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Testing a Social Welfare Theory of Financial Capability: Personal and Governmental Capabilities

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Abstract

We posit that financial capability is a higher order construct that consists of both personal and governmental capabilities. Conversely, previous definitions of financial capability exclusively focus on an individual's personal capability. However, because people live in society, their capabilities are not only what they can do or be from the perspective of their own personal capabilities, but also what they can do or be with the assistance of government. In the social welfare theory of financial capability presented here, government has the responsibility to ensure all citizens are financially included enough, have enough income, and enough wealth that they are given the freedom to pursue their financial happiness. From this perspective, governmental capability consists of the government's financial inclusion-generating functioning, its income-generating functioning, and its wealth-generating functioning. As a set of functionings, we posit they make up what we refer to as, governmental capability. Our findings show that the model matches the data well and the social welfare measure of financial capability is trustworthy. We also find that the social welfare definition of financial capability is a strong predictor across three asset poverty measures and median net worth of U.S. households. In the last part of the main analysis, we find that financial capability is a positive predictor of life satisfaction. However, in the multigroup analysis, financial capability is not invariant by race. We posit this is likely the result of the gross inequality Black individuals have faced in the mainstream economy as a result of the unequal allocation of governmental capabilities dating as far back as the American Constitution and their designation as property. Implications discussed.

Keywords

Financial Capability, Capabilities Perspective, Financial Inclusion, Financial

Well-Being, Wealth

1. Introduction

Ending poverty requires rethinking what it means to be poor and, thus, what it will take to end poverty. Currently, poverty is often thought about from a financial needs perspective: Do families have sufficient income to be able to consume enough to meet today's needs? This definition of poverty results in policies that target getting families above the "poverty line" but ignore positioning an individual to reach their full capability. We have contended in this special issue that poverty is not only about today but also the futures that families and their children can achieve. It is about what people can do and become when their individual resources are augmented by societal institutions, societal knowledge, and resources. From this perspective, poverty is a financial capability problem, not a consumption problem. And thus, we posit that the target for which policy should aim is to make people financially capable, not unpoor. Given this, we suggest that the purpose of the government is to provide its citizens with the conditions necessary to become financially capable. The question becomes what do we mean by financial capability?

Current Understanding of Financial Capability

Johnson and Sherraden (2007) expanded the traditional definitions of financial capability from focusing almost exclusively on financial knowledge to include the ability to act in one's own self-interest (also see Sherraden, 2013). From this perspective, "ability to act" is the personal capabilities an individual has. That is, Sherraden (2013) puts emphasis on how institutions shape personal capabilities. Capabilities are the real opportunities or freedoms people have for achieving functionings (Sen, 1999). They consist of a set of functionings. Functionings are what an individual can do (i.e., current performance/behavior) and who they are (i.e., identities) (Sen, 1985, 1999). As such, institutions matter only to the degree they influence an individual's functionings. From a capability's perspective, the individual and their personal resources (e.g., effort and ability) mediate the influence institutions can have on their outcomes. Therefore, success and failure are still placed in the control of the individual. Sherraden (2013) adopts a capability perspective of the role that institutions play in determining an individual's functionings and thus also their financial capability.

In addition to using capabilities theory (Sen, 1999), Sherraden's definition of financial capability also heavily relies on an institutional theory of saving (Beverly & Sherraden, 1999). The institutional theory of saving, in large part, was developed to answer the question, "how can programs and policies promote saving by the poor" (Beverly & Sherraden, 1999: p. 457). It does so by explaining how the institutional environment impacts people's decision to save and how that decision impacts their saving behavior. In this sense, the focus remains on the individual's

personal capabilities, not on what the external environment itself does to determine the real opportunity a person has to act.

Further, Xiao, Huang, Goyal, & Kumar (2022) recently synthesized a review of financial capability's literature and further expanded on the definition of financial capability. From their perspective, financial capability is "an *individual's ability* [emphasis added] to apply appropriate financial knowledge, perform desirable financial behaviors, and take available financial opportunities for achieving financial well-being" (p. 1693). They point out two ways that this definition is different than Sherraden's (2013). First, they emphasize the personal aspect of opportunity, specifically the opportunity for the individual to create new opportunities. Second, they suggest that interactions between the following three components knowledge, behavior and opportunity are indicators for the higher-level concept, financial capability (Xiao et al., 2022: p. 1693). However, an important way that it is the same as Sherraden's definition, is that they also emphasize personal capabilities. Despite the person center role Sherraden (2013) gives to institutions, one we challenge later, the mere focus on institutions as a component of what it means to be financially capable was novel at the time and made a very valuable contribution to the field.

1.1. Financial Literacy

Financial literacy is a component of financial capability (Sherraden, 2013). Researchers studying financial literacy examine the role that financial knowledge and skills play in determining children's financial outcomes. This research on financial literacy suggests it is an important predictor of whether a person is financially capable.

Evidence on Financial Literacy as a Predictor of a Person's Financial Outcomes

Research shows that financial literacy has a positive association with retirement planning/saving (Behrman, Mitchell, Soo, & Bravo, 2012). A component of financial literacy, financial knowledge, has also been shown to have a positive association with wealth accumulation more generally (Christelis, Jappelli, & Padula, 2010; Van Rooij, Lusardi, & Alessie, 2011). Findings indicate that low financial knowledge is associated with paying higher interest rates and fees (Lusardi & de Bassa Scheresberg, 2013; Lusardi & Tufano, 2015). Moreover, the more financially literate a person is the better they will be at managing their debts (Mitchell & Lusardi, 2020). However, the more financially literate a person is the more likely they will be to invest in the stock market, and to earn higher (risk-adjusted) returns on their investments (van Rooij, Lusardi, & Alessie, 2011; Clark, Lusardi, & Mitchell, 2017). Those with high levels of financial knowledge are more likely to diversify their investment portfolios (Guiso & Jappelli, 2009; Jappelli & Pandula, 2015). Lusardi, Michaud, & Mitchell (2013) find that up to half of wealth inequality may be associated with financial literacy. Financial literacy is a stronger predictor of wealth accumulation than school attainment (Behrman, Mitchell, Soo, & Bravo, 2010). This is not meant to be a complete review of research but to simply establish

there are grounds for positing that financial literacy is an important component of financial capability. We will return to discussing financial literacy as it relates to the interaction wealth and income have with financial literacy. We will also discuss it under the section on personal financial capabilities.

1.2. Financial Inclusion

Researchers who study financial inclusion examine the role access to financial institutions plays in determining an individual's economic outcomes. Like the research on financial literacy, the research on financial inclusion indicates that it is an important factor for determining an individual's economic outcomes.

Evidence on Financial Inclusion as a Predictor of a Person's Financial Outcomes

Ampudia and Ehrmann (2017) estimate that banked households in the United States have net worth that is $42,000 higher than unbanked households with the same characteristics. Célerier and Matray (2019) find that the increase in financial inclusion induced by the Riegle-Neal Act[1] led to banked households' accumulating more interest-bearing assets, investing more in durable assets, and becoming less likely to face financial difficulties. Stein and Yannelis (2020) study the impact of the Freedman's Savings Bank. They find positive evidence that families with accounts had higher income, real estate wealth, and business-ownership rates. While Florant, Julien, Stewart, Yancy, and Wright (2020) run a simulation and find "by providing Black customers access to financial products at the same rates as white customers (an equal access, unequal wealth scenario), financial institutions could realize approximately $2 billion in annual incremental revenue" (para. 11). They also find that "if there was no disparity in the average revenue per household between black and white customers (a total parity scenario), which has been largely driven by differences in wealth and income, the full financial inclusion of Black Americans would generate about $60 billion in additional annual revenue in the financial sector" (para. 11).

1.3. Link between Financial Literacy and Financial Inclusion

In line with financial capabilities theory (Johnson & Sherraden, 2007; Sherraden, 2013), research shows that financial literacy and financial inclusion (i.e., access to financial institutions) are associated with one another. Using experimental data from SEED for Oklahoma Kids (SEED OK), Huang, Nam, and Sherraden (2013) find evidence that financial access significantly increases the chances that families in the treatment group hold a CDA but not in the control group. Furthermore, there is evidence in this study that suggests financial knowledge facilitates holding a CDA but only when financial access is available. Huang and colleagues (2015, 2016) also find evidence that having access to a CDA (i.e., treatment status) posi-

[1]To learn more about the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 which allows banks to branch across state lines go to https://www.federalreserve.gov/boarddocs/supmanual/cch/sec109.pdf.

tively moderates the relationship between financial knowledge and asset accumulation (i.e., savings amount and total assets). This indicates that financial capability requires both improved financial knowledge and financial inclusion. It also suggests that financial capability is linked to asset accumulation, a topic we will discuss more in next section.

Some research suggest that financial literacy is an important determinant of financial inclusion (Hasan, Le, & Hoque, 2021). That is, financially literate people are more likely to have access to financial institutions. But while financial literacy is positively associated with having access to financial institutions, some research suggests that financial inclusion is a stronger predictor of economic outcomes than financial literacy. For example, Sun, Chen, Ansong, Huang, and Sherraden (2022) find evidence that financial literacy and financial access reduce economic hardship, but that financial access plays a bigger role in reducing financial hardship than financial literacy. However, for this report, sorting out which comes first, or which might be the most important factor, is of less importance. What matters here is that both play a role in individuals' overall financial capability, and financial capability is important for predicting individuals' and families' economic outcomes.

1.4. Limitation of Current Capabilities Theories: Focus on Person Causation

We posit a key limitation of current financial capability theories is that they rely on personal causation or an individual's personal capability and do not adequately account for the role that institutional capability plays in determining a person's financially capability. The focus on personal causation is consistent with capability theories such as Bandura's (1997) self-efficacy theory and Sen's (1999) capabilities theory. In the case of Bandura's (1997) self-efficacy theory, personal causation is when individuals believe they have access while in the case of Sen's (1999) capabilities theory personal causation is when a person has real access/opportunity to particular means believed to be necessary for performing a task and achieving a particular outcome. Personal causation within self-efficacy theory was originally limited to beliefs about whether particular means for achieving an outcome are available within the resources of the self, narrowly defined as effort and ability (Bandura, 1997; Skinner, 1996; Skinner, Chapman, & Baltes, 1988). However, research has shown that personal causation can be enlarged to include perceptions about the degree to which an individual has access to other means such as powerful others, luck, and societal resources (Skinner, 1996; Skinner et al., 1988; Skinner, Wellborn, & Connell, 1990). This is also similar to how Nussbaum (2000) discusses capability. According to Nussbaum (2000), the idea of capability takes into account an individual's personal capabilities that develop "usually with much support from the material and social world" (p. 82).

Humans Are Tool Builders

However, as Steve Jobs said, humans are tool builders. People build tools to

increase their functioning. From stone axes to today's super computers, tools have enabled humans to extend their physical and cognitive functioning empowering them to become the most dominate species on earth. As such, it is nearly impossible to distinguish what a person can do from the tools they use. As tools advance, this only becomes more difficult. There are ways to distinguish. For example, a way to distinguish is the decision they make about which tools to use, and another is how well they use those tools. But again, this assumes everyone has the same opportunity to equal access and effective use of tools; that is, it assumes we live in a meritocracy. Current financial capability theories largely attempt to predict what people can do independent of tools; we posit it is more accurate to predict what people can do with the assistance of tools.

Financial institutions, income, and wealth in a capitalistic economy are three of the most powerful and unique tools available to humans. This is because they are opportunity/access tools. They can be used to purchase other tools that then can be used to enhance functioning in a particular domain. As such, financial institutions, income, and wealth are instrumental in shaping and augmenting what a person can become and do financially. From this perspective, financial capability is not what a person can do and be independently, it is what they can do and be with the assistance of institutions, income, and wealth. We cannot understand what a person is financially capable of without accounting for these three tools and how they interact with one another and a person's own internal tools (i.e., their personal capabilities). In the next section we will lay out an expanded theory of financial capability that accounts for income and wealth.

1.5. New Way of Thinking about What It Means to Be Financially Capable

In the expanded definition of financial capability outlined here, both personal and governmental capabilities (i.e., institutions and the resources they provide) play an important role in determining the level of financial capability an individual has. When we talk about institutional financial capabilities we specifically have in mind explaining government's role in creating social welfare policies which provide a meritocratic playing field that encourages competition. Competition is considered to be an important source of economic growth within the American system of government (e.g., Smith, 2012). It is diminished when economic resources are drastically and unequally distributed determining winners and losers before the game even starts.

Meritocratic Playing Field

A meritocracy does not provide the conditions to ensure everyone achieves the same outcomes. What it is meant to do is to create an economic environment where differences in outcomes are due to individual differences in effort and ability, not birth class. Social welfare policies aim to level conditions so that, ideally, outcome gaps signal individual choices and talents not inherited advantage. Therefore, inequality is the greatest threat to a meritocracy, the greatest threat to

the idea of America. When significant economic inequality exists, it can no longer be discerned by the individual or society whether the differences in performance are because of the individual or the environment they live in. Consequently, we posit, that when it comes to designing social welfare policy, the threat that meritocratic conditions do not exit is of greater concern than the threat that the individual is or will underperform. Therefore, it might be said that some welfare benefits can be so important to the American economic system's ability to function as a meritocracy that the government must guarantee every person who is eligible for the benefit has the benefit (Elliott, 2025). It is not enough that they have access, they actually have to have the benefit. From this viewpoint, providing public assistance for the purpose of creating conditions that align with being a meritocracy is American. Moreover, when people live in a meritocratic environment, it makes them more accountable, not less accountable.

However, currently, there is a large amount of inequality in America. For example, the bottom one-fifth of earners in 2021 made $22,500 in pre-tax income, and the top one-fifth made $418,100 (Congressional Budget Office, 2024, Sept.). Further, in 2022, families at the 10th percentile of the wealth distribution had about $450 in wealth, while the families at the 90th percentile had about $1.9 million in wealth (Brown, McKernan, Garon, Cohen, Harvey, Steuerle, & Biu, 2024). There are also significant gaps in access to financial institutions (Dahl & Fanke, 2017) and levels of financial literacy (Angrisani, Barrerra, Blanco, & Contreras, 2021). When compared to other developed countries, income and wealth inequality is higher in America than in almost any other developed country (Sirirpurapu, 2022). Deep and widespread inequality brings into question whether America is currently functioning as a meritocracy. It also brings into question what can be done to make America function more like a meritocracy. The expanded theory of financial capability presented in this article is meant to better explain financial behavior and outcomes in an economic environment where there is a substantial amount of inequality like in the U.S.

1.6. Governmental Capability

It should be noted that our interest and focus on financial capability is to provide a framework that provides a blueprint for reforming the social welfare system so that it gives every citizen a real opportunity to pursue their financial happiness. With this context in mind, within our expanded financial capability framework, people do not only have personal capabilities but governmental capabilities. Together, they represent the real freedom a person has to pursue their financial happiness. As a reminder, functionings are who a person is (i.e., their identity) and what an individual can do (i.e., their performance/behavior), while capabilities are a set of functionings that determine a person's real opportunity to achieve functionings (Sen, 1985, 1999). The authors extend the concept of functionings to institutions, specifically, the government. Building on the previous section and the idea that there are both personal and governmental capabilities, we posit that both

the individual and the government achieve functionings that in help determine whether a person becomes financially capable. The component of financial capability that the individual is responsible for, is their personal capability. Personal financial capabilities are the set of functionings associated with being financially literate. The two functionings we identify are: the level of financial knowledge and skills a person has. When we discuss the individual components that make up either personal or institutional governmental financial capabilities, they are referred to as functionings. When we discuss a set functionings, they are referred to as capabilities. We will discuss personal capabilities later in this article.

The component of financial capability that governments are responsible for, is ensuring that all citizens have the conditions to pursue their financial happiness. *Governmental capability consists of the government's financial inclusion-generating functioning, its income-generating functioning, and its wealth-generating functioning*. As a set, we posit they make up a person's governmental capability. What this recognizes is that people no longer exist in a state of nature but instead live in a society as citizens. What they can accomplish is tied to how the government functions in relation to them (see e.g., de Soto, 2000). Social welfare policies are a tool government has to raise the level of governmental functioning ensure all of its citizens have the real opportunity to become institutionally financially capable. As a citizen, everyone benefits from public policies—tax deductions, social security in retirement, public goods like roads, regulation of commerce, property rights, etc. No person truly acts outside of the influence of public policy, and thus their outcomes are not only determined by personal capability but the governmental capability the government supplies them with. As such, governmental capability is not about an individual's functionings. It is about how the government is functioning in regard to them. As such, governmental capability may be an indicator for whether America is functioning as a meritocracy.

More specifically, governmental capability is the power of social and political institutions to provide individuals with the opportunity and resources they need to be financially capable. We identify a set of three governmental functionings we posit interact to form governmental capability from a social welfare perspective:

1) Financial inclusion-generating functioning—ensuring every individual is part of a financial institution that can build wealth on their behalf at a level that will allow them to achieve a financial goal;

2) Income-generating functioning—ensuring every individual has enough income to meet basic needs and spark saving; and

3) Wealth-generating functioning—ensuring every individual has enough wealth so that institutions produce wealth at a high enough level over a long enough time period for development to occur and so that institutions can efficiently produce wealth for them.

Again, governmental capability is the part of developing financial capability that the government is responsible for providing, and that helps determine if a person is or has the real opportunity to become financially capable. There are two

ways that governmental capability impacts an individual's financial capability. The first is by directly impacting what they can achieve. For example, we will discuss below how having wealth generates more wealth, and how institutions build wealth above and beyond what people can build on their own. The second is the indirect impact governmental capability has on the development of personal functionings. For instance, we will discuss in the next section how the inherited properties of wealth are integrated into the self. The indirect impact is how earlier definitions of financial capability that include the opportunity to act, incorporate institutions (i.e., its impact on development of personal financial capabilities).

Here, we posit that separate governmental functionings associated with an individual's governmental capability have an independent impact on their financial capability. Without sufficient governmental functioning, a person cannot be said to be financially capable even though they might have very high levels of personal capability. In the second article on measuring asset poverty, we used an example from education to illustrate how the current social welfare system is failing to create the conditions for a meritocracy. However, it also illustrates how personal financial capabilities are insufficient for determining financial capability. The example used was from Dam (2018), 27% of high-income children who are among the least gifted graduate from college, but only 24% of low-income children who are among the most gifted graduate from college.

Another way to attempt to describe the importance of governmental capability is using self-efficacy theory (i.e., I can do beliefs) which is also a capability theory, however, like current financial capability theories, it focuses on personal capabilities. Bandura (1994) defines self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 71). While explaining when personal capabilities are determinative of outcomes, Bandura (1997) comments:

> Where performance determines outcome, efficacy beliefs account for most of the variance in expected outcomes. When differences in efficacy beliefs are controlled, the outcomes expected for given performances make little or no independent contribution to prediction of behavior. (p. 24)

Self-efficacy theory holds that efficacy judgments are more predictive of behavior when conditions of a meritocracy exist and personal capabilities determine outcomes. However, when personal capabilities, what self-efficacy theorists call efficacy judgments, are not the deciding factor Bandura (1997) posits the external environment is a more accurate predictor of an individual's behavior. Like most social psychology theories, self-efficacy theory assumes that meritocratic conditions exist making differences in outcomes between people about their personal capability (e.g., Scheier & Carver, 1987). Similarly, current financial capability theories define financial capability from a personal capability perspective, they understand the ability to act as something determined by individuals (Sherraden, 2013; Xiao, Huang, Goyal, & Kumar, 2022). Regarding whether a person is finan-

cially capable, the environment and institutions matter only to the degree they help shape personal capabilities. However, as discussed when talking about inequality in America, currently resources are distributed very unequally. This unequal distribution of resources likely increases the importance of external capabilities in determining people's opportunity to act. Given this, we posit that a theory of financial capability is needed that better accounts for the role that external capabilities play in determining the opportunity people have to act. We also suggest that the role of personal and external capabilities should not be thought of as one or the other being important, but that each plays a role (i.e., interaction between the two) and at different times one may explain more of the opportunity to act than at others.

In the remainder of our discussion on expanding the definition of financial capability we will primarily focus on how wealth and income make independent contributions to financially capability. The primary goal of financial capability interventions is to empower people to pursue their financial happiness. However, it takes both wealth and income to become empowered when it comes to making financial decisions and acting in ways that would produce one's financial happiness. Empowering people with the knowledge, skills, and even access to institutions for managing their money effectively without giving them wealth and income reduces what they can produce with their personal financial capabilities and limits their development of personal financial capabilities. To help illustrate, admittedly imperfectly, a person can have the best car engine in the word but if they have no or little fuel the engine will not get them to their destination, regardless of how high performing it is. They will be forced to find an alternative means to reach their destination or an alternative destination altogether (Banduara, 1997). Institutions, wealth, and income, in this example, are the fuel that people need to fully develop their personal financial capabilities. Moreover, it is the interaction between their personal and institutional financial capabilities that makes them financially capable of pursuing their financial goals and ultimately their financial happiness.

1.7. Independent Effects of Wealth on Financial Capability

To be financially capable we suggest an individual must have wealth. In this section we focus on wealth and its impact on a person's governmental functioning, a key component of financially capability. Remember, capabilities are a set of functionings (Sen, 1999). We have identified three governmental functionings: financial inclusion/institutions, income, and wealth. We posit they make up governmental capability. We hypothesize that these different functionings interact with one another augmenting how each of them functions. In this section we will discuss research that helps show that these different functionings interact to improve the functioning of each other.

Further, we hypothesize that for different situations a person's functioning might be more important than another person's functioning. For example, some-

one might have more income but no wealth, or be financially included but have no wealth, or experiences an income shock but have no wealth. Each functioning remains important for whether a person is financially capable, but there might be need for government to assess which an individual needs more assistance with at the time. For example, rather than using simple income thresholds for determining eligibility for government assistance. We also theorize that it is possible, when inequality is high enough in society, that enough members of a group's level of governmental functioning is so low it is no longer predictive of behavior and outcomes among members of the group. It is almost like they live in a state of nature, outside society. But it is even worse than living in a state of nature in some ways because government exists and is helping other groups and protecting them against competition from the ousted group. The opposite would also be true where functioning is high enough among everyone that personal capabilities by their selves determine differences in behavior and outcomes. When a society has truly reached the level of being a meritocracy, this would be the situation, institutional financial capabilities would fall into the background and personal capabilities would perfectly explain differences in behavior and outcomes.

In the next section we discuss the role of wealth in determining the level of governmental capability a person has. Most people have heard the statement, you need wealth to build wealth or wealth begets wealth. We discuss four ways that having wealth helps produce more wealth that are related to the theory of financial capability we posit in this article: use wealth to buy assets that help produce additional wealth (e.g., purchase property, education and training, stocks, bonds, etc.), improve governmental functionings, income functionings, and the development of personal functionings.

1.8. Having Wealth Produces More Wealth: Wealth Begets Wealth

Without looking at the mechanisms that explain how wealth produces new wealth, research does show that having wealth is an important predictor of being someone capable of producing wealth. For example, Fagereng, Mogstad, and Rønning (2021), in an experimental study, link Korean-born children who were adopted at infancy by Norwegian parents, on wealth and socioeconomic characteristics. Their mediation analysis examined the following four factors: children's education, income and financial literacy, and direct transfers of wealth from parents. They found that changes in these mediator variables explained nearly 40% of the average causal effect on these children's accumulation of wealth. The direct transfer of wealth was the most important mediator. Rauscher (2016) finds that predicted household net worth is higher for adults who received parental financial support for education than for those who did not when that support exceeded $2200. Elliott, Rauscher, Nam (2018) also find evidence that initial assets even among low-income children are predictive of the amount of assets they will have later in life. At the 25th percentile of 1989 net worth, for each one dollar increase in 1989 net worth, 2011 net worth increases by 41 cents: at the 50th percentile by

$1.20, at the 75th percentile by $1.79. While Derenoncourt, Kim, Kuhn, and Schularick (2022) in attempting to answer the question where wealth comes from, find evidence that initial wealth, the amount a person starts off with, largely determines their ability to build wealth.

There is also evidence that timing of wealth can also help determine a person's ability to build wealth. Elliott, Osafo Agyare, and Min (2025) find evidence that wealth at the time children are college age (age 18) and wealth at the time they graduate college (around ages 25 - 30) are strong predictors of how long it will take college graduates to reach median net worth of U.S. households. Further, their findings indicate that wealth at the time a student graduates from college might be the most impactful time to receive a wealth transfer. This is a period when wealth gaps are at their lowest.

Transforming Wealth into Income Raises the Level of Income for Those with Wealth

Personal income consists of three major components: 1) labor—income received from wages and salaries, 2) assets—income received from investments, such as dividends, interest, and rent, and 3) transfers—income received from government programs and other institutions. In its simplest form, wealth generates personal income when it is transformed from wealth into income. Social welfare policies have largely adopted the philosophy that work/labor is key to increasing personal income. For example, under President Bill Clinton, strict rules in regard to work participation requirements for receiving public assistance were adopted as part of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). In support of this social welfare philosophy, according to the Congressional Budget Office (2024, Sept.), labor income continued to make up the largest share of personal income in 2021. Further, personal income on the whole increased slightly in 2021. In a social welfare system designed around the idea that income from labor is a primary way income gains are achieved, the key to ending poverty largely boils down to the creation of policies that attempt to increase work among the poor in low-wage jobs. We say low-wage jobs, because if the goal of social policy is to just get families above a poverty line, then producing more low-wage jobs is all that is thought to be needed. The idea that poverty is largely the result of low income and work is the key to increasing income among the poor, it implies and supports the narrative that the poor are lazy people who do not want to work. In the asset poverty measurement paper in this special issue, we offer an alternative philosophy for developing social welfare policy that we posit better aligns with the right to pursuit of happiness (Elliott, Osafo Agyare, Zheng, & Min, 2025).

The focus on labor income as a key to ending poverty, ignores the fact that the rise in personal income in 2021 is attributed to growth in income from assets ($8800 on average) not labor income ($1100, on average) (Congressional Budget Office, 2024, Sept., p. 6). Moreover, these gains mostly occurred among higher-income households. Among the lowest quintile, personal income decreased in

2020 and remained the same in 2021 due to the drop in labor income in 2020 (Congressional Budget Office, 2024, Sept.). While the lowest quintile was experiencing a decline in personal income, the highest quintile's personal income grew both in 2020 and 2021 largely from growth in income from owning assets. The Congressional Budget Office (2024, Sept.) reports that among households in the 81st to 99th percentiles average income increased by 8% ($261,800 in 2019 to $281,800 in 2021) and about half of the increase can be attributed to asset gains. Among the top 1%, personal income increased by a staggering 69% ($9.8 million to $16.5 million). About two-thirds of this increase the Congressional Budget Office (2024, Sept.) attributes to asset gains. This suggests that income from assets is an important driver of personal income gains.

1.9. Wealth Interacts with Income to Improve Income's Functioning as a Wealth Producer

A way that wealth might produce more wealth is by improving income functionings as a wealth producer. For example, Shapiro, Meschede, & Osoro's (2013) find that a one dollar increase in income translates to a five dollar increase in wealth for White families but only a 70-cent increase for Black Families. But when Black families start off with similar levels of assets, they have a return of $4.03. So, while there is still a race effect, initial wealth improves the functioning of income as a producer of wealth. Similarly, Elliott, Rauscher, and Nam (2018) find that older age adults living at the 50th or 75th percentile as younger adults produce more wealth from each dollar they earn than older age adults living at the 25th percentile as younger adults. There is also evidence that income helps produce wealth in guaranteed income interventions. Guaranteed income interventions provide families with, often times, monthly cash payments. Research shows that these cash payments can result in families being more likely to have emergency savings and savings for college (Roll, Elliott, Smith, Quick, Brugger, Davis, & Hamilton, 2024). Together, these findings provide evidence for the proposition that the amount of wealth someone starts off with interacts with income to improve the functioning of income as a producer of wealth.

However, it is important to point out, in the case of households at the bottom of the income distribution, initial income appears to have a limit on how effective it can be at producing additional wealth for these low-income households (Rauscher & Elliott, 2016). That is, within the group of households living at the bottom of the income distribution, those at the top of this group over time stop experiencing any wealth gains that income produces. This suggests while income is important for producing wealth, it has limited potential for people working low paying jobs. This does not mean that income should be part of interventions designed to build wealth, it does suggest that the amount of income matters and that policies focused on providing families with a survival standard of living will not position families to reach a growth standard of living (for more information on these standards see Elliott, Osafo Agyare, & Min, 2025).

1.10. Wealth Interacts with Institutions to Enhances Governmental Functioning

We posit that the amount of wealth an individual has to put in a bank or invest helps determine whether they can be said to be fully included in a financial institution. That is, an individual can have access to a financial institution but lack the wealth needed for that institution to effectively start producing new wealth on their behalf. In capitalist economies, wealth helps determine how well institutions function on behalf of an individual. Simply put, the more wealth an individual puts into a financial institution the more wealth that institution is capable of producing on behalf of the individual. This is also a reason why unequal distribution of wealth creates inequality and threaten meritocracies.

For instance, let's imagine a person puts $1000 in a high-yield savings account with a monthly Annual Percentage Yield (APY) of 5%. If they deposited nothing else that year, they would earn about $51. However, if they had $20,000, the account would produce $1023 for them; if they had $50,000, it would produce $2558; and if they had one million dollars, the account would produce $51,162 for them. That is above and beyond their personal capabilities. Or it could be said that the institution produces over $51,000 of wealth for the child who has a million dollars to put into their account and $51 for the child who has $1000 to put in their account, wealth matters for how institutions function. A similar example can be found in the Children's Development Account (CDA) literature. At age 14 the average treatment child in SEED for Oklahoma Kids or SEED OK, which started at birth with a $1000 initial deposit in 2007, has about $4373 in their account among participants who had not made a deposit themselves (Clancy, Beverly, Schreiner, Huang, & Sherraden, 2022). The CDA institution produced about $3373 in new founds for the average child in the program. Similarly, Maine's statewide program, My Alfond Grant, puts $500 into each child's account at birth. The $500 Alfond Grant invested at birth is now worth $2066 for the oldest recipients who entered the program in 2008 (Quint, 2024). These examples provide an illustration of how initial wealth amounts impact the functioning of institutions. Moreover, both wealth and institutions are important for building wealth. They make an independent contribution above and beyond what a person's personal capability. Moreover, they empower people by increasing the amount of governmental capability they can have which in turn helps determine the level of financial capability they can achieve.

In this section we focused on the direct impact that wealth has on financial capability. However, wealth also plays a critical role on the development of personal financial capabilities that we will discuss later in the section on personal financial capabilities. In the next section we discuss the independent effects that income has on becoming financially capable.

1.11. Independent Effects of Income on Financial Capability

In this section we discuss the important independent effects that income has on

becoming a financially capable person. A way that income is associated with producing wealth is by ensuring families can meet their basic needs, reducing the psychological cost associated with wealth building (e.g., not paying for food to save). It is hard to think of a person being financially capable if they cannot pay their bills and meet their basic needs, a person who cannot is not free to pursue their own financial happiness.

1.11.1. Income's Interaction with Wealth

In general, the correlation between income from labor and a person's net worth is relatively low—about 0.21 (Keister, 2018). While the correlation between income and wealth is low, it is also clear that income matters for producing wealth. Using a hierarchical of needs framework, Xiao and Anderson (1997) explain the role that income plays in building wealth when talking about how families will attempt to save for higher-level needs only after they have saved enough to meet their lower-level survival needs. Not surprisingly then, when it comes to building wealth, income might matter more for low-income households. For example, Elliott, Rauscher, and Nam (2018) find in the case of the lowest income percentile (the 25th), income is a stronger predictor of later wealth than initial wealth (i.e., net worth). The opposite is true among households at higher income percentiles (50th and 75th), wealth is more important for producing wealth. However, in all of the percentile levels, income matters, even if it matters less than wealth. Elliott, Rauscher, and Nam (2018) suggest that the increased importance of income among the lowest income percentile might be because they have such low levels of wealth to start with. We posit, it might also be that income is more important to the lowest income group, because of the kind of wealth they are attempting to build and how they view saving. For instance, Xiao and colleagues find evidence that suggests higher income families think of saving as a type of investment that can be used to build wealth for growth and development (Xiao & Anderson, 1997; Xiao & Noring, 1994). Whereas Sherraden and McBride (2010) find evidence that suggests that low-income families might often think of saving as a way to store money for future consumption needs. And so, low-income families might perceive that saving under a mattress is as good or even better for them than saving in a bank that charges fees. If saving is seen as simply storing money, it is not an investment, and earning interest, for example, is not as important as quick access might be. However, if it is an investment, then the type of institution would seem to matter more.

1.11.2. Income's Interaction with Financial Literacy

Research indicates that in major advanced economies, like the U.S., 60% of adults who live in the richest households are financially literate compared with 40% of their counterparts who are poor (Klapper, Lusardi, & Oudheusden, 2015). Further, financial literacy is often lower in low-income and minority communities, and barriers to education can restrict access to key financial information and strategies (Angrisani, Barrera, Blanco, & Contreras, 2021; Lusardi & Mitchell, 2014).

Similarly, the Federal Reserve Bank of St. Louis finds that income is highly correlated with higher financial literacy scores (Chien & Karson, 2018). While Zubrzycki (2017) finds that 45% of students in higher-income schools earned the top score on a five-point financial literacy scale, compared to 3% of lower-income students. While this is not an exhaustive review of research on the interaction between income and financial literacy, this evidence provides some grounds that such an interaction exists.

1.11.3. Income's Interaction with Financial Inclusion

There is also reason to believe that income interacts with financial inclusion (Dahl & Fanke, 2017). For example, research shows that many low-income and minority neighborhoods lack local banks, leading to a phenomenon known as banking deserts. This makes it difficult for these communities to access necessary financial services (Dahl & Fanke, 2017). In 2021 29.3% of Black households making less than $15,000 per year were unbanked, 26.5% of Hispanic, and only 13.6% of White households (FDIC, 2021). Banks often require a minimum balance, which those in low-income communities may struggle to accumulate. This can create a barrier to opening or maintaining accounts. FDIC (2021) reports that this is the number one reason the unbanked give for not having an account. Faber and Friedline (2020) find that Black and Hispanic communities face higher costs than White communities to open and maintain checking accounts, including minimum opening deposits, minimum balance requirements, regular maintenance or service fees, and overdraft fees. Moreover, research indicates that low-income and minority communities are often targeted for predatory loans with high-interest rates, which can trap them in a cycle of debt (Engel & McCoy, 2002). Meier and Sprenger (2010) find that it is often harder for individuals in low-income brackets and minorities to obtain credit or loans due to poor credit histories or lack of credit. Further, online banking and financial services may not be accessible for those who lack internet access or technological proficiency, often the case in low-income communities (Bhutta, 2018).

So, income as a financially capability tool has been shown to have strong interactions with the three governmental capability components. In the next section we discuss the important role that personal financial capabilities play in determining whether a person is financially capable.

1.12. Personal Financial Capabilities

Just because governments provide the conditions so that an individual can be institutionally capable, it may not accurately reflect what a person is financially capable of. That is, being intuitionally financially capable is insufficient for someone to become financially capable. Specifically, whether a person is financially capable or not is also determined by the individual's personal financial capabilities. Personal financial capabilities are the set of functionings associated with being financially literate. The set of functions are related to a person's ability to use of financial knowledge and financial skills. From this perspective being financially literate

means that an individual can understand (use knowledge) and effectively manage (use skills) institutional resources (institutions/financial inclusion, income, and wealth) for the purpose of pursuing their financial happiness.

The Role of Wealth in the Development of Financial Literacy

As stated in the introduction, the better government is at providing the conditions for being institutionally capable, the more personal capability matters for the kinds of outcomes they can achieve. In the measure asset poverty article in this special issue, we discussed how the inherited properties associated with owning wealth can become internalized as characteristics (Elliott, Osafo Agyare, Zheng, & Min, 2025). In this way, we posit that wealth is a key tool for promoting development of personal financial capabilities. Given that we discussed these in more detail in the asset measurement paper, they will not be discussed in detail here. However, it is important to emphasize that to be financially capable, it is not enough to be institutionally financially capable, a person also needs to be personally capable (i.e., financially literate).

We give less attention in this article to personal financial capabilities to save space and because they are the main focus and thus have been discussed extensively in the existing financial capability literature (e.g., Sherraden, 2013; Xiao et al., 2022). However, this does not dimmish its importance within the theoretical framework outlined in this paper, nor its contribution to what it means to be financially capable.

1.13. Research Questions

In the current study, we examine the structural validity of financial capability among college graduates and its relationship with asset poverty and life satisfaction. First, we ask whether the four theorized indicators, including income, wealth, financial literacy, and financial inclusion, coherently manifest financial capability. Once that measurement foundation is established, we examine the relationship between financial capability and asset poverty. Specifically, we investigate whether college graduates' level of financial capability at graduation predicts the likelihood of falling into asset poverty ten years later. We also compare race-specific pathways to determine whether financial capability exerts differential influence on asset poverty. The third question extends the analysis from financial outcomes to subjective well-being: does financial capability at graduation predict higher life satisfaction a decade later? As with asset poverty, we estimate the overall effect and explore whether the strength of the relationship differs across racial groups.

2. Methods

2.1. Data

This study uses longitudinal data from the Panel Study of Income Dynamics (PSID), a nationally representative sample of over 18,000 individuals living in 5000 families in the United States. PSID collects information on employment, in-

come, and wealth with a high degree of validity (Juster et al., 1999; Pfeffer et al., 2016). The survey was conducted annually from its first survey in 1968 until 1997, and biannually thereafter. Wealth information has been collected every 5 years since 1984 until 1999, and every other year since then. Although it is a longitudinal study, the PSID has consistently achieved high response rates, remaining above 95% since 1970 (Schoeni et al., 2013). For detailed information about the PSID data, readers are referred to Beaule et al. (2023).

2.2. Sample

Since the first available wealth information is from 1984, the time frame analyzed in this study is 1984 to 2021. To investigate the impact of birth wealth, the age of the sample was restricted to 0- to 5-year-olds in 1984. These individuals were aged 37 - 42 by 2021, which is referred to as early middle age or established adulthood stage (Levinson et al., 1986). For testing the impact of financial capability, this study uses the Well-Being and Daily Life 2016 Supplement survey data and restricts the sample to those who responded to the study. The sample in this study is restricted to Black and White individuals who hold a bachelor's degree from a four-year college or university to investigate the return on their degree after graduation. The focus on these racial groups is justified by the small number of individuals from other racial backgrounds. The small number of other racial groups is because in the basic PSID sample did not include Latinos unless they co-resided with persons in the U.S. in 1968. Further, the Latino supplemental sample was not added to the PSID until 1990 (Beaule et al., 2023). With these restrictions, our sample included 576 households.

2.3. Measures of Outcome Variables

We create three different measures of asset poverty:

Asset Poverty 1. What is referred to in this study as Asset Poverty 1, Haveman and Wolff (2000) define as when a college grad's household lacks sufficient wealth (i.e., net worth) to remain above the official poverty line for three months. Based on this definition, we create a time-varying binary variable where an individual is considered asset poor if, in any given year, their level of assets—adjusted for household size—falls below one-quarter of the annual poverty line, as determined by the U.S. Census Bureau. This is a dichotomous variable with the following two categories: asset poor and asset secure.

Asset Poverty 2. Oliver and Shapiro (1997) provided an alternative definition of asset poverty which will be called Asset Poverty 2. It is when a college grad's household does not possess wealth (i.e., net worth) equivalent to three months of total their annual family income (also see Shapiro, 2004). The rationale behind this definition is to evaluate whether a household has accumulated enough assets to endure a period of financial instability, such as three months, without relying on a continuous income stream. This is a dichotomous variable with the following two categories: asset poor and asset secure.

Asset Poverty 3. An individual is asset empowered when they have a set of functionings that make them financially capable of producing wealth in a high enough amount that they can be said to be on track to achieve a financial goal (e.g., pay for college, start a business, buy a home, retire). We determine what a high enough amount is from what financial brokers have suggested people should have in net worth during different ages if they are to retire comfortably (Fidelity, 2025). Graduates who are currently capable of producing wealth at a level that would allow them to reach their financial goals, we identify as being asset empowered. So, this is a dichotomous variable with the following two categories: asset poor and asset empowered.

In this study, being asset empowered is operationalized as when college graduates have an amount of net worth equivalent to X times their *annual* income. Instead of using the amount saved for wealth, we use net worth. As Haveman and Wolff (2004) state, "A portfolio of assets as complete as net worth is a point-in-time stock that reflects prior saving and other asset accumulation decisions taken over a long period of time" (151). As such, we see it as a better indicator of a household's overall wealth position.

Because the data go up to ages 37 to 42, we examine the following wealth building goals:

- 25 - 30 yrs = 1x
- 30 - 35 yrs = 1x
- 33 - 38 yrs = 2x
- 35 - 40 yrs = 3x
- 37 - 42 yrs = 3x

Life Satisfaction. Life satisfaction is collapsed into a dichotomous variable with completely satisfied and very satisfied coded as 1 for being satisfied and somewhat satisfied, not very satisfied, and not at all satisfied coded as 0 for not satisfied.

Financial Capability Variables. In this study we posit that there are four components of financial capability: 1) financial literacy, 2) financial inclusion, 3) income, and 4) wealth.

Financial Literacy. The financial literacy measure in this study is modeled closely after the approach used by Bialowolski et al. (2021). We use data from the Well-Being and Daily Life 2016 Supplement survey to create a binary variable that serves as an indicator of financial literacy. This measure, widely utilized in the literature (see Lusardi & Mitchell, 2007; Schmeiser & Seligman, 2013), is based on respondents' correct answers to the following three questions:

1) "If the chance of getting a disease is 10 percent, how many people out of 1000 would be expected to get the disease?"

2) "If 5 people all have the winning numbers in the lottery and the prize is $2 million, how much will each of them get?"

3) "Suppose you have $200 in a savings account. The account earns 10 percent interest each year. How much would you have in the account at the end of two years?"

Respondents who answered all three questions correctly are classified as financially literate. Importantly, for conducting longitudinal analysis, research shows that financial literacy is relatively stable over time (Angrisani, Burke, Lusardi, & Mottola, 2023). Therefore, it can be used in longitudinal analysis even when it is measured only at one point in time.

Financial Inclusion. Xiao and colleagues (1994, 1997) find evidence that low-income households are more likely to report saving for survival needs using such financial institutions as checking and saving accounts, middle-income are more likely to report saving for emergencies using employer-sponsored savings plans, savings bonds, and money market accounts, while high-income are more likely to save for growth needs using bonds, stocks, and trusts. Mylonidis, Chletsos, and Barbagianni (2017) use data from the PSID and create similar categories to Xiao and colleagues to measure financial exclusion. We follow this work. However, Mylonidis et al. (2017) create four separate dummy variables. We create a single four-level variable in 2009 with the following categories:

- **0 = Excluded**—graduate does not possess any of the following: 1) money in checking or savings accounts, money market funds, certificates of deposit, government savings bonds, or treasury bills; 2) private annuities or IRAs; and 3) corporate stocks, stock mutual funds and investment trusts, and zero otherwise;
- **1 = Survival**—graduate has 1) and no 2) or 3);
- **2 = Security**—graduate has 1) and 2) but no 3); and
- **3 = Growth**—graduate has 1), 2), and 3).

Net Worth/Wealth. Household net worth in the PSID is calculated by summing various types of assets held each year, including business assets, checking or savings accounts, real estate, stocks, and other assets, and then subtracting all outstanding debt. This provides a time-varying measure of net worth. Throughout the study, the terms "*net worth*" and "*wealth*" are used interchangeably. Each year's net worth values were inflation-adjusted to 2021 levels using the Consumer Price Index (CPI). To mitigate scale differences and stabilize its variance, we transformed this variable by standardizing it.

Income. Total household income was measured as a continuous variable in the PSID, calculated as the sum of total household income from the previous tax year, including all taxable income, transfer income, and Social Security income for everyone in the family. We collected data on household income for the following years: 1984, 1989, 1994, 2001, 2003, 2005, 2009, 2011, 2013, 2015, 2017, 2019, and 2021. Negative income values were trimmed to zero. Household income was highly skewed, which could pose potential issues in our analysis. Similar to wealth, we transformed income by standardizing it.

2.4. Variables of Interest

Race. Race was indicated with White as the reference group, given that the study focused exclusively on Black and White individuals

From the net worth variable, we derive several asset-related variables:

1) Birth Wealth: This is the 1984 household net worth when individuals were between the ages of 0 and 4.

2) Enrollment Wealth: This represents the 2001 household net worth when individuals typically enroll in college; between the ages of 17 and 22.

3) Graduation Wealth: This is the 2009 household net worth when individuals typically graduate from college; between the ages of 25 and 30.

2.5. Control Variables

In addition, a comprehensive set of covariates are controlled for in 1984. Family size was quantified as the number of individuals in the household. The household head's age was measured in years. Marital status was recoded as a binary indicator for whether the household head was married. The education level of the household head was categorized based on the years of schooling completed: those with 12 years or less were classified as having "high school or less" education; those with more than 12 years but fewer than 16 years were categorized as having "some college"; and those with 16 years or more were classified as having "four-year college or more" education. Employment status was also considered, with the unemployed being the reference group. Additionally, the gender of the individuals was controlled for as a dichotomous variable, with male serving as the reference group.

2.6. Analytic Strategies

All models were estimated with lavaan (Rosseel, 2012). Indicators of financial capability were taken from the 2009 wave of the PSID, and financial literacy was added from the 2016 wave, the first year this item was fielded. Outcome measures, including three asset poverty variables, a below-median-net-worth dummy, and a life-satisfaction dummy, were drawn from the 2021 wave, to ensure the temporal order.

2.6.1. Measurement of Financial Capability

A confirmatory factor analysis specified the four indicators as manifestations of a single latent factor. Because the indicators are continuous but exhibit mild non-normality, we used the maximum-likelihood estimator with robust standard errors (MLR). Model fit was judged with the comparative-fit index (CFI), Tucker–Lewis index (TLI), root-mean-square error of approximation (RMSEA), and standardized root-mean-square residual (SRMR), adopting conventional cut-offs of CFI/TLI ≥ 0.90 and RMSEA/SRMR ≤ 0.10. Standardized loadings were interpreted, and latent factor scores were predicted for subsequent structural equation models.

2.6.2. Structural Equation Models for Asset Poverty and Life Satisfaction

Each binary outcome was regressed on the latent financial capability factor using structural equation models. Given the categorical nature of the dependent variables, models were estimated with the weighted least-squares mean- and variance-

adjusted estimator (WLSMV), which provides robust standard errors and appropriate test statistics for logit-linked outcomes. For each outcome we first fitted an aggregate model and then a multigroup model that allowed the parameters to differ between White and Black graduates. Linear contrast on financial capability coefficients was evaluated with-difference tests using the WLSMV scaling correction. Changes in global fit indices (CFI, TLI, RMSEA, SRMR) were used to gauge whether freeing parameters by race improved or maintained model adequacy.

Missing Data and Inference

Missing data were addressed with the full-information routines available in each estimator (FIML under MLR and pairwise-present under WLSMV). Statistical significance was assessed with two-tailed tests at the 0.05 level.

3. Results

3.1. Descriptive Results

Table 1 presents the baseline statistics for the categorical variables in the study. As we follow the sample from 1984 through 2021, the baseline statistics mostly refer to 1984, except for the financial literacy variable, which was collected in 2016 only.

Table 1. Descriptive statistics for control variables.

Categorical Variables	N	%
Household (Parent/Head's Information)		
Race		
White	377	65
Black	199	35
Marital Status		
Married	471	82
Not Married	105	18
Education Level		
High School or Less	304	53
Some College	126	22
Four-year degree or more	143	25
Employment Status		
Employed	481	84
Unemployed	95	16
College Graduates' Information		
Gender		
Male	231	40
Female	345	60

Continued

Financial Literacy					
Literate		212		39	
Not Literate		329		61	
Continuous Variable	**Mean**	**Median**	**SD**	**Min**	**Max**
Household Income	$27,600	$24,600	$21,500	$1.00	$167,000
Household Size	4.12	4.00	1.15	1.00	9.0
Early Wealth	$208,091	$46,821	$1,411,774	−$393,869	$23,578,607
Enrollment Wealth	$389,786	$81,689	$2,776,665	−$188,457	$65,816,267
Graduation Wealth	$74,465	$6315	$308,410	−$212,191	$4,085,949

PSID = Panel Study of Income Dynamics.

The sample includes 576 individuals, with a gender distribution of 60% female (n = 345) and 40% male (n = 231). Regarding racial composition, 65% of the respondents identify as White (n = 377), while 35% identify as Black (n = 199). In terms of marital status, a majority of the sample, 82% (n = 471), are married, whereas 18% (n = 105) are not married. The education level of the householders shows that 53% have a high school diploma or less (n = 304), 22% have attended some college (n = 126), and 25% have completed four years of college or more (n = 143). For the unemployment status, 84% of the householders are employed (n = 481), while 16% are unemployed (n = 95). Regarding financial literacy, 39% of the respondents demonstrate their financial literacy (n = 212), compared to 61% (n = 329) who do not.

3.2. Governmental Capability by Wealth and Race

Table 2 provides information on the four individual components of financial capability: financial literacy, financial inclusion, income, and wealth. Financial literacy are indicators of personal capability of a college graduate. Financial inclusion, income, and wealth are the set of functionings that make up an individuals' governmental capability.

Table 2. Financial capability by wealth and race in 2009 and 2021.

2009	Asset Poor Black Sample				Asset Poor White Sample			
	FLit[a]	**FInc[b]**	**Income**	**Wealth**	**FLit**	**FInc**	**Income**	**Wealth**
	Mean	*Mean*	*Mean/Median*	*Mean/Median*	*Mean*	*Mean*	*Mean/Median*	*Mean/Median*
Asset Poverty 1	1.8	0.5	$33,155/$29,094	$−9169/$0	2.4	1	$48,309/$42,708	$−16,368/$−5000
Asset Poverty 2	1.8	0.5	$35,617/$30,000	$−9961/$−300	2.4	1.1	$54,405/$46,775	$−16,445/$−5600
Asset Poverty 3	1.8	0.5	$40,268/$32,800	$−3430/$0	2.4	1.2	$64,410/$54,000	$6995/$4000
Median Net Worth of U.S. Households	1.7	0.4	$21,104/$20,520	$6466/$0	2.4	1.1	$25,789/$26,400	$−1414/$30

Continued

2021	Black				White			
	FLit	FInc	Income	Wealth	FLit	FInc	Income	Wealth
	Mean	*Mean*	*Mean/Median*	*Mean/Median*	*Mean*	*Mean*	*Mean/Median*	*Mean/Median*
Asset Poverty 1	1.8	0.5	$50,731/$34,640	$−16,033/$0	2.2	1	$73,608/$63,010	$−27,630/$−3470
Asset Poverty 2	1.8	0.5	$55,444/$36,376	$−19,541/$−125	2.2	1	$84,343/$71,732	$−32,476/$−8000
Asset Poverty 3	1.8	0.6	$69,104/$52,610	$25,901/$2000	2.4	1.2	$141,492/$112,910	$166,938/$104,000
Median Net Worth of U.S. Households	1.7	0.5	$32,801/$31,000	$21,920/$1,000	2.2	1.1	$46,112/$50,710	$85,082/$24,000
2009	Not Asset Poor Black Sample				Not Asset Poor White Sample			
	FLit[a]	FInc[b]	Income	Wealth	FLit	FInc	Income	Wealth
	Mean	*Mean*	*Mean/Median*	*Mean/Median*	*Mean*	*Mean*	*Mean/Median*	*Mean/Median*
Asset Poverty 1	1.8	1.0	$68,800/$63,900	$106,513/$67,000	2.5	1.6	$93,707/$77,943	$180,149/$69,300
Asset Poverty 2	1.8	0.9	$57,042/$50,750	$93,179/$50,500	2.4	1.6	$86,484/$73,000	$174,113/$65,050
Asset Poverty 3	1.7	1.0	$48,122/$37,536	$165,887/$89,350	2.5	1.8	$93,213/$78,822	$339,625/$155,000
Median Net Worth of U.S. Households	1.9	0.9	$70,513/$63,300	$32,322/$8500	2.4	1.4	$88,909/$72,700	$114,240/$30,000
2021	Not Asset Poor Black Sample				Not Asset Poor White Sample			
	FLit	FInc	Income	Wealth	FLit	FInc	Income	Wealth
	Mean	*Mean*	*Mean/Median*	*Mean/Median*	*Mean*	*Mean*	*Mean/Median*	*Mean/Median*
Asset Poverty 1	1.8	0.7	$93,361/$73,900	$144,606/$102,250	2.5	1.4	$172,423/$137,202	$485,433/$261,250
Asset Poverty 2	1.7	0.7	$79,944/$65,500	$121,426/$80,000	2.5	1.4	$167,553/$133,653	$473,240/$256,092
Asset Poverty 3	1.9	0.4	$39,760/$28,472	$186,960/$123,512	2.4	1.7	$183,991/$140,500	$982,865/$705,137
Median Net Worth of U.S. Households	1.9	0.8	$127,622/$109,085	$79,254/$53,000	2.5	1.4	$186,210/$146,150	$476,902/$254,500

[a] Flit stands for financial literacy. [b] Finc stands for financial inclusion. Score of <1 = less than survival, scores of 1 - 2 = above survival but not secure, and 2 - 3 = in between secure and growth.

3.2.1. Black Asset Poor vs. Black Not Asset Poor

When comparing Black college graduates who are asset poor to those who are not asset poor, we find that financial literacy is about the same for each group. The major differences are between the governmental capability of the asset poor Black college graduate and the not asset poor Black college graduate. For example, the mean financial inclusion scores for asset poor Black college graduates are substantially lower than for the not asset poor. Similarly, mean income and wealth are considerably lower for asset poor Black college graduates than for the not asset poor. The is also a substantial gap in income $35,645 (70%), and wealth $115,682

(171% or about 13 times more) as well. Similar trends occur in 2021. However, the income $42,630 (59%) and wealth $160,639 (164% or about 10 times more) gaps grow.

3.2.2. White Asset Poor vs. White Not Asset Poor

The financial literacy of White asset poor and White not asset poor college graduates is very similar. However, there is a substantial difference in financial inclusion between White asset poor and White not asset poor college graduates. The is also a substantial gap in income $45,398 (64%), and wealth $196,517 (169% or about 12 times more) as well. Similar trends occur in 2021. However, the income $98,815 (80%) and wealth $513,063 (180% or about 19 times more) gaps grow.

3.2.3. Black Asset Poor vs. White Asset Poor

Black asset poor college graduates have lower levels of financial literacy and financial inclusion than their counterparts. They also earn less income annually than White asset poor college graduates (2009 gap $15,154, about 37%; 2021 gap $22,877, about 37%). When wealth is considered, an interesting picture comes to light. It appears on the one hand asset poor White college graduates have more access to credit (−$16,368) than asset poor Black college graduates (−$9169) in 2009 (gap of −$7199; 56%). In 2021 White college graduates have −$27,630 debt and Black college graduates have −$16,033. This is a gap of −$11,597; that is, the Black Asset Poor/White Asset Poor debt gap is 53% in 2021.

3.2.4. Black Not Asset Poor vs. White Not Asset Poor

There are substantial differences between Black college graduates who are not asset poor and their White counterparts on all indicators. For example, in 2009 the Black/White income gap using Asset Poverty 1 is $24,907 (31%). The Black/White wealth gap is even larger, $73,636 (51%) in 2009. In 2021, the Black/White income gap using Asset Poverty 1 is $79,062 (59%); the wealth gap is $340,827 (108% about 3.4 times more).

3.2.5. Some Overall Observations

The findings suggest that the size of the White Asset Poor/White Not Asset Poor income and wealth gaps are smaller in 2009 (income gap 64%; wealth gap 12 times more) than the size of the Black Asset Poor/Black Not Asset Poor gap (income gap 70%; wealth gap 13 times more) but by 2021 they are larger (White gap – income 80%; wealth 19 times more; Black 59%; wealth 10 times more). The other interesting aspect is that the size of the Black gap shrinks over time whereas the size of the White gap grows substantially over time. It appears, among the wealthy class, wealthy Black college graduates' income and wealth grow slower than wealthy White college graduates. It is also notable, that for the Asset Poor regardless of race, overtime, they continue to rely on credit, and the amount of debt they have increases rather than shrinks. That is, they are not able to use credit to build wealth at least not over the 12 years between 2009 and 2021 when they would be 37 to 42 years old.

3.3. Latent Construct of Financial Capability: Aggregate Confirmatory Factor Analysis

The latent construct of financial capability was first evaluated with a confirmatory factor analysis that loaded four observed indicators at college graduation (see Table 3). This analysis shows that all four indicators measure the underlying financial capability construct and work altogether to capture it clearly. Standardized loadings ranged from 0.392 to 0.771 (all $p < 0.001$), showing that each indicator contributed meaningfully to financial capability while financial inclusion carried the heaviest weight (=0.771, SE = 0.066). Global fit indices confirmed excellent model adequacy, with CFI = 0.989, TLI = 0.935, RMSEA = 0.070, and SRMR = 0.016. The fit indices are all within ranges that are considered acceptable, suggesting that the model matches the data well and the measure of financial capability is trustworthy.

Table 3. Financial capability model: confirmatory factor analysis, aggregate and by race.

Panel A: Aggregate Model	**Aggregate**	
	Std. Loadings (S.E.)	
Financial Literacy	0.392*** (0.045)	
Financial Inclusion	0.771*** (0.066)	
Income	0.527*** (0.052)	
Net worth	0.392*** (0.043)	
Model Fit Indices		
CFI/TLI	0.989/0.935	
RMSEA	0.07	
SRMR	0.016	
Panel B: Multigroup Model	**White**	**Black**
	Std. Loadings (S.E.)	*Std. Loadings (S.E.)*
Financial Literacy	0.256*** (0.059)	0.104 (0.135)
Financial Inclusion	0.675*** (0.120)	1.173 (1.232)
Income	0.468*** (0.090)	0.321 (0.376)
Net worth	0.436*** (0.077)	0.305 (0.274)
Model Fit Indices		
CFI/TLI	0.964/0.783	
RMSEA	0.104	
SRMR	0.021	

Latent Construct of Financial Capability: Multigroup Confirmatory Factor Analysis by Race

However, the multigroup confirmatory factor analysis differed for White and Black graduates. All four indicators measure the underling financial capability

construct for White but not Black college graduates. For White college graduates standardized loadings ranged from 0.256 to 0.675 (all $p < 0.001$), showing that each indicator contributed meaningfully to financial capability while financial inclusion carried the heaviest weight (=0.675, SE = 0.120). In contrast, standardized loadings ranged from 0.104 to 1.173 (all $p > 0.05$; not significant), showing that none of indicators contributed meaningfully to financial capability for Black college graduates. Global fit indices fall below acceptable fit, with CFI = 0.964, TLI = 0.783, RMSEA = 0.104, and SRMR = 0.021. The financial capability is not invariant by race. One explanation is that we are only able to measure financial capability using the indicators among White graduates but not Black graduates. An alternative explanation is that the financial capability indicators are not meaningful among Black graduates. That is, individuals of different racial backgrounds may face varying challenges and opportunities in building and utilizing their financial capability.

3.4. Aggregate Structural Logistic Asset Poverty with Financial Capability Models

Using the latent factor scores from the CFA, structural logistic models examined whether early financial capability protected (i.e., less likely to be asset poor) college graduates from being asset impoverished a decade later under different definitions of asset poverty. Table 4 (Panels A-C) shows that across all definitions, higher levels of financial capability are significantly associated with lower likelihoods of being asset poor. In the Asset Poverty 1 model (Panel A) the coefficient for financial capability was −3.134 (SE = 0.494, $p < 0.001$), corresponding to an odds ratio of about 0.04. The protective effect remained large for Asset Poverty 2 (=−2.523, SE = 0.428, $p < 0.001$; OR = 0.08; Panel B) and Asset Poverty 3 (=−2.216, SE = 0.448, $p < 0.001$; OR = 0.11; Panel C). The protective association of financial capability was also observed for falling below the national median net worth (=−2.495, SE = 0.419, $p < 0.001$; OR = 0.08).

Table 4. Structural logistic models: asset poverty with financial capability.

Panel A: Asset Poverty 1	**Asset Poverty 1**
	Coef. (S.E.)
Financial Capability	−3.134*** (0.494)
Model Fit Indices	
CFI/TLI	0.999/0.994
RMSEA	0.058
SRMR	0.041
Panel B: Asset Poverty 2	**Asset Poverty 2**
	Coef. (S.E.)
Financial Capability	−2.523*** (0.428)
Model Fit Indices	

Continued

CFI/TLI	0.997/0.986
RMSEA	0.076
SRMR	0.059
Panel C: Asset Poverty 3	**Asset Poverty 3**
	Coef. (S.E.)
Financial Capability	−2.216*** (0.448)
Model Fit Indices	
CFI/TLI	0.992/0.960
RMSEA	0.121
SRMR	0.032
Panel D: Median Net Worth	**Median Net Worth**
	Coef. (S.E.)
Financial Capability	−2.495*** (0.419)
Model Fit Indices	
CFI/TLI	0.998/0.989
RMSEA	0.058
SRMR	0.035

Model-fit indices were uniformly strong except for the Asset Poverty 3 model, where RMSEA is 0.121, which exceeds the conventional acceptable cutoff for close fit. However, the same model displayed a CFI of 0.992, a TLI of 0.960, and an SRMR of 0.032. These latter indices fall well within accepted cut-offs, which suggested that despite the elevated RMSEA, the overall specification still captures the data structure satisfactorily. On balance, the model represents the data.

Multigroup Structural Logistic Asset Poverty with Financial Capability Models by Race

A series of multigroup structural models next explored whether the relationship between financial capability and asset poverty differed for White and Black graduates. Table 5 shows that regardless of race, coefficients of financial capability were negative, yet the magnitudes and their statistical significance varied. Among White graduates, capability was a significant predictor for all four outcomes: Asset Poverty 1 (=−4.596, SE = 1.547, $p < 0.01$), Asset Poverty 2 (=−3.073, SE = 1.145, $p < 0.01$), Asset Poverty 3 (=−4.953, SE = 2.122, $p < 0.05$), and the median-net-worth benchmark (=−2.843, SE = 0.912, $p < 0.01$). For Black graduates, the protective effect reached significance only for falling below the national median net worth (=−1.750, SE = 0.886, $p < 0.05$); coefficients of financial capability for Asset Poverty 1 (=−3.084, SE = 1.847), Asset Poverty 2 (=−2.742, SE = 1.734), and Asset Poverty 3 (=−0.320, SE = 0.947) were directionally negative but not statistically different from zero.

Linear contrasts between groups revealed no significant White–Black differences for Asset Poverty 1, Asset Poverty 2, or the median-net-worth indicator. A significant difference emerged only for Asset Poverty 3 (=−4.633, SE = 2.324,

$p < 0.05$).

Table 5. Multigroup structural logistic models by race: asset poverty with financial capability.

Panel A: Asset Poverty 1	Asset Poverty 1
	Coef. (S.E.)
FCAP: White	−4.596** (1.547)
FCAP: Black	−3.084 (1.847)
FCAP White vs. Black (linear contrasts)	−1.513 (2.409)
Model Fit Indices	
CFI/TLI	1.000/1.011
RMSEA	<0.001
SRMR	0.013
Panel A: Asset Poverty 2	**Asset Poverty 2**
	Coef. (S.E.)
FCAP: White	−3.073** (1.145)
FCAP: Black	−2.742 (1.734)
FCAP White vs. Black (linear contrasts)	−0.331 (2.078)
Model Fit Indices	
CFI/TLI	1.000/1.005
RMSEA	<0.001
SRMR	0.035
Panel C: Asset Poverty 3	**Asset Poverty 3**
	Coef. (S.E.)
FCAP: White	−4.953* (2.122)
FCAP: Black	−0.320 (0.947)
FCAP White vs. Black (linear contrasts)	−4.633* (2.324)
Model Fit Indices	
CFI/TLI	0.991/0.969
RMSEA	0.079
SRMR	0.052
Panel D: Median Net Worth	**Median Net Worth of U.S. Households**
	Coef. (S.E.)
FCAP: White	−2.843** (0.912)
FCAP: Black	−1.750* (0.886)
FCAP White vs. Black (linear contrasts)	−1.093 (1.271)
Model Fit Indices	
CFI/TLI	0.991/0.954
RMSEA	0.080
SRMR	0.054

The quality of model fit either improved or remained robust when the analysis shifted to the multigroup framework. For Asset Poverty 1 and 2, RMSEA fell below 0.001 and CFI/TLI rose to 1.000. For Asset Poverty 3, RMSEA declined from 0.121 in the aggregate model to 0.079 in the multigroup specification, while CFI (0.991) and TLI (0.969) stayed comfortably above conventional thresholds. The median-net-worth model showed virtually unchanged fit, with CFI = 0.991, TLI = 0.954, RMSEA = 0.080, and SRMR = 0.054.

3.5. Aggregate Structural Logistic Life Satisfaction Model with Financial Capability

The final set of models examined whether financial capability translated into higher life satisfaction. In the aggregate sample (Table 6, Panel A), financial capability predicted a 0.990-unit increase in the log-odds of being satisfied with life (SE = 0.262, $p < 0.001$). The associated odds ratio of 2.69 indicates that financially capable graduates were almost three times more likely to report that they were satisfied. The model fitted the data well (CFI = 0.996, TLI = 0.992, RMSEA = 0.045, SRMR = 0.038).

Table 6. Life satisfaction with financial capability, aggregate and multigroup by race.

Panel A: Aggregate Model	**Life Satisfaction**
	Coef. (S.E.)
Financial Capability	0.990*** (0.262)
Model Fit Indices	
CFI/TLI	0.996/0.992
RMSEA	0.045
SRMR	0.038
Panel B: Multigroup Model	**Life Satisfaction**
	Coef. (S.E.)
FCAP: White	1.113 (0.627)
FCAP: Black	1.373 (1.606)
FCAP White vs. Black (linear contrasts)	−0.260 (1.724)
Model Fit Indices	
CFI/TLI	0.998/0.995
RMSEA	0.024
SRMR	0.038

Multigroup Structural Logistic Life Satisfaction Model with Financial Capability by Race

When the same relationship was estimated separately for White and Black graduates, the point estimates remained positive for both groups while neither was statistical significance at the 0.05 level. For Whites, the coefficient was 1.113 (SE

= 0.627, $p = 0.07$), implying an odds ratio of about 3.04, while for Blacks the coefficient was 1.373 (SE = 1.606, $p = 0.39$), corresponding to an odds ratio near 3.95. The linear contrast between the two groups (=–0.260, SE = 1.724, $p = 0.88$) was likewise far from significant. Importantly, the multigroup specification achieved an even stronger overall fit than the aggregate model, with CFI = 0.998, TLI = 0.995, RMSEA = 0.024, and SRMR = 0.038.

4. Discussion

Throughout this special issue we contend that ending poverty is a financial capability problem, not an income/consumption problem. Previous definitions of financial capability focus on an individual's personal capability. Even when theories include institutions as part of what it means to be financially capable (e.g., Sheraden, 2013), they primarily do so with respect to how they influence the development of an individual's personal capabilities (see Xiao, Huang, Goyal, & Kumar, 2022). That is, they focus on the individual as an independent agent (i.e., personal causation). However, we posit that it is nearly impossible to separate out what a person can do and achieve from the tools they use. Further, we suggest that institutions, income and wealth are three of the most powerful tools for shaping and augmenting what a person can become and do financially. They make up a person's governmental capability. From this perspective, financial capability is not what a person can do independently. Instead, it is what they can do with the assistance of institutions, income, and wealth (this is similar to the Zone of Proximal Development by Vygotsky, 1978). Moreover, the government has a responsibility to ensure all citizens have enough of each that they are given a real opportunity to pursue their financial happiness. However, we posit that it is not enough that a person being institutionally financially capable. They must also be personally capable: financially literate. Being financially literate means that an individual can use their financial knowledge and effectively manage institutions, income, and wealth to attain their financial happiness.

The analysis starts off with providing descriptive data on the four different components of financial capability by wealth and race. There is a lot of discussion in the literature of the Black/White wealth gap (e.g., Oliver & Shapiro, 1997). This research consistently finds that there is a large wealth gap when Black households are compared to White households (e.g., Shiro, Pulliam, Sabelhaus, & Smith, 2022). We find similar findings when it comes to the Black/White wealth gap. There is research that specifically exams the Black/White college graduate wealth gap (e.g., Emmons & Noeth, 2015; Hamilton, Darity, Price, Shridharan, & Tippett, 2015). For example, Hamilton, Darity, Price, Shridharan, and Tippett (2015) find that Black families who have a head of household who graduated from college have about 33% less wealth than White families who have a head of household who dropped out of high school.

However, we find no research findings on the wealth gap between low wealth White college graduates and high wealth White College graduates. The findings

suggest that the size of the White Asset Poor/White Not Asset Poor income and wealth gaps are smaller in 2009 (income gap 64%; wealth gap 12 times more) than the size of the Black Asset Poor/Black Not Asset Poor gap (income gap 70%; wealth gap 13 times more) but by 2021 they are larger (White gap—income 80%; wealth 19 times more; Black 59%; wealth 10 times more). The other interesting aspect is that the size of the Black gap shrinks over time whereas the size of the White gap grows substantially over time. It appears, among the wealthy class, wealthy Black college graduates' income and wealth grow slower than wealthy White college graduates. It is also notable, that for the Asset Poor regardless of race, overtime, they continue to rely on credit, and the amount of debt they have increases rather than shrinks. That is, they are not able to use credit to build wealth at least not over the 12 years between 2009 and 2021 when they would be 37 to 42 years old.

Next, we test for the first time whether the four indicators income, wealth, financial inclusion, and financial literacy interact to form the higher order construct, financial capability. Our findings show that the fit indices in the aggregate model are all within ranges that are considered acceptable, suggesting that the model matches the data well and the measure of financial capability is trustworthy. However, as hypothesized, in the multigroup analysis, financial capability is not invariant by race. We posit if enough of a group is not institutionally financially capable because of inequality their level of financially capability will be too low as a group for it to be predictive of the groups outcomes other things will better explain their outcomes. We are not suggesting that financial capability does not matter for Black college graduates. Instead, we are positing that so few Black college graduates have enough of the four components of financial capability, that there is not enough statistical power for an effect to be detected.

In support of this, research indicates that there is considerable evidence that Black Americans experience high levels of institutional and financial inequality. Specifically, research consistently shows that Blacks face very high levels of inequality with respect to financial literacy (e.g., Yakoboski, Lusardi, & Hasler, 2019), financial inclusion (e.g., FDIC, 2021), wealth (e.g., Kochhar & Moslimani, 2023), and income (e.g., Davis & Filipovic, 2025). We also find evidence to support this in the descriptive data (**Table 2**). Asset Poor Black college graduates score much lower on financial literacy and financial inclusion than their White counterparts. Moreover, they have far less income and wealth than their White counterparts. Research interventions that seek to increase the amount of financial inclusion, income, wealth, and financial literacy Blacks have, are needed to better understand if this model of financial capability is a good fit with Black college graduates' outcomes.

We went on to examine whether college graduates' level of financial capability at graduation predicts the likelihood of falling into asset poverty ten years later. Aggregate findings using the whole sample indicate the expanded definition of financial capability is a strong predictor across of four wealth measures (Asset

Poverty 1 - 3 and median U.S. household net worth). We also compare race-specific pathways to determine whether financial capability exerts differential influence on asset poverty. We find that in the case of White college graduates the expanded definition of financial capability remains a strong predictor across all four wealth measures. However, in the case of Black college graduates, it is a statistically significant predictor for Asset Poverty 3 and median net worth of U.S. households. Both require higher levels of net worth to meet the threshold of being not asset poor when compared to Asset Poverty 1 and 2. So, the Not Asset Poor Blacks, have more of all four components of financial capability; it suggests a high enough level that financial capability becomes predictive. This aligns with our discussion on Black households generally not having enough institutional or personal capability for their overall financial capability to be predictive of outcomes.

However, even though there are few Black college graduates who are institutionally financially capable, there are also few Black graduates who are not asset poor using the Asset Poverty 3 measure. So, even though there are few Black graduates who are financially capable, they make up a larger percentage of those Blacks who are not asset poor. Therefore, the power to detect an effect is stronger. Whereas, with Asset Poverty 1 and 2, few Black college graduates are financially capable. But the definition of asset poverty is much broader therefore the percentage of Black college graduates that are not poor is much higher. As a result, financially capable Black college graduates make up a much smaller percentage of those who are not asset poor, weakening the power to detect an effect. Larger sample size might help detect an effect. Or it might just be as discussed, Black college graduates experience too much institutional and economic inequality for financial capability to be a strong predictor of their financial outcomes. Unless interventions are implemented to increase the amount of governmental capability, and in turn, their overall financial capability this theory will have limited utility for understanding the financial outcomes of Black college graduates.

Lastly, we extend the analysis from financial outcomes to life satisfaction as a proxy for the pursuit of happiness. We ask does financial capability at graduation predict higher life satisfaction a decade later. Aggregate results indicate that it does. While not using the same measure of financial capability, past research has shown that more limited definitions of financial capability are associated with similar constructs as life satisfaction such as financial well-being (Xiao & Kim, 2021).

Implications

While more research is needed, however, findings provide some evidence that financial capability not only consists of financial literacy and inclusion, but also income and wealth. This extends current theory and research in the field (e.g., Sherraden, 2013; Xiao, Huang, Goyal, & Kumar, 2022). More broadly, the authors suggest that financial inclusion/institutions, income and wealth make up governmental capability, a component of the higher order construct, financial capability. It helps explain the role that governmental capability plays in whether a person is

financially capable, independent of their personal capability (i.e., their financial literacy). It is what a person can do with the assistance of institutions, income, and wealth. This is a better representation of a person's financial capability.

There is evidence that could suggest that the theory of financial capability examined in this study has less utility for explaining the financial outcomes of Black college graduates than it does White college graduates. A potential implication is not that Black graduates need an alternative to financial capability for explaining their financial outcomes. This is because it is not as though they are achieving similar or superior outcomes as White college graduates and the reason for them achieving these outcomes is unexplained by the theory of financial capability outlined here. Therefore, we posit that the inability to detect an effect of financial capability for Black college graduates is more likely to be the result of the gross inequality they face in the mainstream economy, not the inappropriateness of the theory itself. This inequality renders the tools needed for functioning in mainstream society, unavailable altogether, or in such limited quantity that they are rendered ineffective as predictors of their outcomes. And while it might be true that Black college graduates have knowledge, skills, and tools to be effective outside of mainstream institutions, to move up the economic ladder and compete in mainstream society they need access to the knowledge, skills, and tools that are effective in mainstream society. Thus, we contend that social welfare policies are needed that move America closer to being a meritocracy and provide Black college graduates with sufficient levels of income, wealth, and access to mainstream financial institutions so that they are predictive of their outcomes. Now saying that, if America is able to achieve a true meritocracy or something closely resembling it, governmental capability will become redundant and once again will not be predictive of outcomes, only one's personal capability will be predictive.

There is evidence in this study that Black college graduates experience too much institutional and economic inequality for financial capability to be a strong predictor of their financial outcomes. This is antithetical to the American Dream, which popularized the notion that effort and ability should determine a person's outcomes, not where they start in life. This is why redistribution is needed, so that America can live up to its meritocratic values. Redistribution, when used to level the playing field, is a critical part of maintaining a healthy capitalist society. It is commonly believed that capitalism unchecked produces and exacerbates inequality (e.g., de Soto, 2000; Piketty, 2014). Piketty (2014) "… capitalism automatically generates arbitrary and unsustainable inequalities that radically undermine the meritocratic values on which democratic societies are based" (p. 1).

Moreover, findings that suggest that financial capability is associated with people being more satisfied with their lives, suggest that policies that seek to strengthen peoples' financial capability may better equip them to pursue their own happiness. If this is the case, and if researchers find additional evidence that supports these findings, it might provide a way to reform the existing social welfare system to better align with the meritocratic values America aspires. And deliver

on its promise that all citizens will have the freedom to pursue their own happiness.

Lastly, there is some evidence to suggest that policies that improve peoples' financial capability might also empower them to become producers of wealth. If the goal is to end cycles of poverty and reduce the number of people who need government assistance, passing legislation that seeks to improve a person's financial capability might be a better way to do this. This is contrary to the current social welfare system that focuses on providing a survival standard of living and attempts to reduce the number of people receiving benefits by enforcing work requirements and time limits on receiving benefits.

5. Conclusion

As tool builders, people build tools to increase their functioning and the functioning of society. They enable them to extend their physical and cognitive functioning freeing them to reach their potential. Moreover, the ability to specialize, allows for the creation of the best tools in a particular area further contributing to growth and development not only of the individual but also of society.

In a capitalist society there is a focus on the importance of individualism, free markets, and competition as drivers of economic growth and development. However, specialization might be the most important factor. Living in society allows for specialization (Durkheim, 1997). Specialization promotes individualism by allowing people to identify what they are most talented at, what they are more passionate about, and then to freely pursue it. It fuels competition by allowing them to put all their energy into developing their talent so that they can compete at the highest level and produce the most value possible from their talent. This is not possible outside of living in society. For it is government that provides the essential legal structures that form society and allow for specialization to occur. This includes establishing a system of money, defining and enforcing property rights, and regulating contracts, which provides the certainty needed for individuals and businesses to specialize in producing specific goods and services (de Soto, 2000). As such, both the individual and society benefit from specialization.

Further, the ability to specialize allows for increased efficiency, innovation, and overall societal progress to occur. A social welfare philosophy that has as one of its main tenants to reduce government to where the only function it is able to carry out is protecting the wealth of the wealthy, will lead to that society's demise. Certainly, there is an argument for helping government run more efficiently and a need to recognize that not all government growth benefits society. However, the goal should be to help government work better and grow where growth is needed to enhance what a person can do with the assistance of institutions, income, and wealth.

As such, it would appear that America needs a social welfare philosophy that both recognizes the importance of the individual but also understands that individual's live in societies. The social welfare theory of financial capability outlined

in this article, does not only account for what a person can do independently, it also accounts for what a person can do with governments assistance. This is the power of living in a society, government's ability to augment what an individual can do on their own. From this perspective, efforts to reduce government assistance are misguided and counterproductive. Government assistance is a necessary collective good that is needed if both individuals and society are to reach their full potential.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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