

The Role of Economic Enfranchisement in Setting Strong Goals

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Susan Hackett

Major Professor: Philip Watson, Ph.D.

Committee Members: Aaron Johnson, Ph.D.; Liang Lu, Ph.D.

Department Administrator: Christopher McIntosh, Ph.D.

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Authorization to Submit Thesis

This thesis of Susan Hackett, submitted for the degree of Master of Science with a Major in Applied Economics and titled “The Role of Economic Enfranchisement in Setting Strong Goals,” has been reviewed in final form. Permission, as indicated by the signatures and dates below, is now granted to submit final copies to the College of Graduate Studies for approval.

Major Professor: _____ Date: _____
Philip Watson, Ph.D.

Committee Members: _____ Date: _____
Aaron Johnson, Ph.D.

_____ Date: _____
Liang Lu, Ph.D.

Department
Administrator: _____ Date: _____
Christopher McIntosh, Ph.D.

Abstract

This analysis introduces a conceptual framework for economic enfranchisement, which is the extent to which a person has influence on their economic well-being, and studies its effect on an individual's likelihood to set strong financial goals. The term "economic enfranchisement" and its concept have been absent from the literature, but related concepts have been studied. The analysis shows that economic enfranchisement has a significant effect on an individual's likelihood to set financial goals; more enfranchised individuals are more likely to set goals than their disenfranchised counterparts. Further, the goals they set are more likely to be strong than goals set by disenfranchised individuals.

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Introduction

In times of economic hardship, whether regionally or personally, some individuals tend to make goals to improve their financial situation. Recent economic research on goals has shown that they are an effective mechanism for economic mobility; simply having a goal to improve one's financial well-being has shown to increase outcomes, regardless of effort put forth towards achieving the goal (Aguinaga et al. 2019). While this research on goals is promising territory in development economics, there are still many uncertain factors. What leads individuals to set financial goals, and why do some people set stronger goals? While development economics has typically focused on studying resource constraints, or external constraints, research in behavioral economics and psychology have indicated that issues of perceived control and enfranchisement may be relevant in the goal setting process (Dalton, Ghosal, & Mani 2016, Lybbert & Wydick 2018). I propose a conceptual framework for economic enfranchisement, a concept that reflects an individual's perceived influence over their financial future, and study its effect on whether or not and how strongly individuals set goals.

The study of psychological factors, or internal constraints, is becoming increasingly relevant in economics. The field of behavioral economics has emerged, applying psychology principles to economics to analyze behavior. Even more recently, over the past decade, a new area of research has emerged – behavioral development economics – applying a behavioral economics framework to development economics (Kremer, Rao, & Schilbach 2019). This research field examines the interaction of economic, psychological, and social factors, and their role in development, particularly around poverty and welfare analysis.

An emerging area of research within behavioral development economics relates to goals and aspirations. Studies focused on pathways out of poverty have found relationships between aspirations and economic mobility, although the type of relationship is unclear. Lybbert & Wydick (2018) argue that those in poverty are likely to seek higher aspirations, while Dalton, Ghosal, & Mani (2016) find that poor individuals slip into a feedback cycle where they begin to aspire less, coining the term “aspirations failure.” The model by Heath, Larrick, & Wu (1999) on goals as reference points may indicate that both effects occur; people worse off may set higher goals, but they may also have difficulty finding the motivation to start. Additionally, much of the research surrounding goals focuses on effort put towards achieving them, or outcomes once an exogenously dictated goal is set (Wuepper & Lybbert 2017). Despite research indicating

the importance of setting goals (Aguinaga et al. 2019), little research has been conducted surrounding why some people set goals and others don't.

In the absence of a consensus in the literature surrounding what leads individuals to set financial goals, and how strong they set goals, I study the effect of economic enfranchisement on goal setting. Economic enfranchisement, defined as the extent to which a person has influence on their economic well-being, has not been directly studied. I propose a conceptual framework for economic enfranchisement, distinguishing it from other measures of perceived control and efficacy (ability) that have been studied in the behavioral economics and psychology literature. This framework is a substantial contribution to the literature, opening up pathways for more research within behavioral development economics by highlighting the importance of economic enfranchisement in individual decision-making. I hypothesize that more enfranchised individuals are more likely to set strong goals, and less enfranchised individuals are less likely to set goals at all. This research tests the theory of aspirations failure, questioning whether people in poverty are indeed less likely to set goals, extending the theory's context beyond income to consider disenfranchisement as a reason for failure to set goals. Additionally, this research contributes to the literature around goals as reference points, again considering enfranchisement, as an internal constraint, in addition to income, an external constraint. Further, this research deviates from prior research on goals by studying how an individual sets a goal, rather than goals that are set exogenously and assigned to an individual.

The analysis uses survey data from the Area Sector Analysis Process (ASAP) program, which surveys rural Americans about their individual and community economic goals and priorities. I use a two-stage Heckman selection model with an ordered probit model in the second stage. The results confirm that there is a positive relationship between economic enfranchisement and the likelihood of setting a goal, and an even stronger likelihood of setting a strong goal. More broadly, this research emphasizes the importance of behavioral factors in economic mobility, providing a basis for future research and economic development initiatives.

Chapter 1: Literature Review

There are three topics around which existing literature has provided a basis for research on economic enfranchisement and goal setting. First, research on subjective and financial well-being provides context for why people may seek to improve their financial situation, and how their financial situation can affect their overall utility. Research on financial well-being sets the stage for studying individual goals to improve financial well-being, and why some individuals may be dissatisfied with their current financial well-being. While economic enfranchisement has not been directly studied, researchers have indicated that a related concept, perceived control over one's circumstances, can affect subjective financial well-being. Finally, research on goals and aspirations, while relatively recent in economics, shows the importance of personal financial goals in questions of economic mobility. Little research has examined the setting of the goals themselves.

Subjective and financial well-being

Subjective well-being (SWB) has long been investigated as a means to measure the ever elusive concept of "utility." SWB enables researchers to study social and psychological aspects of life and their relation to economic outcomes, providing a reasonable proxy for experienced utility (Heliwell & Barrington-Leigh 2010). Although the level of SWB can be changed due to objective events or circumstances, there is no universal relationship, as each individual exhibits different preferences.

Easterlin's (1995) work has found that more money raises SWB at low levels of income, but does so less and less as income raises; in other words, there is a decreasing marginal utility to income. This is largely because income helps individuals meet certain universal needs (e.g. food, shelter, clothing), which makes a drastic difference for individuals in poverty (Diener et al. 1993). Once those basic needs are met, the effect of income is stronger when relative (rather than absolute) income is measured. Therefore, research on relative income is relevant in discussions of well-being.

Relative income considers one's income relative to others. Although people don't often know how much the people around them earn, the literature on relative income suggests that it considers changeable standards derived from expectancies, standard of living, and social comparisons (Diener et al. 1993). Both absolute and relative income have implications for perceived well-being, but have different effects at different levels of development (Blanchflower & Oswald 2000, Chang 2013, Clark & Oswald 1996). For

example, absolute income has a large effect on utility for people in poverty, whereas relative income has a larger effect on utility for people in more developed countries.

While SWB is helpful for understanding overall utility, it is usually measured in a global, context-free manner, i.e. with survey questions asking questions like “How happy are you with your life as a whole these days?” Global SWB certainly has its place, but narrow, context-specific well-being, which is assessed in a single area of life, can be more helpful for designing policy instruments with the intent to improve well-being. van Praag, Frijters, & Ferrer-i-Carbonell (2003) proposed a model where SWB depends on satisfaction with different domains of life: work, financial, household, health, leisure, and environment. Their tests found that financial satisfaction was the strongest indicator of total SWB.

Other research has found a similar relationship. A study by Gerrans, Speelman, & Campitelli (2014) surrounding the effects of financial literacy interventions found that financial wellness was one of the strongest contributors to SWB. Satisfaction with one’s financial status, or financial well-being (FWB), relies more on objective measures than SWB does (e.g. assets, debt, etc.), but those objective factors can’t completely account for variation in FWB among individuals, as individuals exhibit different preferences for living standards (Brüggen et al. 2017). FWB is still strongly affected by subjective factors, like financial knowledge, attitudes, and behaviors (Shim et al. 2009, Gerrans, Speelman, & Campitelli 2014).

Brüggen et al. (2017) defined FWB as "the perception of being able to sustain current and anticipated desired living standard and financial freedom" and discussed FWB’s distinction from financial efficacy. Financial efficacy surrounds a person’s skills and ability to control their financial matters. While financial efficacy can be a factor in FWB, it reflects a person’s ability to enact change.

Perceived control

While financial efficacy is about having the necessary knowledge to control one’s finances, an individual may still feel they have little control over their finances, concepts studied in the psychology literature as perceived control and locus of control (LOC). LOC is a concept that captures an individual’s perception of their ability to control what happens to them. It is generally divided into two categories – internal and external (Sumarwan & Hira 1993, Prawitz et al. 2013). An individual with an internal LOC believes they are personally responsible for what happens to them, while someone with an external LOC believes that events in their life are the result of external factors, such as chance, fate, or powerful others. LOC has

been called a companion concept to self-efficacy; control is perceived by the individual, although its perception is often based on past experiences (Lybbert & Wydick 2018).

An individual's LOC can affect their decisions by changing the perceived probability that their decisions will result in their desired outcome, affecting an individual's choices and the desired outcomes themselves. An individual who attributes events in their lives to external factors alone may feel that they cannot change their circumstances, because the effort they put in will have little effect on achieving the desired outcome. Further, LOC can also affect a person's views of their current circumstances. LOC has been linked to life satisfaction (Johnson & Krueger 2006) and related well-being indicators. Individuals with a more internal LOC tend to report greater satisfaction with various aspects of life. In the financial realm, an internal LOC has been linked to greater perceived income adequacy and satisfaction with one's financial status (Prawitz, Kalkowski, & Cohart 2013, Sumarwan & Hira 1993). Danes' 1991 study of farm women found that an internal LOC was a significant predictor of the perceived gap between living standard and living levels; women with a more internal LOC perceived a smaller gap between living standards and levels.

Throughout the literature on perceived control and LOC, there is no consensus regarding whether LOC is a consequence of past outcomes or circumstances, or a trait that affects decisions and perceptions, which then have implications for current circumstances and decisions. Many studies implicitly assume that LOC determines behavior, but others have noted that the direction of causality may be reversed. Further, LOC is often assessed in a very general sense, rather than in relation to specific domains of life. Furnham (1986) was the first to apply LOC to the financial domain, proposing an economic locus of control scale. Survey respondents were asked their views on statements surrounding poverty, economic mobility, and wealth in relation to internal and external factors. Furnham's scale distinguished between different types of internal and external factors, including work ethic, luck, fate, and powerful others.

Furnham's economic LOC scale has been criticized for losing the previously considered unidimensionality of LOC. Interestingly, Furnham's research found that both the richest and the poorest groups had the lowest internal LOC. An analysis of the sub-scores for the different factors reveals that each group had drastically different reasons for this. Poorer individuals had high "powerful others" scores, attributing their circumstances to power imbalances that hinder economic mobility. Wealthy individuals had higher "chance" scores, with the author noting that at high levels of wealth, there is a greater amount of risk in relation to investments and gross economic forces.

Goals and aspirations

Much of the research surrounding perceived control and well-being focuses on past or current events and circumstances; however, perceived control also has the potential to affect future behavior through influencing an individual's goals and aspirations. The relationship between perceived control, goals, and aspirations has been studied less in the realm of economics. While there is a plethora of psychology research surrounding goals and aspirations, much of it focuses on personal affective characteristics and cognitive biases (Locke & Latham 2006).

It has been shown that one's locus of control has a connection to aspirations. Burlin's (1976) study of career aspirations for high school girls investigated how an internal or external locus of control influenced occupation aspirations. Subjects answered questions that would later lead to an internal-external LOC classification, as well as their occupational aspirations in an ideal world versus their actual occupational intentions. Girls with an internal LOC were more likely to choose occupations categorized as "innovative", or strongly dominated by men, in the ideal-world scenario. Girls with an external LOC were more likely to perceive that their futures were dictated by the "system", choosing more traditionally female occupations, even in a hypothetical scenario where gender norms did not apply. However, when asked about their realistic intentions to choose an occupation, both types indicated they would choose more traditionally female occupations. While these findings have implications for the study of identity and gender norms, they also have implications for aspirations research, implying that an external LOC limits individuals' ability to aspire to heights they might not otherwise aspire to.

A study by Prawitz, Kalkowski, & Cohart (2013) examined the relationship between LOC and hope in the context of personal finances. Findings showed that individuals with an external LOC tended to be less hopeful about their financial futures and were less likely to direct efforts towards the achievement of financial goals. This suggests that LOC is an important factor in making progress toward goal achievement, but the study did not examine how LOC comes into play when an individual is conceiving of the goals themselves. The authors discuss the results of their analysis within a framework of goals; however, their surveys asked respondents whether they participated in various financial adjustment behaviors in recent months, such as cutting spending, dipping into savings, or postponing major purchases. The vast majority of "goals" were evaluated as such after the fact and represented behaviors or actions more than goals.

Danes & Rettig (1993) studied the role of perceived control in the intention to change one's family financial situation. They defined intentions as "plans of action in pursuit of behavioral goals" using a survey that asked subjects their likelihood of changing their overall financial situation. The authors noted that both financial resource flexibilities and perceptual factors, like LOC, can influence such intentions. Findings showed that perceptual factors were crucial in the intention to change the family financial situation, in most cases outweighing resource flexibility factors. This again indicates the importance of perceived control, but does not examine how it affects the setting of the goals themselves.

While the desired outcomes of goals are important for many individuals wishing to change their financial situation, it has been shown that the mere act of setting goals can improve outcomes. A study by Aguinaga et al. (2017) examined the effects of various interventions designed to help bring individuals out of poverty. Subjects participated in an experiment where they were asked to set a goal each month (selected from a list compiled by the researchers) and surveyed over the course of the months, where they were also randomly assigned to other interventions, such as attending support groups or given monetary incentives for completing goals, or given no intervention beyond goal-setting. The simple act of setting a goal was shown to be significant in improving financial outcomes, independent of the other interventions.

Interventions can help people in poverty set goals, but many in poverty lose hope and aspire to less than what they optimally could achieve. Dalton, Ghosal, & Mani (2016) studied this phenomenon, called aspirations failure. They argue that wealthy and poor people share the same preferences and behavioral biases in setting aspirations, but that poverty exacerbates the effect of a behavioral bias where people fail to realize how much their effort influences their aspirations. This results in a cycle where aspirations gradually lower. The authors view their framework as "the first step in a bigger project," noting while poverty itself is linked to lower aspirations levels, it doesn't fully explain lack of aspirations.

It should be noted that although goals and aspirations are conceptually similar, and the terms are often used interchangeably, they are distinct notions. Aspirations represent a broad hope or ambition of achieving something (Kremer, Rao, & Schilbach 2019). For example, an individual might aspire to be wealthy or have a successful career. Aspirations are often based on societal norms; with the example of aspiring to have a successful career, societal norms dictate what "successful" is. Lybbert & Wydick (2018) regard aspirations as exogenously given, whether by culture, norms, environment, or one's peers. This is a sentiment echoed by others, including Easterlin (1995) when discussing his seminal work on happiness

and economic development. He proposed that aspirations can influence happiness, but that aspirations likely vary with levels of economic development, giving an example of material aspirations in western culture versus African culture. Goals, on the other hand, are more precise. A goal is a “discrete, tangible, extrinsic reward that has real consequences for physiological well-being” (Heath, Larrick, & Wu 1999). Goals relate to specific objectives. Therefore, while one’s aspiration could be to “achieve financial freedom”, there are a variety of goals that could underpin the aspiration, like “pay off my student loans” or “save \$5,000 this year.”

Heath, Larrick, & Wu’s (1999) model of goals as reference points provides a valuable framework for researching goals. In this framework, goals alter the psychological values of outcomes, affecting how individuals exert effort towards goals. Analyzing goals using prospect theory, the authors equate goals to reference points on a value function, where individuals experience loss aversion and diminishing sensitivity to gains and losses, which varies the closer or farther they are from their goal. In this model, people are risk-seeking when they are below their goals and will be more likely to make aggressive goals. In addition, higher goals (relative to one’s position on the value function) tend to guide individuals to exert more effort towards achievement of their goals and persist longer. Nevertheless, diminishing sensitivity means that those at extreme ends of the value function may have less motivation to achieve their goals. This theoretical model presents further basis for the study of goals and how an individual’s position relative to the goal (e.g. having low financial well-being versus a higher financial well-being) can affect goal setting.

Chapter 2: Conceptual Framework and Theoretical Model

In this section, I propose a conceptual framework for economic enfranchisement and a theoretical model for evaluating its effect on setting goals. In proposing this conceptual framework, I outline the ways that, while locus of control is similar in application to economic enfranchisement, economic enfranchisement is a distinct concept.

A proposed conceptual framework for economic enfranchisement

Economic enfranchisement is the extent to which a person has influence on their economic well-being. This concept is similar to locus of control, but distinct in some important ways. First, LOC focuses on perceived responsibility (or lack thereof) for life events. It doesn't take into account the individual's skills, knowledge, or agency to change their economic well-being. Per Rotter (1966), LOC assesses whether an individual believes their behavior is causally linked to its consequences. Economic enfranchisement, on the other hand, takes into account both internal (perceptual) and external (objective) constraints, and focuses on internal and external influence, not responsibility. Next, while LOC is measured on scale from entirely internal to entirely external, economic enfranchisement captures a more nuanced internal-external dynamic, recognizing that somebody can be economically enfranchised but still be subject to external forces, or be disenfranchised but still have some personal influence.

One of the greatest criticisms of the locus of control concept is that it is not unidimensional (O'Brien 1991). LOC is thought to be internal or external; however, many have theorized that there are different types of externals. An individual's belief that external factors are responsible for the events in their life could be referencing drastically different external factors, such as power structures or fate. Furnham (1986) noted this distinction when developing his economic locus of control scale. Because of this, it can be difficult to consider the relationship between perceived control and issues of economic mobility. If the rich and the poor both feel that external factors are responsible for their life events, while the middle class feels the opposite, the concept of LOC has limited applicability for studying economic mobility.

Economic enfranchisement implies a unidimensionality from enfranchised to disenfranchised. Consider the example of a poor and a wealthy person who both have an external LOC. It is valid for both to have an external LOC, but the poor person may feel that way for reasons of systematic economic barriers, while the rich person may feel that way due to the riskiness of their investments. In the framework of economic

enfranchisement, however, the wealthy person in this example would not feel disenfranchised due to these risky investments, while the poor individual would likely feel disenfranchised due to the systematic barriers.

Economic enfranchisement recognizes the importance of economic, psychological, and social factors when assessing well-being and the opportunities for changing it. Economic factors include the availability of resources; psychological factors include internal biases and perceptions; and social factors include one's circumstances and environment. For this reason, it is a better measure for assessing economic mobility, goals, and aspirations than LOC.

There are notable gaps in the literature surrounding economic enfranchisement and goal setting. While there has been research studying the relationship between perceived control and hope or aspirations, economic literature has not explicitly studied economic enfranchisement as it is conceptualized in this paper. Further, the research on goals focuses on aspirations, effort towards goals, intention to change, or the efficacy of poverty interventions where individuals choose from exogenously dictated goals. My research looks at the act of setting goals – whether individuals set them or not, and whether they set goals that they think will make them significantly better off or marginally better off if achieved. Will increasing individual economic enfranchisement increase the likelihood of setting high financial goals?

This research builds off of Heath, Larrick, & Wu's (1999) model of goals as reference points. This model indicates that the individuals who are worse off have greater incentive to set higher goals, but if they are the worst off, they may have difficulty getting started, a phenomenon referred to as the "starting problem." This research also extends the research by Dalton, Ghosal, & Mani (2016) on aspirations failure, which indicates that individuals in poverty set lower aspirations. Due to the conflicting views of these two pieces of research, it is not clear whether less enfranchised individuals are likely to set higher or lower goals, or if they fail to set goals altogether.

Theoretical model

The concept of the effect of economic enfranchisement on goal setting can be illustrated with the following utility function:

$$U = (1 + g(I, E, \omega))U_0$$

Where U_0 denotes an individual's initial level of utility, and g denotes a goal as a function of income (I), economic enfranchisement (E), and a set of personal characteristics ω . The literature on goals, particularly Heath, Larrick, & Wu (1999), has established that when an individual sets a goal, it creates a reference point (the desired outcome) that is above one's initial utility. Therefore, if g is greater than or equal to zero, $(1+g)$ is positive, and:

$$(1+g)U_0 \geq U_0.$$

It then follows that $g(I, E, \omega) \geq 0$. The functional form of $U = (1 + g) U_0$ follows from the model of aspirations by Dalton, Ghosal, & Mani (2016). While that model considered effort towards a goal rather than the magnitude of the goal itself, the functional form illustrates how an individual sets a goal. If $g = 0$ (a goal is not set), $U = U_0$. In other words, the individuals does not seek to increase their utility. On the other hand, if a goal is set, then $U > U_0$.

It has been established in the literature that income increases utility (Easterlin 1995, Diener et. Al 1993); $dU/dI > 0$. The effect of economic enfranchisement E on goals has not been studied. I hypothesize that $dg/dE > 0$; in other words, increasing economic enfranchisement increases goals; if the magnitude of E , economic enfranchisement increases, the individual is more likely to set a goal ($g > 0$), and the magnitude, or strength, of the goal increases with E .

Chapter 3: Data and Methods

The data used in this analysis are from a survey administered to rural communities through the Area Sector Analysis Process (ASAP) program. The ASAP program is a research and outreach project that aims to support economic development initiatives by incorporating community preferences. The survey developed for the ASAP program, entitled “the Survey of Community Priorities for Quality of Life,” asks respondents about their individual and community economic, environmental, and social priorities and goals. The sample used in this study consists of data collected from 2014 to 2018 in rural counties in Arizona, Idaho, New Mexico, and Utah. After excluding samples for missing data (samples where respondents did not answer the questions of interest or provide demographic data), a sample of 2,130 respondents was used for this analysis.

Table 3.1 and Table 3.2 present demographic characteristics for the sample. Of the respondents, 49% were female and 51% were male. The mean age of respondents was 49. The respondents reported their highest level of education attained; 18.7% of respondents had not had education past a high school diploma, while 22.2% had a graduate school education. The mean years of education for the sample was 14.9 years, which corresponds to a two-year college education. The mean household income for the sample, measured as the mean of midpoints of income ranges, was \$74,142. The standard deviation for income was \$47,320, indicating a large variance in household income for respondents.

Table 3.1. Demographic characteristics of sample (N = 2,130)

Characteristic	Value	n	%
Gender	Female	1,044	49.01%
	Male	1,086	50.99%
Age	18-25	92	4.3%
	26-35	328	15.4%
	36-45	489	23.0%
	46-55	416	19.5%
	56-65	499	23.4%
	>66	306	14.4%
Educational attainment	Eighth Grade	12	0.6%
	High School	385	18.1%
	Two-year College	453	20.4%
	Other Post-High School	276	13.0%
	Four-year College	550	25.8%
	Graduate School Education	472	22.2%

Household income	< \$15,000	118	5.5%
	\$15,000-\$24,999	145	6.8%
	\$25,000-\$34,999	186	8.7%
	\$35,000-\$49,999	332	15.6%
	\$50,000-\$74,999	454	21.3%
	\$75,000-\$99,999	412	19.3%
	\$100,000-\$149,999	345	16.2%
	\$150,000-\$199,999	83	3.9%
	>\$200,000	55	2.6%
County	Cochise, AZ	262	12.3%
	Graham, AZ	116	5.5%
	Greenlee, AZ	88	4.1%
	Valley, ID	77	3.6%
	Cibola, NM	92	4.3%
	Emery and Carbon, UT	15	0.7%
	Beaver, UT	50	2.4%
	Cache, UT	29	1.4%
	Carbon, UT	158	7.4%
	Emery, UT	37	1.7%
	Garfield, UT	43	2.0%
	Grand, UT	140	6.6%
	Juab, UT	197	9.3%
	Millard, UT	176	8.3%
	Piute, UT	68	3.2%
	San Juan, UT	89	4.2%
	Sanpete, UT	121	5.7%
	Sevier, UT	142	6.7%
	Washington, UT	128	6.0%
	Wayne, UT	101	4.8%

Table 3.2. Descriptive statistics for sample

Characteristic	Mean	SD
Male	0.5099	0.5000
Age	49.2697	14.4529
Educational attainment (years)	14.8779	2.2057
Income	74,142	47,320

Respondents answered a series of questions relating to their perceived level of economic enfranchisement and recent goal setting. The question “How much influence do you feel you have on your personal future economic well-being?” was used to indicate perceived economic enfranchisement. Respondents chose from the following options: 1. I have little influence, my personal future is mostly dictated by outside forces, 2. My personal future is equally dictated by myself and outside forces, and 3. I have a lot of influence

on my personal future, outside forces play only a small role. This scale indicates one's level of perceived economic enfranchisement, with option 3 indicating the highest level of enfranchisement and option 1 indicating the lowest. About one-third of respondents (33.1%) reported the highest level of economic enfranchisement, while 11.8% selected option 1, corresponding to disenfranchisement. The remaining 55.1% of respondents selected option 2, indicating moderate economic enfranchisement.

To indicate goal setting, respondents were asked "Over the past year, have you made any specific goals to improve your personal economic condition?" Over 65% of respondents indicated that they had set a goal, while the other 35% had not. Respondents who reported setting a goal were asked about the strength of the goal using the question "If you stated a personal financial goal in [the previous question], how much better-off do you think you will be if you achieve this goal(s) this year?" Response options ranged from 1 for "the same" to 5 for "much better-off." About 4.6% of respondents reported setting goals that would not make them any better off, 5.4% set goals that would make them barely better off, and 27.8% set goals that would make them a little better off if achieved. "Moderately better-off" was the most common response (35.7%), and 26.4% of respondents indicated they would be much better-off if they achieved their financial goal(s).

Table 3.3. Survey questions and response distributions

Question	Responses	n	%
How much influence do you feel you have on your personal future economic well-being?	1 = I have little influence, my personal future is mostly dictated by outside forces.	251	11.8%
	2 = My personal future is equally dictated by myself and outside forces.	1,174	55.1%
	3 = I have a lot of influence on my personal future, outside forces play only a small role.	705	33.1%
Over the past year, have you made any specific goals to improve your personal economic condition?	No	741	34.8%
	Yes	1,389	65.2%
If you stated a personal financial goal in [the previous question], how much better-off do you think you will be if you achieve this goal(s) this year?	1 = The same	63	4.6%
	2 = Barely better-off	73	5.4%
	3 = A little better-off	377	27.8%
	4 = Moderately better-off	483	35.7%
	5 = Much better-off	358	26.4%

To determine the effect of economic enfranchisement on goal setting, the two questions relating to goals are used as dependent variables in the study. The variable *SetGoal*, using the response to the question “Over the past year have you made any specific goals...” is a dummy variable indicating if the respondent set a goal. The variable *GoalStrength*, using the response to “...how much better off do you think you will be if you achieve this goal(s) this year?” indicates the strength of the goal that was set. However, there is a concern with sample selection of *GoalStrength*, as respondents only answered this question if they responded “yes” to *SetGoal*. To correct for selection bias, I used Heckman’s two-stage selection model (Heckman 1979). This model combines two equations: the first, a selection equation, where a dependent variable determines whether another variable will be observed or not, ergo selecting a sample for the second dependent variable to be observed. Heckman’s two-stage model estimates these selection and outcome equations together using a maximum likelihood estimation, where the second stage of the model calculates likelihood using conditional probabilities that the first dependent variable (the selection variable) occurs.

The strength of the goal was selected from a series of ordered responses. While ordinal, these responses cannot be treated as a continuous variable; we are unable to assume equal interval distances between options. Therefore, an ordered probit model is used. Ordered probit regression is used to preserve the ordering of categorial response options without treating them as a continuous variable. This type of model is frequently used in measures of financial well-being, life satisfaction, or other analyses where respondents assess a value on a scale without a uniform distribution (Daykin & Moffatt 2002). An ordered probit model is used in the second stage of a two-stage Heckman model when the dependent variable of the outcome equation is an ordered categorical variable (Chiburis & Lokshin 2007). Finally, to control for variations across communities, I use fixed effects for each county.

The final specified model for individual *i* in county *j* is:

$$SetGoal_{ij} = \alpha_1 * EE_{ij} + \alpha_2 * LogIncome_{ij} + \alpha_3 * LogAge_{ij} + \alpha_4 * Male_{ij} + \alpha_5 * College_{ij} + \epsilon_{ij}$$

$$(GoalStrength_{ij} \mid SetGoal_{ij}) = \beta_1 * EE_{ij} + \beta_2 * LogIncome_{ij} + \beta_3 * LogAge_{ij} + \beta_4 * Male_{ij} + \beta_5 * College_{ij} + \epsilon_{ij}$$

Table 3.4. Variable descriptions

Variable	Description
Male	Indicates respondent's gender 1 = male 0 = female
LogAge	A log transformation of respondent's age
College	Indicates whether respondent has had education past a high school degree 1 = yes 0 = no
LogIncome	A log transformation of respondent's household income. This follows from midpoints derived from income categories on the survey.
SetGoal	Indicates whether the respondent set a goal to improve their financial situation. Response to the question: <i>Over the past year, have you made any specific goals to improve your personal economic condition?</i> 1 = yes 0 = no
GoalStrength	Indicates the strength of the respondent's goal to improve their financial situation: Response to the question: <i>If you stated a personal financial goal in Q3, how much better-off do you think you will be if you achieve this goal(s) this year?</i> 1 = The same 2 = Barely better-off 3 = A little better-off 4 = Moderately better-off 5 = Much better-off
EE	Indicates respondent's level of economic enfranchisement. Response to the question: <i>How much influence do you feel you have on your personal future economic well-being?</i> 1 = I have little influence, my personal future is mostly dictated by outside forces 2 = My personal future is equally dictated by myself and outside forces 3 = I have a lot of influence on my personal future, outside forces play only a small role

Table 3.5 presents descriptive statistics for the subsamples that differentiate the two stages of the model. These subsamples are defined by responses to *SetGoal*. The sample for *SetGoal* = 1 is the selected sample, which feeds into the second stage of the model for conditional analysis of *GoalStrength*. Significant differences between the subsamples can be seen, particularly across age and income, with respondents who reported setting a goal being five years younger, on average, than those who did not, and having annual household income \$10,000 higher on average than those who did not set a goal. Further, the means for *EE*, the measure of economic enfranchisement, also vary significantly across the two samples, with the sample for *SetGoal* = 1 appearing to be more enfranchised than the sample of individuals who did not set goals.

Table 3.5. Descriptive statistics for subsamples, SetGoal = 1 versus SetGoal = 0

Variable	SetGoal = 1 (N = 1,489)		SetGoal = 0 (N = 810)	
	Mean	SD	Mean	SD
Male	0.5184	0.4998	0.4939	0.5003
Age	47.7109	13.6202	52.1916	15.4888
College	0.8560	0.3512	0.7341	0.4421
Income	77,521.14	48,895.86	67,809.93	43,357.43
EE	2.2843	0.6029	2.0796	0.6721

Chapter 4: Results

Results for the final model are presented in Table 4.1. This table is an abridged version as it excludes the county fixed effects. See Appendix A for the full regression output including county fixed effects. The regression output shows the maximum likelihood estimation of the probit model. The bottom panel shows the probit coefficients for *SetGoal*, while the top panel shows ordered probit coefficients for *GoalStrength* after correcting for the selection bias of *SetGoal*. The Wald chi-squared (232.76) and p-statistic (0.0000) suggest the overall model is highly significant.

The first stage of the model, the probit equation for *SetGoal*, shows the independent variables' effects on the dependent variable *SetGoal*. Nearly every independent variable of interest, except for gender, has a highly significant effect on setting a goal. An increase in perceived economic enfranchisement is associated with an increased likelihood to set a goal. Similarly, the log of income is associated with increased likelihood to set a goal. The log of age is negatively associated with likelihood to set a goal. A possible explanation for this is that older individuals have less time to improve their financial circumstances, so may feel discouraged from setting goals. *College*, a dummy variable for having education past a high school degree, had the largest coefficient.

The results for the second stage of the model show the effects on the dependent variable *GoalStrength*. Economic enfranchisement again has a significant positive effect. The effect of income is not as significant. Age again has a significant negative effect. While gender did not have a significant effect on the likelihood of setting a goal, it did have a slightly significant negative effect on the strength of the goal, indicating that males are slightly less likely to set strong goals than females. Interestingly, the effect of having a college education does not have a significant effect on the strength of a goal. This is peculiar, given that it had the strongest significant effect in determining likelihood to set a goal.

Table 4.1. Regression output for two-stage model, excluding county fixed effects

Variable	Coefficient	Standard error	z
First Stage: SetGoal			
EE	0.22803***	0.047	4.85
LogIncome	0.13644**	0.04347	3.14
LogAge	-0.66081***	0.09879	-6.69
Male	0.06397	0.06022	1.06
College	0.40364***	0.07511	5.37
Second Stage: GoalStrength			
EE	0.38833***	0.06189	6.27
LogIncome	0.11387**	0.05344	2.13
LogAge	-0.69762***	0.16127	-4.33
Male	-0.11031	0.06477	-1.7
College	0.18007	0.13043	1.38
Constant	0.38335	0.50767	0.76
Cut 1	-2.35515**	0.68633	-3.43
Cut 2	-1.91413**	0.66979	-2.86
Cut 3	-0.81867	0.63517	-1.29
Cut 4	0.20612	0.61024	0.34
Athrho	0.20745	0.4696	0.44
Rho	0.20452	0.44995	
Model statistics			
N	2,095		
Selected	1,354		
Nonselected	741		
Wald chi-squared (24)	232.76		
P > chi-squared	0.0000		
Log likelihood	-3009.991		

* p<.01, ** p<.05, *** p<.001

See Appendix A for full table with county fixed effects.

Recall that the second stage of the model is an ordered probit model. The interpretation of probit coefficients is difficult due to the non-linearity of the probability function. The model coefficients provide the change in the z value resulting from a unit change in an independent variable. Marginal effects can be used to better understand the impact of the independent variables. Marginal effects change at each value of each independent variable; thus, they can show the effect of isolated values of the variables, but do not infer the exact relationship for all points, as in OLS.

Table 4.2 shows the average marginal effects on *GoalStrength* for each value of EE. Given that these are average marginal effects, the absolute magnitude of the coefficients is not as meaningful as the direction and relative magnitudes across the various levels of economic enfranchisement. The most significant

results appear for the highest level of *GoalStrength*, indicating the likelihood of respondents selecting the response of “Much better off” when asked how much better off they would be if the goal they set was achieved. While this effect is significant and positive for all three observed levels of economic enfranchisement, it is about twice as high for enfranchised individuals (EE = 3) than disenfranchised individuals (EE = 1). This indicates that economically enfranchised individuals are not only more likely to set goals, but more likely to set strong goals compared to disenfranchised individuals.

Table 4.2. Average marginal effects for GoalStrength at all values of EE

GoalStrength (<i>How much better-off do you think you will be if you achieve this goal(s) this year?</i>)	EE = 1	EE = 2	EE = 3
1 = The same	-0.073 (0.0407)	-0.0459 (0.028)	-0.026 (0.0165)
2 = Barely better-off	-0.0346*** (0.0059)	-0.0312*** (0.0088)	-0.0231** (0.0087)
3 = A little better-off	-0.0316 (0.0376)	-0.0662** (0.02)	-0.0799*** (0.0116)
4 = Moderately better-off	0.0719*** (0.0203)	0.0441 (0.0273)	0.0017 (0.0264)
5 = Much better-off	0.0673*** (0.0153)	0.0992*** (0.0157)	0.1275*** (0.019)

Values in parentheses are standard errors. * p<.01, ** p<.05, *** p<.001

These results expand upon findings from Heath, Larrick, and Wu (1999) about goals in a value function framework. In their framework, those worse off will set higher goals. These results contradict their theory, showing that those who set higher goals have higher incomes. However, economic enfranchisement comes into play as an additional factor in the goal setting framework. Those who feel they have more influence on their financial situation will be more inclined to set goals, and more inclined to set higher goals. These findings add the consideration of an internal constraint in models of goals and economic mobility, one that has a more significant effect than income or postsecondary education. By considering these internal constraints, policy makers, economic developers, and the general public can be more sensitive and responsive to individuals in extreme poverty, and consider the role of psychological and behavioral factors in policy options.

While these results have implications for micro-level economic development policy relating to goals, they open up broader questions surrounding the factors that affect an individual’s economic enfranchisement. While economic enfranchisement may not necessarily depend on income in a causal manner (further research is needed), the data in this sample suggest that the disenfranchised tend to be in lower income

groups than the enfranchised (Table 4.3). The highest earners of the sample also appear to be the most enfranchised; over 44% of respondents with income over \$100,000 reported the highest level of economic enfranchisement, while only 6% reported feeling disenfranchised. The data also suggest that the more educated tend to be more enfranchised. Respondents who indicated feeling disenfranchised tended to have lower levels of educational attainment, while more educated individuals tended to report feeling more enfranchised. This is suggestive of relationships between economic enfranchisement, education, and income, although the direction of the relationship is unclear. These relationships may provoke questions of multicollinearity; however, variance inflation factors were calculated in the early stages of the model to test for multicollinearity, and no multicollinearity was found (see Appendix A, Table A.2).

Table 4.3. Cross tabulations of select variables and economic enfranchisement

Characteristic	EE = 1	EE = 2	EE = 3	Total
Household income				
< \$15,000	29	58	31	118
	11.55%	4.94%	4.40%	5.54%
\$15,000 - \$24,999	31	65	49	145
	12.35%	5.54%	6.95%	6.81%
\$25,000-\$34,999	34	110	42	186
	13.55%	9.37%	5.96%	8.73%
\$35,000-\$49,999	44	211	77	332
	17.53%	17.97%	10.92%	15.59%
\$50,000-\$74,999	52	249	153	454
	20.72%	21.21%	21.70%	21.31%
\$75,000-\$99,999	31	238	143	412
	12.35%	20.27%	20.28%	19.34%
\$100,000-\$149,999	24	178	143	345
	9.56%	15.16%	20.28%	16.20%
\$150,000-\$199,999	6	41	36	83
	2.39%	3.49%	5.11%	3.90%
>\$200,000	0	24	31	55
-	0.00%	2.04%	4.40%	2.58%
Educational attainment				
Eighth Grade	3	6	3	12
	1.20%	0.51%	0.43%	0.56%
High School	64	210	111	385
	25.50%	17.89%	15.74%	18.08%
Two-year College	61	240	134	435
	24.30%	20.44%	19.01%	20.42%
Other Post-High School	30	161	85	276
	11.95%	13.71%	12.06%	12.96%
Four-year College	56	312	182	550
	22.31%	26.58%	25.82%	25.82%
Graduate School Education	37	245	190	472
	14.74%	20.87%	26.95%	22.16%
Total	251	1,174	705	2,130
	100%	100%	100%	100%

This model, like others discussed previously, has its limitations. First, it does not make claims of the direction of causality. Behavioral economists often struggle with issues of causality, as a number of mechanisms muddy the waters. Literature on locus of control has suggested that an internal LOC may be the result of past life events and their outcomes, accumulating to shape an individual's perceptions of the world around them. The same could be theorized of economic enfranchisement and goals; a

disenfranchised individual may feel disenfranchised because the goals they set throughout their life were not achieved. However, this relationship between enfranchisement and goals relies on the experience of attempting many goals over time. When broken down to a singular goal or a few goals in a short time period, as in this analysis, there is less basis for claims about the effect of a goal on one's economic enfranchisement.

Chapter 5: Conclusions

This analysis has introduced a conceptual framework for the role of economic enfranchisement, a concept indirectly studied but explicitly absent from economic literature. Economic enfranchisement, which is the extent to which a person has influence on their economic well-being, is shown in this analysis to have a significant effect on an individual's likelihood to set financial goals; more enfranchised individuals are more likely to set goals than their disenfranchised counterparts. Further, the goals they set are more likely to be strong than goals set by disenfranchised individuals.

This work contributes to the growing literature on goals in two main ways. First, most of the research on goals uses exogenously-set goals assigned to individuals and analyzes effort, persistence, or achievement, whereas this research analyzes factors that influence whether or not an individual sets a goal in the first place, and how strong they set their goal. Second, much of the literature on goals focuses on external resource constraints, while this research considers economic enfranchisement as an internal, or behavioral, constraint to the goal setting process.

The results of this analysis have implications for economic development on a micro level. As recent research on goals has indicated that goals are an effective mechanism for economic mobility (Aguinaga et al. 2017, Lybbert & Wydick 2018), interventions that aim to increase goal setting may be worthy of further research. While Aguinaga et al. 2017 endorsed assigning goals to individuals, my research shows that helping individuals feel more enfranchised can guide them to set their own goals – a strategy that may be a less traditional intervention, but potentially less costly as well. Further research on financial outcomes for individuals who experience an increase in economic enfranchisement is needed; however, positive results for such research could indicate that these micro-level interventions could be highly effective.

There are many areas for further research. First, while this analysis has shown that economic enfranchisement is a significant factor in one's decision to set goals, there is still much research to be done to determine how economic enfranchisement can be increased. This research was conducted using survey data that asked respondents about goal-setting behavior after the fact. It could be further expanded by analyzing goal-setting behavior over time, looking at not only whether goals were set, but if they were achieved and how much effort was put forth towards them. This presents an exciting new application of behavioral economics to development economics, and my hope is that the framework of economic enfranchisement can be further expanded, refined, and applied to other domains.

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Appendix A: Supplementary Tables

Table A.1. Regression output for Heckman model with ordered probit and county fixed effects

Variable	Coefficient	Standard error	z
First Stage: SetGoal			
EE	0.22803***	0.047	4.85
LogIncome	0.13644**	0.04347	3.14
LogAge	-0.66081***	0.09879	-6.69
Male	0.06397	0.06022	1.06
College	0.40364***	0.07511	5.37
County fixed effects			
Graham, AZ	0.40794**	0.15745	2.59
Greenlee, AZ	0.46436**	0.17209	2.7
Valley, ID	0.13202	0.16957	0.78
Cibola, NM	0.1483	0.15679	0.95
Emery and Carbon, UT	-0.20586	0.33918	-0.61
Beaver, UT	0.30706	0.20988	1.46
Cache, UT	0.12258	0.26645	0.46
Carbon, UT	0.29919**	0.13307	2.25
Emery, UT	0.53653**	0.24321	2.21
Garfield, UT	0.4883**	0.22381	2.18
Grand, UT	0.45842**	0.14562	3.15
Juab, UT	0.20223	0.12541	1.61
Millard, UT	-0.00236	0.13276	-0.02
Piute, UT	-0.26475	0.17654	-1.5
San Juan, UT	0.23031	0.16771	1.37
Sanpete, UT	0.45651**	0.15418	2.96
Sevier, UT	0.01463	0.13788	0.11
Washington, UT	0.23041	0.14695	1.57
Wayne, UT	0.15176	0.15513	0.98
Second Stage: GoalStrength			
EE	0.38833***	0.06189	6.27
LogIncome	0.11387**	0.05344	2.13
LogAge	-0.69762***	0.16127	-4.33
Male	-0.11031	0.06477	-1.7
College	0.18007	0.13043	1.38
County fixed effects			
Graham, AZ	0.14311	0.17644	0.81
Greenlee, AZ	-0.0549	0.19842	-0.28
Valley, ID	-0.18369	0.18541	-0.99
Cibola, NM	0.06894	0.17428	0.4
Emery and Carbon, UT	-0.57086	0.38996	-1.46
Beaver, UT	-0.26727	0.22392	-1.19
Cache, UT	-0.12682	0.2865	-0.44

Carbon, UT	-0.00742	0.157	-0.05
Emery, UT	0.18064	0.25935	0.7
Garfield, UT	0.00538	0.24364	0.02
Grand, UT	-0.30564	0.19021	-1.61
Juab, UT	0.0444	0.14239	0.31
Millard, UT	-0.27817	0.14583	-1.91
Piute, UT	-0.2086	0.22153	-0.94
San Juan, UT	-0.14382	0.18206	-0.79
Sanpete, UT	-0.42543**	0.19656	-2.16
Sevier, UT	-0.14237	0.15228	-0.93
Washington, UT	-0.28076	0.17001	-1.65
Wayne, UT	-1.51265***	0.20976	-7.21
Constant	0.38335	0.50767	0.76
Cut 1	-2.35515**	0.68633	-3.43
Cut 2	-1.91413**	0.66979	-2.86
Cut 3	-0.81867	0.63517	-1.29
Cut 4	0.20612	0.61024	0.34
Athrho	0.20745	0.4696	0.44
Rho	0.20452	0.44995	
Model stats			
N	2,095		
Selected	1,354		
Nonselected	741		
Wald chi-squared	232.76		
P > chi-squared	0.0000		
Log likelihood	-3009.991		

* p<.01, ** p<.05, *** p<.001

Table A.2 presents a test for multicollinearity using variance inflation factors. As shown, the variance inflation factors are all less than 1.7 with a mean of 1.3, indicating a very low probability of multicollinearity among variables.

Table A.2. Variance inflation factors

Variable	Variable Inflation Factor
EE	1.08
LogIncome	1.34
LogAge	1.15
Male	1.09
College	1.09
County fixed effects	
Graham, AZ	1.45
Greenlee, AZ	1.32
Valley, ID	1.27
Cibola, NM	1.3
Emery and Carbon, UT	1.05
Beaver, UT	1.17
Cache, UT	1.11
Carbon, UT	1.49
Emery, UT	1.13
Garfield, UT	1.16
Grand, UT	1.47
Juab, UT	1.63
Millard, UT	1.69
Piute, UT	1.23
San Juan, UT	1.30
Sanpete, UT	1.44
Sevier, UT	1.48
Washington, UT	1.51
Wayne, UT	1.35
Mean VIF	1.30