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Household Finance in Contemporary Capitalism: Facts in Search of Theory

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Abstract: Both International and Comparative Political Economy have a blind spot where households – and particularly households' finances – are concerned. This is a problem. Household financial activities have a large and growing impact on economic outcomes; however, our understanding of the underlying causal mechanisms remains weak. This weakness stems from the fact that discussions of household finance are limited – and what discussions are taking place are spread across scholarly communities that don't always communicate well with one another. This paper attempts to rectify that problem. It surveys the existing theoretical treatments of household financial activities, provides data showing that those activities are important, and lays out both a framework and a research agenda for examining the role of household finance in contemporary capitalism. In doing so, it reveals opportunities for cross-pollination between IPE, CPE, and scholarship concerning "financialization."

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Both International and Comparative Political Economy (IPE and CPE, respectively) have a blind spot where households – and particularly households' finances – are concerned. This is a problem. As households' access to financial markets has improved, both sides of their balance sheets have expanded dramatically, enhancing the household sector's impact on domestic and international economic outcomes. Household financial activities have a major impact on growth performance, macroeconomic volatility, and external indebtedness. Moreover, households' savings and borrowing behavior profoundly affects the operating environment of both financial and non-financial firms.

Despite these facts, households remain of relatively marginal interest to political economists. IPE examines globalization and interdependence primarily through the actions and interactions of states, international organizations, and firms. CPE – particularly institutionalist CPE – also tends to focus on firms and their relationship with the state. When they are discussed, households are either treated as a factor of production or are discussed within the context of social programs.

This is a major oversight. Empirically, household financial activities appear to have a large and growing impact on economic outcomes; however, our understanding of the underlying causal mechanisms remains weak. This weakness stems, in large part, from the fact that discussions of household finance are limited – and what discussions are taking place are spread across scholarly communities that don't always communicate well with one another. This paper attempts to rectify that problem. It surveys the existing theoretical treatments of household financial activities, provides an empirical sketch of how those activities are important, and lays out both a framework and a research agenda for examining the role of household finance in contemporary capitalism. In doing so, I hope to reveal opportunities for cross-pollination between IPE, CPE, and scholarship concerning "financialization."

The paper is organized into four sections. The first conducts a survey of how these three academic communities think about households' role domestically and in the global economy. The second marshals existing research from across a number of fields – combining it with novel data from OECD countries – to establish a macro-level picture of the impact households' financial decisions have on wider economic outcomes. The third section then argues that we need to establish a discussion of household finance that

crosses scholarly borders, presenting a framework for examining household finance that speaks equally to multiple literatures. The fourth and concluding section highlights the key puzzles and challenges that pursuing such a research agenda would entail.

I: Capitalism and the Household

The potential benefits of a fuller treatment of household finance are most pronounced in three intellectual communities: IPE, CPE, and the various schools of heterodox macroeconomics concerned with the "financialization" phenomenon. This section provides thumbnail sketches of those fields and how they treat households and household finance – to the extent that they engage with households at all.

The relative dearth of household-focused research in these fields becomes particularly evident when contrasted with how mainstream macroeconomics deals with households. Orthodox macroeconomics – either referring to older Keynesian insights into the national income accounting identity or the more in-vogue dynamic stochastic general equilibrium (DSGE) models – envision households as playing a central role in determining economic equilibria. On the simplest level, consumption is the largest component of output as defined by the accounting identity – and economists have a long-standing interest in the link between consumer finance and consumption. There are a number of well-established discussions over whether households use financial markets to "smooth" their consumption over time (Mankiw 2000), how households construct their portfolios (Guiso et al. 2002), and how consumers mentally process the act of becoming indebted (Prelec and Loewenstein 1998). Contemporary DSGE models – that is, models of an entire economy based on the actions of many individual agents – have also have a history of including household finance in their models (although it is a short one) (Iacoviello 2005; Pataracchia et al. 2013).

While mainstream macroeconomics does have a track record of seeing households as key shapers of economic equilibria, the field is limited in other ways. Because it is not especially sophisticated in its incorporation of institutions – and because the field assumes a large degree of causal universalism – it is generally blind to how markets evolve over time and diverge across space. What divides orthodox economists from their

heterodox brethren is the view that markets exist in a constant state of *dis*equilibrium, fundamentally subject to alteration through policy innovation, institutional transformation, and shifting norms. This same interest in how the underlying structures of capitalism evolve is found in IPE and CPE as well. In order to see how households participate in capitalist change – not merely in the determination of economic output – we must look to these communities. And here, households have been of more marginal interest.

Households in IPE

IPE was born from two needs: The first was the need to redress the "dialog of the deaf" between Economics and International Relations (Cohen 2008). The second was for a better understanding of the increasing complexity and density of cross-national economic linkages. By the late-1960s and early 1970s, global capitalism had begun the inexorable march away from a system of largely independent parts and toward today's largely unified system. IPE came out of efforts to understand the consequences of that shift (c.f. Cooper 1980; Keohane and Nye 2012).

The liberalization of global capital flows has arguably been the most important component of complex international interdependence. The need for capital – and the dangers of capital fleeing a national system – has been a central concern of IPE from the beginning. Capital movements transmit shocks between countries and constrain policymakers' options (Cooper 1980). The benefits of freer access to capital create opportunity costs for countries that forego those benefits in order to remain closed (Keohane and Milner 1996). Accommodating this change largely meant the abandonment of fixed exchange rates. Finance – no longer a "servant" to domestic policymakers – could wreak havoc on exchange rates by exiting from undesirable national systems (Helleiner 1996). The pressure to compete for access to international capital incentivizes convergent financial reforms, potentially stoking convergence on common policies (Cerny 1997).

Originally, households only entered this discussion either as vulnerable victims or as factors of production. Susan Strange (1986), for instance, noted that the ascendancy of unpredictable financial market could victimize less sophisticated financial actors (implicitly including households) who possessed few tools for managing their new

exposures to the global "casino." Likewise, Jeffry Frieden (1991) is indicative of the bias toward thinking of households as labor. That is, he considered labor in the context of their relationship with employers rather than as guardians of their own purchasing power (which would suggest different preferences toward exchange rates).

The global financial crisis of 2007-08 has pushed households closer to the center of the discussion – though only to a certain extent. In a review of the key literature concerned with the rise of global finance prior to the crisis, Richard Deeg and Mary O'Sullivan (2009) identified a number of essential works focused on financial firms, ratings agencies, governance structures, and capital account liberalization – but none that dealt with household financial activities in much depth. Numerous pre-crisis works did warn of instability produced by exotic financial instruments based on household borrowing – and most post-crisis autopsies focused on those instruments to some degree (c.f. Helleiner 2011). Nevertheless, most of these analyses treat households' involvement as incidental, focusing instead on how such financial products distributed risk within the financial system. Few saw households as anything more than an exogenous source of the borrowing needed to create those products in the first place.

This exclusion cannot be attributed to a lack of methodological tools or paradigmatic frameworks. In the dominant "Open Economy Politics" (OEP) approach to IPE, the tools for including household sector forces exist. Households form preferences over economic policy and have those preferences aggregated and articulated through domestic institutions whose actions generate outcomes that feed back into households' preference formation (Lake 2009). Even Thomas Oatley's (2011) robust critique of OEP scholarship does not really come into play because households' preferences are not likely to be heavily influenced by international politics. The problem is one of emphasis, not approach: IPE has viewed households as victims of globalization, as labor, and now as a relatively homogenous pool of borrowers used to produce financial weapons of mass destruction. It does not tend to think of them as users of capital themselves.

There are some exceptions to this diagnosis. Ethan Kapstein's (2006) somewhat prophetic review of the international financial architecture for the Bank for International Settlements (BIS) noted that the increased integration of households into the financial system produced special economic and political dangers. Likewise, Maurice Obstfeld and

Kenneth Rogoff's (2009) discussion of the crisis prepared for the US Federal Reserve heavily emphasized household behaviors: household borrowing in the US and household saving in China were the *sine qua non* for both the emergence of mid-2000s macroeconomic imbalances and, ultimately, for the crisis. Interestingly, both papers were produced for policy audiences rather than academic ones.

The impact of capitalist change on households is also of central concern in feminist IPE and in the "daily life IPE" literature. Genevieve LeBaron (2010, 908, 890) echoes the *raison d'être* of this paper, arguing that there is a need to "more clearly establish variations in households over time and how these shifts have been shaped by, and shape, the social relations of capitalism." This then constitutes a partial response to her call "to overcome the gendered division of academic labour within political economy wherein feminists theorize reproduction and households, and non-feminists maintain a focus on trade, production and finance. As with feminist IPE, it deals extensively with the household; as with non-feminist IPE, it is primarily concerned with patterns of trade, production, and especially finance.

Even within IPE communities that do focus on households, there remains a tendency to understate the importance of household *finance*. The increasingly unified global pool of capital is based to a growing degree on household borrowing. The market for innovative financial products is limited, in large part, by the willingness of consumers to take on debt. Where households are willing to take on such debt – and where regulatory regimes are amenable to the creation of such products – the balance of payments becomes skewed toward financial account surpluses and current account deficits. Where they are not, the balance of payments moves in the opposite direction.

In sum, without the financial integration of the household, the defining characteristics of the post-1970s global economy – the growing balance sheets, intensified capital flows, innovative financial institutions, and persistent macroeconomic imbalances – would look very different. Given that households are a key ingredient in determining the volume and direction of global financial flows, it stands to reason that IPE should focus more closely on what households are doing – and why.

Households in CPE

The arguably national focus of OEP has muddied the distinction between IPE and CPE (Keohane 2009). However, a community of self-consciously comparative political economy scholars remains distinct – and uniquely valuable in their ability to explain households' divergent behaviors and the impact they have on currents across the global sea of financial capital. Yet while a comparative investigation of household finance would be of great benefit to the broader CPE literature, there has been surprisingly little research in that direction.

In the decades following the initial surge of financial globalization that gave rise to IPE, the dominant discussion within CPE became whether national systems would retain a distinctive character or converge on a single liberal model (c.f. Berger and Dore 1996; Crouch and Streeck 1997; Soederberg, Menz, and Cerny 2005). As the international economy became more integrated, countries increasingly felt pressure to conform to emerging international norms in order to compete and remain attractive to capital. Even so, advanced capitalist systems continue to look very different from one another. This tension between convergence and diversity is implicitly or explicitly at the heart of CPE's key texts, including Peter Hall and David Soskice's (2001) *Varieties of Capitalism* (VoC) and the works that followed in its wake.

This debate, and particularly institutionalist accounts of capitalist diversity such as the VoC framework, has focused extensively on non-financial firms and their relations with both labor and the state. Households, interpreted through this lens, are largely considered in terms of their role in productive enterprise – for instance, through collective bargaining systems and wage-moderation regimes. Until recently, the same bias was evident in the treatment of financial firms. VoC approaches to capitalism were always light in their treatment of finance, relying extensively on John Zysman's (1984) dichotomy between bank-based and capital market-based financial systems – again focusing on financial firms' relationships with industry. The thin treatment of finance has been partially rectified since the financial crisis (Hardie et al. 2013); however, engagement with households has remained limited.

Where CPE does engage with household finance, it is often from the perspective of the welfare state (such as in Esping-Andersen 1990) and social policy more generally (Schelkle 2012a). In particular, these scholars have made important strides in highlighting access to financial resources as a potential substitute for traditional welfare state spending (Ansell 2014). Cash-strapped governments shifting the burden of looking after households' needs onto the financial system also features prominently in Raghuram Rajan's (2010) analysis of systemic problems in the United States – though his *Fault Lines* lacks a comparative dimension. This is a key finding; however, it is only one aspect of the role that household finance in fostering cross-national capitalist diversity. Given the role that housing prices played in the financial crisis, there is also a substantial body of work that focuses on the connection between household finance and home prices (Schwartz and Seabrooke 2009; Schelkle 2012b; Johnston and Regan 201X).

There has been some limited work on the broader economic consequences of household finance policy beyond the housing sphere (Schwartz 2012; Fuller 2015). These works take steps toward the full incorporation of households into the discussion of capitalism, its post-1970s evolution, and its diverse national forms. However, they are also of limited theoretical ambit. They focus on the determinants of household activities and on narrow causal linkages to macroeconomic outcomes but tend to avoid making broader statements about wider change in capitalist structures. Finding these broader statements means looking beyond the boundaries of the IPE and CPE literatures discussed so far – to the disparate collection of scholars interested in the "financialization" phenomenon.

Financialization, Heterodox Macroeconomics, and the Household

While the IPE and CPE are highly integrated scholarly communities, groups within heterodox macroeconomics have carried on parallel – and sometimes overlapping – discussions. These scholars, many of whom are best identified as international political economists but come from backgrounds in radical economics, are more attuned to fundamental transformations of capitalism than their more mainstream brethren. Nowhere is this emphasis clearer than in research focused on "financialization," very broadly defined as “the increasing role of financial motives, financial markets, financial actors

and financial institutions in the operation of the domestic and international economies" (Epstein 2005).

The first to identify the financialization phenomenon (and to give it a name) were Marxists who sensed that the rising importance of financial activities signaled a shift in capitalism's mode of production. Naturally, this would have consequences for the distribution of power and economic resources (beginning with Hilferding 1981, continuing with Magdoff and Sweezy 1987, and evident in works like Arrighi 1994). However, it is other islands within the heterodox epistemic archipelago that have incorporated households into their analyses of financialization more completely. These are, chiefly, the small community of British "social accountants" clustered around Julie Froud and Karel Williams at the University of Manchester, the French Regulation School as championed by Robert Boyer, and certain groups of post-Keynesian (or post-Kaleckian) economists.

The social accounting approach to household financialization shares much with the French Regulation School in terms of their approaches. Both see the household sector primarily as savers who – through buying retail savings products – theoretically gain a measure of ownership over a society's productive capacities. This makes them stakeholders in productive firms and gives them an interest in those firms boosting profits and maximizing shareholder value. Where conventional thinking suggests that the battle between labor and capital is zero-sum (in the short-term), this form of social reorganization erodes any such distinction between labor and capital because labor *holds* capital. Systemically, households become shareholders, firms become increasingly bound to maximize shareholder value, and the financial sector intermediates between the two. (Boyer 2001; Froud, Johal, and Williams 2002).

Taken to an extreme, such a democratization of finance might allow households to escape "the tyranny of earned income" as their returns as *rentiers* becomes more important than their wages as workers (Froud et al. 2010). The *régulationistes* go further than the social accountants in building a theoretical superstructure that presents this as a possibility: they see the finance-led growth regime is an entirely different economic model that could sustainably supersede "Fordist" production based on physical capital accumulation. In contrast, Froud and her colleagues are more skeptical. They argue that

while growing savings and enhanced shareholder control have manifestly benefited financial institutions, households themselves remain bound to their fate as laborers.

Likewise, financialization scholarship in the Kaleckian tradition maintains that finance-led growth has not been as evident as the phenomenon of *profit sans l'accumulation* (Stockhammer 2004; Cordonnier 2006). That is, holders of financial capital have extracted value from productive enterprises and restricted those enterprises from investing. A more strident view argues that firms now have clear incentives to "downsize and distribute," essentially cannibalizing themselves in order to pay off shareholders (Lazonick and O'Sullivan 2001). Most of this research focuses on the firm – particularly the work of Englebert Stockhammer (2004; 2006; 2008), James Crotty (2005; 2008), and Thomas Dallery (2009) – or on the links between financialization and wealth concentration (Power, Epstein, and Abrena 2003; Duménil and Lévy 2005). However, there have also been some attempts to create overarching models (similar to in mainstream macroeconomics) that treat household finance as a key variable in determining overall economic activity (van Treeck 2009; Hein 2012).

Such theories – frequently found at the margins of mainstream IPE scholarship – are radical but valuable. They succeed at integrating a number of concurrent developments that are often addressed separately: the enormous growth of global financial markets, households' integration into those markets, the proliferation of financial products based on household borrowing, the embrace of financial markets as social policy tool by policymakers, rising profits despite rising structural unemployment, and the enhanced power of shareholders over productive enterprise.

* * *

Ultimately, the problem with the theoretical treatment of households in these fields is twofold: first, household finance is largely consigned to peripheral academic discussions; second, many of the conversations of household finance are happening separately rather than building off one another. This lack of discussion concerning the political and economic import of households' balance sheet management would be entirely justifiable if households *weren't* actually that important. The next section demonstrates that this is certainly not the case.

II: The Rise of Household Finance

A stylized narrative of the transformation of household finance begins with the wider story of global financial liberalization – a process that began in the late 1970s and early 1980s (Vives 2000). Before this period, households' financial interactions were sharply curtailed through policies of so-called financial "repression:" limits placed on financial institutions (McKinnon 1973; Shaw 1973). Pre-liberalization financial markets were characterized by state-controlled interest rates, quantitative credit restrictions, state-sanctioned cartels, rules prohibiting one type of financial institution from conducting activities assigned to another, fixed commissions and fees, and protection against intrusion by foreign firms and foreign capital.

Though the exact nature of these restrictions varied from country to country, one universal consequence was to restrict the amount of credit available to retail borrowers. Chartering restrictions – legal restrictions on what activities banks were permitted to do – often reserved mortgage-lending for specialized institutions. For example, Britain's Building Societies and Spain's Banco Hipotecario had near-complete monopolies on those countries' mortgage markets until the 1980s. Quantitative credit restrictions – such as the "corset" in Britain or the *encadrement du credit* system in France – sharply curtailed the overall amount that banks could lend. The prevention of cross-border financial transactions meant that a national system's lending capacity was limited to the amount of capital that could be raised within a single country's borders.

Liberalization meant the end of these practices. Fixed interest rates and commissions were eliminated. Quantitative credit restrictions were abolished. Chartering restrictions were phased out. The state withdrew from both the direct ownership of banks and the indirect practice of influencing banks' lending decisions. Perhaps most importantly, restrictions on foreign ownership of financial institutions were largely abandoned. These liberalizing moves were a double-edged sword for financial institutions: they gained the freedom to engage in a much wider range of activities and gained access to larger pools of international capital. At the same time, the elimination of

national barriers to capital and the abolition of chartering restrictions meant that they faced far more competitive environments (c.f. Edey and Hviding 1995).

As a result, the 1980s and 1990s saw banks undergo a competitive transformation. Smaller institutions failed or were purchased by growing universal banks – many of which operated across borders. The balance sheets of these larger institutions expanded as banks made up for falling margins with greater volume. Above all, financial institutions engaged in an unprecedented period of innovation, developing new instruments to facilitate their expansion.

Each of these changes had a tremendous impact on households' access to financial resources. As banks grew their balance sheets, they needed new borrowers – and, increasingly, they have looked to households. The incorporation of specialized consumer lenders into larger universal banks – together with the industry-wide expansion of balance sheets – unified large banks' capital with specialized lenders' market share. The advent of securitization allowed banks to sell marketable derivative assets based on consumer borrowing. This made it easier to raise funds for consumer lending further expanding the pool of potentially loanable funds. In short, financial liberalization had an effect on households that was arguably as significant as the effect on banks – and the end result of that change was to greatly improve households' access to financial markets (Fuller 2015).

Though the liberalization process began in earnest over three decades ago, the full effects of liberalization have become more apparent since the mid-1990s. This is partly because liberalization did not take hold in many developed economies – especially in Continental Europe – until the 1990s. Even then, the impetus for reform among the laggards had much to do with adjustments required to complete the single market and prepare for the launch of the euro. Similarly, innovation in financial instruments took time to spread across the Atlantic: securitization did not become common in Europe until near the end of the 1990s. As a result of this slow global roll-out, the best evidence of the rise of household finance comes from the past twenty years.

On a superficial level, the role of households in the global economy is plain to see: consumption has comprised roughly 60 percent of all economic activity in OECD countries since the mid-twentieth century. Even this measure understates households'

impact on overall economic performance: investment in housing comprises an additional share of gross fixed capital formation – accounting for nearly one third of all investment by the 2000s. As figure 1 shows, household economic activity have grown modestly more significant over the past several decades. After remaining flat from the 1960s through the 1980s, the share of national income generated by consumption has risen steadily, reaching over 62 percent by the early 2010s. Including residential investment, that figure climbs as high as 70 percent in some countries – most notably in the United States.

While this may seem like a minor change, the sheer amounts involved make it noteworthy. While the output of all sectors of the economy has grown, the spending of households has grown faster. Taking 2014 as a benchmark, one percent of OECD-wide GDP amounted to $477 billion. Comparing 2014 to the 1960s, that is the equivalent of taking over $1 trillion from businesses (whose share has shrunk as households' has risen) and giving it to households instead. Because the determinants and consequences of household spending differ markedly from firm spending, this will undoubtedly affect the wider economy.

These figures are the tip of the iceberg in terms of households' increased command of economic resources. While consumers' dominant role in determining global expenditure is neither new nor surprising, less attention has been paid to the rising share of financial resources committed to household use. Not only has household debt risen sharply over the past few decades, households' borrowing has grown far faster than both government borrowing and non-financial firm borrowing. As figures 2 and 3 demonstrate, the ratio of household debt to both non-financial sector debt and government debt has increased markedly since the mid-1990s. This is particularly striking given that the debt loads of all economic actors grew significantly during this period. This means that there has been a tremendous reallocation of financial resources toward households – one that dwarfs households' relative increase in spending.

Furthermore, these figures understate the degree to which household borrowing has resulted in capital reallocation. Financial firms' own debt burdens are often directly attributable to household activities. When a household borrows funds for a mortgage from a bank, that money has to come from somewhere. In the most traditional financial

system, that "somewhere" is often households themselves: banks take their savings (as deposits) and then lend out those funds as loans. In a contemporary financial system, "somewhere" is harder to define. In some cases, banks borrow money from wholesale capital markets (i.e., from other banks). In others, they raise the funds to make mortgages by selling the mortgages they make in order to form mortgage-backed securities. In either case, the financial firm itself takes on a liability to match the one incurred by households.

But things can get more complicated. Each time a derivative product is formed out of existing assets, it creates both new assets and new liabilities within the financial sector. For example, chopping up a mortgage-backed security and repackaging it as a collateralized debt obligation (CDO) creates a new asset for whoever buys the CDO – and a new liability for whoever owns the mortgage backed securities that provide the payment streams within the CDO. This process of dividing and repackaging assets can continue indefinitely – and each time the payment streams on existing assets are organized into new derivative assets, new assets and liabilities appear in the financial sector. At the heart of this financial labyrinth, however, lies the original household transaction: it is their payments that have ultimately been combined and recombined multiple times. Without their payments, there could be no derivative assets. What this means is simple: every household mortgage or loan that is securitized causes household debt to grow *and* produces many times that growth on the balance sheets of the financial sector.

Data from Securities Industry and Financial Markets Association (SIFMA) makes clear that this link between household borrowing, securitization, and financial sector debt cannot be understated. In the United States, for example, more than 80 percent of all securitized assets were based on underlying borrowing by households – and new issuance of US securitized assets in 2007 alone amounted to roughly $3 trillion. While not all of the expansion in financial sector liabilities can be chalked up to financial institutions' relationships with households, a substantial amount certainly can be. And, as figures 4 and 5 show, the relative growth of financial sector debt has been even more striking than that of the household sector.

In sum, the financial integration of the household has caused (1) a modest but quantitatively significant reallocation of spending from business to households; (2) a

significant increase in the relative share of financial resources flowing toward households; (3) part of the reallocation of financial resources toward the financial sector itself. But what do these changes mean? The evidence suggests they are problematic.

Accounts of the "finance-growth nexus" – the hypothesis that financial intermediation enhances economic growth – rely heavily on the Schumpeterian notion that financial markets spur growth by allowing productive economic actors to engage in entrepreneurship and productivity-enhancing investment (c.f., King and Levine 1993). The nexus, conceived of in this way, does not place any value in household borrowing. Though there are exceptions, households do not generally use their sources in productive ways; instead, they use borrowed funds to consume or invest in non-productive residential property. While this may fuel economic growth in the short term by boosting consumption and causing asset prices to rise, this growth is not self-sustaining in the way that industrial credit might be. A reallocation of financial resources to households is therefore of dubious social value: it represents a shift of capital from productive to unproductive uses.

There are three potential negative consequences to consider. First, as illustrated most recently by Atif Mian and Amir Sufi (2014), increased household indebtedness generates macroeconomic instability. This is consistent with evidence from past boom-bust cycles: household borrowing is essentially procyclical, driving up economic growth in expansions and then causing more protracted recessions once a period of expansion ends (M. King 1994). Data from OECD countries during the post-2000s period provides further support for this idea: household debt growth was positively correlated with consumption growth from 2000-07 and then negatively correlated with consumption growth over the 2008-12 period.

Second, there are several reasons to believe that a finance-growth nexus predicated on household indebtedness will lead to heightened inequality. In order to realize capital gains, a person has to hold some amount of capital to begin with (or have the reputation to sustain heavy borrowing). This incumbency effect means that the wealthier an individual is, the better positioned they are to benefit from increased access to resources (Schwartz and Seabrooke 2008; Trumbull 2012). More straightforwardly, an expanding financial sector itself produces inequality through the disproportionately large

compensation it offers to a few of its employees. Though the data available is sparse, figure 6 does appear to suggest that larger financial sectors are correlated with greater shares of national income accruing to the top 1 percent of earners.

Additionally, the creditor-debtor relationship is structured in such a way that long-run increases in inequality are all-but assured: as households borrow, their purchasing power today increases but their wealth and future purchasing power falls (they now have a debt obligation and the interest payments that come with it). For society's creditors, the reverse is true – they surrender some of their purchasing power today (the amount lent) in order to increase their incomes (interest payments) and wealth (the underlying loan asset). Since net borrowers tend to be poorer than net savers, this will tend to exacerbate inequality. Worse, if the debtor offered collateral to obtain funds (as with a mortgage), the creditors retain the senior claim on that collateral – meaning that the poorer party is more exposed to falling asset prices than the richer creditor (Mian and Sufi 2014).

Third, as noted before, Obstfeld and Rogoff (2009) have pointed to the marketability of US households' willingness (and ability) to borrow – contrasted with less willingness and ability in other regions of the world – as a primary cause in the buildup of global macroeconomic imbalances. In other words, the United States has a comparative advantage in debt formation while other countries have comparative advantages in household saving. This complementarity will tend to create lasting financial account imbalances as capital flows from savers to borrowers. This, in turn, produces pressure for capital exporters to run a negative current account and capital importers to run matching current account surpluses. Such a comparative advantage in debt formation has arguably been on display in the eurozone over recent years, with household borrowers in the periphery matched with household savers in the European interior.

This discussion of consequences is valuable because it illustrates that the degree to which households have become entangled in financial markets varies from country to country and – more importantly – suggests that this variation can help to explain real-world outcomes. While the direction of change is broadly uniform, the magnitude of change is not. Among OECD countries, the largest increase in the ratio of household to non-financial sector borrowing from 2000-07 occurred in Greece. The only two countries

in which that ratio fell over the same period were Germany and Austria. Indeed, as figure 7 shows, households in the entire group of European "periphery" countries experienced greater household financial integration than that of Germany. While this finding is narrow and inconclusive, it is consistent with each of the points presented above: that the degree of household integration into financial markets has generally increased – and that severe negative consequences have been felt where that increase is largest.

III: Households as Bridges

Thus far, this paper has presented a collection of empirical data lacking a theoretical home – those facts being that (1) households have intensified their interactions with the financial sector; (2) these interactions have economic consequences; and (3) such interactions and their consequences vary from country to country. Having established this, how can we better incorporate them into existing theory?

Between IPE and CPE

Households are particularly relevant to bridging the gap between IPE and CPE because their financial interactions are, paradoxically, both more "international" and more "national" than the financial activities of most banks and non-financial firms.

This statement requires some explanation: household finance is more "transnational" because of the relatively homogenous nature of household financial interactions. In a world where capital can move freely across borders, household savings (i.e., deposits) are added to an essentially global pool of loanable funds. Household borrowing then draws down funds from that pool. In practice, the world doesn't exactly work like this: home bias in investment means that financial institutions have a tendency to keep funds within the countries in which they originate (Tesar and Werner 1995). The best explanation for this bias is informational. That is, investors can more easily collect information about potential investment outlets in their own country than in others. This gives them an advantage in finding the best uses for capital when compared to their international competitors (Van Nieuwerburgh and Veldkamp 2009).

Household finance is more "transnational" because it is potentially less bound by home bias. The reason for this is the underlying homogeneity in household financial

contracts. Mortgages are among the most standardized financial contracts in the world; large numbers of contracts are offered on substantially similar terms. This homogeneity – and the large number of contracts offered – explain why American-style securitization works in the first place. Just as banks can adjust their reserves on hand to avoid bank runs by knowing households' typical withdrawal activities, banks can usually predict the delinquency rate on a portfolio of similar consumer loans. Based on that information, they can buy and sell the payment streams from their mortgage books as securitized assets.

Through the process of securitization, the idiosyncratic features of a particular financial contract are largely eliminated: it doesn't matter if a handful of homeowners default because their individual payments comprise such a small piece of the securitized asset. Information about the end-borrower thus becomes less relevant. Contrast this with a corporate bond, in which the holder of the bond is entirely exposed to default by one actor. In that situation, more information will be needed before someone is willing to buy the bond.

This difference also helps explain how firms around the world became exposed to the US mortgage industry prior to the financial crisis: financial institutions bought and sold payment streams without much of any information about the end-borrower. This would be relatively uncommon for international trade in sovereign debt or corporate bonds (though more common for equities markets, where investors buy and sell entire indices). That is not to say the market for mortgages is globally unified: disparate underwriting rules ensure that an American mortgage and a German mortgage remain substantially different. Even so, SIFMA data shows that the issuance of multinational MBS (i.e., securities comprised of payment streams on mortgages coming from multiple countries) is not insubstantial. Before the crisis, the market for these assets amounted to some $300 billion, more than double the size of the French and German MBS markets combined.

This loss of informational fidelity is largely important from an IPE standpoint because it teaches us something about the flow of capital between countries. At the same time, however, household financial interactions remain more "national" than the financial activities of many other actors. The point here is that households cannot engage in venue

shopping and regulatory arbitrage in the same way that a large bank or firm can. In simpler language, an Italian mortgage-seeker has to deal with Italian financial rules and Italian financiers in a way that UniCredit or Fiat does not. Households, by virtue of their relative immobility and lack of financial sophistication, are simply more exposed to national idiosyncrasies than big banks and big business.

Put together, the relatively "national" and "transnational" nature of household finance illustrates that we need both IPE and CPE perspectives in order to understand what is going on – and we need those subfields to talk to each other. Ignore the international marketability of assets produced by consumer borrowing – or alternatively, overlooking the national determinants that shape borrowing behavior of households in the first place – are equally unwise.

Across the Financialization Archipelago

The tougher – but arguably more fruitful – gap to span is between the various perspectives on financialization and CPE. Heterodox macroeconomics tends focus on economic systems in general, which has the indirect effect of homogenizing capitalism across countries. However, it does *not* homogenize capitalism across time: financialization is a process that has resulted in capitalist systems evolving over a period of years. CPE has the complementary strengths and weaknesses: it is well-suited to understanding spatial disparities between capitalist systems but has more trouble with change across time.

The opportunity at a macro level seems clear: by connecting the financialization literature with CPE, we can come to a better understanding of how capitalism changes across both time and space. Ewald Engelen and Martijn Konings (2010, 620) note as much in their contribution to the Oxford Handbook of Comparative Institutional Analysis, lamenting "that the financialization of contemporary capitalism has not received sufficient attention from comparative institutionalism and the VoC-literature." Engelen and Konings have done more than most to bridge the divide between financialization and CPE scholarship, positing the existence of three varieties of financialization "trajectories." This approach is promising – yielding the benefits of both cross-spatial and cross-temporal analysis. Moreover, it matches closely with what Wolfgang Streeck

(2010) has highlighted as a central problem with VOC theorizing: the lack of historical context and dynamism in trying to isolate static capitalist varieties.

At the same time, the theoretical ambition of financialization scholarship makes some scholars wary. The penchant for making broad generalizations about systemic change is what defines heterodox thinkers as heterodox – and can exclude them from certain discussions. Our discussion of household finance therefore represents an opportunity for finding overlap at the more intermediate theoretical level. By focusing on the financial integration of households, we can develop a framework that doesn't surrender the broader ambitions of the financialization agenda but also doesn't require all connected research to buy into the idea of a profound transformation at the very heart of global capitalism.

A Synthesis

Such a framework, constructed from the two theoretical bridges described in this section and the facts presented in the preceding pages, can be summed up in five causal assertions:

1. Global financial liberalization has brought households – as a sector – further into global capital markets as both creditors and debtors;
2. Such integration has significant consequences on domestic and international economic outcomes;
3. National policy and institutional configurations still exert tremendous influence over the activities of households on an individual level;
4. Such policies and configurations – and how they evolve – diverge across economies;
5. The result is divergent macroeconomic consequences.

These assertions accommodate the facts concerning the rise of household finance, the paradox of households' "international" and "national" roles, the transformation of capitalist systems over time, and the role of national features in mediating that

transformation. Analyses in this vein can therefore speak to the empirical record while also speaking to IPE, CPE, and financialization theorists in equal measure.

IV: The Puzzles Ahead

The exercise of building an intermediate-level theory of household financialization would be pointless if it did not help us provide answers to real empirical puzzles. Fortunately, these puzzles can be found in abundance.

First, we need a better understanding of the consequences of households' altered financial interactions. On the international level, this largely concerns how capital is allocated across borders: that is, to what degree are global macroeconomic imbalances determined by household behaviors? If household borrowing is encouraged in certain areas of the world and mitigated in others, this will have an affect on the balance of payments. Borrowing systems would tend to run financial account surpluses and mitigating systems would run the matching deficits. This has implications for how we think about comparative advantage: we normally think about comparative advantage in terms of a country's current account, determining what an economy exports. But if a country is better suited to sell highly marketable assets based on consumer credit, it effectively has a comparative advantage in the export of assets. This has implications for the study of external imbalances between countries – and more work is needed on what those implications are. On the domestic level, there are potential connections between household finance and macroeconomic instability as well as between household finance and inequality. The latter has been subject to some study (e.g., Mian and Sufi 2014), though more comparative research is called for.

Second, we really don't understand why countries approach household finance differently. Clearly, national preferences toward household financial interactions vary – but what causes those variations? Culture, policy myopia, intergenerational political conflict, and diversity within institutions and how they are linked together are all likely candidates. A survey of preliminary work into these determinants would take more space than is available here. Suffice to say, however, that these works are preliminary and *ad hoc*, failing to cohere into a satisfying explanation.

Finally – on a programmatic level – the causal links between liberalization and heightened household financial interactions also need to be better fleshed out. The same is true of the specific links between nationally distinct features and the attendant consequences.

In short, this is a research agenda with many tasks ahead of it. But those tasks are worth the effort. Moreover, they should be approached through a common framework – such as the one presented here – that encourages the cross-pollination of ideas between IPE, CPE, and heterodox macroeconomics.

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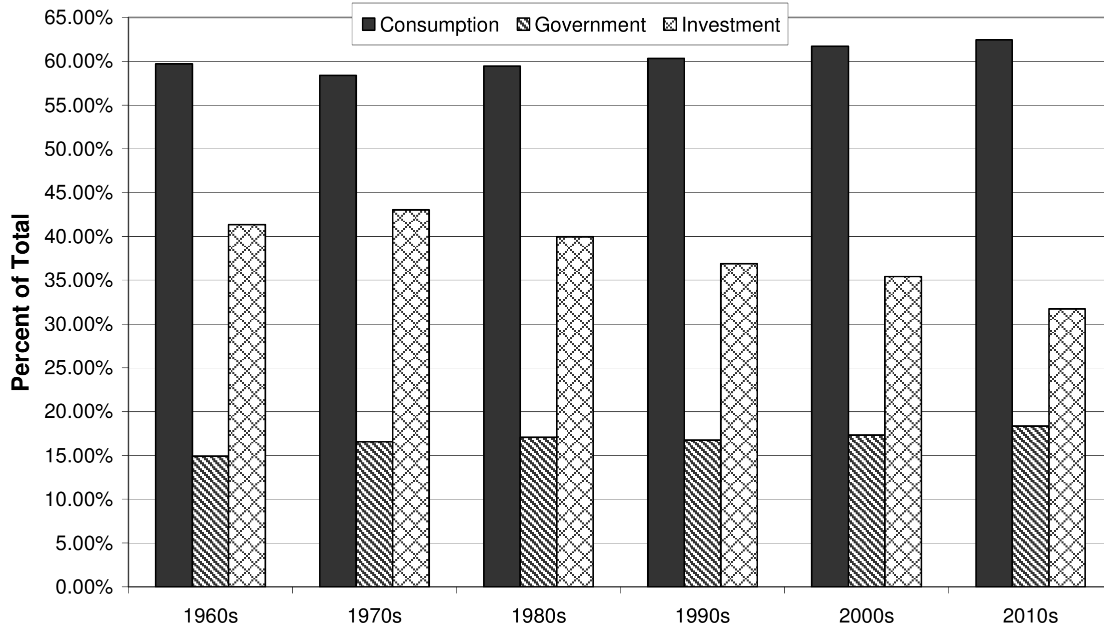

Figure 1 *Source: OECD Annual National Accounts*

Figure 2 *Source: OECD Non-Consolidated Financial Balance Sheets*

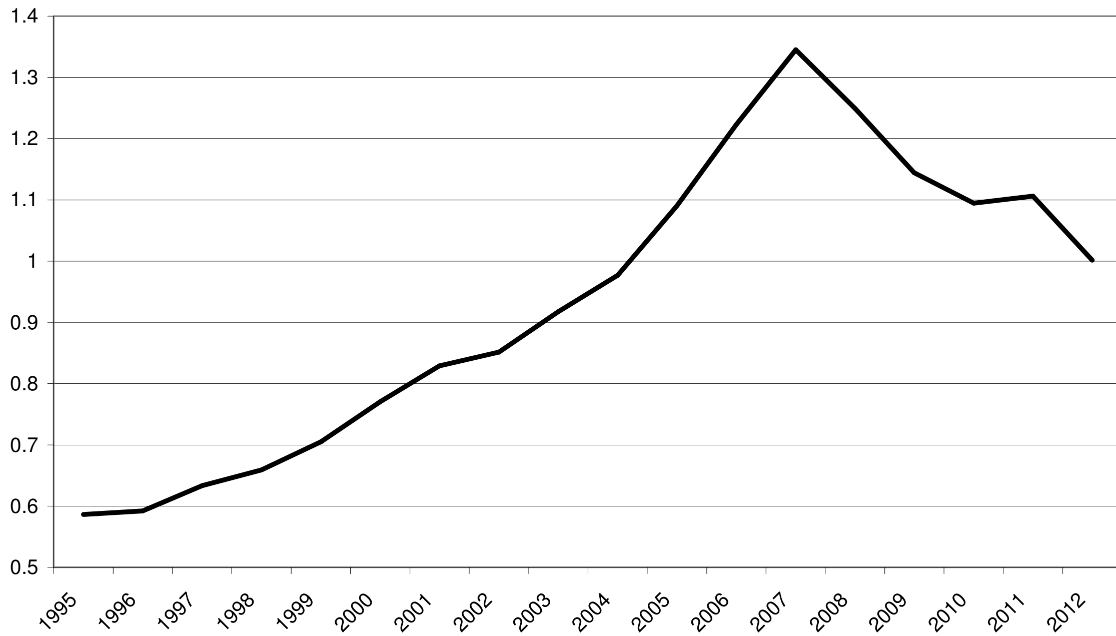

Figure 3 *Source: OECD Non-Consolidated Financial Balance Sheets*

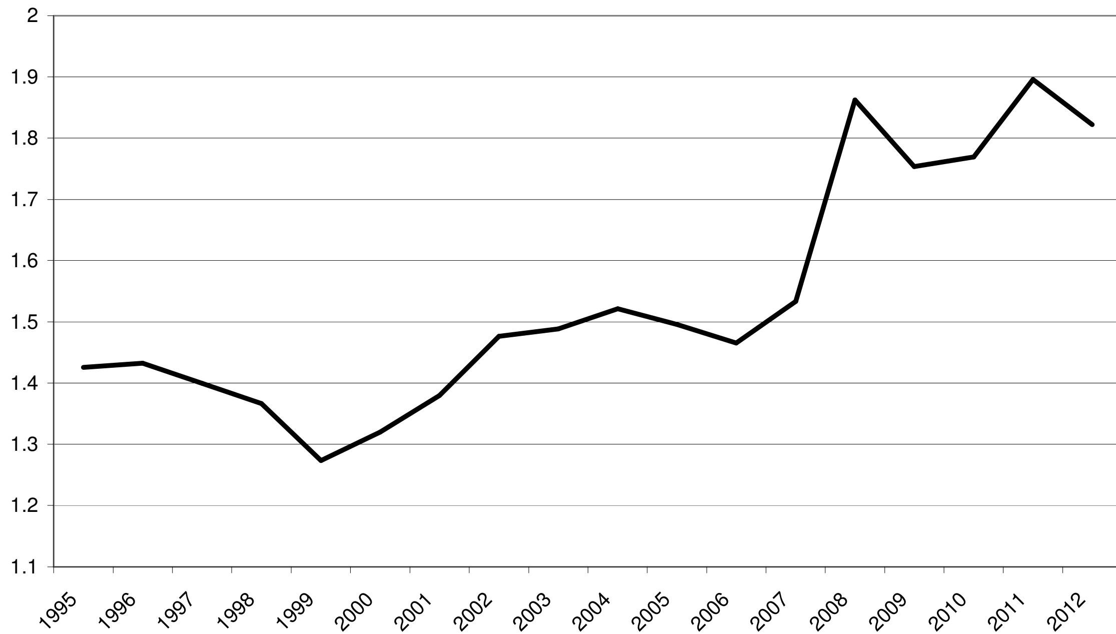

Figure 4 *Source: OECD Non-Consolidated Financial Balance Sheets*

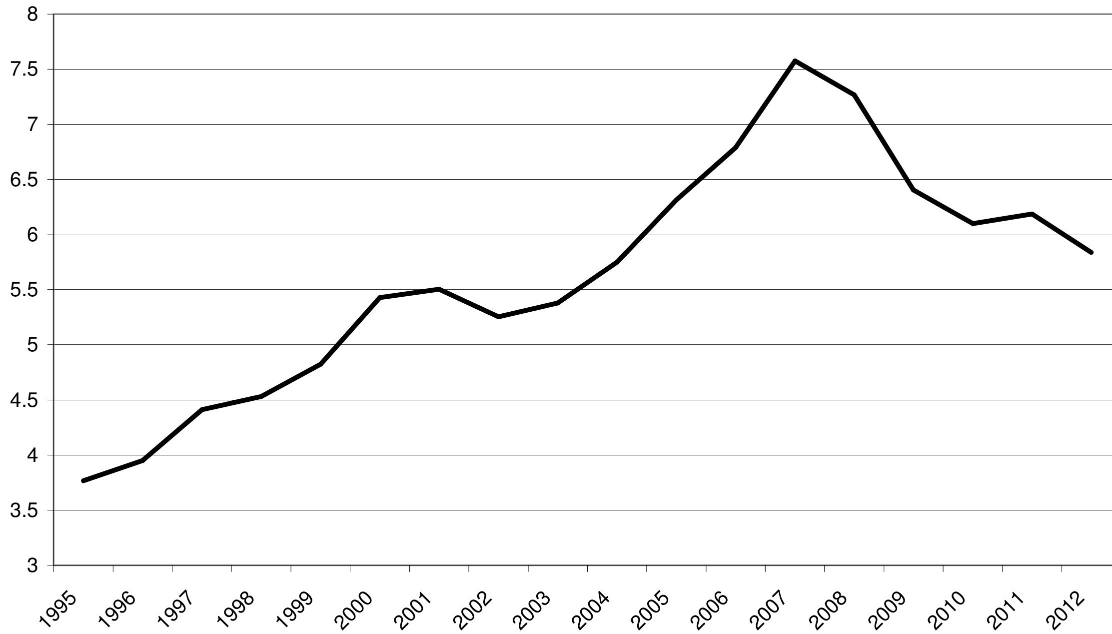

Figure 5 *Source: OECD Non-Consolidated Financial Balance Sheets*

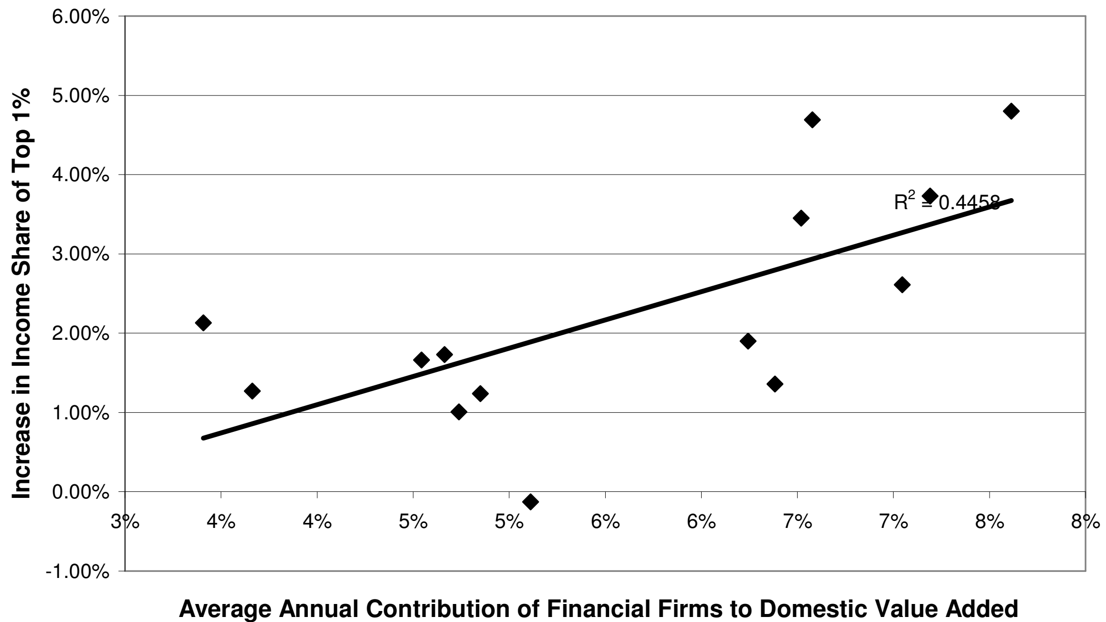

Figure 6 *Sources: OECD, World Top Incomes Database*

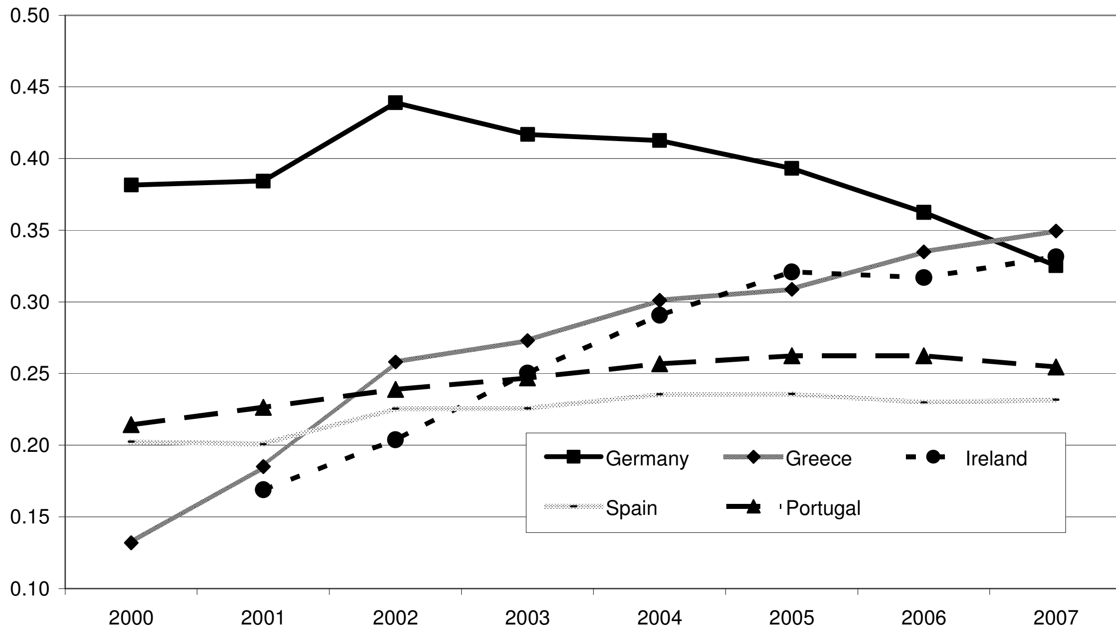

Figure 7 *Source: OECD Non-Consolidated Financial Balance Sheets*