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1 Introduction

This paper is meant to serve as an overview of topics that relate, more or less directly, to the Housing Opportunities Program (HOP). It is intended primarily for people who are considering volunteering with HOP, and is strongly recommended to compers. More generally, the paper is for anyone who wants to understand the philosophy behind HOP. Since its founding in 1990, students have put a lot of critical thought into the program. They have identified premises on which the program rests, and tried to define and solve the decision problems that the program faces. This paper accumulates much of this thinking in formal language.

The paper begins with some comments on the microfinance movement, of which HOP is a part. Microfinance has created a lot of buzz in the past decade(s), and it is worth knowing what exactly microfinance is, what it isn’t, and where HOP fits into the spectrum of microfinance institutions (MFIs) that now dot the development landscape.

I continue with general considerations about housing markets, income and expenditure of low-income families, and credit constraints. These topics provide motivation for HOP, establishing the existence of a social need, and rationale for HOP, identifying opportunities that may exist to address the need. Generally speaking they are meant to give you some intuition about why HOP exists and why HOP volunteers think their program is a good idea, compared to other possible ways of using time and money.

I move on to discuss issues that are specific to HOP. One section develops the concept of an “optimal repayment rate” in mathematical detail. Readers who have not had intermediate microeconomics may want to skip the math, but should still try to get the intuition. The optimal rate concept is basic to the way HOP evaluates loan applications, and you should fully grasp it in order to participate in group discussions about whom to lend to. The final section discusses group-lending and village banking methods, and ways in which these models can be adapted and used by HOP. This section looks back to the earlier comments on the microfinance movement and draws on the historical experiences of other MFIs.

Comments, criticisms, questions, etc. are all welcome. This document is a collage of topics with a theme, and it is never meant to graduate from working-paper status. I can be reached before June 2004 at niehaus@fas.harvard.edu.
2 Microfinance

[This section draws heavily on Jonathan Morduch’s paper "The Microfinance Promise". I highly recommend Morduch’s paper to anyone interested in a more thorough overview of the history and present state of the microfinance movement.]

2.1 Definitions

If finance is the borrowing and lending of money (abstracting away from the investment instruments and secondary markets that go along with borrowing and lending), then microfinance is about “small” finance.

This does not mean that the institutions and organizations that coordinate financial activity are small. Some microfinance initiatives are very small — some are fairly autonomous village credit unions — but others are large conglomerates like Grameen. Rather, “micro” usually refers to the size of the average loan made by a lending institution. Technically this definition could get a bit hazy since, for example, a credit card company may provide credit in small increments to many of its customers. What most people mean by microfinance is something like, lending money in small increments to poor families who do not qualify for credit at conventional financial institutions.

There is nothing about microfinance that makes it inherently a not-for-profit activity, or a for-profit activity, or a government program. Allthese kinds of MFI exist, and there is a vigorous debate about whether the microfinance sector will remain mixed or eventually become all one or all the other.

2.2 Banking

Regarding finance in general, perhaps the important fact to keep in mind is that lending and borrowing as they are conducted in the United States and other developed nations today represent the exception rather than the rule when one looks across the globe and back through history. Liquid, functioning credit markets are rarities. The reason is simply that once someone else has your money, they have every incentive to find ways to avoid having to ever return it. Without very effective institutions to enforce debt contracts, lenders will lose most of their money. Alternatively, lenders will have to charge such high rates to cover default losses that no one will want to borrow. In the developed countries this problem has been solved in some cases with institutions that make lending possible.

One basic form of enforcement is contract law that allows lenders to secure their loans against the borrower’s collateral. If the borrower does not repay the loan, the courts allow the lender to take possession of the collateral. If the justice system functions well and without corruption, this enforcement method allows people who own physical property such as a house to borrow against it’s value.

In the absence of collateral, citizens of developed countries are often still able to borrow using their credit history as a guarantee that they will repay. In the United States, credit histories are main-
tained by a small group of companies that amalgamate information from credit card companies, landlords, sellers who offer financing, and other sources into a record for each consumer. Borrowers have incentives to repay their loans because non-repayment will hurt their credit history, which will in turn hurt their ability to borrow — or get a job or an apartment — in the future. Credit histories are a special case of a reputational institution.

If enforcement is imperfect, a second problem in lending is distinguishing between potential borrowers who may be inherently better or worse risks. For example, suppose you are considering investing either in a business run by entrepreneur A or by entrepreneur B. One may be significantly less risky than the other, but both A and B have incentives to underrepresent the riskiness of their venture to you. Without some mechanism to distinguish good risks from bad risks, lenders face a market for “lemons” and will again have to charge a high rate just to break even. Again, reputational mechanisms can help mitigate the problem by provide some record of the past performance of different individuals.

2.3 Village Banking

The above comments suggest that lending to the poor, who have little or no collateral, would be difficult. This is especially true if there are no firms providing a reputational memory service. The facts fit this story. Microfinance has been around for a long time, but it was originally unsuccessful by any useful measure. Early microfinance programs from the 1950s on were generally unsuccessful by any useful measure. The experiments failed; repayment rates were low, the costs of the programs high, and the amount of help actually reaching the poor — as opposed to the politically connected — was low.

Recently, however, microfinance has experienced a change of fortune. New microlending banks have achieved near-perfect repayment rates while lending to clients without collateral. Millions of low-income families have gained access to credit that allows them to start small businesses and work their way out of poverty. This recent change of fortune is due to the introduction of new lending models. Among other things, the new models help lenders (1) select borrowers to lend to, and (2) enforce repayment from those borrowers. There is a great deal of heterogeneity among these models across different MFIs, but collectively they have been dubbed “village banking”.

Village banking usually substitutes “social capital” for the physical capital used to secure loans given to richer citizens. Social capital is a fairly abstract concept with competing definitions, but for our purposes it can be equated with relationships that a person has developed with his or her peers. A relationship is valuable in a financial sense if the peer is able to observe characteristics of the person that a bank officer could not, and if they are able to put some pressure on the person to take an action — such as repaying a loan — that the person might not want to do. A person with many strong relationships like this may be able to credibly commit to repaying a loan, and this in turn will mean that they will be able to get the loan in the first place.

How exactly is social capital used to secure loans? The technical details are best expressed
in game theory and I will omit them for the sake of brevity. Instead consider a simple group-lending model as an example. In a basic model, villagers who want to apply for a loan must form a group and apply jointly. After the loan is issued, if one member fails to repay their share the other members of the group become responsible for that share. Any member who does not pay what is expected of them, loses eligibility for future loans.

First, it can be shown that under these rules applicants will tend to form groups with other applicants who have similar “riskiness”. The intuition is that partnering with riskier types increases a “safe” type’s chance of having to shoulder extra repayments.

Second, groups tend to enforce repayment internally. Since default by one member hurts the others, they will use whatever peer pressure they can exert to force that member to repay. If the relationships within the group are strong enough, i.e. if the value of the relationship to the delinquent member is high enough, then repayment will be enforced.

I leave the group-lending concept for now, but will return to it in section 6 of this paper. Group lending drives the recent and surprising success of microfinance banks worldwide; microfinance programs ignore the model at the risk of imitating its far less successful predecessors.

2.4 Credit Alternatives for the Poor in the Developed World

[This and the subsequent section combine experience from HOP with comments from the excellent overview “Replicating Microfinance in the United States: Opportunities and Challenges” by Mark Shreiner and Jonathan Morduch.2]

Given the above discussion, one should expect microfinance in a developed country to be less successful precisely because more citizens in these countries are already integrated into traditional credit markets. However, there are still citizens of developed countries who do not have good access to credit. Some have bad credit histories and are ineligible; others are unfamiliar or uncomfortable with formal credit institutions. Neither reason necessarily makes them a bad credit risk.

Low-income families in the U.S. take advantage of a variety of credit sources. If banks and credit cards are not options, they turn to pawn shops, check-cashing services, payday lenders, tax rebate lending services, and some “fringe banks.” The cost of credit from these sources is typically high. Another critical but often unnoticed source of credit for poor families is borrowing from other family members or from friends. This sort of borrowing is less visible but just as important.

In public discussions about credit for the poor there is apparent tension between acknowledging need to charge higher rates to compensate for higher risks, and accusations of extortion and usury. On the one hand, making small loans to the poor inherently costs more than traditional lending because fixed costs are not as easily covered and because the poor are less likely to able to repay their creditors in adverse circumstances.

On the other hand, some banks may use predatory practices towards poor and less-educated clients. This often involves redlining, marking individuals from poor or minority neighborhoods with a red flag and then either rejecting their applications or charging them higher rates. Other oft-criticized practices are prepayment penalties and hidden balloon payments which make it difficult to repay a loan, and flipping, offering refinancing with hefty fees.

Negative scrutiny of those who lend to the poor will tend to discourage reputable people from getting into the business. Potential microlenders may not dare to charge cost-covering interest rates for fear of being labelled usurers. In contrast, as a non-profit organization HOP does not have to cover costs; we seek to maximize social impact rather than profit, and so we can loan money at low rates - currently 0%.

2.5 Microfinance Opportunities in the Developed World

Given the patchwork state of the credit industry serving low-income households, is there an opportunity for microfinance in the developed world?

Microfinance for small businesses in the United States is a particularly difficult proposition. First, the economic challenges facing entrepreneurs are different. In a developing country, a startup business might expect to find less competition and less complementation in its business community. In the United States, suppliers and complementers are abundant but competition is also fierce. Whereas in Latin America a small-goods store can find an immediate niche, in the United States the same store has to compete with hundreds of similar businesses, with huge supermarkets, and with online shopping alternatives. Many American markets are dominated by large corporations and chain businesses which enjoy economies of scale and advantages of globalization. Generally speaking, the barriers to entry to many industries, in terms of financial requirements which must be met to be competitive, are high. There are also barriers in terms of human capital. Many industries have steep learning curves; on the level of the microenterprise, business in the U.S. requires an original product and marketing concept, education in accounting and negotiating, and a host of other skills.

The U.S. economy also offers attractive alternatives to self-employment. There are more opportunities to work for a wage as opposed to being self-employed; there is also a more extensive public safety net (welfare and unemployment benefits) than exists in many poor countries. These conditions creates a minimum reservation wage for potential microentrepreneurs. A high reservation wage means lower incentives for entrepreneurship than in less developed countries.

In this context microloans to entrepreneurs have, unsurprisingly, proven relatively unsuccessful. Many of the ventures financed fail, so that repayment suffers and the clients fail to improve their incomes. Further, evaluating business plans in the United States tends to be more complicated and costly than in rural villages. E.g. it is not hard to figure out if buying a milk cow is a good investment, but it can be hard to predict the profitability of a new barbershop downtown.

On the other hand, while HOP’s direct goal is
to prevent homelessness, it also functions indirectly as a method for sustaining productive employment of individuals and of resources. When tenants are evicted, they often are unable to keep their jobs as they move, seek new housing, or become homeless. It is true and remarkable that some homeless men and women go to work during the day, but holding down a family-supporting job is for the most part impracticable without housing or while seeking housing. (There are also significant but less intangible efficiency costs of transition: loss of established community ties, the effort of learning a new neighborhood, and disruptions in children’s education, among others.) Meanwhile following eviction the landlord loses the rent on his apartment during the ensuing transition period. If the evicted client was chronically unable to pay then this is a necessary cost, but if the client was evicted due to a temporary income fluctuation then it is inefficient. By helping to prevent such inefficiencies, HOP keeps people and resources productively employed.

HOP can thus be seen as a demand-side lender to the employed, as opposed to traditional supply-side microlending to the self-employed. HOP supports its clients ability to pay for housing and thus indirectly supports their employment, education, etc. Since entrepreneurship is less empowering in the U.S., less likely to lift the poor out of poverty, the HOP approach is a logical adaptation.

The next section elaborates on the role that HOP lending plays in household decision-making and prospects. I will return in section 6 to the critical question for microfinance in the United States: how to adapt village banking models to the metropolis.

3 Income, Spending, and Credit

I offer a brief discussion of consumption subject to credit constraints as it relates to the situations typically faced by HOP clients. I also digress to consider potential moral hazard problems associated with establishing a program committed to lending money to tenants in danger of being evicted.

3.1 Consumption-Smoothing

The immediate rationale for HOPs operation is a response to the credit constraints which low-income households experience. Abstractly, the need for HOP arises from the behavior of low-income tenants over time as they deal with financial stress: medical expenses, job uncertainty, support of dependants, and so forth. One of the more stylized implications of the theory of utility maximization over time is that a person’s consumption during any given period depends not on income during that period, but on total expected income over all periods. In strongest form this principle is known as the lifetimes earnings hypothesis, and it predicts a steady standard of living throughout life to the extent that such is possible. Practically speaking, this means borrowing substantially during the years prior to one’s first job, repaying debt and saving during employment, and then spending again during retirement. Well and good, but we do not in fact see many ten-year-old’s buying cars and dining out!

Such discrepancies are accounted for by several factors, including uncertainty about the future and, most significantly, the inability to borrow
Figure 1: Perfect consumption-smoothing: the lifetime earnings hypothesis.

money during periods of low income. This is referred to as being liquidity constrained. In the case of the ten-year-old it is not surprising that even if the average citizen can expect a sizable salary as an adult, the average child will not be able to borrow based on that expectation. As a result we observe imperfect consumption-smoothing. This is why children remain economically dependant on their parents.

Figure 2: Lifetime consumption-smoothing with credit constraints.

Now HOP is also concerned with individuals facing liquidity constraints, but at a mature time in life when a stable level of consumption must be independently sustained. This is also a time when the uncertainties of childhood are replaced by the hard facts of adulthood: earning power, credit history, and unfortunately perhaps racial background. These factors determine each person’s access to credit. Individual behavior still exhibits consumption-smoothing, while liquidity constraints and uncertainty cause a degree of variation. This is illustrated by the third figure,

Figure 3: Smoothing over income fluctuations with credit constraints.

which represents consumption patterns during a period of low income (e.g., job loss) or abstractly during any other exogenous financial stress. Intuitively this means that, after being laid off or during an expensive illness, the rational individual will not stop consuming altogether, but will scale back consumption, especially of non-essential ‘luxury items.’

For HOP clients this response is not an option; there is a certain minimum level of consumption of essentials below which they cannot simply ‘scale back.’ First, because most of our clients earn just enough to pay for food, clothing, and shelter, they do not have ‘luxury goods’ in their monthly budgets which they can eliminate in response to a loss of income. Second, they are usually consuming essentials at a subsistence level - enough food to stay alive, enough
clothing to keep warm in the winter, and the cheapest apartment they can find. Thus there is little room to scale back consumption of essentials either. Graphically we can depict this constraint with a subsistence line equal to or slightly below the level of average income. Economically, a lack of liquidity forces poor families below this line. This means that our clients must look at food, clothes, and housing, and choose two of the three. The result is usually homelessness.

HOP attempts to alleviate this situation by removing the liquidity constraints which force our clients' level of consumption to dip below the subsistence level. Our loans allow low-income households to spend the amount of income which they will average over an extended period, rather than constraining them to what they are currently earning.

3.2 Moral Hazard

It is worth noting that if HOP lending has potential benefits, it also has potential for abuse. Moral hazard is economics jargon for some sort of “bad” or “reckless” behavior that individuals are induced to take because of a deal they made. In this case, the “deal” is HOP’s implicit commitment to help people who fall behind on their rent payments.

The hazard is that if individuals know HOP has made this commitment, they may not make as great an effort to avoid rent arrearages. For example, suppose that I wish to purchase an expensive new TV. I cannot afford to pay out of pocket, but the store offers 10% financing. I can actually do better as follows: the next time my landlord comes to collect rent, I tell him I cannot pay and apply to HOP for a loan. If my application is refused, I cough up the cash that I had all along. If on the other hand my application is accepted, I give my landlord a HOP check and spend my rent money on the TV. I repay HOP at 0% interest — or perhaps not at all — and end up with a TV for cheap.

This is of course an exaggeration. Eviction is a fairly catastrophic event and any chance that the above plan could fail might make it not worth trying. But moral hazard is a real possibility when many individuals know about HOP and are able to keep their financial information relatively private from interviewing loan officers.

4 HOP and the Housing Market

To understand the role that HOP plays, we first considered its impact on individual decision-making subject to variable income and constrained credit.

We now broaden our horizon to include the entire local housing market. HOP currently operates on a scale small enough that its impact on the housing market is negligible. However, public policies at the federal, state, and city level have played major roles in shaping the housing market. We will discuss these policies and their effects in brief to understand the environs in which HOP operates. We will then consider the impact that HOP would have if it were scaled up.
4.1 The Housing Market: Substitutability

The “housing market” is not a single market for a homogenous good, but a continuum of markets for housing of different sizes and qualities which are imperfect substitutes for each other. The market for studio apartments in Cambridge is affected by the market for duplexes in Roxbury and by the market for ranch-style suburban homes in Danvers. High prices in one of these market niches will raise demand in the others, though not as much as if the various housing units in question were identical.

We can imagine a simple two-good model of this heterogenous market in which two kinds of housing are sold, a high type and a low type. The high type is characterized by more floor space, better quality of construction, more amenities, more desirable location, etc. all of which the low type lacks. It follows that in equilibrium and absent any policy intervention the low type will cost less than the high type of housing. Whether or not the equilibrium price of low-type housing will be “affordable” according to any exogenous standard of affordability, remains uncertain.

Supply of both types of housing depends only on the price that producers/landlords receive for housing units, and their costs of producing and managing those units. Demand for each type of housing, however, depends both on the income profile of the local resident population and on the price of the other type of housing. Supply is relatively inelastic in the short run because the development of new housing units takes time (and because rental properties generally have fairly low vacancy rates, so that changes in apartment-search behavior cannot do much to offset an increase in demand for housing.)

Now imagine that a boom in high-tech industries increases the demand for high-type housing among affluent young workers. This was the situation in and around Boston through much of the 1990s. This significantly increases the price of high-type housing (due to the short-run inelasticity of supply). This in turn raises demand for low-type housing, which is an imperfect substitute. The result is an across-the-board increase in the prices of housing. Since the prices of different types of housing move together in this way, it makes some sense to speak of a unified “housing market.”

Note that the economic causality described above is different from the phenomenon that sociologists term “gentrification.” This is a process whereby a small pocket of the young nouveau riche choose to move into an older, dilapidated inner-city neighborhood. Their increasing presence gradually restores the neighborhood to a new fashionability. Consumer stores, coffee shops, and of course more wealthy tenants arrive in droves, and the poorer former inhabitants of the neighborhood are priced out.
Gentrification could be seen as resulting from changes in tastes, not income (though of course the two changes may be connected). The demand for high-type housing falls while demand for low-type housing rises due to the new fashion-ability of urban living. The result is a new equilibrium in which the price of high-type housing is lower than before, while the price of low-type housing is higher.

Though the drivers of change are different, the end result for low-income families is similar: the price of low-type housing rises.

4.2 Public Policy and the Housing Market

When the price of low-type housing rises, low-income families have to pay more for a place to stay. In current policy debates the term “affordability” is used to describe the situation where typical housing costs are below some fraction of area median income. This means that for households far below area median income, housing will only be affordable at very low prices. A typical cutoff is 30% of median income, which defines “30% affordability”. “50% affordability” is defined analogously.

The housing market was a topic of political debate long before “affordability” was defined. At the turn of the 19th century, journalists and activists publicized the living conditions of the poor in urban centers such as New York and Chicago. Some of these writers called for government intervention in the housing market. Other activists such as Jacob Riis opposed government intervention and called for the intervention of private philanthropy (Riis urged landlords to adopt a motto of “philanthropy and 5%,” meaning generosity to the poor with a below-market rate of return on their properties.) Since that time, government at different levels has used various policy tools to intervene in the housing market: regulations, price controls, subsidies, and direct public financing.

I will briefly discuss these policies in turn here. The discussion focuses explicitly on the impacts that various government interventions have on the housing market: prices, quantities, quality, shortages, etc. Some of these policies have effects outside of the housing market. Taxes and subsidies affect government balance sheets and may indirectly lead to changes in funding for other programs. Regulations have both direct and indirect effects. The purpose here is not to consider the effects of policies in their entirety and endorse or reject them, but only to understand their impact on the housing market.

Building Codes and Zoning

Building codes and zoning are the earliest forms of government intervention in the housing market. Building codes which require fire safety measures, limit occupancy, etc. date from the progressive era. In part these laws were motivated by a desire to protect tenants (as well as employees in workplaces) from the health and fire risks of their cramped living situations. They were also popular with the rich, who feared that the slums would become breeding grounds for disease or start fires which would then spread into the better quarters of the city. Zoning also had strong support among the affluent classes, who wanted to preserve distance between themselves and the slums.

Building codes had the unintended consequence
of raising the price of low-type housing. Simply put, compliance with the codes cost money. Developers who had to build fire escapes charged more for the buildings. And when landlords were required to limit the occupancy of their rooms (to prevent unhealthy overcrowding) they responded by raising the rent per person. Building codes have less impact on high-type housing, because those units are more likely to already comply with the codes. Wealthy families will generally be willing to pay more for higher quality, but poor families may be unable to do so.

The same remains true today. Building and health codes enforce safety standards but raise the cost of building and maintaining housing. This is one cause of homelessness. When a family can afford half the cost of renting an apartment and is willing to squeeze into the space with another family in a similar situation, they can both be housed. But when that kind of crowding is illegal, both families become homeless because they cannot afford the minimum amount of space per person that the law requires. In some parts of Boston, for example in crowded immigrant communities, this kind of informal subletting is common. Similarly, some families may be able to afford an apartment that is built from cheap but flammable materials. When the law requires that developers use more expensive, less flammable materials, that family cannot buy legal housing.

Zoning was also introduced in the early 1900s as the first real policy tool at the disposal of urban planners. Zoning has a specific economic function: it can be used to limit external effects of property ownership. If a businessman builds his factory next to your home, the noise and smoke generated will undoubtedly devalue your property and generally make your life miserable. Many zoning rules are intended to separate such “incompatible uses” of land. Others are not. For example, some municipalities limit the fraction of a property that can be built-on to ensure that open space is preserved; other rules limit the height of all buildings in a neighborhood. Such zoning codes operate like building codes: they enforce a particular vision of “quality” but in doing so raise the price of housing by constraining its supply. Developers are unable to respond to increasing demand for housing by building more if it is illegal to build either upwards or outwards. Families that might be able to afford an apartment built onto the 7th floor become homeless if a 7th floor is illegal. This is a major issue in Cambridge today, where building heights are far less than what property values would predict because of the difficulty of getting new development approved by the city.

In the worst cases, some towns intentionally zone out low-income families. For example, some suburbs require that land be sold and developed only in increments of several acres, which prices out the poor.

A related recent development is the “Smart Growth” agenda, which resembles zoning at a regional level. “Smart Growth” encompasses many elements, but is essentially a planning response to criticisms of urban “sprawl.” These criticisms include use of vast quantities of land, loss of farmland, environmental harms, auto-dependency with heavy traffic, and other more aesthetic criticisms such as the drabness of suburban subdivisions. Typical “smart growth” policies include urban growth bounds (which prohibit new development beyond a perimeter) and set-asides of farmland and parkland. It
should be clear what the impact of such regulations is on the housing market. They reduce the quantity of land available for development, raising the cost of housing. Smart growth policies are sometimes particularly biased against low-income housing. For example, rules banning mobile home parks, which are seen to epitomize the ugliness of sprawl, force the poorest homeowners to return to the rental market or become homeless.

**Depression-Era Federal Programs**

[Much of this information is drawn from Kenneth Jackson’s “Crabgrass Frontier,” a worth-reading history of the suburbanization of the United States.]

A whole set of programs, inspired and funded at the federal level, date back to the era of the Great Depression and the Roosevelt administration. The Depression wreaked havoc on the financial sector and on the home mortgage industry in particular, prompting federal intervention. Some of these programs remain today; all are important for understanding the current state of the housing market. Several have rather notorious track records.

Of some lasting importance was the Home Owners Loan Corporation, which refinanced many mortgages that were in danger of default. HOLC effectively subsidized housing for eligible Americans. It also introduced standards for rating the credit-worthiness of different neighborhoods, which unfortunately were in part racial driven and introduced the practice of “red-lining” minority neighborhoods (under HOLC’s system the presence of black residents had a negative effect on the credit rating of the neighborhood).

Perhaps the most important program was the Federal Housing Administration, which underwrote loans from private banks to first-time home purchasers. This intervention effectively subsidized home ownership (and thus home construction). This program is likely one of the reasons that ownership/rental ratios in the United States are much higher than in many other developed countries.

Finally, the Depression saw the beginnings of the public housing and slum clearance movement under the guidance of the United States Housing Authority. Cities that declared low-income neighborhoods “blighted” could legally seize the land by eminent domain and then receive Federal subsidies to redevelop it. In many cases these provisions were used by cities to try to restore their tax bases; in some worst cases low-income “slums” and minority neighborhoods were replaced with fewer total units of more expensive housing that the former residents could not afford. In other cases, public housing simply concentrated the poorest tenants into small areas with high crime rates and low social capital.

An attempt has recently been made to reform public housing through the HOPE VI program. Projects have been redeveloped to provide some privacy, a mixture of residential and commercial neighborhoods, a mixture of income levels, and other aspects of more organic neighborhoods.

Public housing programs have also been criticized because they crowd out rather than supplement private development. Subsidy programs such as the FHA or Section 8 vouchers (below) have the opposite effect, tending to stimulate private production.

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3New York: Oxford University Press, 1985
Rent Control

Rent control is a common form of government intervention in the housing market. Rent control is a price ceiling, a legal restriction preventing rents from rising about a given level.

Rent control has the same effect on the housing market that price ceilings have on any market: it decreases supply and increases demand. However, because the supply of housing is relatively inelastic in the short run, the decrease in units supplied is not noticeable (no one tears down apartment buildings in response to a rent control ordinance). This makes rent control a politically attractive instrument, but does not change the long-run reality. New housing does not get built, and old housing does not get repaired, if the profits that owners of housing can earn are reduced or eliminated by rent control. The funds that would have invested in such projects are instead invested in another more profitable industry. In the long run, rent control reduces the stock of available housing.

Rent control is politically attractive because it transfers wealth from the owners of rental properties to the tenants. Tenants represent a much larger voting block than landlords, so political support for rent control will often exist. Meanwhile alternative policies, such as publicly funding housing or subsidizing housing, impose costs on taxpayers and are therefore less politically attractive (since taxpayers are a large voting block).

Tenants as a class benefit from rent control, but not all potential tenants benefit. Tenants in rent-controlled housing have strong incentives to stay, even if they would prefer to live elsewhere or no longer need an an apartment of the given size. When tenants do leave, landlords have many applicants for each available apartment. But they are forbidden to raise the price until only one applicant is willing and able to pay. In this scenario, landlords may use other factors to decide who gets the apartment. They may rent only to people of their race or gender, or only to families, or they may base their rationing decisions on any other factor that suits them.

Section 8 Vouchers

The federal program most relevant to HOP’s work is the Section 8 housing voucher program.

Currently, the voucher program receives less funding than would be necessary to provide vouchers to every family that qualifies under the program’s means-testing. The resulting shortage of vouchers is handled by rationing vouchers through waiting lists. Many HOP applicants are currently on the Section 8 waiting list. Many others urgently need to use their vouchers before a time limit expires and they return to the waiting list.

The voucher program has advantages over other forms of housing assistance. First, vouchers are funded by federal tax revenues or by borrowing. This means that the costs of funding the voucher program are both widespread and apparent. We have seen that this is not the case with other forms of housing intervention such as rent control. Second, vouchers give greater freedom to individual families to choose where to live. If they wish to spend a little bit more for a bigger apartment, or a little bit less on a smaller one, they are able to do so. This is not the case with public housing (which tends to be fairly homogeneous) or rent control (which encourages families to stay in any rent-controlled apartment they can
secure).. Third, vouchers stimulate private investment in new units of low-type housing, which is a sure way to increase the stock of “affordable” housing.

4.3 Supersized HOP?

Having considered the impact of public policies on the environment in which HOP operates, we now turn to the effects of HOP lending itself on the housing market. Currently these effects are negligible because HOP operates on a small scale. We consider a hypothetical scenario in which HOP expands and provides credit to a significant percentage of Boston’s low-income tenants.

Assume that landlords care only about rental revenues — that is, assume that they do not care about the welfare of their tenants. This does not always hold but it is a reasonable approximation. Then landlords decide whether or not to evict an indebted tenant by weighing the likely gains and losses from doing so. The gains are the revenue that a new, paying tenant would provide. The chief loss is an opportunity cost, increasing in the time the apartment sits empty before a new tenant is found and in the probability that the old tenant would have been able to resume paying during that time. Another potential loss is legal fees if the current tenant sues to prevent eviction.

Obviously, HOP exists to tip the cost-benefit scales and induce landlords to choose not to evict current tenants. The primary purpose for intervening is to improve the situation of the tenant. But if the landlord chooses not to evict where previously he would have evicted, then HOP’s intervention has also made the landlord better-off. Generally speaking, HOP on a large scale would serve as a kind of insurance policy for tenants at risk of falling behind in their rent — but this would also amount to insurance for landlords against tenant nonpayment. Both parties would benefit.

In other words, HOP’s intervention has a positive effect on the returns to being a landlord, or more generally the returns to owning rental housing. No one knows what the magnitude of this effect is. It is certain, however, that a larger-scale program would have a greater impact on the profitability of building and owning low-type housing. Whether the impact would be appreciable is an open question.

4.4 Housing and the Law

Earlier I mentioned the health and construction codes which regulate the construction and rental of apartment housing. One significant aspect of these codes is that, under current law, tenants who are threatened with eviction for non-payment of rent can sue to forestall that eviction if they can prove that the apartment they rented was in violation of the codes. For example, if there is a family of rats in the walls of the bathroom, the tenant may be legally entitled to remain in their apartment even if they have been delinquent in paying their rent.

In the past HOP has been indirectly involved with legal proceedings of this nature. The Small Claims Advisory Service (SCAS), with which HOP shares an office, occasionally helps tenants win forestallment of eviction on grounds as above. Also, in 2002 a HOP member helped
the Tenants Rights Network of Boston develop a website which informs tenants of their legal rights and helps them find resources and advice.

What the rights of tenants vis-a-vis their landlords should be, is a contentious question. I will set aside the moral question to focus on positive aspects. What are the effects on the housing market of the current allocation of rights, compared to alternatives? What is the impact of programs like SCAS or the Tenants Rights Network?

A first consideration for understanding law and economics is that legal activity per se is rent-seeking activity. Legal proceedings do not generate more goods and services for the people who participate in them. Instead they arrange for some redistribution of values between the involved parties. Law is a essential to a well-functioning society in part because it protects rights which should not be subject to commodification. Law is also important for economic outcomes because it enforces rules that help people cooperate without fear of being cheated. But the courts function best when they achieve those goals simply by creating the threat of legal action, not with time-consuming and expensive litigation.

The laws governing the tenant-landlord relationship currently give expansive protection to the tenant, in some circumstances allowing him/her to stay in their apartment without paying rent. Apparently many evictions can and are legally forestalled because tenants are made aware of this fact and take legal action. What is the impact of increased legal activity along these lines? Such actions are costly for landlords, taking up time and money. If compliance with the codes is cheaper than the costs of litigation (including possible fines) then the landlord will usually comply. But litigation also makes the overall prospect of owning and/or managing low-type housing less attractive. Landlords find that they are forced either to spend money improving their apartments or to let tenants live for free after unfavorable court rulings. Housing units that would be marginally profitable when the level of legal activity is low become unprofitable to operate when legal activity is frequent and will be taken off the market. Investors will be wary of low-type housing when confronted with the catch-22 of expensive code compliance or expensive litigation.

In the end, legal action against landlords benefits the the individual suitors (who often win permission to stay in their apartments) but hurts other tenants who find that the housing stock shrinks while rents increase to cover legal expenses. Therefore, there are negative externalities associated with legal action. These costs are not internalized by individual tenants or their lawyers/advocates because in each particular case they have the welfare of one family in mind. But in aggregate, litigation may impose more costs on low-income tenants as a group than it will capture benefits. From the point of view of low-income families as a group, an increase in legal action may be harmful.

Legal action vs. lending and subsidy is not an academic question. Social workers, including HOP volunteers, face regular choices about whether to pursue a remedial relationship with a landlord or an adversarial one. Both approaches can reap benefits for the individual tenant(s); the difference is in the effect on the landlord’s incentives to provide low-cost housing.
One simple indicator of HOP’s performance is the repayment rate which we get on our loans, or the amount of money that is repaid divided by the total amount lent. Historically our repayment rates have been poor, typically no more than 10% - 20%. Higher repayment has always been a program goal. This begs the question, how much higher? What repayment rate would be “right?”

The quick answer is of course 100%. If we get all our money back every time, then a single donation of $500 can be used over and over again an unbounded number of times. The total impact of the initial $500 would then be almost unlimited. (More accurately, it would be very large but bounded and would depend on the rate at which housing prices increase. See below.) However, I will argue here that this is an oversimplification of the situation, and that the optimal repayment rate may be less than 1.

To understand the reasoning behind an optimal repayment rate you really only need to know two things. First, HOP wants to lend to the neediest families, which are also the riskiest. Second, low repayment reduces the impact we have over the long term. There is an obvious tradeoff here between helping the neediest families, and helping families that will repay us so that we can use our money again. The purpose of this chapter is to capture that tradeoff mathematically and think about what factors might affect the optimal level of repayment.

5.1 Social Welfare

We will start with a simple model of HOP’s preference for helping poorer rather than richer families. Imagine a world populated by \( n \) people; suppose that for each person \( 1 \leq i \leq n \) we denote the income of that person by \( Y_i \). Suppose further that we index persons in order of their incomes, so that \( Y_1 \leq Y_2 \leq \ldots \leq Y_n \).

We would like to have some quantitative measure of the welfare of the group as a whole; we call such a measure a social welfare function. Perhaps the simplest choice of a social welfare function is the sum of individual incomes,

\[
W(Y_1, Y_2, \ldots, Y_n) = Y_1 + Y_2 + \ldots + Y_n
\]

This function defines a preference ordering over all possible combinations of individual incomes. However, this ordering lacks any income-egalitarian tendency, which can be seen from the fact that

\[
W(0, 0, \ldots, n) = W(1, 1, \ldots, 1)
\]

Even more relevant for HOP, a transfer \( t \) of income from a rich person to a poor person reduces social welfare if there is any cost \( c > 0 \) associated with the transfer:

\[
W(Y_1, Y_2, \ldots, Y_i + t, \ldots, Y_j - t - c, \ldots, Y_n)
= W(Y_1, Y_2, \ldots, Y_n) - c < W(Y_1, Y_2, \ldots, Y_n)
\]

This would make any welfare-improving intervention by HOP impossible, since HOP loans always involve some overhead costs. We need to introduce some income-egalitarian feature to our welfare function. One possibility is to make the
welfare function concave in individual incomes (for example, by considering utilities instead of incomes, or by choosing a totally different \( W(\cdot) \).)

An even simpler method that I will use is to weight each individual income \( X_i \) by a factor \( 0 \leq \alpha_i \leq 1 \), and make our first normative assumption.

**Assumption 1:** \( \alpha_i < \alpha_j \iff X_i > X_j \)

This minimal condition places higher weight on changes in the income of poorer people. If we then define

\[
W(Y_1, Y_2, \ldots, Y_n) = \alpha_1 Y_1 + \alpha_2 Y_2 + \ldots + \alpha_n Y_n
\]

we have a social welfare function that can increase with a costly transfer from rich to poor:

\[
W(Y_1, Y_2, \ldots, Y_i + t, \ldots, Y_j - t - c, \ldots, Y_n) = W(Y_1, Y_2, \ldots, Y_n) + \alpha_i t - \alpha_j (t - c)
\]

iff \( \alpha_i > \alpha_j (1 - \frac{c}{t}) \)

Finally, we will be a bit more specific about how we choose \( \alpha \). Let \( \alpha(Y) \) be a strictly decreasing function of \( Y \) that is differentiable (hence continuous), and for any person \( i \) let \( \alpha_i = \alpha(Y_i) \). For any finite collections \( \{Y_i\}, \{\alpha_i\} \) we could choose a function \( \alpha(\cdot) \) that “fits” these points. So this is a reasonable extension from our discrete model to a continuous analog. I will in particular require that \( \alpha : \mathbb{R} \to [0,1] \) is onto, i.e. it spans its entire range; this requires that \( \alpha(0) = 1 \) and \( \alpha(1) = 0 \).

### 5.2 Probability of Repayment

Consider a household that borrows from HOP. To justify HOP’s lending, we have argued that this household may be *credit-constrained*, which means that they can only pay bills if they have cash on hand to do so. If a family is credit-constrained before they borrow from HOP, they will still be credit-constrained after they borrow from HOP. This means that they will only be able to repay their loan if they have cash available to do so. If we think that households have financial ups and downs — which are called positive and negative shocks — then there is some probability less than 1 that the household will do well enough after the HOP loan to be able to pay it back. Formally, if we think about household wealth as a random walk, as in section 1, then we can associate some probability less than 1 with the event, “the family is able to repay.”

However, a family that is able to repay does not necessarily do so.

Suppose that HOP has no means of enforcing repayment; we do not take clients to court, we do not put comments on their credit histories, and we have no other leverage on our client. Traditionally this has been the case with almost all HOP clients. Clients will only pay back if they feel morally or subconsciously obliged to do so, and if that impulse is stronger than the desire to use $500 for themselves. Different people will behave more or less morally in this situation, but thinking about the population as a whole, call \( 0 \leq \delta \leq 1 \) the probability that a person will pay back a loan that they can afford to repay. Formally, \( \delta = P(\text{repay loan} \mid \text{able to repay}) \). It is here that we make our second ideological assumption:

**Assumption 2:** \( \delta \) is independent of \( Y \).
people. Put in the same situation, and facing the same external incentives to repay $500, rich and poor people are equally likely “do the right thing.” To explain repayment rates, then, we have to think about other things: external incentives to repay, and ability to repay in the first place.

We will return in section 6 to discuss ways of enforcing repayment, but for now fix $\delta$, and let vary the ability of a client to repay a loan. If $r = P(\text{able to repay})$ then

$$P(\text{repay loan}) = P(\text{repay | able}) P(\text{able}) = \delta r$$

From the law of large numbers it follows that over many loans the average repayment rate will be close to this probability. We will therefore think of the quantity $\delta r$ as the average repayment rate on HOP loans.

What determines the probability $r$ that a family will be fiscally able to repay a loan? Roughly speaking, $r$ depends on the possible combinations of incomes and expenses that the family might have, and the probabilities of each. We will abstract away from all this detail and think about $r$ as an increasing function of $Y$, household income. Households with higher incomes are more likely to be able to repay, households with lower incomes less likely. Let $r = R(Y)$ with $R'(Y) > 0$. $R$ is strictly increasing and hence invertible, and we have

$$r = R(Y) \text{ s.t. } R'(Y) > 0$$

$$\alpha_i = \alpha(Y_i) \text{ s.t. } \alpha'(Y) < 0$$

$$\Rightarrow \text{define } \alpha(r) = \alpha(R^{-1}(r))$$

Then $\alpha'(r) = \alpha'(R^{-1}(r)) \frac{d}{dr} R^{-1}(r) \leq 0$, so $\alpha$ is a decreasing function of $r$. Intuitively, people who are more likely to be able to repay are also wealthier and thus do not receive as high a weighting in our social welfare function.

5.3 Optimization

We have now finished all the work we need to set up an objective function for HOP.

Suppose that on average HOP’s loans provide a benefit $B$ to the recipient family, and that this $B$ does not depend on income levels. We can think about $B$ as the utility of not being evicted, with all its component parts: not losing a job, not having to take kids out of school, etc. A HOP loan also provides a benefit $D$ to the client’s landlord, who does not lose rent money that he/she is owed and does not have to go through the process of screening potential replacement tenants. The total benefit from a single loan, weighted according to our social preferences, is therefore

$$\alpha(r_{\text{tenant}})B + \alpha(r_{\text{landlord}})D$$

If each loan is repaid with probability $\delta r$, and if we start with enough capital to make one loan, then the total number of loans that can be made over time is

$$1 + \frac{1}{\delta r} + \frac{1}{(\delta r)^2} + \frac{1}{(\delta r)^3} + \ldots = \sum_{k=0}^{\infty} \left( \frac{1}{\delta r} \right)^k = \frac{1}{1 - \delta r}$$

If we also consider that housing prices rise over time, then we should adjust this figure downward slightly. Let $i$ be the percent increase in housing costs during the time it takes to issue and collect repayment on one loan. Then (assuming loans
increase in size to match housing prices) the total number of loans made will be
\[ \sum_{k=0}^{\infty} \left( \frac{1}{\delta r(1 + i)} \right)^k = \frac{1}{1 - \delta r(1 + i)} \]

It is easy to see that if all we cared about was the number of loans issued, we would want to set \( r \) as high as possible. If we want to maximize the social impact of our lending, however, we have to maximize the total impact of our initial capital:
\[ I(r_{\text{tenant}}) = \frac{\alpha(r_{\text{tenant}}) B + \alpha(r_{\text{landlord}}) D}{1 - \delta r_{\text{tenant}} (1 + i)} \]

To simplify the math that follows, I will make the assumption that \( \alpha(r_{\text{tenant}}) \propto \alpha(r_{\text{landlord}}) \), which seems reasonable since richer tenants are likely to have richer landlords. This lets us express the numerator as \( \alpha(r_{\text{tenant}}) \tilde{B} \) where \( \tilde{B} \) is some other constant. The problem is now
\[ \max_r I(r) = \max_r \left( \frac{\alpha(r) \tilde{B}}{1 - \delta r(1 + i)} \right) \]

where by \( r \) I mean \( r_{\text{tenant}} \). The first-order condition is
\[ \frac{\alpha'(r) \tilde{B}}{1 - \delta r(1 + i)} + \delta (1 + i) \frac{\alpha(r) \tilde{B}}{(1 - \delta r(1 + i))^2} = 0 \]
\[ \Rightarrow (\alpha'(r))(1 - \delta r(1 + i)) + (\delta (1 + i)) (\alpha(r)) = 0 \]
\[ \Rightarrow \alpha'(r) = \frac{\delta (1 + i)}{\delta r(1 + i) - 1} \]

Note that for an optimum to exist, it must hold that \( \delta r(1 + i) < 1 \). If so, both sides are negative and
\[ -\frac{\alpha'(r)}{\alpha(r)} = \frac{\delta (1 + i)}{1 - \delta r(1 + i)} > 0 \]
and thus
\[ -\frac{\alpha'(r)}{\alpha(r)} = -\frac{d}{dr} \log(1 - \delta r(1 + i)) \]
\[ \Rightarrow \frac{d}{dr} \log(\alpha(r)) = \frac{d}{dr} \log(1 - \delta r(1 + i)) \]

Substitute dummy variables and integrate both sides:
\[ \int_0^r \frac{d}{du} \log(\alpha(u)) = \int_0^r \frac{d}{du} \log(1 - \delta u(1 + i)) \]
\[ \Rightarrow \log(\alpha(r)) - \log(\alpha(0)) = \log(1 - \delta r(1 + i)) - \log(1) \]

Since we assumed \( \alpha(0) = 1 \), this implies
\[ \alpha(r) = 1 - \delta r(1 + i) \]
or
\[ r^* = 1 - \frac{\alpha(r^*)}{\delta (1 + i)} \]

Now recall that \( r \) is the probability that a client is able to repay, and that the actual observed rate of repayment is the product \( \delta r \), so that optimal observed repayment is
\[ \delta r^* = \frac{1 - \alpha(r^*)}{1 + i} \]

The numerator is less than 1, and the denominator is greater than 1, so the entire expression is less than 1. In other words, the repayment rate that maximizes HOP’s social impact is less than 100%.

The intuition here should be clear. We have assumed that HOP can only raise it’s repayment rate only by lending to people who are more likely to be able to repay. In other words, we have held constant people’s willingness to repay if they are able. We also suggested that people who are more likely to be able to repay, are also less needy. Under these assumptions, the repayment rate that maximizes HOP’s social impact is less than 100%, reflecting a tradeoff between higher repayment and targeting the neediest.
5.4 Comparative Statics

In this section we consider how the optimal repayment rate changes with changes in $\delta$ and $i$. Because we defined $r^*$ implicitly, none of these are obvious. In fact, without making some assumptions about $\alpha(\cdot)$ these changes are of ambiguous sign.

Rewrite (1) as

$$(1+i)\delta r^* = 1 - \alpha(r^*)$$

Then differentiating with respect to $\delta$ gives

$$(1+i)r^* + (1+i)\delta \left( \frac{\partial r^*}{\partial \delta} \right) = -\alpha'(r^*) \left( \frac{\partial r^*}{\partial \delta} \right)$$

and therefore

$$\frac{\partial r^*}{\partial \delta} = \frac{-(1+i)r^*}{\alpha'(r^*) + (1+i)\delta}$$

The denominator could be of either sign, so the effect of changing $\delta$ on $r^*$ is unclear. Similarly for $i$,

$$\frac{\partial r^*}{\partial i} = \frac{-\delta r^*}{\alpha'(r^*) + (1+i)\delta}$$

and the sign is ambiguous.

6 Group Liability and Individual Incentives

Our conclusions about what level of repayment to aim for were based on a given probability $p$ that the client will be able to repay but will choose to default. Minimizing this chance is a separate but important program objective. It is acceptable for HOP to take risks on truly needy individuals, and expected that they will at times be unable to repay; but it is unacceptable for clients who could pay to instead default, and thus drain money out of the loan cycle. It is therefore critical for HOP to establish incentives for individuals to repay if they are able.

In the past few years HOP has sought to encourage repayment by building closer relationships with clients, assigning a volunteer specifically to each client and arranging follow-up meetings to check in on the clients progress. We have also tried to play "good cop, bad cop" with our clients by emphasizing that their loan officer is advocating for them to the rest of the group, which is likely to be more skeptical. This trust-building approach to collecting repayment has produced weak results. One interpretation has been that clients associated HOP with Harvard and that this association overwhelmed any sense of trust or obligation that might otherwise have developed.

There have never been tangible incentives for individuals to repay HOP. Our founders made an ideological commitment to forego the enforcement methods used by commercial lenders, such as legal suit or foreclosure on collateral. Realistically, legal enforcement is probably too expensive anyway: the costs of using courts are probably fixed and high relative to the amounts we typically lend. Lawsuits would ever return enough cash to justify the time and expense involved. Further, we choose as a matter of integrity not to threaten our debtors with legal actions which we will in reality never take - whether or not such cheap talk would have an impact.

In the past this has left our clients with little reason to repay their loans other than personal ethics, and as discussed the perceptions of HOP and Harvard have weakened that motive consid-
erably.

One alternative both to formal enforcement systems and to case-by-case trust-building, is to leverage trust where it already exists. This means working with pre-existing informal institutions and social networks that exhibit an ability to cooperate without the use of formal institutions. In fact, microfinance programs in the developing world work in this way. The prototypical scheme is one of group liability. Typically, a microfinance bank will issue a loan to a local group of anywhere from five to twenty or thirty people, who divide the funds amongst themselves. The group as a whole is then responsible for repayment. Groups form spontaneously, and they tend to pool applicants with similar risk characteristics ex ante. This is because relatively "safe" individuals will not want to be pooled together with "risky" applicants for fear of ending up liable for their neighbor’s prodigality. Similarly, because the group is collectively responsible ex post, each member has an incentive to force his neighbor to pay up; otherwise he is left holding the bill. The resulting interdependence has yielded impressive results and made microfinance the darling of developmental theorists.

Microfinance in the developing world depends on the promise of future loans as an incentive. Group members pressure each other to repay because they want to preserve their own future access to credit. In the case of entrepreneurial loans, there is a high likelihood that the client will need additional capital in the future to further expand and develop his/her business. Repaying each loan ensures the subsequent availability of capital. This is analogous to the concept of a "credit history" in the United States.

HOP can potentially combine the principles of group lending and reputation-building to create a forceful incentive scheme. However, because of the urgent needs of our clients facing eviction, it is impractical to try to gather a group of clients together for a spontaneous group loan. And such a group would have little internal consistency, little "social capital," which members could use to force others to repay. Instead, HOP should seek out an established group of tenants who are all potential clients. This group should have some form of leadership or representation that can be relied upon to act in the best interests of the group. They might do so because of altruistic motives, or alternatively because members of the group could provide them with compensation for their help. A leader must benefit in some way from HOP loans to the group so that he or she has an incentive to maintain a good relationship with us.

A leader should also be well acquainted with the situations of individual group members. The leader must help HOP overcome the informational asymmetries inherent in lending to first-time applicants. This is particularly important because our groups are not formed spontaneously, as in 3rd world microlending, and so groups will not have homogenous risk characteristics.

In a prototypical partnership arrangement, HOP would provide a financial commitment, a promise to provide up to $X per year in loans to members of the group. In exchange, we would require that the group’s leaders 1) screen applications and ensure accuracy of information, 2) use internal sanctions to force group members who receive loans to repay, and 3) help HOP maintain contact with clients through the entire
loan and repayment process. If the leader failed to meet these conditions, HOP would scale back or terminate the partnership.

This threat to leave is critically. It implies that future HOP loans to other members of the group are contingent on the repayment of current loans. Even if the actual recipient of a loan deemed it unlikely that he or she would need another loan, other tenants would then have cause to pressure them to repay. And at the end of the year HOP officials can sit down with group leaders, compare their performance with other partners, discuss successes and failures, and then decide whether or not to renew the partnership. Thus, in order to make the incentive scheme work HOP must be perfectly willing to break off a partnership if repayment is not rendered. If the loss of future credit is seen as a non-credible threat, the incentives fail. This is the rationale for partnering with multiple tenant groups, giving HOP the ability to sever any one particular tie without drastically reducing the number of clients we serve.

What kind of “groups” might work well for such a lending model? Some of the important factors to consider are 1) the political power of the leadership and its ability to act in the best interest of the group; 2) administrative capabilities of the group, as they pertain to HOP’s obtaining accurate application information and remaining in contact with current clients; 3) the risk/need tradeoff and likely annual need for credit that the group exhibits. The range of groups deserving consideration is broad: tenant groups, churches and temples, all the clients represented by a single caseworker, all the tenants of a single landlord, etc.