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Financialization, Corporate Consolidation and Inequality: National Economic Trends Since 1980

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Introduction

The previous white paper documented a divergence in wages among regions in the United States since 1980. Specifically, it showed that wages in St. Louis have fallen further behind several coastal regions. This paper provides a brief review of literature on national economic trends that formed the context in which regional wage differentials evolved. These trends are: the growth of the financial services sector; the financialization of non-financial businesses; corporate consolidation and mergers; and a growth in inequality.

Since 1980, the financial services sector has accounted for an increasing share of Gross Domestic Product (GDP). In addition, non-financial firms have become more active in financial markets, deriving an increasing share of income from the buying and selling of financial assets. These trends have been associated with an increase in mergers and acquisition activity, including leveraged buy-outs. Some scholars have also hypothesized a link between the growing financialization of the economy and the observed growth in income inequality in recent decades.

This paper does not draw a clear causal connection between the financialization of the American economy and differences in wage growth among U.S. regions. However, an understanding of the economic context for regional wage divergence is a necessary first step for understanding the economic fate of metropolitan areas.

Financialization

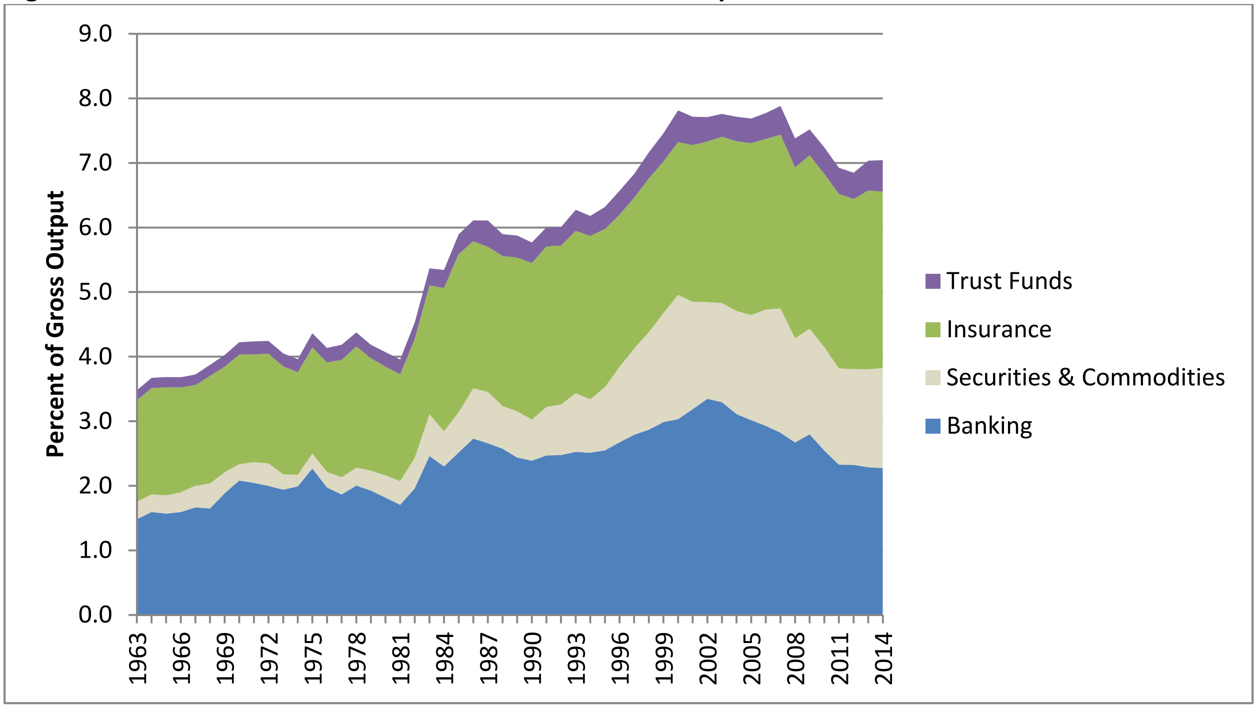
The Growth of the Financial Services Sector: In 1980, the financial services sector contributed 4.1% of U.S. gross output. In 1990, the figure had risen to 5.8%, climbing to 7.8% in 2000. Most of growth came in two subsectors: securities and commodities trading and brokerage; and banking and credit intermediation, a category that includes credit cards. Figure 1 shows gross output for the financial services industry, as well as selected subsectors.

Greenwood and Scharfstein (2013) note that asset management and provision of credit to households are the two activities that contributed most to the growth in the financial services industry. In 1980, household credit constituted 48% of GDP; in 2007, this had more than doubled to 99% of GDP. Most of the increase in household credit was in the form of mortgages, although consumer debt also increased significantly. Greenwood and Scharfstein find that all of the increase in mortgage debt was securitized, meaning that the loans were packaged into securities rather than held as income-generating assets by banks.

The securities and commodities trading industry increased from 0.3% of GDP in 1980 to 1.9% of GDP in 2000. According to Greenwood and Scharfstein, the growth of the financial services industry was accompanied by an increase in the value of stocks and bonds. In 1980, the market value of stocks and bonds was estimated at 107% of GDP. By 2007, the market value of these assets had climbed to 323% of GDP. The market capitalization of the S&P 500 increased from 50% of GDP to 141% of GDP in the same time period.

Tomaskovic-Devey and Lin (2011) note that finance sector profits went from 20% of all profits in 1980 to 45% in 2002. Compensation in the financial services industry also increased dramatically in this time period. In 1980, wages in the financial services industry varied from the national average by less than 5%. By 2000, wages in the finance sector were fully 60% higher than the national average.

Figure 1: Financial Services as a Percent of Total Gross Output



Source: U.S. Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by Industry Data, www.bea.gov/industry/xls/GDPbyInd_GO_1947-2015.xlsx

Financialization of Non-Financial Businesses: Tomaskovic-Devey and Lin (2013) argue that the growth of the financial services industry was only one component of financialization. Of at least equal importance was the increasing tendency of non-financial businesses to derive income from financial assets. The General Motors Acceptance Corporation (GMAC) exemplifies this trend. GMAC was founded in 1919 as a way to assist buyers of General Motors cars. However, in the 1980s, GMAC expanded its activities to mortgage markets, insurance, and commercial finance. In 2004, GM reported that two thirds of its profits came from GMAC. Similar stories can be told about Ford, General Electric, and other major corporations. Through the late 1970s, manufacturing firms derived about 29% of their income from financial income. The ratio of financial revenue to total profits rose to 45% by 1990, before climbing to more than 60% in 2005.

The Rise of Institutional Investors

One of the main drivers of financialization in the 1980s was the rise of the institutional investor. In 1980, 32% of stocks were held by institutional investors such as pension funds, mutual funds, educational trusts, and financial institutions. By 2007, stocks held by institutional investors represented

68% of market capitalization (Greenwood and Scharfstein, 2013). In 2005, three quarters of the shares of Fortune 1000 corporations were owned by institutional investors.

The rise of institutional investing was driven by the inflation of the 1970s, financial deregulation, and changing ideas about risk management. Since the 19th century, trustees of investment funds had been bound by a concept known as the "prudent man rule" (Langbein, 1996). This rule emphasized avoiding speculation, and encouraged managers of trusts to invest funds solely in risk-free instruments such as U.S government bonds or high quality corporate bonds. In 1952, economist Harry Markowitz introduced a mathematical framework that laid the foundation for a new paradigm of risk management known as Modern Portfolio Theory (MPT). Markowitz, who would later win the 1990 Nobel Memorial Prize in Economics, offered mathematical proofs that diversification of high and low risk investments could lead to higher yields, while also retaining acceptable levels of risk (Fabozzi et al., 2002). An MPT perspective on investment was codified in the Employee Retirement Income Security Act (ERISA) of 1974, and subsequent rules.

Markowitz's ideas found willing listeners among trust fund managers in the 1970s who saw their holdings battered by inflation. Rydqvist et al. (2014) note that pension funds owned virtually no common stocks in 1950. By the mid 1960s, pension fund involvement in the stock market had increased to the point that these funds held about 5% of stocks. After the 1960s, pension fund involvement in stocks accelerated sharply, to the point that they owned more than 25% of stocks by the mid 1980s. A similar story can be told for mutual funds, which were aided by the creation of 401k accounts by legislation in 1978. In 1982, mutual funds owned just 3% of stocks and 1% of US-issued bonds. Today, mutual funds own 25% of stocks and 12% of bonds.

Davis (2009) reports that the assets of mutual funds amounted to $135 billion in 1980, rising to more than $12 trillion in 2007. Mutual fund assets were concentrated in a half dozen funds, including Vanguard and Fidelity. Together, these major funds owned more than 40% of mutual fund assets. In 2009, Fidelity was the largest share owner in McDonalds, and owned 7% of Wendy's.

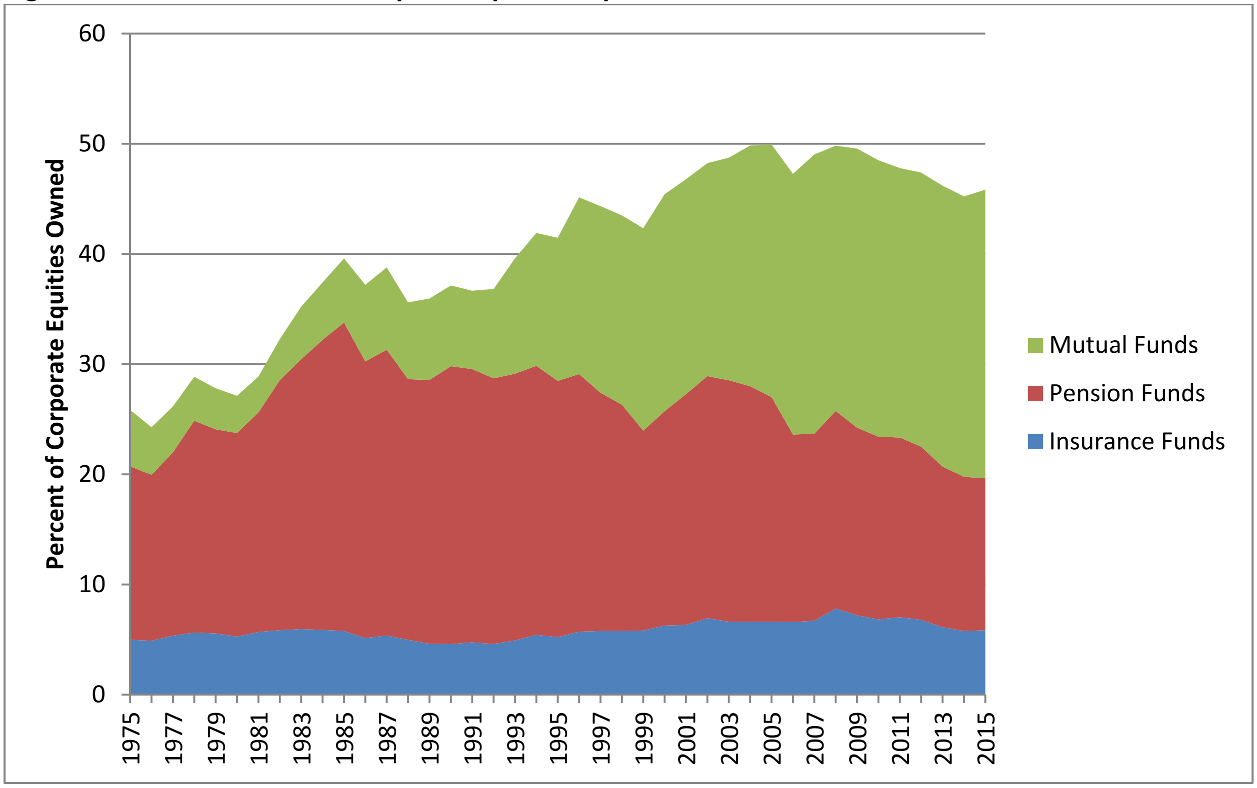
Savings and loan (S&L) institutions were another source of institutional funds entering bond and equity markets in the 1980s. S&Ls also suffered from the inflation of the 1970s, and successfully pressed for deregulation. The 1982 Garn-St. Germain Depository Institutions Act deregulated thrifts and allowed holdings of diverse assets including non-investment grade bonds, more commonly known as "junk bonds." Taggart (1987) reports that junk bond holdings were fairly low for most S&Ls in the 1980s, although several institutions invested heavily in junk bonds. One, the Columbia Saving and Loan Association of Beverly Hills held $2.3 billion, or 28% of its assets, in junk bonds. An additional set of actors contributing to the rise of institutional investing was educational trusts (Fishman, 2014).

Figure 2 shows the percent of corporate equities[1] held by institutional investors over the period 1975-2015 as measured by market valuation. Three types of institutional investors are shown on the graph: mutual funds and similar investments[2], pension funds, and insurance funds. Collectively, these three types of institutional investors owned less than a quarter of stocks as late as 1976. This share more than doubled to over 50% in 2004-2005. The share owned by pension funds almost doubled in the decade

[1] Excluding shares of open-end investment companies.
[2] The mutual funds category on the graph includes closed-end funds, exchange-traded funds, and equities owned by brokers and dealers.

from 1976 to 1985, going from 15% to 28%. After 1985, the most dramatic growth in ownership share was among mutual funds, which went from just 3% in the early 1980s to more than 25% in 2015.

Figure 2: Institutional Ownership of Corporate Equities



Source: Board of Governors of the Federal Reserve System, Financial Accounts of the United States: Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, Historical Annual Tables 1975-2015. Table L.223.

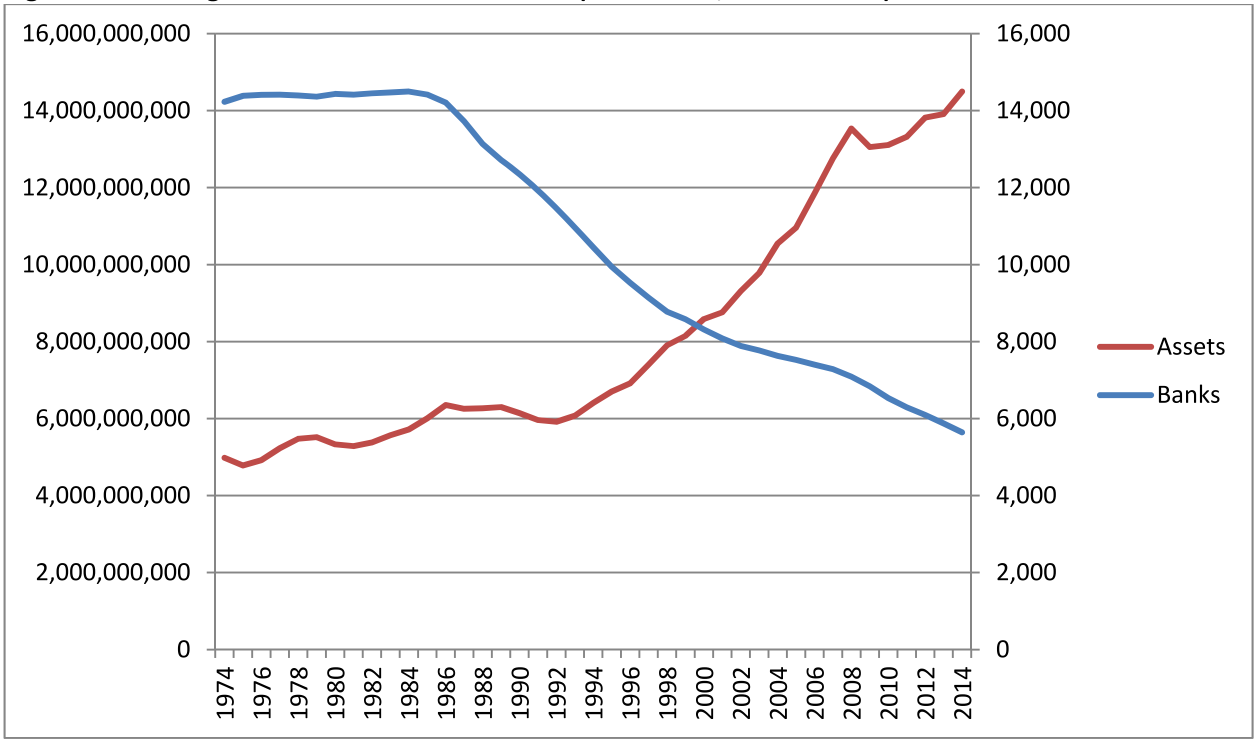
Mergers and Acquisitions

One consequence of the rise of institutional investing was a dramatic increase in corporate mergers and acqusitions (M&A), including leveraged buy-outs (LBOs), often financed with junk bonds. Holmstrom and Kaplan (2001) report that acquisition volume went from about 1% of GDP in the mid-1970s to about 5% of GDP in 1988. After a dip during and after the recession of 1990-91, acquisition volume continued its upward trajectory, reaching more than 15% of GDP in 1998.

Banking is an example of an industry that experienced concentration as a result of mergers and acquisitions, particularly after restrictions on interstate banking were relaxed in the 1980s. Figure 3 shows the number of banking institutions in the United States from 1974 to 2014. From the 1930s through the mid-1980s, the number of banking institutions held steady at just over 14,000. The number of banks dropped sharply following financial deregulation in the 1980s, falling to just 5,643 in 2014. Meanwhile, bank assets rose from $4.8 trillion[3] in 1978 to $14.5 trillion in 2014.

[3] 2014 dollars

Figure 3: Banking Institutions and Bank Assets (Thousands, 2014 Dollars)



Source: Federal Deposit Insurance Corporation, Bank Data and Statistics, Table CB09, https://www5.fdic.gov/hsob/HSOBRpt.asp

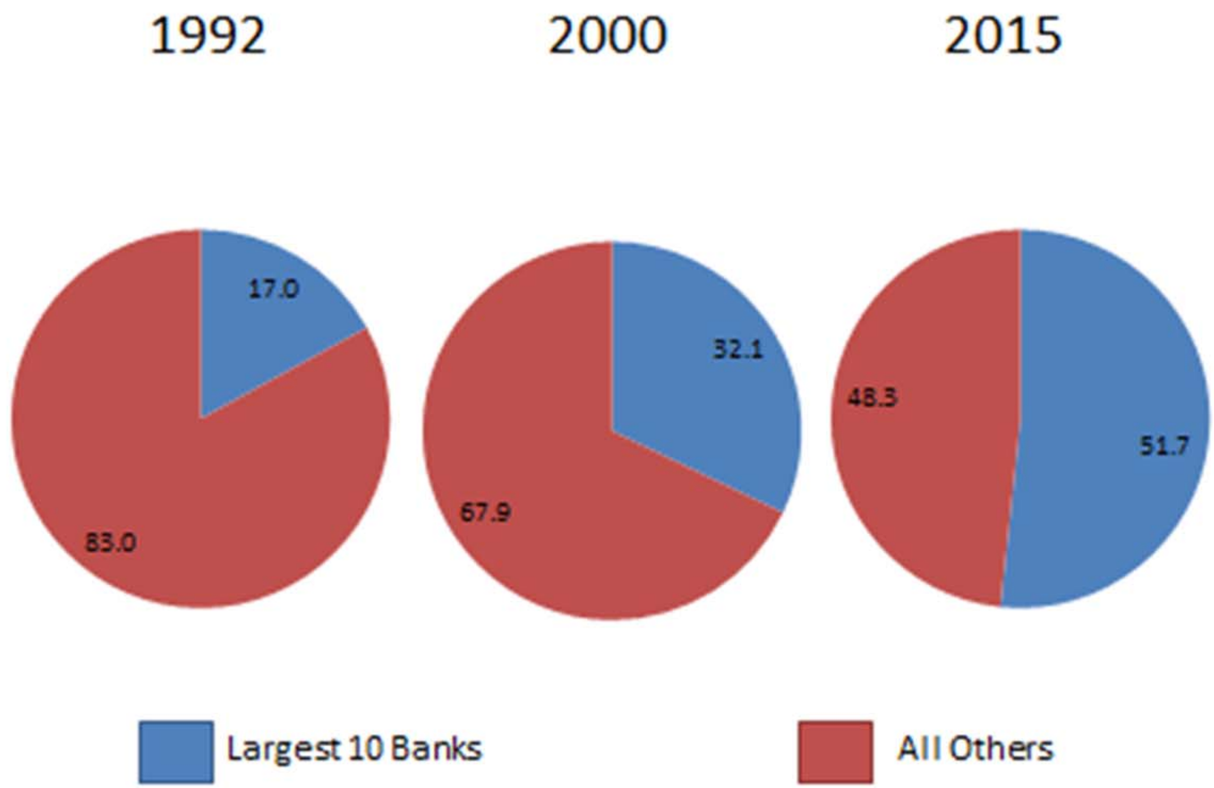
Figure 4 shows how mergers and consolidation in the banking industry led to increasing domination of the market by the largest banks. In 1992, the largest 10 banks in the United States controlled 17% of all bank assets. The figure rose to 32% in 2000. In 2015, the largest 10 banks controlled more than half of all banking assets in the United States.

Mergers and acquisitions since 1980 affected businesses in the St. Louis area, both in financial and non-financial sectors. In St. Louis, mergers and acquisitions ended local ownership of many of the region's largest firms, including McDonnell-Douglas, Anheuser Busch, Brown Shoe, TWA, Ralston Purina, Mallinckrodt, Jones Pharma, Jefferson Smurfit, Southwestern Bell, General Dynamics, May Department Stores, and A.G. Edwards. In 1980, there were 23 Fortune 500 companies with headquarters in St. Louis. By 2015, the number had dwindled to just nine.

The St. Louis region also lost several locally owned banks during this period, of which the following is a partial list: Boatmans, Mercantile, Roosevelt, Mark Twain, Magna, Southwest, and Bremen. In 1992, there were 159 locally owned banks, compared to 79 in 2015.

Holmstrom and Kaplan (2001) link the increase in corporate acquisitions to the rise of the institutional investor. Institutional investors were little concerned with institutional loyalty to corporations and their senior management. Rather, these investors expected rapid appreciation in the value of their assets, and demanded constantly rising stock prices. These investors were more amenable to hostile takeover

Figure 4: Bank Assets Controlled by 10 Largest Banks



Source: Federal Deposit Insurance Corporation, Statistics on Depository Institutions, https://www5.fdic.gov/sdi/download_large_list_outside.asp bids than individual investors had historically been. In addition, investors provided capital for takeover artists such as Carl Icahn by purchasing the junk bonds that typically financed leveraged buyouts.

Jenson (1988) refers to struggles over corporate governance in the 1980s as the "market for corporate control." In this telling, corporations in the 1970s and early 1980s experienced low returns on investment. In part this may have been due to corporate mismanagement, but in part it was due to foreign competition that produced excess capacity in the manufacturing sector. Institutional investors, frustrated over low returns, pushed for higher yields, forming a "shareholders movement." As a result, stock owners became more open to leveraged buyouts that raised stock prices.

The emphasis on stock prices was reinforced by changes in executive compensation. In 1980, less than 20% of CEO pay took the form of equity-based compensation, such as stock options. In 1994, nearly half of CEO pay was in stock options and incentives related to stock price. A 1993 change in the tax code further incentivized firms to base pay on stock options. The law capped tax deductible pay at $1 million unless performance based (Holmstrom and Kaplan, 2001).

Davis (2009) argues that the shareholder movement gave rise to a new culture of corporate governance. Rather than viewing a corporation as an institution for making and selling products in the market, the new culture understood corporations as bundles of assets to be bought and sold in the market. Corporations and divisions could be bought and sold to other corporations, or to private investors. The emphasis on financial management rather than production led to an organizational model known as "original equipment manufacturer." Under the OEM model, a corporation focuses on designing and marketing a brand, and then outsources actual production to other firms around the world. Rather than focusing on production, "the value added by Nike or Coca-Cola is through intellectual property—brands, patents, advertising copy, distribution know-how. Nike and Coke, like pharmaceutical companies and universities, are in the ideas business" (p. 33).

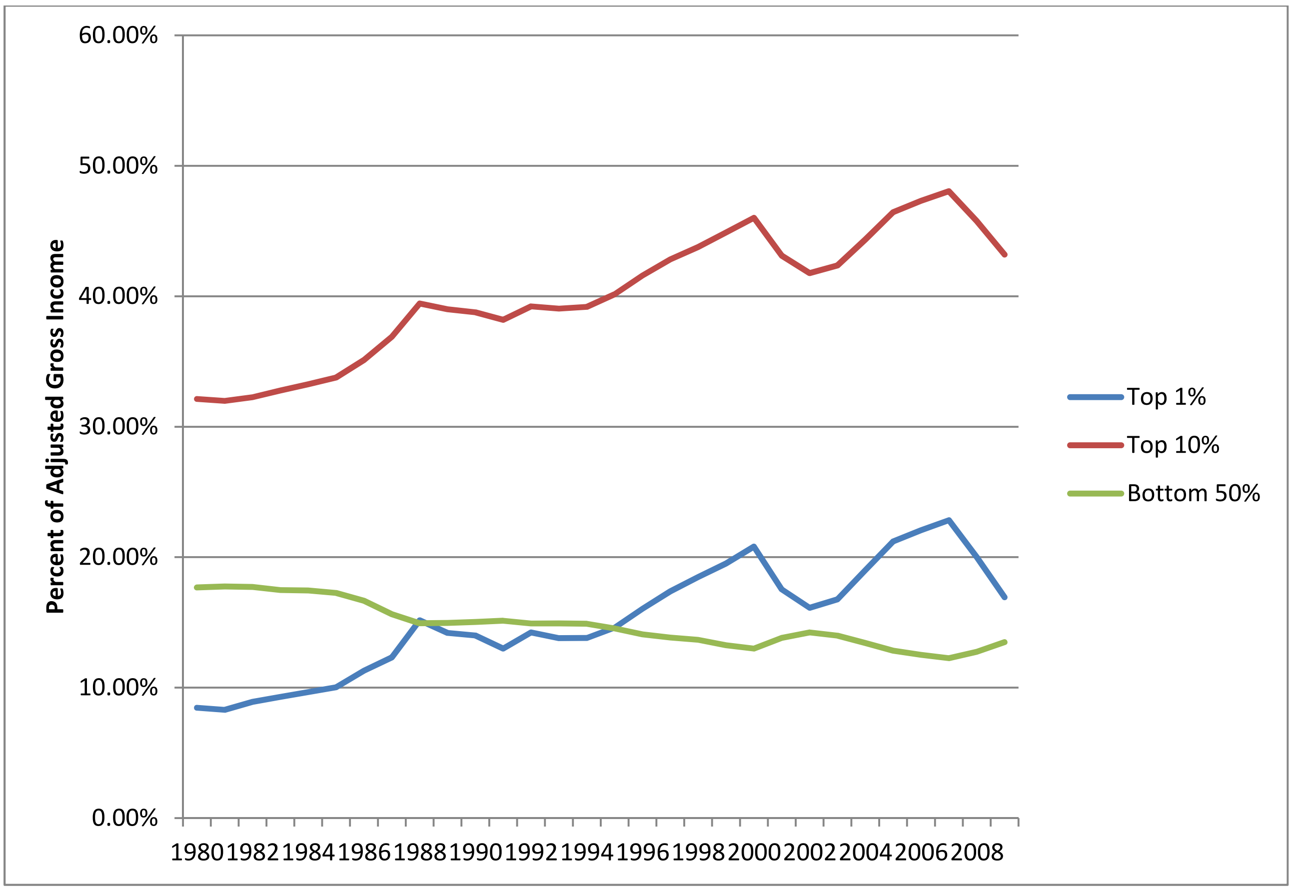
Growing Inequality

A central feature of economic life over the last four decades has been an increase in income inequality. Figure 5 shows the share of national income received by households in the top 1% of the income distribution, the top 10%, and the bottom 50%. Shares of income for the top 1% and the top 10% rose during each speculative bubble, receded somewhat when the bubble burst, then continued on an upward trajectory. In the 1980s, the share received by the top 10% rose from 32% of national income to 39%, rising to 46% at the height of the dotcom bubble, and 48% during the housing bubble. The top 1% went from 8% in 1980 to 15% in 1988, rising to 21% in 2000 and 23% IN 2007. The bottom half of the income distribution saw a steady decline in shares of national income, from 18% in 1980 to 13% in 2009.

Several scholars have linked the increase in inequality to financialization. Van Arnum and Naples (2013) present an econometric model that indicates a relationship over time between the percent of GDP contributed by the financial services sector and the gini coefficient, a measure of income inequality. The relationship appears to be robust, controlling for other factors such as imports, unionization and changes in the minimum wage.

Tomaskovic-Devey and Lin (2013) propose three causal mechanisms linking financialization and the growth in inequality. First, financialization reduces labor's share of income. In 1970, labor received 70% of national income; by 2010 this had fallen to 65%. According to Tomaskovic-Devey and Lin, financialization caused a greater share of corporate profits to be paid to holders of capital in the form of interest and dividends. Since wealthier households own a disproportionate amount of stocks and bonds, this trend increased the share of wealth for households in the upper ends of the income distribution. Second, financialization was associated with an increase in the compensation of senior managers. Corporate officers received about 6% of corporate income in 1970, a figure that rose to 9% by 1990 before declining to 7.5 to 8% between 2000 and 2008. As noted previously, an increase in equity-based compensation, coupled with generally rising stock prices, helped increase the share of corporate profits received by senior executives. As a result, wage dispersion, as measured by the variance of workers' income levels, rose steadily after 1970.

Figure 5: Shares of Income for Top 1%, Top 10% and Bottom 50%.



Source: Tax Foundation: http://taxfoundation.org/article/summary-latest-federal-individual-income-tax-data-0#table5

Zalewski and Whalen (2010) caution that the effect of financialization on inequality can vary dramatically, depanding on national policies. Measuring the level financialization in a country using an index developed by the Internatinal Monetary Fund, Zalewski and Whalen find that both financialization and inequality increased in almost every western nation between 1996 and 2005. However, compared to the United States, many European nations experienced far smaller increases in inequality due to social welfare policies.

Conclusion

The purpose of this paper was to document national economic trends that have affected regions over the last 40 years. Financialization has been a significant trend since 1980, and can be broken into two components: the rising importance of the financial services sector, and the increasing orientation to finance on the part of non-financial firms. Financialization has been associated with a dramatic increase in asset price values, and in corporate acquisitions.

The rise of institutional investing was a key driver of financialization after 1980. Equity markets in the 1980s experienced a massive influx of capital from pension funds, insurance funds and mutual funds, leading to an appreciation of asset prices. Institutional investors were motivated to increase their participation in equity markets by the inflation of the 1970s, financial deregulation in the 1980s, and changing conceptions of risk management.

The rise of institutional investors was also a major impetus to an increase in the number of corporate mergers and acquisitions. Institutional investors that relied on increasing stock values were open to buyout offers, even when opposed by corporate management. Institutional investors also provided purchasers of the high yield bonds that were floated to finance buyout offers. As a result of these trends, a change in the culture of corporate governance occurred, in which corporations were increasingly viewed by management as bundles of assets to be traded in markets, rather than producers of goods to be sold in markets. Changes in executive compensation, encouraged by changes in the tax code, reinforced the increasingly finance-oriented nature of corporations.

Financialization has been linked to rising inequality by several scholars. Financialization was associated with a falling share of national income for labor, with rising executive compensation, and with growing wage dispersion.

Although the connection between financialization and inequality has been explored in numerous studies, there has been relatively little attention paid to the geography of financialization. Little work has been done that draws causal connections between the financialization of the economy and the fates of different regions. Future working papers will attempt to explore this connection.

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