Financialization, Wealth and Income Inequality

THESIS

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Michael Nau
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Master's Examination Committee:

Dr. Rachel Dwyer, advisor
Dr. Andrew Martin
Dr. Randy Hodson
Abstract

Income inequality has been rising in the U.S. in recent decades. Prior scholarship generally links increasing income inequality to labor market and demographic changes. However, these changes alone cannot explain the growing concentration of income at the very top of the income distribution nor the rising importance of financial income for wealthy households. Using the Survey of Consumer Finances, I find that financial income, which is the returns to wealth, has come to account for the majority of overall income inequality in the last decade. This dramatic shift is a result of financialization, a set of interrelated processes that include financial deregulation as well as changes in the consumption and investment patterns of firms and households. This finding underscores the need to study property relations when examining income inequality.
Vita

June 2003 .................................................. Shaker Heights High School

2007 .......................................................... B.A. History, Miami University

Fields of Study

Major Field: Sociology
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Introduction

In recent years, stratification scholars have devoted increasing attention to the growth of inequality in American society. Most of their research has focused on how changes in labor relations (Fortin and Lemieux 1997), technology (Autor et. al. 2003), demographics (McCall and Percheski 2010, Western and Morris 1999), and social policy (Iverson and Wren 1998) can help to explain rising inequality. This literature generally assumes that the most important factor shaping a society’s level of income inequality is the distribution of wages among households (Western and Morris 1999). Debates regarding inequality are framed in terms of finding which factor has the strongest effect on the variance in wages (Western, Bloome and Percheski 2008). Although these studies of inequality are important contributions, they do not provide a full picture of income stratification. In particular, they have trouble explaining the recent hyper-concentration of income within the top one percent of households in part because they ignore the fact that financial income is an increasingly central factor in household income inequality.

This paper contributes to the ongoing debate on inequality by proposing “financialization” as an alternative explanation of current stratification patterns. Scholars describe financialization as the growing importance of finance and financial markets for
firms and households (Epstein 2005). This change is reflected both in the rising size of the FIRE (finance, insurance, and real estate) sector’s share of total corporate profits as well as the expansion of non-financial firms into financial activity (Krippner 2005). This paper also contributes to the growing financialization literature in economic sociology by investigating the dynamics and effects of financialization on the household sector. Using the Survey of Consumer Finances, I find that income growth has been highly concentrated at the top and that financial income constitutes the largest single component of that growth. My findings suggest that the rapid rise of speculative financial assets among the wealthy during the 2000s accounts for this dramatic shift. Ultimately, this study underscores how changes in property relations, such as financial regulation, corporate governance, and the debt of firms and households, can bring about dramatic changes in the distribution of income.

This paper also contributes to the literature on growing inequality by proposing several methodological improvements to the measurement and study of inequality. I argue that stratification scholars should devote greater attention to changes in non-wage income. Although many researchers have studied the effect of government redistribution on income inequality in the form of taxation and social programs (Neckerman and Torche 2007), these transfers constitute only a part of non-wage income. Income from investments, e.g., financial income, is another key source of income for American families. This is especially the case for very high-income households, who are ignored in conventional comparisons between the income of the median and 90th percentile households. One reason prior research has omitted financial income is the lack of reliable
survey data on top income households, although some scholars have been working to
advance our knowledge of this important demographic group (Piketty and Saez 2003).
Despite these important empirical contributions, theoretical understanding of the
dynamics behind top income growth remains underdeveloped. By linking the income
growth of very high-income households to financialization and its attendant effects on
household wealth, I provide a mechanism that helps to explain the rapid rise of financial
income at the top. Most importantly, however, I argue that inequality scholars cannot
ignore this process because financial income growth within the top percentile accounts
for the majority of the growth in inequality in the U.S. in the last two decades.
Research on Income Inequality

After significantly declining in the immediate postwar period, income inequality began to rise in the U.S. in the mid 1970s (Neckerman and Torche 2007). Using the wages of the 90\textsuperscript{th} and 10\textsuperscript{th} percentile of workers as a metric of inequality, scholars found that inequality growth accelerated in the 1980s and slowed in the 1990s (Card and DiNardo 2002). This rising inequality was in part a function of the polarization that characterized jobs growth during this period (Wright and Dwyer 2003). Household income inequality between the 90\textsuperscript{th} and 10\textsuperscript{th} percentiles remained relatively stable in the 2000s (Gottschalk and Danziger 2005), although wage inequality continued to rise within occupations (Kalleberg and Mouw 2010). Throughout this period, however, top percentile households continued to increase their proportion of overall household income (Piketty and Saez 2003).

Prior theorizing on rising income inequality has generally sought to explain the changing relationship between the 90\textsuperscript{th} percentile or the top quintile and the rest of the income distribution. This literature uses wages and salaries (either explicitly or implicitly) as the main measure of family income. The methodological orientation of this
literature is reflected in its theoretical development; scholars have emphasized the importance of changes in workplace and labor markets and how they shape inequality. Popular among economists, the Skill-Biased Technological Change hypothesis states that increasing returns to highly-skilled workers accounts for the rise in inequality since the early 1980s (Autor, Levy, and Murnane 2003). Other researchers take issue with this claim, focusing instead on institutional (Fernandez 2001) or policy (Kenworthy 2003) changes that affect the distribution of wages and the protection of workers from market forces (Iverson and Wren 1998). These factors include the decline of real minimum wages (Fortin and Lemieux 1997) and union power (Morris and Western 1999), shrinking internal labor markets (Davis 2009), globalization (Sassen 1990, Alderson and Nielsen 2002) and welfare state retrenchment (Kenworthy 2005). On the other hand, demographers have studied changes in workforce participation, family structure and earnings homogamy (McCall and Percheski 2010), although much of the variance in income has increased within rather than among demographic groups (Western, Bloome and Percheski 2008). While these studies make significant contributions to our understanding of rising income inequality, they do not include accurate measures of income within the top percentile or full information about financial income. As a result, they cannot provide a complete picture of rising income inequality in recent decades.
Inequality and the “Winner-Take-All” society

Although most of the prior research on income inequality has ignored the rapid income growth among households with very high levels of income, a few scholars have attempted to shed light on this phenomenon. Robert Frank (1996) argues that improvements in communication technology have combined with the expanded reach of markets to create “winner-take-all-markets” that provide high payoffs to occupational superstars. Piketty and Saez (2006) echo this sentiment in their discussion of the “working rich” (p.204). One problem with this account is that it fails to provide a convincing mechanism that explains the timing of top income growth. Markets have expanded and communications technology has steadily progressed while inequality has generally declined throughout the 20th century; Frank does not explain why the 1980s or early 1990s should constitute a reversal in this relationship. In fact, prior research links the spread of mass markets and technology with declines, rather than rises, in inequality (Kuznets 1955). Frank’s account also cannot explain why other industrialized market
societies, such as Japan and France, have not experienced the same trend (Piketty and Saez 2006).

Hacker and Pierson (2010) respond to the latter critique by noting that the political-legal context of markets plays an important role in determining who the “winners” are as well as the magnitude of their payoffs. In particular, they argue that the growing political power of business has facilitated the passage of legislation favorable to corporate elites. At the same time, the business lobby has effectively obstructed state action to reduce inequality in a process they call “policy drift.” One example of policy drift is the continued classification of hedge fund managers’ income as capital gains rather than wages which provide them preferential tax treatment. Although Hacker and Pierson (2010) correctly assert the important role of politics plays in shaping income inequality, their account is incomplete. In this paper, I seek to fill in the gaps left by Frank (1996) as well as Hacker and Pierson (2010) by remedying various problems with their analyses.

One of the problems with Hacker and Pierson’s (2010) analysis is their dependence on the work of Piketty and Saez (2003, 2006), who use tax data to track the income of wealthy households. Although this research is invaluable to stratification scholars, tax data can be problematic because the wealthy have a significant incentive to understate their income. This is particularly the case with financial income, which wealthy households regularly manipulate in order to minimize tax liability (Johnson, Moore and Schreiber 2009). In fact, Hacker and Pierson argue that an important example of policy drift was the decline of effective enforcement in the IRS during the second
Bush Administration for wealthy individuals who illegally sheltered their income from taxes (2010). In this paper, I remedy the issue by using the Survey of Consumer Finances (SCF), which may be more reliable than tax data regarding the finances of very wealthy household because there is no monetary incentive in the SCF to underreport their income.

Another issue with Hacker and Pierson’s analysis is a lack of plausible mechanisms connecting the timing and character of top income growth with specific examples of new legislation or policy drift. They argue that a long series of policy changes and cases of policy drift have accumulated since the late 1970s such that income for the business elite has been steadily rising. As a result, the exact relationship between particular laws or policies and income remains murky in their analysis. While I do not discount the importance of elections law and changes within political parties, I argue that a subset of laws dealing with property rights are the key factors promoting rising inequality at the top. By focusing attention on changes in property relations, I can pinpoint the relationship between law and income, especially financial income, which is derived from the ownership of financial assets.

A third problem with Frank (1996) and Hacker and Pierson’s (2010) analyses pertains to their description of the “winners” benefiting from rising inequality. Both focus on corporate executives and other high-ranking workers as the chief beneficiaries of winner-take-all politics. Although executive compensation has dramatically risen in recent decades (Khurana 2002), the fact that top percentile households are primarily business elites is assumed rather than verified in Frank’s (1996) and Hacker and Pierson’s (2010) analysis. This assumption has important implications for the framing of
possible policy remedies for income inequality. For example, in recent years the pay of
bank executives has come under close public scrutiny as policymakers and the public
have debated whether top managers deserve such exorbitant compensation. As such, the
debate over rising inequality is often framed in terms of whether top managers are paid
more than they are “worth”. This focus on the merit of compensation practices is
inappropriate, however, if high-income households are increasingly deriving their income
from the ownership of wealth rather than participation in the workforce. In this paper I
conduct an analysis of households within the top income percentile over the last two
decades to determine whether they are “the working rich” (Piketty and Saez 2006) or are
increasingly deriving their income from the ownership of wealth.

Finally, prior scholarship on top incomes does not determine the degree to which
rising income at the top has shaped overall levels of inequality. Piketty and Saez have
documented that the share of overall household income received by the top percentile has
ballooned in the last two decades. These findings are certainly suggestive, but they do not
systematically calculate to what extent top income growth matters for overall levels of
inequality compared to other developments, such as job polarization or rising returns to
education. In other words, it could be the case that income growth at the top is an
interesting trend, but that its importance when explaining overall inequality growth may
be limited compared to other changes within the rest of the income distribution. By
decomposing the relative contribution of financial and non-financial income to overall
levels of inequality, I can determine the degree to which financial income growth at the
top accounts for overall inequality growth among American households.
Inequality, Wealth and Property Rules

Although wealth is often studied as a dimension of stratification separate from income (Wolff 1992, 1998, Keister 2000, Neckerman and Torche 2007), wealth and income are both important for economic well-being (Spilerman 2000). In this paper, I conceptualize wealth and income as two interconnected aspects of overall resource inequality. Financial income links the two because interest, dividends and capital gains are flows of income derived from the ownership of financial assets. Likewise, income can be saved and thereby add to an individual’s stock of wealth. The rate of return on investments and aggregate patterns of savings, therefore, all have effects on the income distribution that are mediated by the distribution of wealth. This interconnected nature of wealth and income is well known to economists and scholars of finance, who define the price of financial assets, such as bonds or stocks, as the present discounted value of future net income flows (Hayashi 1982). However, because wealth is determined by cultural and legal rules regarding property, conceptualizing wealth and income as interrelated focuses our attention on how property rules shape income (Carruthers and Ariovich 2004). As the legal framework and social arrangements underlying property rights change, they can
have dramatic effects on the distribution of income in society. In particular, financialization has increased income inequality largely because it has profoundly altered the formal and informal property rules for a crucial element of household wealth: financial assets.

Financial assets mediate the effect of financialization on inequality because they contribute to an individual’s stock of wealth but can only have value (or produce financial income) in the context of a financial market. As social institutions, financial markets combine individual investors with the financial services industry, the leadership of non-financial corporations, financial regulators, and the court system. Financial markets, therefore, simultaneously function as a societal means to allocate savings to productive investments while also ensuring the protection and orderly exchange of the preponderance of society’s household-level property. Changes in the rules and practices governing financial markets have a dramatic effect on the distribution and disposition of society’s wealth (Keister 2002), which in turn affects income inequality through the distribution of financial income.
Financialization and Inequality: Hypotheses

Using this insight about the interconnected nature of wealth and income, here I describe in this section how financialization has shaped property relations since the mid 1990s and how these changes are likely to have affected the distribution of income. Although this is not an exhaustive treatment of all aspects of financialization, I focus on the changes with the greatest implications for income inequality: corporate governance and investment, and financial deregulation.

Financialization, Corporate Governance and Corporate Investment

According to Marx, capitalist firms seek to maximize their profits (Marx 1999). Economic sociologists have noted, however, that the pursuit of profit in capitalist economies is far from straightforward. Companies have imperfect information about markets and face uncertainty regarding future risks. Economic action is also embedded in and shaped by cultural-political (Fligstein 2001) and legal contexts. As a part of financialization, American firms have altered their governance structures and investment practices in the search for stable and growing profits. These changes have transformed property relations in the U.S. because corporations are the most fundamental form of
private property in advanced capitalist countries. Thus, changes in corporate practices
directly affects both the owners of corporations (i.e. owners of financial assets) as well as
workers.

One of the major changes in American corporations brought about by
financialization is the adoption of the Shareholder Value conception of corporate control
(Fligstein 2001). Rooted in the stagnation of the 1970’s, Shareholder Value became the
business elite’s response to declining profitability. Proponents of Shareholder Value
argued that American corporations had become overly bureaucratic and inefficient
because they were diverted from the primary pursuit of profits. Instead of focusing on the
bottom line, corporate strategy and investment were made less efficient due to conflicting
commitments to multiple groups of stakeholders alongside owners, such as employees,
management and consumers (Davis 2009). As proponents of Shareholder value reasoned,
if corporations focused solely on maximizing the value of their stock, then they would
ultimately increase their economic performance. Although management was often
reluctant to adopt this new orientation, hostile takeovers emerged by the 1980s as a legal
and legitimate means to discipline recalcitrant executives (Hirsch 1986).

This new focus on stock prices as the sole metric of performance dramatically
altered the investment priorities of American companies. Quarterly reports increased in
importance as a growing army of stock analysts and institutional investors scrutinized
earnings statements and company prospectuses (Davis 2009). Executives that provided
rapid and short-term increases in profits were rewarded with rising stock prices and
generous compensation packages (Khurana 2002). However, this new logic of investment
soon took its toll on workers: profitable companies began to lay off workers and defer capital improvements in order to improve their balance sheets in the short run (Fligstein 1991, Aglietta and Breton 2001). Eventually, corporate leaders concluded that financial markets rewarded firms with reduced workforces and minimal tangible assets (Davis 2009). Although this reorganization likely played a role in the historic stock market boom of the 1980s and 1990s, it did relatively little for profitability, jobs or wage growth. For example, Fligstein (2004) found that companies adopting Shareholder Value strategies did not experience increased profitability, although they did have higher levels of layoffs, particularly for unionized workers. This finding is echoed by Wright and Dwyer (2003), who find that job growth during the economic expansion of the 1990s was weak by historical standards. Instead of the general prosperity promised by its advocates, Shareholder Value contributed to a shift in the allocation of national income from labor to capital (Kristal 2010).

Concurrent with the diffusion of Shareholder Value as a regime of corporate governance was the financialization of corporate profits. As Krippner (2005) notes, financialization can be understood as “a pattern of accumulation in which profits accrue primarily through financial channels rather than through trade and commodity production” (Krippner 2005). As a result of this shift, the FIRE sector’s share of overall corporate profits grew in recent decades and “non-financial” corporations, such as GE, increasingly turned to financial activities to maintain profitability (Davis 2009). While this turn to finance may have averted crisis for some firms, it also suppressed jobs and wage growth. Financialization offered firms the functional equivalent of outsourcing:
managers found that employees and capital equipment could be replaced with financial 
assets that promised higher returns and could be maintained with minimal labor inputs 
(Krippner 2005). This development dovetailed perfectly with Shareholder Value, because 
it allowed firms inexpensive short-term gains while avoiding the costly and risky process 
of product development.

Although the mass adoption of Shareholder Value among American firms and the 
financialization of profits were gradual historic trends reaching back to the 1970s, their 
effect on the income distribution was amplified by the recession of the early 2000s. 
During the 1990s economic expansion, many firms still sought to expand their 
workforces while others found that initiating layoffs during prosperity was a politically 
delicate task. With the onset of recession, however, firms quickly laid off employees. As 
productivity bounced back, firms were slow to create new jobs or raise wages. This de- 
linking between productivity growth and jobs led economists to speak of a “jobless 
recovery” (Mischel, Bernstein and Allegretto 2005). Although this phenomenon had 
multiple causes, a significant factor was the replacement of workers by financial assets in 
firms’ investment portfolios: from 1999 to 2004, the total financial assets of non-financial 
firms grew from $9.3 trillion to $13.1 trillion, a 40% increase in five years (Federal 
Reserve 2010). This rapid growth is particularly astounding considering that 1999 was 
near the height of a massive stock bubble while during the years 2001-2004 the U.S. 
economy averaged a disappointing 2.25% annual GDP growth rate\(^1\). These dramatic 
changes in corporate governance and investment form the basis for my first hypothesis:

\(^1\) Bureau of Economic Analysis, National Income Product Accounts.
Hypothesis 1: As financialization increasingly shaped corporate investment in the 1990s, financial income growth outpaced wages. With the onset of recession in the early 2000s, financial income continued to rapidly grow while wages stagnated.

Wealth scholars have long noted that wealth is much more unevenly distributed in society than income (Keister 2000). Because financial income is simply the returns to wealth, it is likely much more concentrated than wages or other forms of income:

Hypothesis 2: Financial income growth in the 1990s and 2000s was much more concentrated among high-income households than was growth in wages.

**Financial Deregulation**

Another important aspect of financialization in the last two decades was the deregulation of financial markets. The transformation of property relations associated with deregulation during this period corresponded to an increasing concentration of power within financial markets. In the 1980s, mutual funds helped middle class investors gain entry into financial markets (Keister 2000). After the collapse of the 1990s tech bubble, however, financial gain was increasingly realized in opaque financial markets inaccessible to all but an elite. The growing stratification within financial markets was facilitated in part by the Gramm-Leach-Bliley Act of 1999. This law removed the last New Deal-era restrictions on the banking industry, allowing banks to engage in securities
trading and insurance underwriting (Mamun, Hassan and Maroney 2005). Passed to legalize the prior merger of Citicorp with Travelers Insurance, it was followed by a wave of industry consolidation. The newfound freedom of “financial services” companies to engage in a broad range of financial activities corresponded to a significant centralization of newly created financial wealth within these conglomerates: according to the OCC, in the third quarter of 2007, the top five banks held 97.2% of total derivatives\(^2\) contracts (U.S. Department of the Treasury 2007).

The stratification within financial markets was further exacerbated by a key case of policy drift: the continued minimal regulation of hedge funds. Hedge funds, usually structured as private investment partnerships, are significant pools of investments effectively off the regulatory radar. Unlike mutual funds, hedge funds are not required to register with the Securities and Exchange Commission (U.S. Securities and Exchange Commission 2008a). Hedge fund managers often engage in sophisticated trading strategies using complex derivatives, and typically require investors to put down a significant amount of capital (Davis 2009). As such, access to hedge funds is usually only available to the wealthiest investors. The relative advantage of hedge funds over more accessible forms of investment can be illustrated by a technological development in financial markets during the 2000s: high frequency trading. Using supercomputers and complicated algorithms that could calculate strategy and execute trades in milliseconds, high-frequency traders (usually hedge funds and the leading investment banks) increased

\(^2\) Derivatives are financial instruments or contracts that are tied to the value of an underlying asset (such as currency, equity, or bonds), and can therefore be said to “derive” their value from such assets. A common example of a financial derivative during this period was a mortgage-backed security, which was essentially a bundle of many home mortgages that was subsequently sold to investors via financial markets.
profits by exploiting rapid market changes and thereby gaining an advantage over “traditional” traders. In the words of Andrew M. Brooks, an executive at T. Rowe Price, a major U.S. mutual fund, “(W)e’re moving toward a two-tiered marketplace of the high-frequency arbitrage guys, and everyone else (Duhigg 2009:A1).” Notably, financial regulators, such as the SEC, declined to regulate high-frequency trading. This increasing concentration within financial markets provides the basis for my third hypothesis:

Hypothesis 3: The combination of financial deregulation and policy drift in key areas of market regulation in the late 1990s and early 2000s meant that the gains realized in financial markets became increasingly concentrated among ultra-wealthy households.

Although changes in the financial services industry were critical in facilitating stratification within financial markets, one of the most profound regulatory changes during this period was the passage of the Commodity Futures Modernization Act (CFMA) in December 2000. The major legal change in the CFMA was the removal of a broad range of over-the-counter (OTC) derivatives from the jurisdiction of the Commodity Futures Trading Commission (CFTC). With the passage of the CFMA, derivatives could now be traded on private markets without effective regulatory oversight. This free-wheeling legal environment helped to fuel the rapid expansion of derivatives markets: according to the Office of the Comptroller of the Currency (OCC), the notional value of derivatives contracts grew from $37.9 Trillion in the third quarter of 2000 to $158.2 Trillion in the third quarter of 2007, a growth of more than 300% in seven
years (U.S. Department of the Treasury 2007). Derivatives as a form of property had existed for decades (MacKenzie and Millo 2003), but in this new legal context they thrived.

Another factor contributing to the rapid rise of derivatives as a form of property was the increasing use of debt by corporations to finance investment. In 2004, the Securities and Exchange Commission lowered the leverage requirements of “consolidated supervised entities”, the five main investment banks. As a result, banks increased their leverage dramatically; at the time of its collapse, Bear Stearns had a leverage ratio of 33:1. That is, for every dollar of assets, it had 33 dollars of burrowed money (U.S. Securities and Exchange Commission 2008b). Although there are no formal leverage requirements on hedge funds, prior to the late 1990s they were more marginal players in financial markets. During this period, however, hedge funds as an organizational form became rapidly diffused (Davis 2009). This shift to hedge funds is apparent in tax records: “passthrough” capital gains income, the way that most income from hedge funds is reported, numbered at $366.9 Billion in 2007 compared to $122.4 Billion in 1997 (in 2007 dollars), a nearly 200% increase in a decade despite the crash of the tech bubble and disappointing economic performance (Wilson and Liddell 2007, Wilson 2003). A key factor in the significant returns that hedge funds and financial services companies realized during the 2000’s was their ability to use borrowed money.

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3 Leverage refers to the burrowing of money in order to fund current investment or consumption. For example, a financial firm that burrows many times its capital reserve can be understood as “highly leveraged”.

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The proliferation of debt during this period, however, was not limited to corporations; American households also turned to debt as a means to finance consumption. While rising household debt has been a long-term trend (Sullivan, Warren and Westbrook 2000), high debt levels rose further during the recession of the early 2000s as many families struggled to stay above water (Mischel et. al. 2005). According to the Federal Reserve’s Flow of Funds Accounts, the total liabilities of the personal sector grew from $9.3 trillion in 1999 to $14.7 trillion in 2004, an increase of almost 60% in five years (Federal Reserve 2010). Although rising levels of debt is itself a significant development for the economic well-being of American households, this trend was magnified by the diffusion of a certain form of property relation: securitization. Originally developed decades earlier to expand access to credit, securitization is a process through which debts are transformed into fungible financial assets and sold to investors via financial markets. Although many different flows of income can be securitized, including life insurance policies and VA pensions (Davis 2009), mortgage-backed securities constituted a significant part of securitized debt. In this way, as American households became increasingly indebted, their liabilities created trillions of dollars in financial assets because debt is simultaneously a liability for one party and an asset for another (Harvey 2006). Rising debt for consumers meant rising wealth and financial income for investors.
Hypothesis 4: Following the collapse of the stock bubble in the early 2000s, ultra-wealthy households increasingly turned to debt-based speculative financial assets created by corporations and households in order to maintain high levels of financial income growth.

Financialization and the Contours of Income Inequality

Although various aspects of financialization, such as financial deregulation, have been widely associated with economic volatility (Minsky 1980), the account presented here indicates that they are also deeply connected to distributional issues (Krippner 2010). According to a regulationist perspective, a given form of capitalism requires a coherent and unified legal, institutional and cultural “logic” in order maintain systemic stability. As Boyer (2000) and others have argued, Fordism has been replaced by a finance-led growth regime in which the wealth-consumption relationship replaces the formerly central wage-consumption relationship as the main engine for economic growth (Aglietta 2000). As such, asset appreciation (such as rising stock prices) has become increasingly important in shaping consumption, a phenomenon that economists have called the “wealth effect” (Poterba 2000). Extending this idea, I argue that the returns to financial assets have become an increasingly central element of income growth, and, therefore, income inequality.

Hypothesis 5: As financialization became the ascendant economic logic in the 2000s, financial income came to account for a majority of overall household income inequality.
If rising income inequality is a function of financial income at the top, then a very
different picture of top income households emerges than imagery of the “working rich”
Instead, inequality driven by financial income growth implies that the possession of
financial wealth, not workforce participation, is the mechanism through which
households gain entry into the top income percentile.

Hypothesis 6: As the 2000s progressed, top percentile households began to look less like
“the working rich” in winner-take-all markets or politics. Instead, this group increasingly
derived its income from the ownership of financial assets, not workforce participation.
Analytical Strategy

In order to test the power of financialization as an explanation of current stratification patterns, I examine historical trends in the distribution of wealth and income among American households. In order to test my first two hypotheses, that financial income growth outpaced wage growth and was more concentrated than wages since the 1980s, I compile descriptive statistics of income growth during this period. I also use the same descriptive statistics to determine whether financial income became increasingly concentrated during this time (hypothesis 3). In order to test my fourth hypothesis, that financial income growth corresponded to a sharp rise in speculative financial assets among the wealthy, I track the financial portfolios of wealthy households since the early 1990s. On order to test hypothesis 5, that financial income growth at the top has driven inequality growth in recent years, I decompose the relative contributions of financial and non-financial income to overall levels of income inequality in the time period 1992-2007. In order to test my sixth hypothesis, that very high income households are increasingly dependent upon wealth for income and are looking less like “the working rich”, I tabulate descriptive statics of top percentile households, including employment status and functional dependence on financial income.
Data

For this study, I use the Survey of Consumer Finances (SCF). The SCF is a repeated cross-sectional survey sponsored by the Federal Reserve Board. It is conducted every three years with a sample of about 4,500 heads of households. The survey collects data on pre-tax income, wealth holdings, demographics and other topics. The SCF is particularly suited for this study because it combines a nationally representative sample of households with an oversample of wealthy households. It provides extensive information about the income of the wealthy unavailable in commonly used surveys such as the Panel Survey on Income Dynamics (PSID) (Gottschalk 1997) or Current Population Survey (CPS) (Card and DiNardo 2002, Western and Morris 1999). This difference becomes clear when comparing income estimates from the CPS to the SCF; although the SCF provides information about the income distribution that is similar to the SCF for the bottom eighty percent of the income distribution, the CPS significantly understates the income of households above the 95\textsuperscript{th} percentile (See figure 1). The SCF is also preferable to other surveys because it includes detailed information on household wealth, which is crucial for empirically supporting my account. To account for the sample design of the SCF, I use the sample weights provided by the Federal reserve and adjust my estimations for the SCF’s multiple imputations. For more information on
weights and imputation procedures, see (Kennickell and Woodburn 1997). Additional information regarding my treatment of SCF data is described in Appendix A.
Methods

For this study, I construct two different measures of financial income: a measure including interest, dividends, capital gains, and income from “other businesses or investments”, net rent, trusts, or royalties, and a measure including all the preceding except for capital gains. I use both measures because of the potentially problematic nature of capital gains. As Piketty and Saez (2003) point out, capital gains are “lumpy” because they dramatically fluctuate over time. Although this poses problems for identifying trends in income, omitting capital gains from analysis leads to a severe underestimation of financial income. For example, according to the IRS, in the tax year 2007 dividends and interest income combined was $665 Billion whereas net capital gains income was $749 Billion (Strudler and Parisi 2009). In fact, in every year since 1993, capital gains income has been the largest single source of financial income (Hollenbeck and Kahr 2008). To construct non-financial income, I add all other forms of income including wages and salaries, government transfers, retirement income, alimony, child support, and business income. Wages constitute by far the largest component of non-financial income.

In order to test my fourth hypothesis, that financial income growth in the 2000s corresponded to the growth of speculative financial assets in the portfolios of wealthy households, I construct measures of financial wealth. I define assets as “speculative” if
they are investments subject to capital risk (i.e. they could go down in value). This
includes stocks, bonds and mutual funds. Assets not subject to capital risk, such as
savings accounts and checking accounts are considered non-speculative.

In order to test my fifth hypothesis, that financial income has come to account for
the majority of overall income inequality in the 2000s, I use the decomposition strategy
outlined by Shorrocks (1983). Conceptually, this method involves calculating overall
observed inequality, the inequality of each component of income and the share of that
income component to overall income. The computation is expressed as:

\[ s(\text{factor } f) = \rho(\text{factor } f) \times \text{sd}(\text{factor } f)/\text{sd}(\text{totvar}) \]

where “\( s(\text{factor } f) \)” is the proportional contribution of income factor \( f \) to overall
inequality, “\( \rho(\text{factor } f) \)” is the correlation across all cases between income factor \( f \) and
overall income, “\( \text{sd} \)” is the standard deviation, and “\( \text{totvar} \)” is the set of total incomes\(^4\).
For this calculation, I compare the relative contributions of financial and non-financial
income (described above) to overall income inequality.

Testing my sixth hypothesis, that top income households are increasingly deriving
their income from wealth rather than workforce participation, track the characteristics of
top percentile households over time. In particular, I measure the importance of financial
income for this group by tracking the percentage of top percentile households that derive
more than half of their income from wealth over time. I also include indicators of the

\(^4\) This calculation is available in Stata in the command “ineqfac”.

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percentage of top percentile households that derive more than four-fifths of their income from wealth. However, because some workers in the FIRE sector may report their compensation as financial income, I also include an indicator of the percentage of households in which no adults are in the workforce.
Results

*Top Percentile Income Growth*

The SCF data show a concentration of income at the top comparable to the findings of Piketty and Saez (2004). This comparison is shown in figure 2. As we can see, the most dramatic shift in the share of overall household income between 1982 and 2006 was the drop for households in the bottom four quintiles from about 47% to less than 39% of total household income. Corresponding to this loss, the income share for the top percentile grew from about 14% in 1982 to over 21% in 2006. Since the early 1980s, top percentile families have increasingly claimed a portion of the national income previously reserved for the bottom 80%.

I find substantial support for my first hypothesis that financial income growth outpaced the growth of non-financial income since the mid-1990s. As shown in figures 3 and 4, the growth of financial income for households in the top percentile in the years 1995-2001 was much greater than the growth of non-financial income (71% to 47%, respectively). In the 2000s, however, there is even stronger support for my first hypothesis: financial income for top percentile households grew 64% in the years 2001-2007, but non-financial income (primarily wages) dropped almost 30%. During this same
period, non-financial income was either stagnant or declining for all other percentile
groups. Although households in the bottom eighty percent of the income distribution saw
a modest 16% increase in financial income in the second half of the 1990s, almost half of
these gains were erased in the 2000s. This concentration of financial income growth at
the top supports my second hypothesis that financial income growth has been more
concentrated than wage income growth.

*Deregulation, Speculation, and the Concentration of Market Power*

In figure 4, I also find strong support for my third hypothesis, that financial
income became increasingly concentrated from the 1980s to the 2000s. In the 1980s, the
stock market boom was broadly shared among households in the top twenty percent of
the income distribution, who saw a dramatic increase in financial income during this
period. In late 1990s expansion, however, financial income growth was primarily
concentrated within the top five percent of households. In the 2000s, financial income
became even further concentrated, with financial income growing almost twice as fast for
top income households as for any other percentile group.

Figure 5 offers significant support for my fourth hypothesis that the rapid growth
of financial income coupled with economic stagnation in the 2000s corresponded with the
dramatic rise of debt-based speculative financial assets in the portfolios of wealth
households. In the years 1992 to 2001, the average value of total speculative financial
assets for a top percentile doubled from about $500,000 to about $1,000,000. In the
2000s, that amount doubled again to $2,000,000 in 2007. Closely tracking this rise in
speculative assets for the period 1992-2007 was the quadrupling of financial income; in the face of stagnation, wealthy households increasingly turned towards investments in risky financial assets in order to increase the returns to their wealth.

Financial Income and Overall Inequality

In figures 6 and 7, we can see that financial income among the top percentile of households constitutes a significant part of overall income growth since 1983. Including capital gains income (figure 6), top percentile households saw their income grow almost four times more than any other percentile group since 1983; financial income growth comprises about two-thirds of overall income growth for this group. Omitting capital gains (figure 7), income growth among the top percentile is still almost twice any other income group, while financial income accounts for half of top percentile income growth. Using the expanded and restricted definition of financial income leads to the same conclusion: income growth since the early 1980s has been highly concentrated within the top percentile and is primarily due to the rise in financial income. Next, I decompose the relative contributions of financial and non-financial income to overall household inequality in the years 1983-2007 (including capital gains income). This analysis produces significant support for my fifth hypothesis, that financial income has come to account for the majority of overall income inequality in the last decade. The relative contribution of non-financial income to overall inequality reached its maximum during the early 1990s recession, when it accounted for about 80% of overall inequality. However, as the 1990s progressed, non-financial income lost ground to financial income.
as the main factor of income inequality. On the eve of the early 2000s downturn, financial income and non-financial income each accounted for about half of overall observed inequality. This trend continued into the 2000s as wages stagnated and financial income continued to grow while becoming increasingly concentrated. Ultimately, financial income contributed to almost 80% of overall income inequality on the eve of the financial crisis in 2007. The speed and magnitude of this transformation is astounding; within a 15-year period, the U.S. shifted from a primarily wage-based system of income stratification to one based on the ownership of (and returns to) wealth.

Top Income Households: The “Working Rich”? 

Looking more carefully at the demographics of top percentile households in recent decades, I find support for my sixth hypothesis that top income households are increasingly dependent upon wealth rather than their occupations for income. During the 1980s, and early 1990s, top percentile households appeared increasingly like the take-all-winners described by Frank as well as Hacker and Pierson; their reliance on financial income declined and they became increasingly likely to have at least one adult member in the workforce. Although this trend saw a small reversal in the mid-1990s, by 2000 the original pattern towards the “working rich” appeared to resume. In the 2000s, however, there was a dramatic shift: the percentage of top percentile households for which financial income constituted at least half of total income more than doubled from 2000 to 2006 from about 20% to almost 45%. The percentage of top percentile families for which financial income was at least eighty percent of total income increased from about 16% in
2000 to almost 30% in 2006. Most strikingly, I find that top percentile families are increasingly withdrawing from the labor force; in the 2000s, the percentage of households in this group in which all adults were voluntarily unemployed more than tripled from 4.3% to 15.6%. This astonishingly high rate of non-involvement in labor force was nearly three times higher than any year prior to 2000 since the SCF began in 1983. Scholars have warned that the U.S. may be returning to a Gilded Age-style political system (Bartels 2008, Hacker and Pierson 2010). The evidence presented here suggests that we may be also returning to a Gilded Age-style stratification system better characterized as dominated by rentiers rather than entrepreneurs and technocrats.
Discussion

In this paper I find strong support for the utility of considering non-wage income when studying income inequality. In particular, financial income, the returns to wealth, has become central to rising inequality in the last decade. Although reliable data on finances are more difficult to obtain for the wealthy than for other households, studying these households is vital for a complete understanding of income inequality. I also find strong evidence that the changes in property relations associated with financialization have had profound effects on the distribution of income. In particular, changes in corporate governance and investment as well as financial deregulation have tilted the distribution of income towards capital and away from labor. This process has led to the concentration of income growth among owners of financial assets while wages have stagnated. This finding is of considerable importance because it underscores the need for stratification scholars to consider property relations when explaining income inequality.

My findings also have significant relevance to public policy. Although executive compensation is an important aspect of income inequality in the U.S. today, out-of-control pay for top managers is a smaller part of the overall inequality story than recent public attention suggests. Instead, in the last decade, the winners in the American
economy have been transforming into a rentier class with historically low levels of labor force participation. Thus, public debates over the benefits or drawbacks to high levels of inequality among workers presuppose a merit-oriented stratification system that is increasingly at odds with empirical evidence. Rather, membership within the top percentile of incomes is more a function of wealth and not education or achievement on the job. This finding about the beneficiaries of financialization is critical for ongoing debates about the taxation of financial income, financial re-regulation, and the proper formula for robust and broadly-shared economic growth.

Beyond contemporary policy debates, these findings also reveal a profound, if disturbing, picture of American capitalism. As the logic of rentiers has permeated American corporations and the policy formation process, economic performance has been disappointing and most workers have seen little benefit from recent productivity gains. Instead, corporate investment and public policy are increasingly governed by the dictates of narrow, short-term gain rather than long-term, public-oriented planning. Although capitalism has had a long history of renewal following sustained periods of stagnation, the American economic system as it currently stands seems poised to deliver very little in the way of income growth for most Americans.
Conclusion

Financialization has had a profound effect on the distribution of American society in recent decades. In fact, many argue that financial deregulation and short-term investment strategies are significant factors in the recent financial crisis, which has led to the loss of millions of jobs and continued wage stagnation. Further research should examine the effects of the financial crisis and the subsequent Great Recession on the role financialization plays in the income distribution. The experience of the early 2000s recession, however, is potentially illuminating in that the collapse of the stock market bubble of the late 1990s and the recession of the early 2000s coincided precisely with the period of rising financialization of inequality. Available data suggest that a similar phenomenon may be occurring now. In 2009, the financial services industry, which was further consolidated during the crisis, enjoyed record profits. The stock market rapidly recovered much of its losses and the notional value of derivatives contracts jumped to $234.7 trillion during the third quarter of 2010, an increase of 35% since the same period in 2007 (U.S. Department of the Treasury 2010). Although some wealthy investors experienced massive losses, Johnson et al. (2009) note that the composition of the group with top incomes changes rapidly over time. Speculators that placed bad bets will be
replaced by winners. Meanwhile, unemployment remains high at nearly 10% while wages stagnate and policymakers consider cutbacks to social programs. After a short hiatus, the financialization of inequality may well continue. As suggested by Krippner (2010), the distributional decisions of societies facing declining prosperity are not predetermined. Instead, the distribution of income will be the outcome of future political and social struggles over access to society’s resources.


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Appendix A: Treatment of SCF data

In the survey year 1992, the average “other” income for this group, when imputed, is more than ten times higher than any other survey year. This affects my calculations because “other” income is usually a very small fraction of overall household income. To correct for this issue, I replaced the 147 imputations that represented top percentile households with “other” income greater than $400,000 (1991 dollars) with the average “other” income among top percentile households in the years 1989 and 1995, $35,330 (1991 dollars). The other anomaly for the year 1992 is with proprietor income. 690 imputations have over $600,000 in business income, which is problematic because every value for proprietor income over $600,000 in 1992 is imputed. In other words, no survey respondents informed the Federal Reserve that they had received $600,000 or more in proprietor income; the amounts were inserted as a result of the imputation procedure. To correct for this anomaly, I replaced the imputed proprietor incomes over $600,000 with the average proprietor income in the years 1989 and 1995, $269,177 (1991 dollars). Following these corrections, I adjusted household income statistics for inflation using the Consumer Price Index provided by the Bureau of Labor Statistics.
Figure 1: Quintile and Top 5% Household Income Thresholds for the SCF and CPS, 1989-2007 (in 2006 dollars)
Figure 2: Income Shares by Percentile Group, 1983-2007
Figure 3: Percent Changes in Average Non-investment Income by Percentile Group, in Constant Dollars (1983-2007)
Figure 4: Percent Changes in Investment Income by Percentile Group, in Constant Dollars (1983-2007)
Figure 5: Average Financial Asset Holdings and Financial Income for Top 1% Households, 1992-2007 (in 2007 dollars)
Figure 6: Income Growth from Financial Income (Including Capital Gains) and Non-financial Income by Percentile Group (1983-2007)
Figure 7: Income Growth from Financial Income, (Excluding Capital Gains) and Non-financial Income by Percentile Group, 1983-2007
Figure 8: Decomposition of Percent Contributions to Overall Household Income Inequality by Financial and Non-Financial Income (1983-2007)
Figure 9: The Growth of Rentier Characteristics among Top Percentile Households (1983-2007)