irrespective of their origin. Combined with the political phenomena of enabling constraints that increase policy space during crises (Gourevitch, 1982), these policies suggest the existence of powerful, effective, and efficient strategies for American policy makers. However, zero interest rates also imply that moral hazard (GAO, 2014), adverse selection of social sectors and classes, and a variety of new themes emerge relevant to political analysis.

Figure 24: Average Length of Securities Outstanding at Federal Reserve SOMA , 2017-2021, n years



Source: Federal Reserve System Open Market Account (SOMA)

Figure 25: Net interest payments by Federal Government, 1962-2021, percent GDP



Source: Congressional Budget Office (2022). *The Budget and Economic Outlook: 2022 to 2032.* Supplement

This comparative advantage enjoyed by the US government may also be seen in the declining cost of interest payments. Figure 25 displays the net interest payments of the federal government as a percent of GDP from 1962-2021. The increase from below 1.5 percent through most of the 1970s to around three percent until 1996 is consistent with the basic theses of financialization. However, the substantial decline of net interest payments thereafter, and the apparent recovery in 2020-21, despite the economic fallout of the Covid 19 pandemic, corroborates the powerful comparative advantage of American monetary policy. It also indicates the challenges for political scientists to reconsider the implications of the channels of monetary authority.

Although these latter trends are recent, the evidence from the balance sheets and income and production accounts of the government sector in the US suggest both an extreme centralization and financialization of monetary policy. This is consistent with the financialization literature. However, the back to the future turn to private bank deposits at the 12 Regional Federal Reserve Banks indicate change in a reverse direction. Instead of centralizing policy in the FOMC and financial markets, the traditional bank credit channel became, since 2017, equally important. A return to government income policies is another trend away from the monetary policy channels of financialization.

Conclusion

The original methodological insight of financial balance sheet studies was to "fill in the equation of exchange from empirically derived data." (Reifler, 1952: ix). However, given the large number and intrinsic duality of variables that measure financial claims and liabilities, cross sectional statistical analysis of sectoral and national matrices soon becomes forbiddingly complex. A historical institutional approach provides two advantages. The first is to increase the number of observations back in time. The second advantage is less obvious. The historical statistics from official US sources permit, unexpectedly, the recovery of the meanings and measures of modern political economy for savings, banking, finance, and money. This reveals unexpected common ground between transaction cost economics, that emphasizes market failures, and the Polanyian tradition of critical political economy, that emphasizes social reactions of self-defense against commodification. From this historical institutional perspective, the balance sheets of banks and financial institutions represent a gradual process of accumulation, one deposit, one loan, and one investment at a time. The key to the historical-institutional analysis of balance sheet data is to follow, not the money, but the financial claims and related liabilities back in time. Instead of aggregating money to reduce mathematical equations or focusing on the social use or economic circulation of money, this implies a critical political genealogy of the production of money.[17]

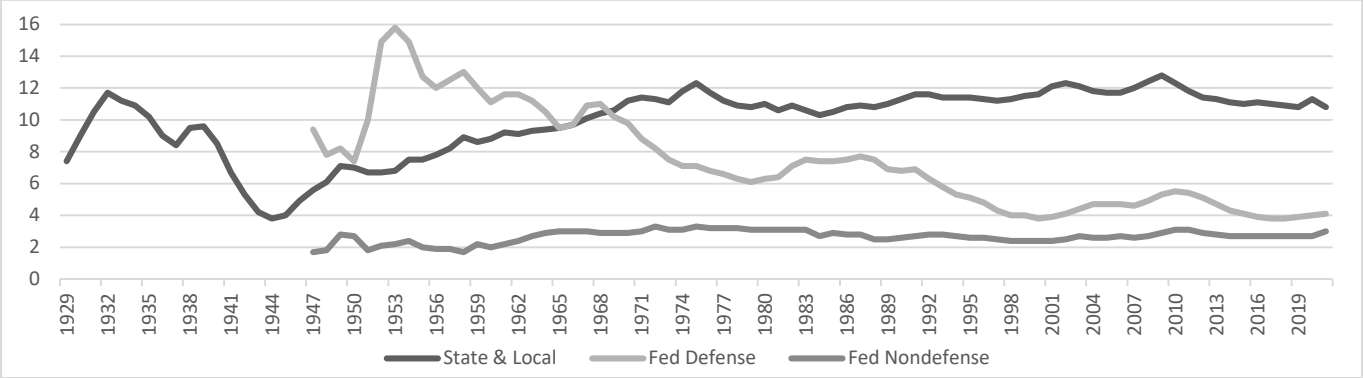
The massive literatures and remarkable data from the US make the breadth of this approach possible. American political development studies have become a well-established subdiscipline of political science (Orren and Skowronek, 2004; Skowronek, 1982). American political economy is a more recent innovation (Hacker et al, 2022; Soskice, 2010). Both approaches reject the use of economic theory to explain political phenomena. Here too. However, here the strategy is more overtly the reverse: To use the historical institutional methods of political science to understand phenomena normally considered as strictly economic.

In this respect, several observations are in order about the implications of the findings presented herein for the new subfield of American Political Economy and the now traditional subfield of American Political Development. First, *centralization*, as a phenomenon of administrative authority, political power, and economic policy in the US is a core concern in both subfields, and indeed many others (Carpenter and Whittington, 2003; Mettenheim, 1997). However, with all due respect, research in American political economy and development tends to emphasize the virtues of centralization in ways that are not entirely consistent with central ideas in American political thought (Lowi, 1979).

Moreover, the empirical evidence also points in the other direction. A historical-institutional view of NIPAs data suggests a *decline* of central government and the rise of state and local government since 1945 (see Figure 27). Unfortunately, the bias toward centralization that obtains in the economic approaches discussed in this paper appear to be shared in studies of American political development and political economy. This runs counter to a profound skepticism in American political and economic thought about the virtues of centralization, especially in terms of finance and banking and government. The aversion to big banks and big government is almost universal in American political science and, indeed, public opinion.

[17] The author thanks Mindey Peden for this observation.

Figure 27: Federal vs State & Local Government percent shares of US GDP, 1929-2021



Source: St Louis Federal Reserve Statistics. Note: Lines = Shares of gross domestic product: Government consumption expenditures and gross investment: State and local, Federal Defense, Federal Nondefense. Percent. Annual.

A second observation arises here: That turning to the field of comparative political economy for new perspectives on the American economy risks trading the problems of one paradigm (economics) for another (European development). Unfortunately, comparative political economy remains very Eurocentric. The risk posed by viewing the US through European lenses is somewhat ironic because American political science developed, in large part, by overcoming the misplaced ideas from Europe about politics in the New World. In terms of political economy and economic policy, it remains true, for good or bad, that small- and mid-size states do indeed *coordinate* better than larger, more complex, and more contested polities such as the US. However, American political science (like the country itself), developed, in large part, as a rejection of centralizing paradigms from Europe: of parliamentary government, of well-organized programmatic parties, and of central government coordination of labor, capital, and society through well-established hierarchies.

Studies in American political development studies do not escape this irony. Despite the origins of the American Political Science Association in a split from studies of administration, and the long line of skeptics in the US about reformism and centralization, the field of American political development nonetheless shares, to an important extent, an underlying assumption that is antagonistic with critical, populist, Madisonian, and many other American traditions of political and economic thought. This underlying assumption is that the centralization of administrative authority in American history represented progress toward more effective governance. This difference between studies in American political development and the traditions of the separation of powers, federalism, and decentralization that values local government and voluntary associations requires further consideration. Especially because recent claims about the common ground between comparative political economy and American political development studies seems, with all due respect, to also ignore this problem.

A third observation that may be drawn from this paper is that theories of American political development seem particularly unable to explain reversals. Although critical perspectives within the field have indeed focused on processes of exclusion in the past, the rise of inequality and recent reversals of democracy have become so pervasive and so widespread, both within the US and abroad, that reconsideration of some of the more naïve ideas about American exceptionalism and development seem warranted. This is not the place to return to the scholarship on the breakdown of democratic regimes in the past (Linz and Stepan, 1978). However, the powerful liberal bias in America, that tends to believe that “all good things go together” (Hartz, 1955), suggests that, once again, core concepts about the autonomy of politics and the causal processes of regime change (largely elaborated by studies of foreign countries), also requires reincorporation into studies of American political development.

This leads to a fourth observation: That another mainstream literature in comparative politics, that of political development theory, is unexpectedly promising for rethinking the monetary channels of social exclusion and inclusion emphasized in this paper. The literature on political development turned on the autonomy of politics during the sequential inclusion of upper, middle, and lower social classes in historical and comparative perspective. Political reversals, in this sense, involve not just deterioration in the legal and constitutional parameters of democracy, but, also, the exclusion of popular classes from participation in political institutions.

Economics has made remarkable progress in understanding the complexity and variety of monetary channels. However, unfortunately, political scientists have just begun to use the new concepts and measures of money, credit, and policy channels to address these questions, despite the recognition that these channels produce large wealth effects (Ajdacic, 2020; Chwieroth and Walter, 2019; Ahlquist and Ansell, 2017). The technical approaches to independent central banking have failed. The social cost produced by liberalization (that caused

concentration, centralization, and the financialization of banking, finance, and public policy) has proved immense. It is therefore urgent to improve understanding of how democratization, decentralization, and greater political participation may improve central banking. In this respect, the federalist, regional bank centered design of the Federal Reserve presents a unique paradigm, and political opportunity. In comparison, Europeans have surrendered the traditional democratic means of monetary policy (Scharpf, 2011). The regional federal design and bank-centered channels of the Federal Reserve system run counter to the anti-political conceptions of central banking in economics and the even more foreboding centralization experienced abroad.

These are difficult challenges. However, both theory and evidence from the US suggest that a back to the future movement is more than possible – it is underway. In terms of theory, the 1934 constitution of national accounts provides solid grounds to recover the original meanings and measures of classic modern American political economy and the related views of banking. In terms of evidence, the NIPAs, and a vast trove of historical statistics that have not yet been financialized, make it possible to remove the ideological veil of finance that caused, and concealed, financialization in the US. The conceptual stretching of other people´s money to include the wholesale financial claims of banks and financial firms, from this perspective, produced ideologies far worse than even Karl Marx imagined. The veils and wedges of finance have become so pervasive and so performative, that much work will be required. Studies of American political economy and development are uniquely suited to contribute here.

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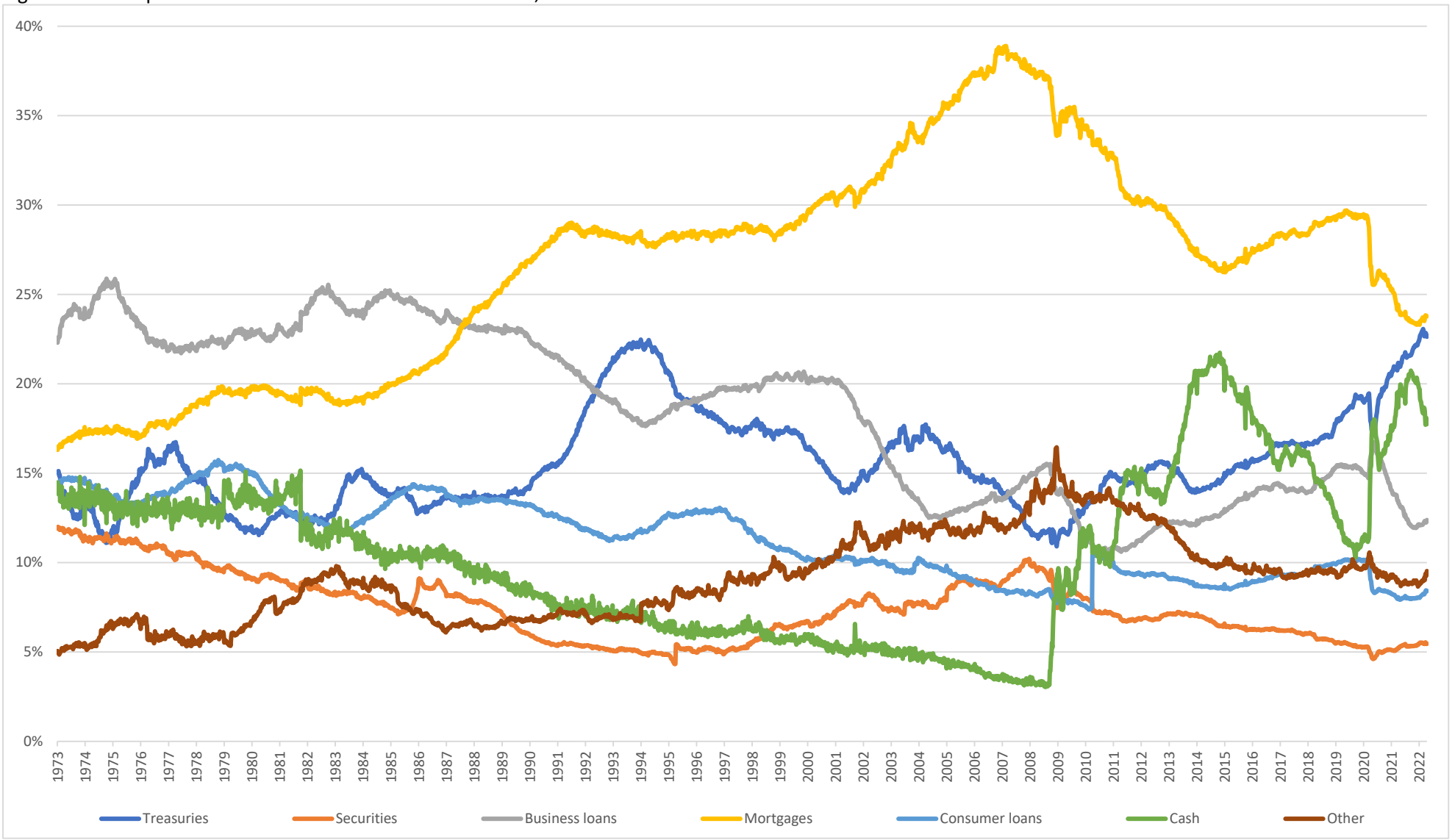
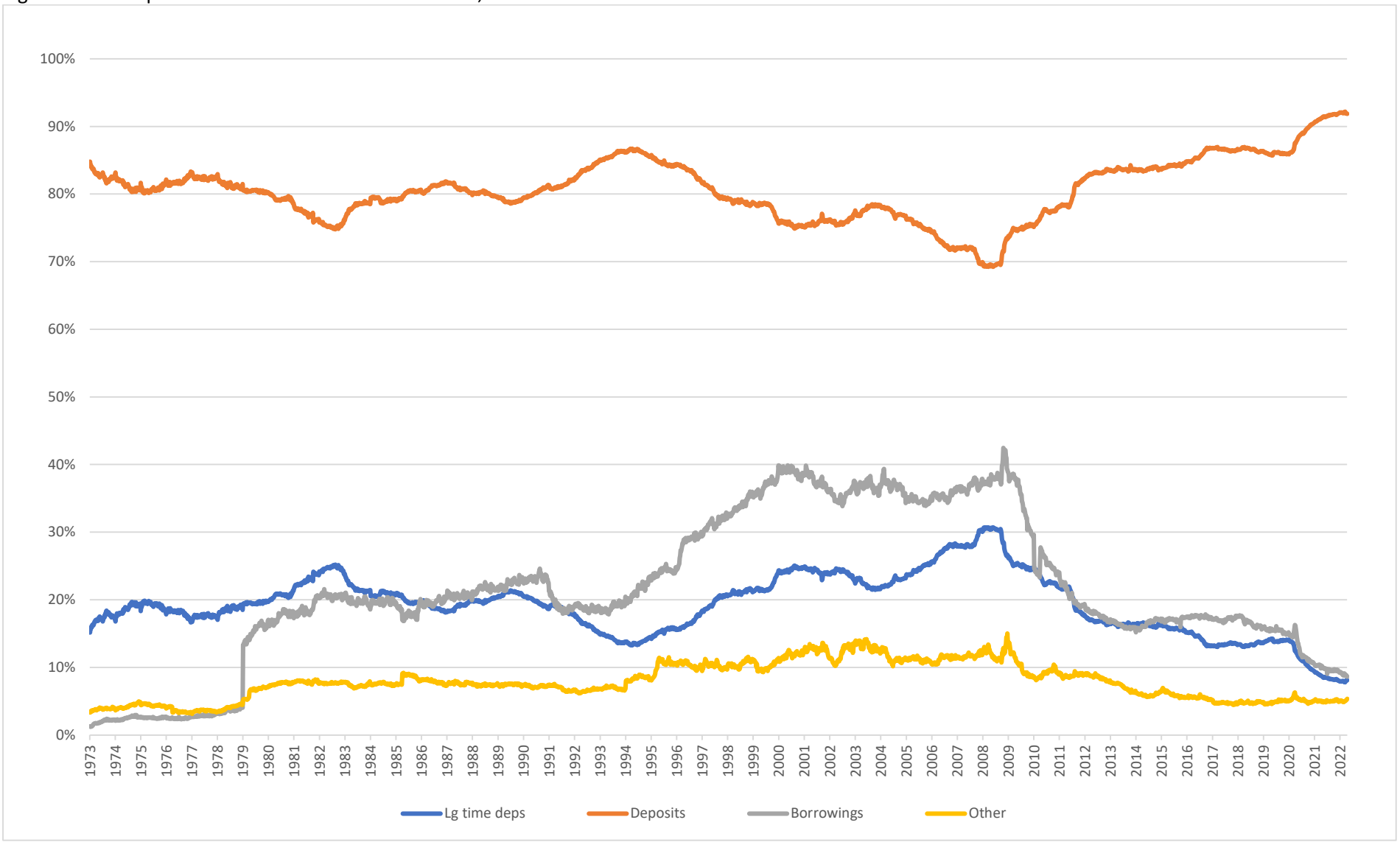
Appendices

Figure A1: Principal Financial Claims of US Commercial Banks, 1973-2022



Source: Federal Reserve, H.8. Assets and Liabilities of US Commercial Banks.

Figure A2: Principal Liabilities of US Commercial Banks, 1973-2022



Source: Federal Reserve, H.8. Assets and Liabilities of US Commercial Banks.

Appendix 3: FDIC Bank Performance and Structure Data, 1984-2021. Source: FDIC Bank Data, ratios by asset size group.

Figure A3.1: US bank assets over 5-year maturity by bank size, 1984-2021

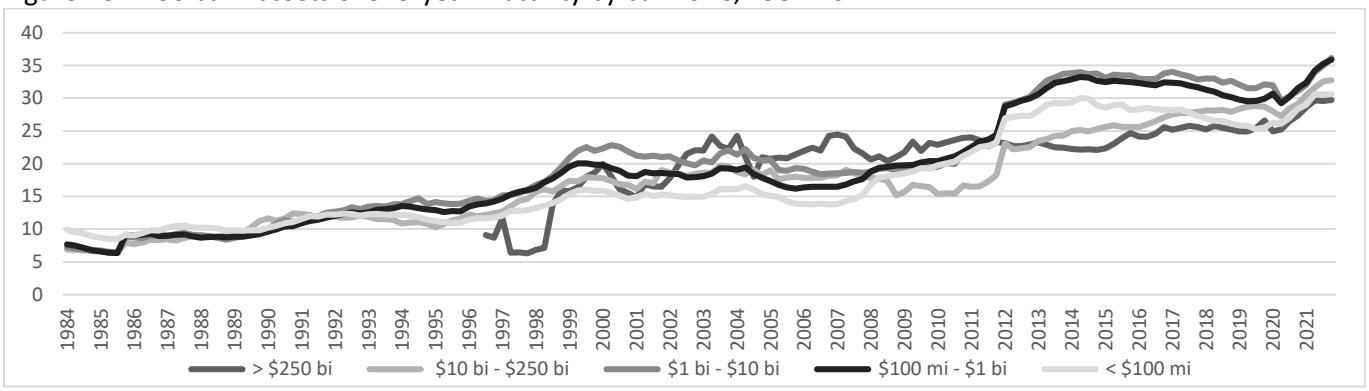


Figure A3.2: US bank core capital by bank size, 1984-2021

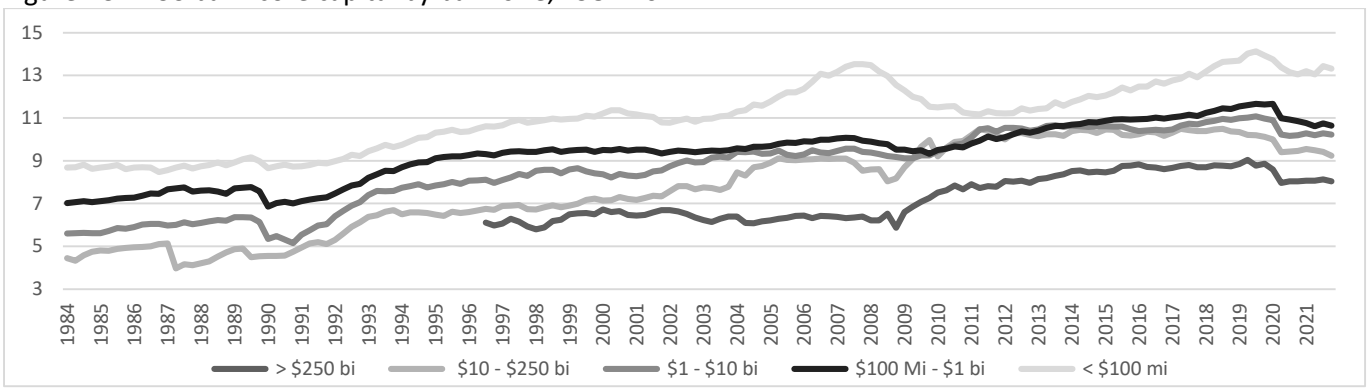


Figure A3.3: US bank cost of funding earning assets, percent, quarterly, 1984-2021

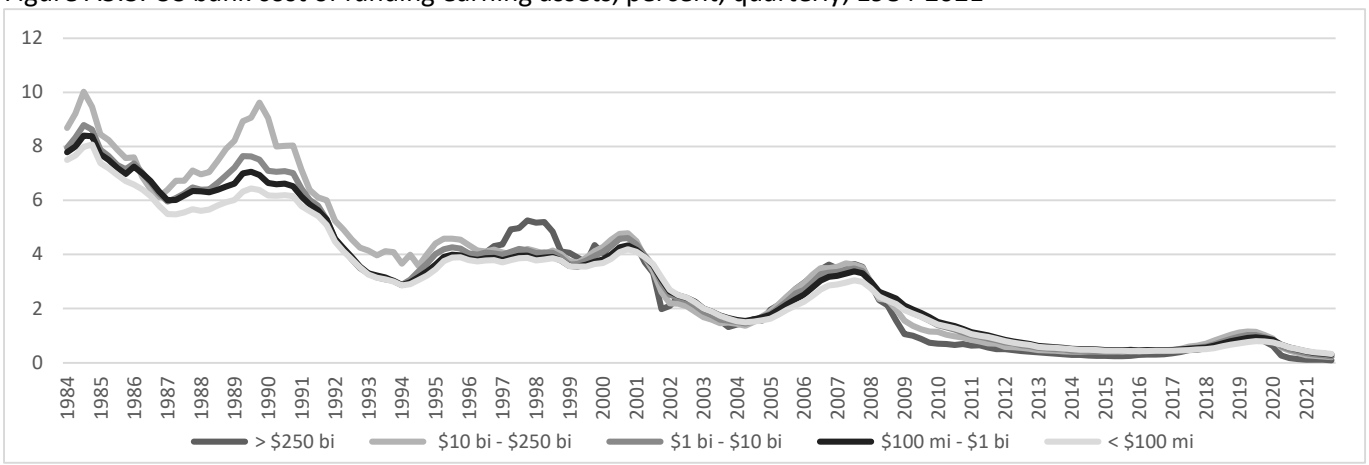


Figure A3.4: US bank loss allowance to noncurrent loans and leases (Coverage Ratio), 1984-2021

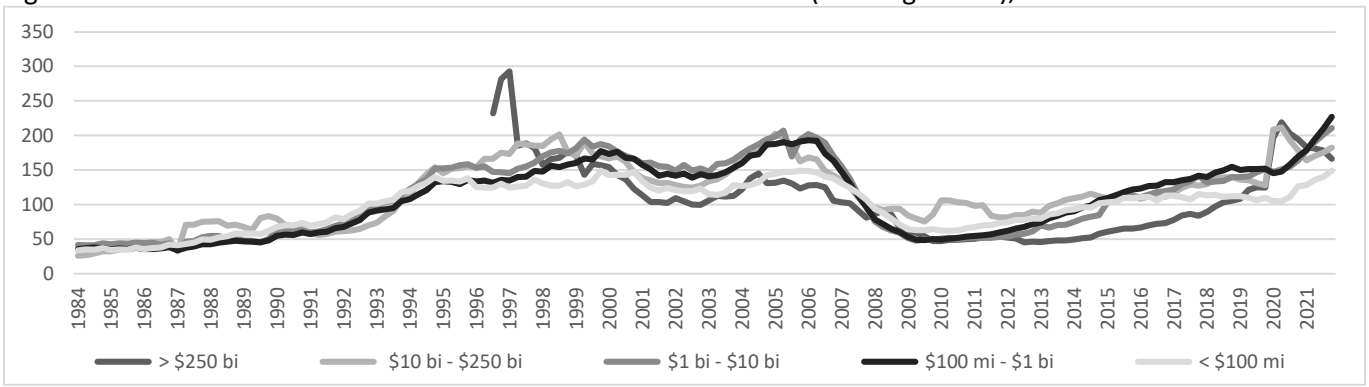


Figure A3.5: US bank deposits as percent total assets, 1984-2021

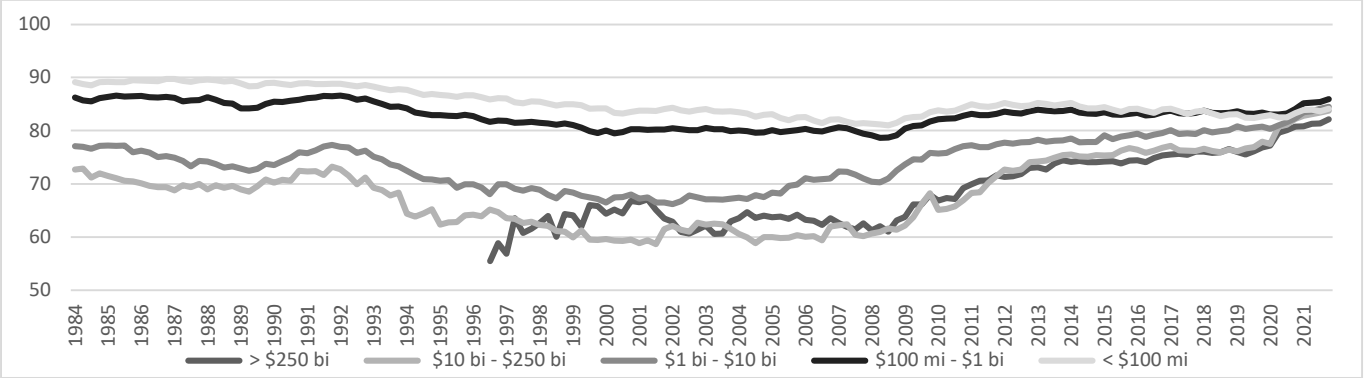


Figure A3.6: US bank efficiency ratio, 1984-2021

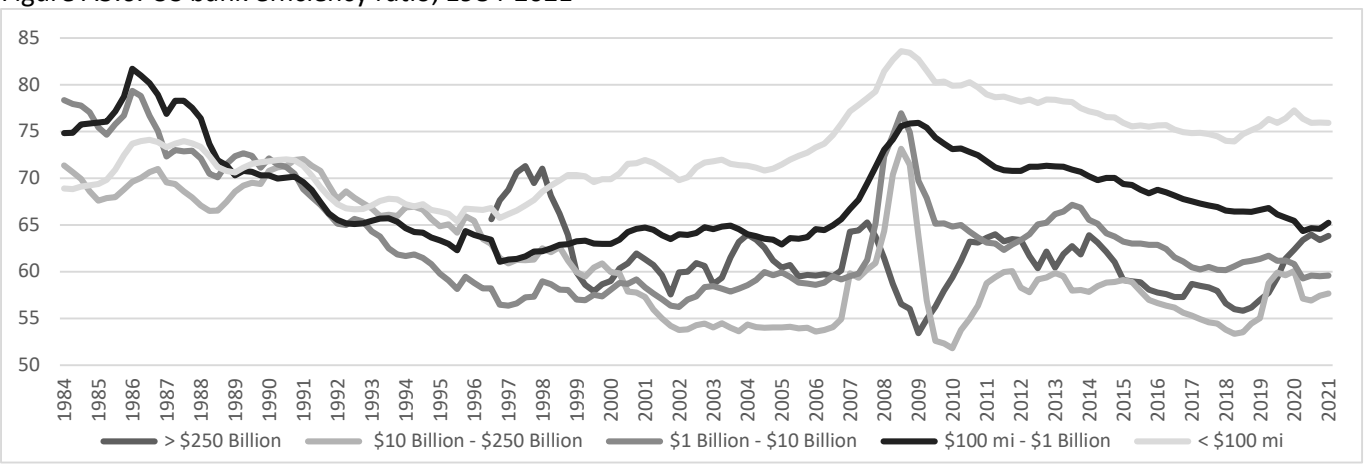


Figure A3.7: US bank equity capital to assets, 1984-2021

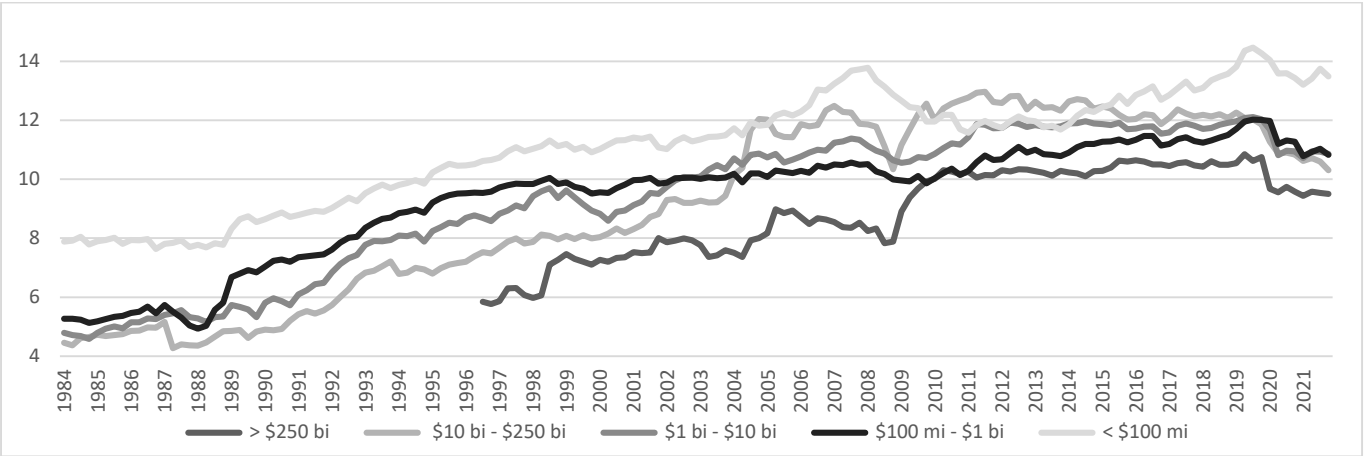


Figure A3.8: US bank quarterly loss provisions, percent of net charge-offs, 1984-2021

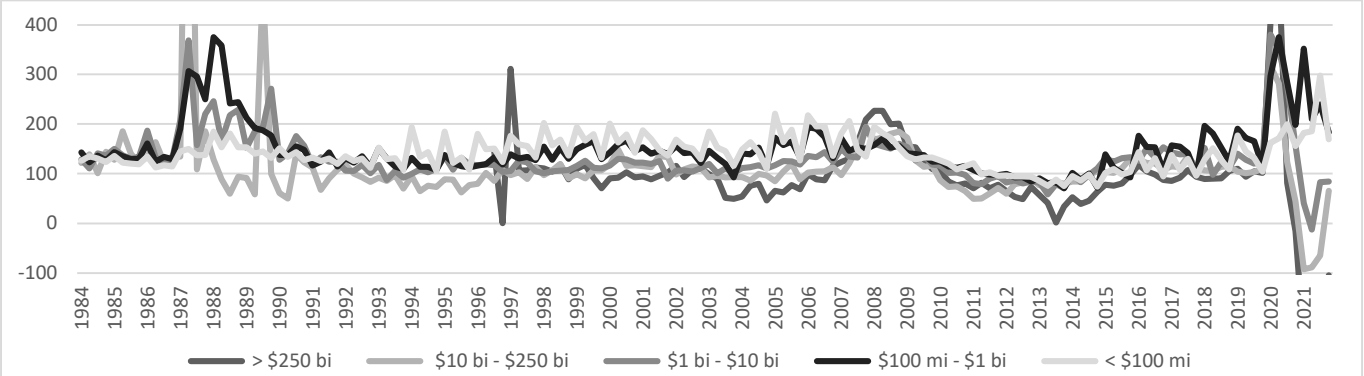


Figure A3.9: US bank percent loans and leases 30-89 days past due, 1984-2021

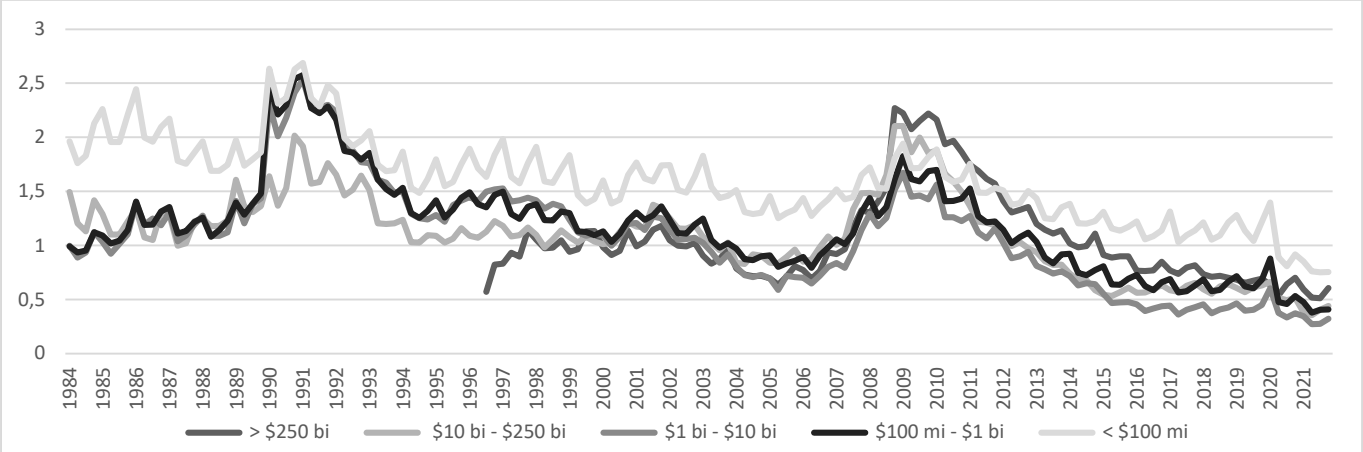


Figure A3.10: US bank loss allowances to total loans and leases, 1984-2021

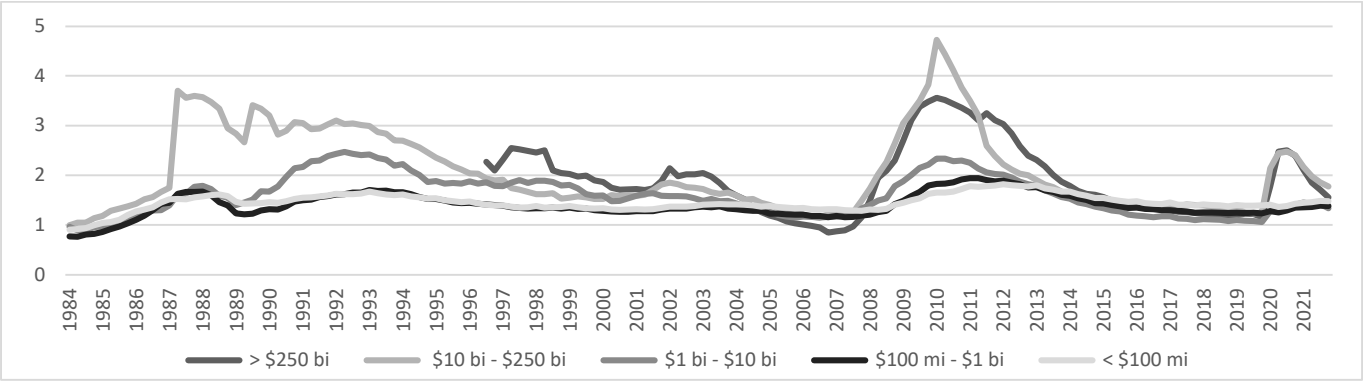


Figure A3.11: US bank loss provision as percent total operating revenue, 1984-2021

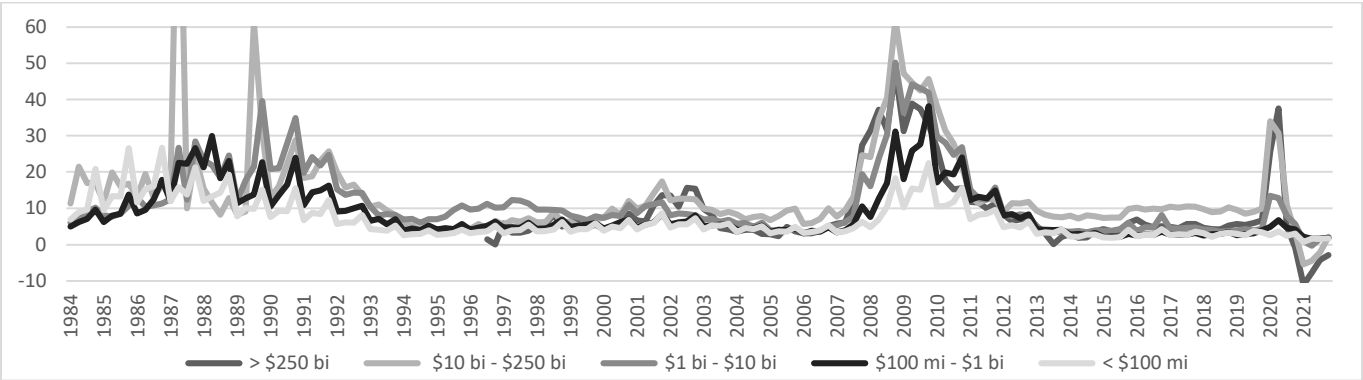


Figure A3.12: US bank net charge offs to total loans and leases, 1984-2021

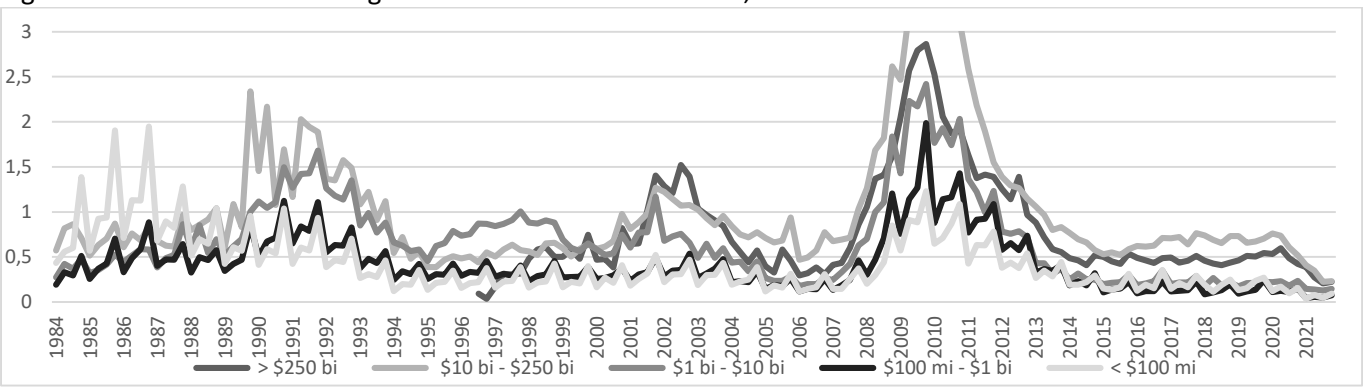


Figure A3.13: US bank net interest margin, 1984-2021

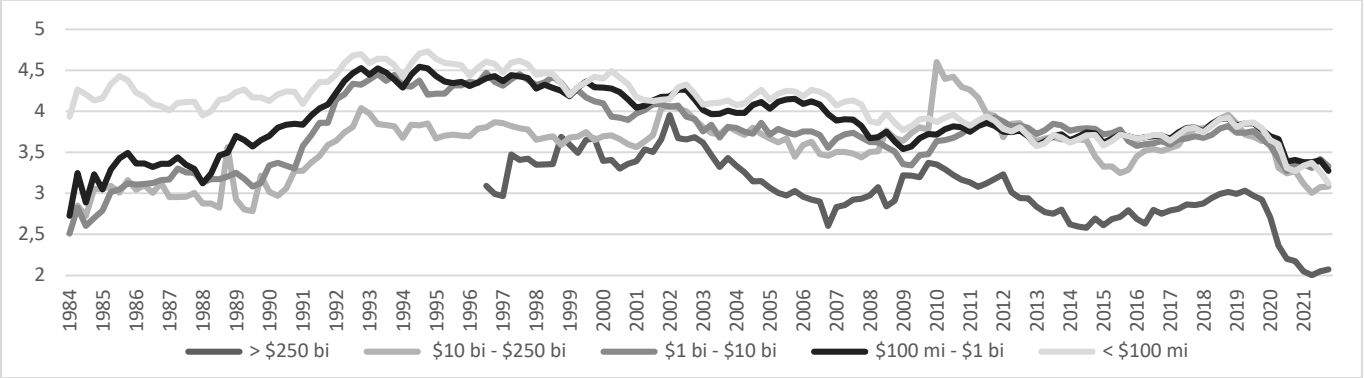


Figure A3.14: US bank net loans and leases as percent of total assets, 1984-2021

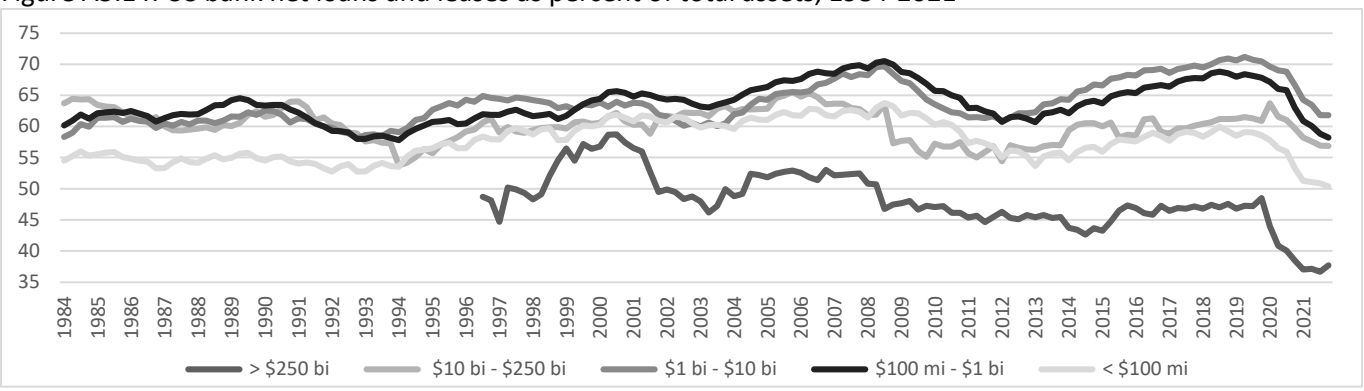


Figure A3.15: US bank net loans and leases as percent of total assets, 1984-2021

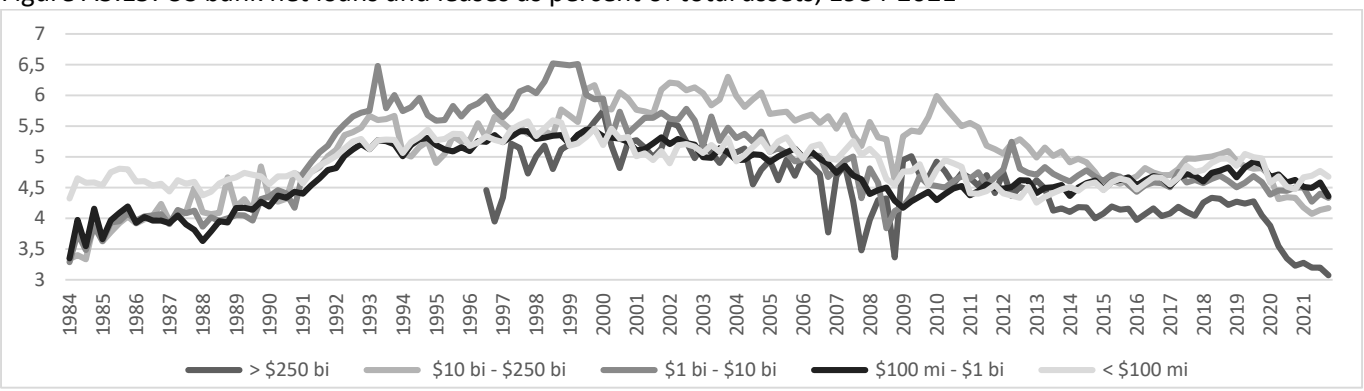
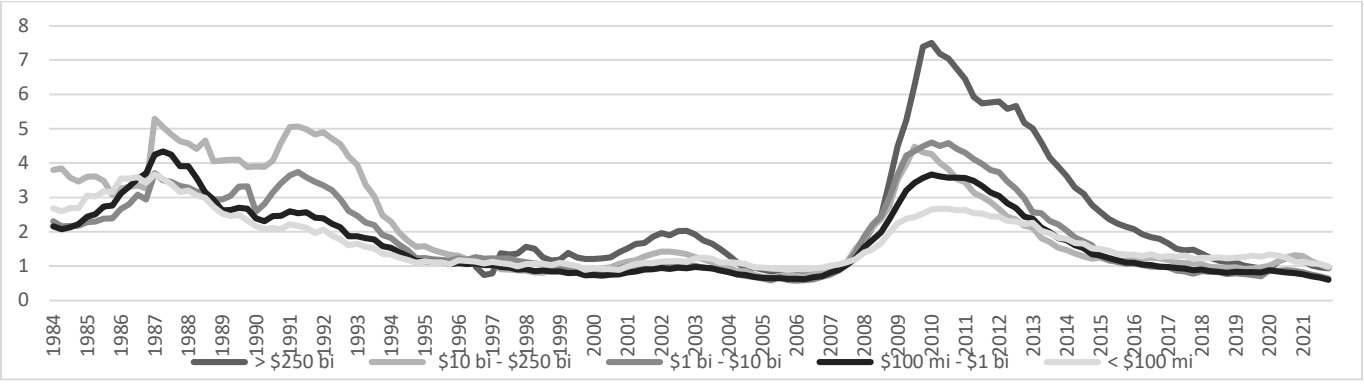


Figure A3.16: US bank percent of noncurrent loans and leases, 1984-2021



Source: FDIC Bank Data, ratios by asset size group.

Figure A3.17: US bank noncurrent loans and leases, percent of Tier 1 Capital plus reserves

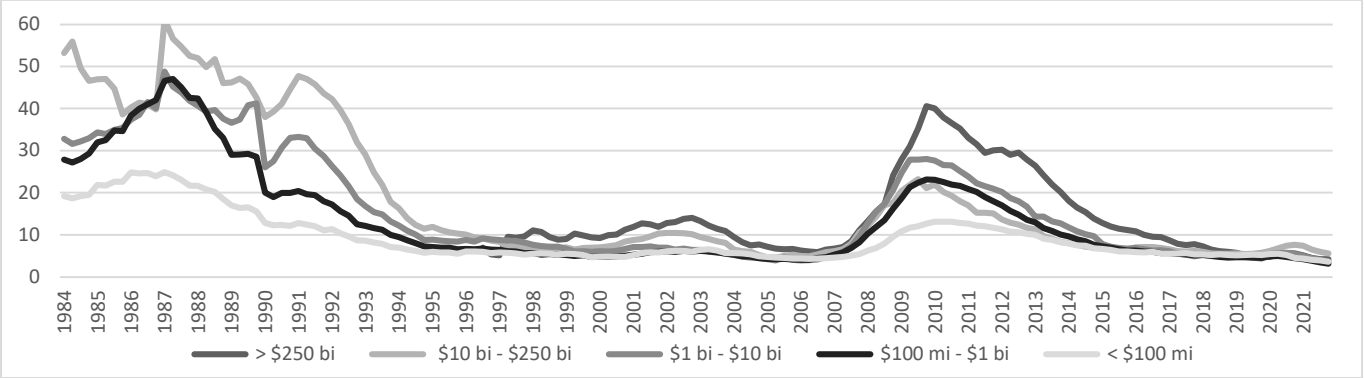


Figure A3.18: US bank noninterest expenses, percent total assets, 1984-2021

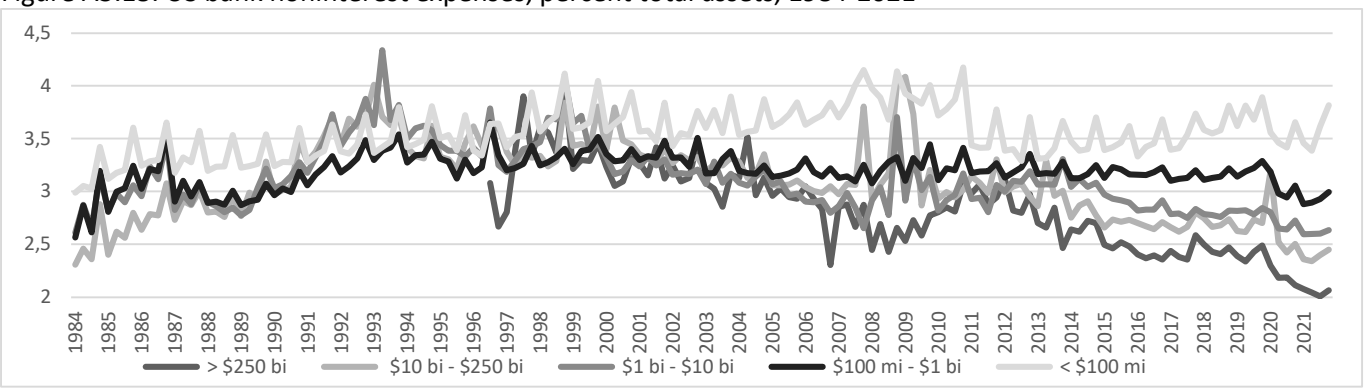


Figure A3.19: US bank noninterest income, percent total assets, 1984-2021

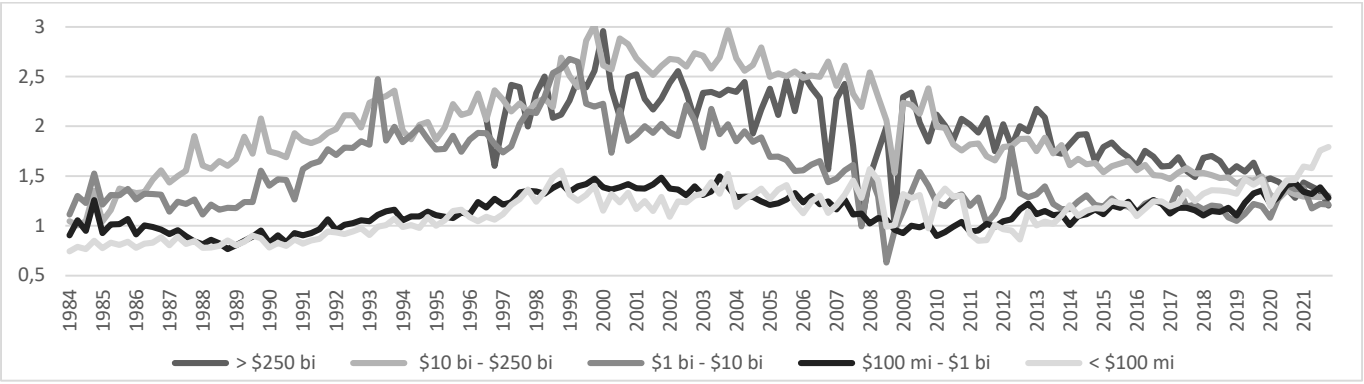


Figure A3.20: Percent of US banks reporting year-on-year income growth, 1984-2021

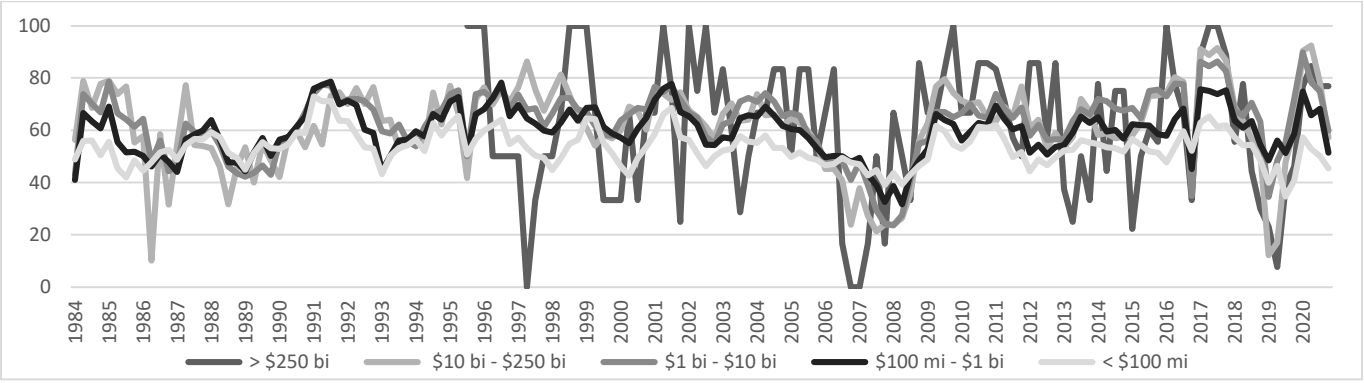


Figure A3.21: Percent of US banks reporting negative quarterly income growth, 1984-2021

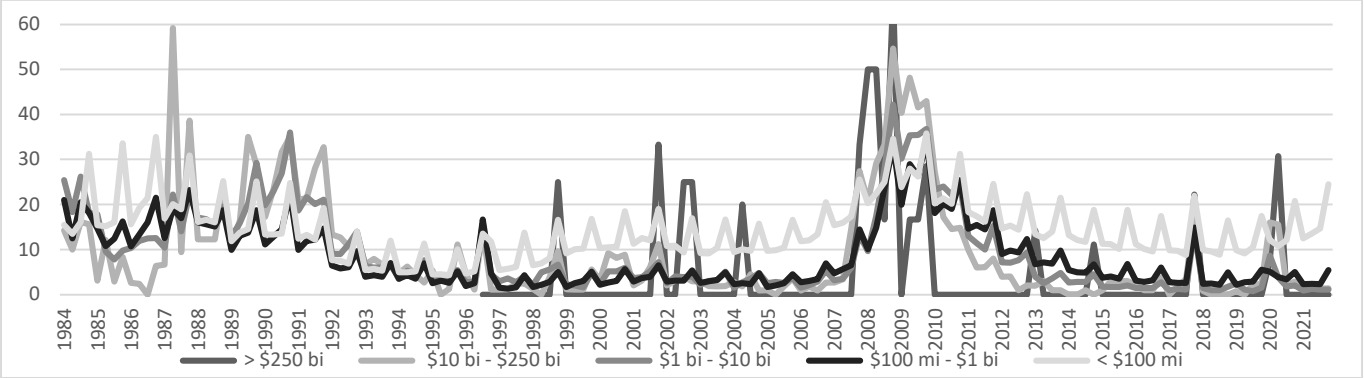


Figure A3.22: US bank pre-tax returns on assets (ROA), 1984-2021

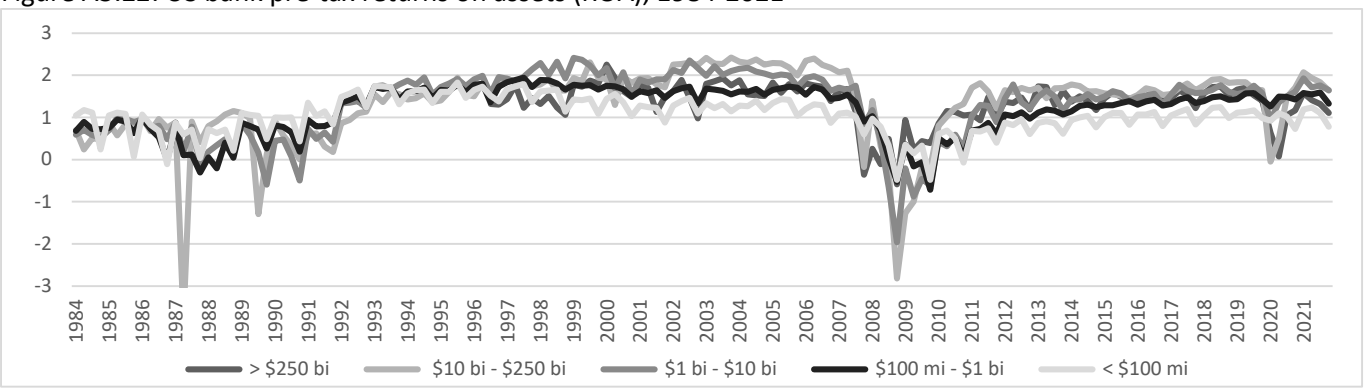


Figure A3.23: US bank pre-tax returns on equity (ROE), 1984-2021

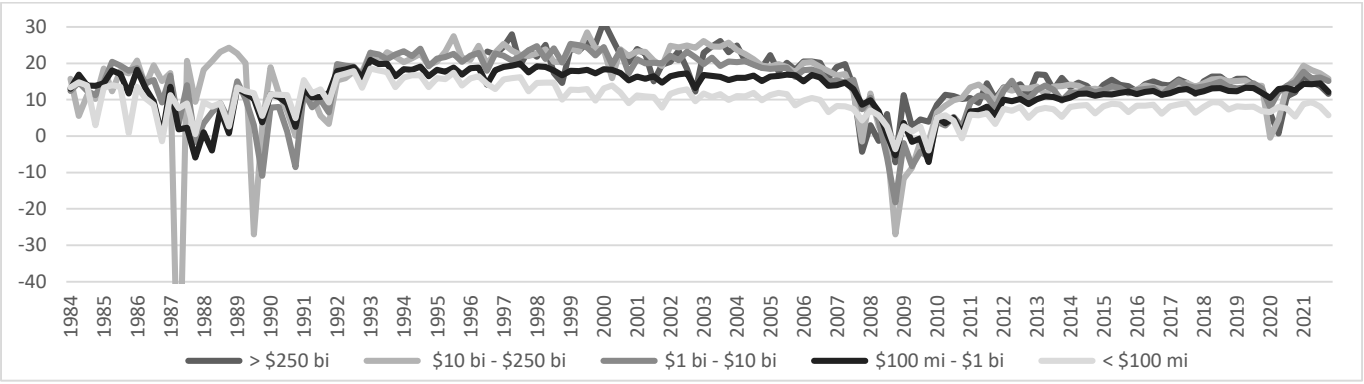


Figure A3.24: US bank retail loans as percent total loans, 1984-2021

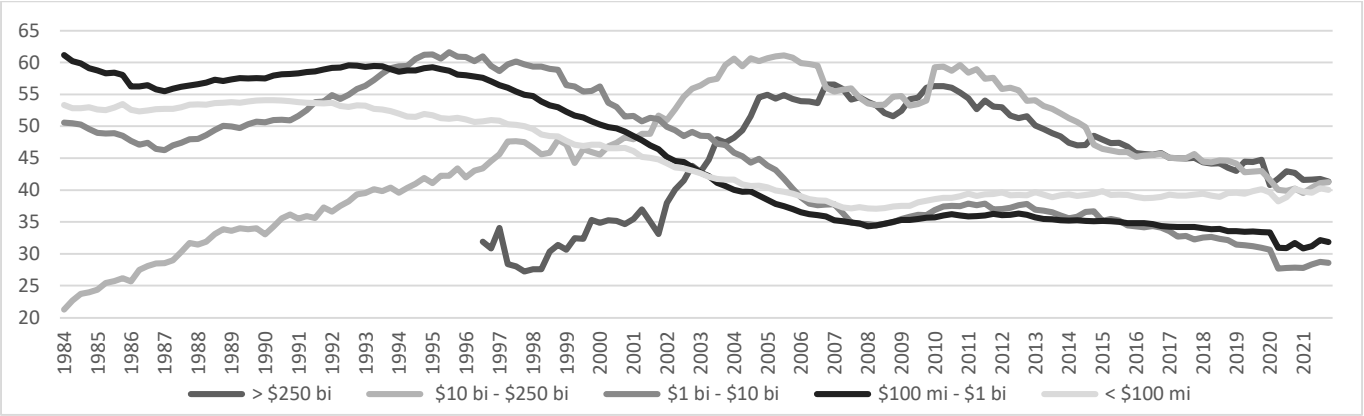


Figure A3.25: US bank risk weighted assets as percent total assets, 1990-2021

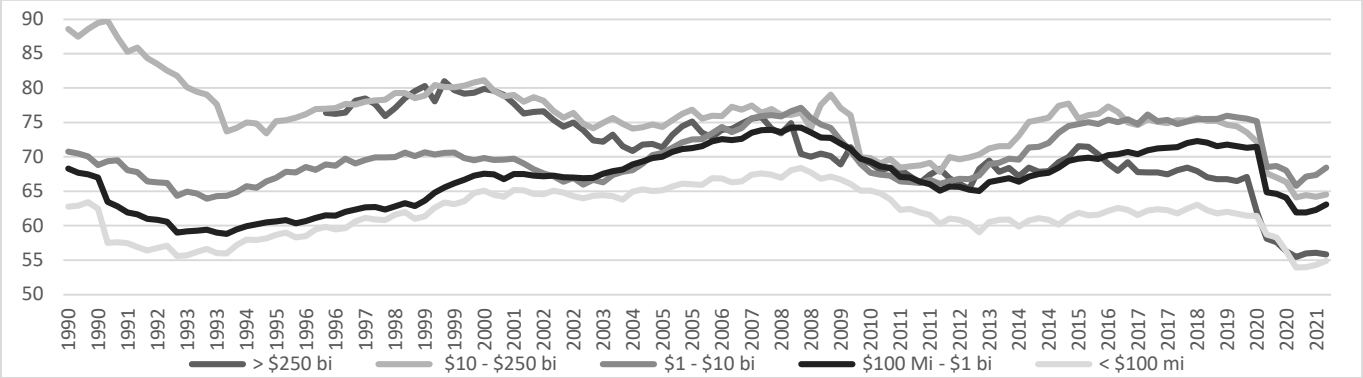


Figure A3.26: US bank asset shares by size of bank, 1984-2021

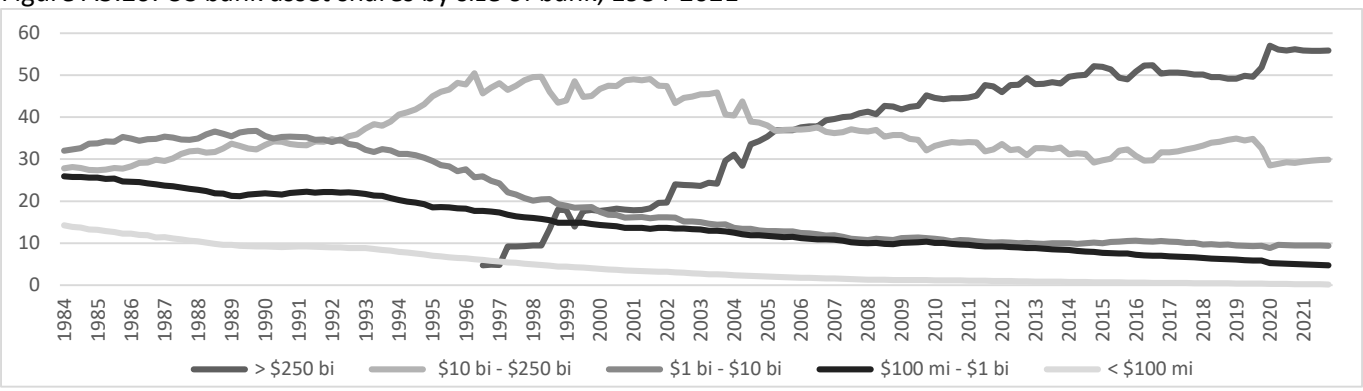


Figure A3.27: US bank yields on earning assets, 1984-2021

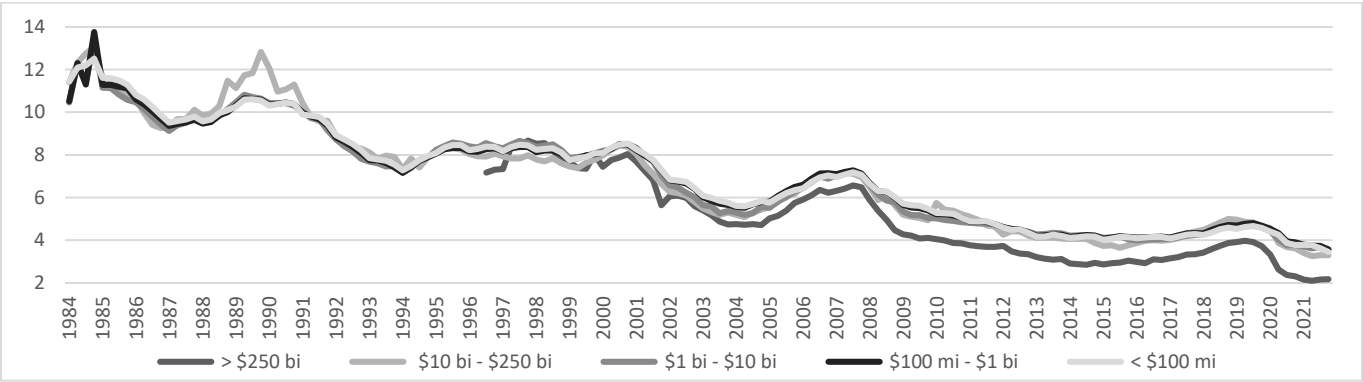


Table A3.1: FDIC Sample: Number of US banks by size of total assets, 1984-2021

	1980s	1990s	2000s	2010s	2021Q1	2021Q2	2021Q3	2021Q4
> $250 Billion		2	5	8	13	13	13	13
$10 - $250 Billion	46	73	106	110	145	147	149	147
$1 - $10 Billion	541	489	494	607	806	817	833	813
$100 Million - $1 Billion	3,843	3,835	4,233	3,815	3,119	3,103	3,066	3,049
< $100 Million	12,955	8,241	4,186	1,817	895	871	853	817
All Insured Institutions	17,385	12,638	9,025	6,357	4,978	4,951	4,914	4,839