

THE INEQUALITY-DEBT-CRISIS NEXUS: EXPLORING THE MISSING POLITICAL ECONOMY DIMENSION

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Inequality poses serious economic, political, and social challenges to countries worldwide. A recent report issued by the United Nations warns that ‘countries with high and rising inequalities generally experience slower growth than those with lower inequalities’ (United Nations 2020: 45). Even worse, ‘rising inequality creates discontent, political dysfunction and can lead to violent conflict’ (United Nations 2020: 50). In addition to these macro effects, inequality may also impact a society at the micro level. For example, inequality is shown to negatively influence individuals’ health conditions, life satisfaction, and moral values (Vandemoortele 2021). These harmful consequences of inequality led Joseph Stiglitz to conclude that ‘widely unequal societies do not function efficiently, and their economies are neither stable nor sustainable in the long term’ (Stiglitz 2012: 83).

Moreover, an economy may be destabilized by inequality, particularly through the channel of household debt. Developing this analysis, Rajan (2010) attributed the occurrence of the 2008 financial crisis to an inequality-driven credit boom. More specifically, he argued that rising inequality in the US over the several decades before the financial crisis generated great political pressure for redistribution, eventually manifesting in the form of subsidized housing finance. Low-income households who used to be denied access to credit markets were then encouraged to participate in mortgage finance. The resulting lending boom created a massive run-up in housing prices that ultimately reversed in 2007 and led to the financial crisis of 2008. The basic logic of Rajan’s argument

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can be summarized as follows: income inequality → household debt → financial crises.

Motivated by Rajan's argument, numerous subsequent studies have explored the relationship between income inequality, household debt, and the likelihood of financial crises. This literature generally confirms the suggestion that income inequality does play a role in the evolution of household debt, the occurrence of financial crises, and their interactions. However, there are still many unsettled points and disagreements. More importantly, most studies overlook the role of politics in initiating and catalyzing the process from inequality to household debt and then to financial crises; consequently, they may suffer from an omitted variable bias. As this article shows, political factors indeed matter in understanding: (1) whether greater income inequality increases households' demand for debt; (2) whether and to what extent that demand for debt can be met by banks; and (3) under what conditions credit expansion may trigger a financial crisis.

In exploring these issues, this article critically considers the literature on inequality, household debt and crises. The next section focuses on studies that test or otherwise cast light on Rajan's hypothesis. Then comes a section discussing how political factors affect both the connection between income inequality and household debt, and the connection between credit booms and financial crises. The concluding section briefly summarizes the case for a political economic perspective on these issues. The extensive bibliography at the end of the article is a resource that may be helpful for other researchers on this important topic.

Inequality, debt and crises: a brief survey

From inequality to debt

We first survey US-centered empirical studies and then review cross-country empirical studies. Certain US-centered studies indeed confirm the inequality-debt nexus. Using aggregate US data for 1980 to 2003, Christen and Morgan (2005) reported that income inequality has substantially contributed to increased consumer borrowing, and particularly to installment loans (which are used to finance the purchase of consumer durables). Boushey and Weller (2008) found that in the US, from 1980 to

2004, inequality had a significantly positive effect on credit card debt, which in turn contributed to an increase in personal bankruptcy. Berisha, Meszaros and Olson (2015) showed that income inequality and household debt in the US have a significant statistical relationship from 1919 to 2009. Yamarika *et al.* (2016), using US state-level data for 1977 to 2010, found a positive long-run relationship between inequality and housing credit and indicated mutually causation between these two variables.

However, other studies reached more nuanced conclusions. Fasianos *et al.* (2017) employed annual data for 1913-2008 and showed that the relationship between inequality and debt is nonlinear, *i.e.*, household debt only responds to a rise in income inequality, while a fall in income inequality has no impact on the level of debt. Berisha and Meszaros (2017) built a state-level panel dataset that spanned 2003 to 2012 and reported that household debt influences measures of income inequality, rather than *vice versa*. A similar conclusion was reached by Berisha and Meszaros (2018), who (based on a time series data for 1927 to 2011) found that increases in household debt led to an increasing income inequality, although the effect is short lived. Based on the Survey of Consumer Finance conducted by the Federal Reserve Board covering 1989 to 2013, Thompson (2018) differentiated the effects of rising top income on middle- and upper-middle-income households (taking on more housing-related debt) from those on lower-income households (reducing non-mortgage borrowing). De Stefani (2020) combined several datasets (Consumer Expenditure Survey, Panel Study of Income Dynamics, and Current Population Survey) and reported that, in the decade preceding the 2008 financial crisis, among poor and middle-income American families, homeowners significantly increased their debt-to-income ratios (while renters' leverage declined) in response to an increase in top incomes.

In contrast to the above studies, which adopt a 'demand-driven' hypothesis that implicitly or explicitly assumes that household debt increases because poor or middle-income families demand credit to finance housing and/or consumption, Coibion *et al.* (2020) offered a 'supply side' hypothesis. Their empirical evidence indicated that 'although low-income households increased their leverage (debt relative to income) relative to higher income households in the years leading up to the Great Recession, *they did so to a larger extent when living in low-inequality regions than in high-inequality regions*' (Coibion *et al.* 2020: 3, italics in original). This is the case because 'as income inequality rises, banks treat an applicant's income as an increasingly precise signal about their type and therefore target lending

toward higher income households on average' (Coibion *et al.* 2020: 47). Coibion *et al.*'s (2020) approach was followed by Loschiavo (2021), who used survey data on Italian households and reached a similar conclusion.

When we turn to the cross-country literature, we find certain studies that confirm the positive impact of income inequality on household debt. Klein (2015: 393) reported that there is a 'long-run relationship between income disparity and household debt' and 'depending on the inequality indicator used, in the long-run, a 1% increase in inequality leads to an increase in household credit by 2-6%.' Gu *et al.* (2019) found that both the level and growth of credit are positively and significantly influenced by income inequality. More specifically, they reported that: 'the rise in income inequality contributed to 8.9% of the increase in the private sector indebtedness on average across OECD countries in the sample period' (Gu *et al.*, 2019: 2292). Chang *et al.* (2020) showed that income inequality contributes to both credit growth and an increase in credit size (relative to GDP), which is more evident in countries that have experienced deindustrialization. Herradi and Leroy (2020) reported that inequality (evolution of top incomes) has persistent effects on credit expansion, especially for mortgages and business loans. Bazillier *et al.* (2021) found that increases in income inequality trigger expansions of household debt, particularly when inequality is measured by the ratio of top incomes to middle incomes, rather than the ratio of top incomes to bottom incomes.

However, other cross-country studies have failed to find a robust relationship between inequality and household indebtedness. Rubaszek and Serwa (2014) could not identify any significant relationship between the Gini coefficient and the ratio of household debt to GDP. Malinen (2016) found that income inequality has a positive long-run effect on aggregate credit, but not on household loans. Stockhammer and Wildauer (2018), using the top 1% income share and Gini coefficient as proxies for inequality, concluded that: 'we fail to find a robust statistically significant relationship between income inequality measures and household debt' (Stockhammer and Wildauer, 2018: 112). Moore and Stockhammer (2018) found weak evidence for long- and short-run effects of inequality on household debt.

From debt to crises

The empirical evidence of an association between household debt and crises seems stronger. A number of studies have found household credit to be a useful indicator to predict financial crises. Büyükkarabacak and Valev (2010) reported that household credit growth is associated with a greater likelihood of financial crises (whereas the predictive capability of enterprise credit is weaker and less robust). In using a different measure of household credit, *i.e.*, household credit/GDP gap (constructed by subtracting a trend that is recursively estimated), Anundsen *et al.* (2016) found that both the household credit gap and the enterprise credit gap positively and significantly affect the likelihood of a crisis, but household debt is more powerful in predicting a crisis. In addition, the impact of the household credit/GDP gap is amplified when there is a housing bubble, corroborating the findings of Jordà, Schularick and Taylor (2015a) who demonstrated that the interaction of asset price bubbles and credit (total loans rather than household credit) growth increases the risk of a financial crisis-driven recession. Drehmann *et al.* (2017) introduced the debt service measure and reported that debt service is the main channel through which new borrowing in the household sector affects the probability of financial crises. Alter *et al.* (2018) further confirmed that household debt increases the probability of financial crises (the effect is twice as strong for nonfinancial corporate debt) and found that changes in household debt are more important than levels in predicting financial crises.

Rather than exploring the aggregate measure of household credit, other studies have focused on certain components of household credit, such as mortgage credit, and similarly confirmed its connection to the likelihood of financial crises. Jordà *et al.* (2015b) investigated the connections between interest rates, housing price booms, and financial crises with data spanning 140 years and 14 advanced economies, finding that: ‘over the past 140 years of modern macroeconomic history, mortgage booms and house price bubbles have been closely associated with a higher likelihood of a financial crisis’ (Jordà *et al.* 2015b: S4). A similar conclusion was reached by Jordà *et al.* (2016) who reported that both mortgage and non-mortgage loans are predictive of financial crises, but mortgage loans are associated with deeper post-crisis recessions and protracted recoveries. Bezemer and Zhang (2019) also found that mortgage credit helps explain post-crisis recession severity: a rise in credit composition (the share of the

household mortgage credit of the total credit) before the 2008 financial crisis is associated with a greater growth loss after the crisis.

As the literature, particularly the literature on ‘early warning indicators’, has shown, credit – whether measured by its level, growth, or gap (deviation from the trend) – is a useful predictor of financial crises (Frankel and Saravelos 2012; Kauko 2014; Töölö, Laakkonen and Kalatie 2018). Given the established connection between credit indicators and the crisis incidence, as well as the increasing importance of household credit (particularly mortgage loans) in advanced economies since World War II, it is not surprising that most studies confirm the relationship between high levels of household credit and the likelihood of financial crises.

Combining inequality, debt and crises

Rajan’s (2010) original hypothesis is tripartite in nature, *i.e.*, an increase in income inequality contributes to higher household debt, thereby planting the seeds for a financial crisis. It is surprising that most other contributions to this literature, as discussed above, have only focused on parts of this phenomenon. They have usually either examined the relationship between income inequality and household debt; or investigated the connection between household debt and the likelihood of financial crises. Only three exceptions – the studies by Bordo and Meissner (2012); Perugini *et al.* (2016); and Rhee and Kim (2018) – have attempted to explore the entire process. These deserve particular attention.

Using data for 14 advanced countries for 1920 to 2000, Bordo and Meissner (2012) found that, while (aggregate) credit growth heightens the probability of a financial crisis, there is no evidence that a rise in inequality (share of total income of the top 1%) leads to (aggregate) credit growth. Their conclusion has been criticized for not differentiating between household credit and enterprise debt, and for certain methodological flaws (Gu and Huang 2014). Based on Bordo and Meissner’s (2012) sample but using different estimators and more model specifications, Chang *et al.* (2020) reached a completely different conclusion – that income inequality contributes to both credit growth and an increase in credit volumes, particularly in deindustrialized countries. Perugini *et al.* (2016) used a sample covering 18 OECD countries for 1970–2007 and reported ‘a statistically significant, direct, positive relationship between income concentration and private sector indebtedness’, and ‘growing private

sector indebtedness is shown...to increase the probability of a financial crisis' (Perugini *et al.* 2016: 229). Rhee and Kim (2018) employed panel data for 68 countries for 1973 to 2010 and found that income inequality in developing countries increases the probability of financial crises, both directly and indirectly (through the channel of credit growth), whereas neither inequality nor credit growth affects the financial crises in advanced economies.

It seems difficult to reach a consensus, even inside this small body of literature. For example, inequality was measured based on the top 1% income share in Bordo and Meissner (2012) and Perugini *et al.* (2016), but with the Gini index in the study by Rhee and Kim (2018). In addition, while Bordo and Meissner (2012) focused on the level of inequality, Perugini *et al.* (2016) investigated inequality growth; and Rhee and Kim (2018) were interested in both inequality levels and growth. More importantly, neither of the studies directly used the household credit indicator, which is the core intermediary variable of Rajan's (2010) hypothesis. They generally used aggregate credit as an intermediary variable and, while certain variables such as gross fixed capital formation/GDP have been included to control for enterprise credit, whether and to what extent this strategy can fully address the indicator problem is debatable.

Inequality, debt and crises: interim summary

Most studies that attempt to test the hypothesis raised by Rajan (2010) have only focused on parts of the hypothesis, investigating either the first part (the connection between income inequality and household debt) or the second part (the connection between household debt and financial crises).

Regarding the first part (the inequality-debt nexus), while US-centred studies essentially confirm the existence of such a nexus, cross-country studies reach more mixed conclusions.

The second part (the debt-crisis nexus) has been confirmed by most studies, although data and methodological problems inherent to these studies may undermine their robustness (Caggiano *et al.* 2014; Dwyer and Tan 2014; Boyd *et al.* 2019).

Finally, only three studies have attempted to investigate the complete connections between inequality, household credit, and financial crises. However, these three studies used aggregate rather than household credit

as an intermediary variable, and therefore deviate from Rajan's original argument.

A further problem with most of the literature, as the following section will show, is the failure to consider the political aspect as an intervening variable in the inequality-debt-crisis nexus.

The missing political economy aspect

The hypothesis raised by Rajan (2010) seems to have been tested systematically and rigorously, even though it is doubtful that a consensus has been reached. Unfortunately, if we examine the relevant literature more carefully, we find that an important piece of the puzzle has been overlooked by most of the empirical studies that we have surveyed. The missing element is the political factors that bear on the economic relationships.

The failure of existing studies to introduce political variables into their statistical analyses (as a control variable or a mediating factor) seems to deviate from Rajan's original argument. Rajan elucidated the vital role of politics in the inequality-credit nexus by stating that:

politicians have recognized the problem posed by rising inequality... Taxation and redistribution could be an alternative, but, as the political scientists Nolan McCarthy, Keith Poole, and Howard Rosenthal argue, growing income inequality has made Congress much more polarized and much less likely to come together on matters of taxation and redistribution...Politicians have therefore looked for other ways to improve the lives of their voters. Since the early 1980s, the most seductive answer has been easier credit. In some ways, it is the path of least resistance (Rajan 2010: 31).

In other words, according to Rajan, inequality would not *automatically* lead to credit expansion; politicians are the bridge between them. Overlooking this important role of political decision making leads not only to a misunderstanding of the essence of Rajan's (2010) hypothesis, but also to a serious omitted variable problem that may bias the results of the empirical studies. To rectify this deficiency, we need to explore the role of politics in shaping the connections between inequality, household debt, and financial crises. The remainder of this article points to how this may be done, leading to a broader political economic understanding of the nature of the inequality-debt-financial crisis nexus.

Politics and the inequality-credit nexus: demand side analysis¹

When the income level of poor people falls because of increased inequality, they may not immediately resort to credit to maintain their living standard if their welfare as consumers is not lowered. There may be offsetting factors. For example, Kus (2013) argues that the availability of imports from low-wage countries (particularly China) helps low- and middle-income households in OECD countries access a wide range of products at lower prices, thereby moderating the negative effects of income inequality. More importantly, the decisions of low-income households on whether, and to what extent, to participate in credit markets are heavily influenced by the accessibility and generosity of the welfare system. If a universal and generous welfare system is in place, households that experience income stagnation or even income decline may not need to borrow to finance their expenditures. In contrast, cuts in welfare state programs and payments may leave income-constrained households no choice but to rely on debt to meet their needs.

The substitute role of household debt for traditional social policies has been emphasized by many studies. For example, Schwartz (2012: 48) argued that, in the 1990s and 2000s, ‘faced with stagnant wages and a falling real value of pensions, health insurance coverage, and other buffers against risk, households increasingly used credit and in particular housing-based credit as a substitute buffer’. Lapavitsas and Powell (2013: 364) also stated that ‘households have been pushed into the arms of the private financial system as public provision has retreated across a range of fields and real incomes have been broadly stagnant’. Similarly, assets (like housing) which are financed by debt may be increasingly relied upon by low- and middle-income households as self-insurance when faced by the decline of welfare states (Montgomerie 2013; Ansell 2019).

The substitute hypothesis is supported by empirical studies, such as Kus (2013), that have found credit access to have a negative association with

¹ For theoretical clarity, we discuss the role of political factors in the demand and supply of household credit separately. The demand side analysis focuses on the relationship between politicians and households (who may demand credit); and the supply side focuses on the relationship between politicians and banks (supplying credit). In reality, the situation is less tidy. Government policies may simultaneously influence both demand and supply of credit, and politicians may attempt to affect the banking sector (supply side) because they face pressure from households as voters (demand side).

the degree of redistribution. The study by Ansell (2019) reported a negative relationship between house price appreciation and citizens' preference over redistribution and social insurance; while Wiedemann (2021a) showed that households experiencing unemployment borrow more when unemployment benefits are less generous. However, there are studies that find a more complicated relationship between social welfare (e.g. housing) and household debt: household debt is shown to be a complement rather than substitute for social welfare (e.g. housing) under certain circumstances (Van Gunten and Kohl 2020; Comelli 2021; Wiedemann 2021b).

The rise and decline of the welfare state is closely related to political development. There are several political elements that may affect the existence and design of welfare states, such as electoral systems, party ideology, and the power of labor unions (Myles and Quadagno 2002; Dorlach 2021). Party ideology seems to be the most relevant factor in understanding the connection between welfare and household debt. For example, right-wing governments are found to redistribute less (Iversen and Soskice 2006), particularly when house prices are rising (Ansell 2014) and when the budget deficit is increasing (Savage 2019). In addition, Kohl (2020) reports that, in 19 OECD countries, conservative parties have consistently defended private homeownership across countries and time, and in countries with high home ownership rates rising housing prices in turn increase voter approval of incumbent right-wing governments (Han and Shin 2021). Both a reduction in social spending and the expansion of homeownership can be argued to contribute to an increase in the demand for household debt. In contrast, left-wing parties tend to support more generous redistribution policies (and provision of public housing), which then neutralize the effects of inequality on credit expansion (Ahlquist and Ansell 2017).

Politics affects the credit demand of households not only indirectly by shaping the welfare system, but also directly through various policy channels. Politicians may attempt to stimulate the demand for household debt by resorting to, for example, mortgage interest deduction (Hilber and Turner 2014; Gruber *et al.* 2017), low down payments (Reiss 2016), government guarantees for credit risk (Fetter 2013; Grundl and Kim 2021), and other fiscal or financial policies (Fuller 2015; Anderson and Kurzer 2020). Politicians endorse these policies because household credit expansion may help them realize political benefits (wider credit access and higher economic growth) immediately and defer political costs (financial

fragility or even a crisis) to the future. In addition, credit may reward their supporters without triggering the complicated and lengthy process of budget decision-making (Kern and Amri 2021). In contrast, when politicians fail to meet the expectations of credit-seeking households, they are likely to be punished in elections (Antoniades and Calomiris 2018).

Politics and the inequality-credit nexus: supply side analysis

During the last several decades, household credit has expanded rapidly, particularly in developed countries. Léon (2018) reported that, in a dataset of 88 countries, firm credit increased by 22% from 2000 to 2014, while household credit expanded by 70%. In high-income countries, household credit now accounts for approximately half of the total credit. This development can be attributed to certain supply factors. For example, in the period of a knowledge economy, firms increasingly use intangible assets that are difficult to accept as collateral for loans, and banks therefore have to reallocate loans to lenders with tangible assets, such as house-owning families (Dell’Ariccia *et al.* 2021). In addition, certain financial innovations, such as securitization, motivate banks to increase mortgage lending by reducing their risk exposure to loan defaults (Mian and Sufi 2009). Political factors also contribute to the increased supply of household credit.

Laws are the most powerful weapon that can be used by politicians to affect the supply of household credit. For example, the US Community Reinvestment Act (CRA), which was enacted in 1977 to encourage banks to meet the credit needs of low- and middle-income neighborhoods, has been found to induce more and riskier mortgage lending (Agarwal *et al.* 2012; Saadi 2020). The enactment of the CRA was an outcome of a political struggle (Krippner 2017). Moreover, the enforcement of the CRA is also influenced by political considerations: banks protected by powerful politicians (Senators) exhibit less compliance with legal requirements (Akey *et al.* 2021). In the run-up to the global financial crisis of 2008, a large number of housing and mortgage credit related bills were passed by the US Congress; these bills were heavily influenced by the financial industry through campaign contributions and lobbying expenditures (Mian *et al.* 2013; Igan and Mishra 2014) and can be argued to encourage more aggregative expansion of mortgage lending (Dagher 2018). Thanks to its lobbying expenditures and campaign contributions, the financial industry

not only enjoyed favorable policies before the financial crisis of 2008, but also received generous bailouts during the financial crisis (Mian *et al.* 2010; Couch *et al.* 2011; Duchin and Sosyura 2012; Blau *et al.* 2013; Dorsch 2013).

Politicians also have other policy tools at their disposal. They can use macroprudential regulatory tools, particularly those related to housing and consumer lending (such as capital buffers aimed at residential mortgages and loan-to-value ratios) for electoral purposes (Müller 2019). They have also pressured state-owned banks or quasi-public (government sponsored) entities (such as Fannie Mae and Freddie Mac, in the US case) to increase the supply of credit (Fieldhouse, Mertens and Ravn 2018; Garber *et al.* 2020). Finally, as a low interest rate is welcomed by indebted voters (Brännlund 2021), it is not surprising to find that politicians prefer a loose monetary policy (Belke and Potrafke 2012; Chang *et al.* 2020), which in turn contributes to the expansion of household credit (Berisha *et al.* 2018; Stockhammer and Wildauer 2018).

Politics and the Credit-Crisis Nexus²

While credit in general - and household credit in particular - are shown to be effective predictors of future financial crises, not every credit boom ends disastrously. Dell’Ariccia *et al.* (2016) identified 176 credit boom episodes in a sample of 170 countries between 1960 and 2010; among these episodes, only one in three was followed by a financial crisis within three years. Similarly, Richter, Schularick and Wachtel (2021: 14) warned that their results show that while ‘credit booms are associated with an increase in the likelihood of a crisis’, ‘not all booms end in a banking crisis’. Whether and to what extent an empirical connection between credit booms and banking crises can be established depends on regulatory policies, procedures, and tools (Laeven 2011; Kim *et al.* 2013; Duffie 2019). The design and implementation of banking regulations is in turn shaped by political processes.

Regulators may fail to curtail excessive credit growth because they are ‘captured’ by the banking industry that they are supposed to regulate (Dal

² Politics will not only determine whether a credit boom may turn into a financial crisis, but also shape the pattern of response to the crisis (Keefer 2007; Mian *et al.* 2010; Chwieroth and Walter 2020a, 2020b).

Bó 2006; Carpenter and Moss 2014). This may be because of the phenomenon of ‘revolving doors’, whereby personnel move between the regulators and the financial institutions, or because of other problems, such as incompetence or corruption. For instance, Baxter (2011: 181) argued that, in the US, ‘there is ample evidence from various regulatory actions that the industry, particularly large financial organizations, have enjoyed surprising favor at the hands of the financial regulators.’ Omarova (2012: 629) further concluded that ‘in large part, the latest crisis [the financial crash of 2008] was also attributable to the regulators’ failure to maintain their independence from the financial industry and to act in a truly public minded manner--the phenomena commonly associated with the concept of regulatory capture.’ Regulatory capture and the subsequent regulatory failure are certainly not limited to the US (Fernández-Villaverde *et al.* 2013; Demetriades 2017). Recognizing this, following the 2008 crisis, concerns about regulatory capture led to a paradigm shift in OECD countries, in which more regulatory powers in financial markets are allocated to politically controlled officials, such as treasury secretaries and finance ministers, rather than independent agencies (Gadinis 2013).

Regulators may also fail because they cannot resist the pressure from legislators or executives, who in turn need to cater to the interests of voters or their patrons (such as the banking industry). Because, at the micro level, politically connected (and hence powerful) banks face a lower probability of receiving regulatory enforcement actions (Lambert 2019; Papadimitri 2021), they adopted more aggressive and risky strategies before the 2008 financial crisis and achieved a worse performance during the crisis (Igan *et al.* 2012; Kostovetsky 2015). At the macro level, politicians have strong incentives to create credit booms to increase their popularity but are reluctant (or incompetent) to strengthen banking regulations and/or take other corrective measures to prevent credit booms from going bust (Hasanov and Bhattacharya 2019; Herrera *et al.* 2020). Even worse, when the danger of bank failures is imminent, regulatory interventions may still be postponed by politicians for electoral purposes (Brown and Dinç 2005; Liu and Ngo 2014). The evidence therefore suggests that a credit-induced crisis is more like the outcome of a politically determined regulatory failure.

The missing political economy aspect: interim summary

Political factors, such as welfare systems, partisan ideologies, electoral cycles, and interest groups, play a critical role in shaping the inequality-debt-crisis nexus. Politics influence whether, and to what extent, increased income inequality may induce the expansion of household credit and affect the probability of a credit boom ending in a banking crisis. Therefore, failure to consider the effects of politics in studying the inequality-debt-crisis nexus will inevitably generate biased results. Indeed, the mixed findings that we have surveyed in the second section of this article may be the consequence of heterogeneity in political institutions (and perhaps other social, economic, cultural factors for which the studies fail to control) across sample countries. In other words, the chain reactions from income inequality to credit expansion and then to banking crisis may only occur in countries with political conditions conducive to those connections and consequences. The US seems to be the most obvious case in point: its political conditions, such as a meagre and selective welfare system, regulatory capture, political ideology, and power of the financial industry, are extremely conducive to initiating and catalyzing this disastrous process (Prasad 2012; Trumbull 2012; McCarty *et al.* 2013; Prasad 2016; Krippner 2017; Atkinson 2019). Because these conditions are less prevalent in other countries, income inequality-induced banking crises (through household credit expansion) may not be a universal phenomenon.

Conclusion

In the last decade, numerous studies have explored Rajan's (2010) hypothesis that income inequality tends to contribute to banking crises by stimulating the accumulation of household debt. Taking this literature as a whole, we may agree with Bazillier and Hericourt's (2017: 488) conclusion that: 'there is strong evidence supporting the idea that inequalities do play a role in the dynamics of credit, finance, and possibly financial crises'. However, there are many unsettled disagreements. More importantly, the literature seems to deviate from Rajan's original argument by overlooking the essential role of politics in shaping the entire process from inequality to financial crises. This deviation may lead to an incomplete or even distorted understanding. As discussed in this article, political factors, such as welfare states, party ideologies, elections motivations, and the power of interest groups, indeed

matter: they not only shape the way that households and banks respond to increased income inequality, but also determine the probability of credit booms ending in systemic banking failures. The variance of political institutions over time and between countries suggests that the inequality-debt-crisis nexus may be dynamic, heterogeneous, and difficult to standardize. These political aspects should be taken more seriously in future studies. Blending the economic and political elements leads to a more integrated approach to understanding the complex relationships between income inequality, household debt, and financial crises.

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