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Asset Depletion Among the Poor: Does Gender Matter?
The Case of Urban Households in Thailand

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I. Introduction

During periods of recession and economic crises our economic well-being
deteriorates in many familiar ways. Unemployment, stagnant wages and a growth of the
informal sector are usually coupled with government budgetary cuts. Faced with
increased economic insecurity, people are "silently" called upon to expand their
production work within household care economy, filling thus the gaps that market
retrenchment and decrease in government provisioning create. As numerous studies have
demonstrated by now, the burden of adjustment is not gender-neutral; rather, women,
especially in poor households disproportionately shoulder this burden (Lourdes Beneria
and Shelley Feldman 1991; Pamela Sparr 1993; Nilufer Cagatay, Diane Elson and Caren
Grown 1995; UN 1999).

One important dimension of the impact of economic fluctuations on economic
well-being that has remained less visible is the change in the level and composition of
household assets. Under economic duress, people are prone to sell or pawn assets they
possess in order to survive or to help smoothen their consumption. This too, it will be
argued, is not a gender-neutral phenomenon. If so, then economic hardship, whether
brought about by individual misfortune or by macroeconomic processes, is likely to
affect men and women differently. This paper, which uses a sample of 270 individuals
drawn from a survey of 152 households in three low-income communities in Bangkok,
will show that asset depletion among urban poor households in Thailand exhibits a
gender specific pattern.

Such a differentiated effect has the potential of creating trajectories that magnify
the gender gap above and beyond the immediate time grid of the crisis. First, the upturn
may find women with a sizable depletion of a particular class of tangible assets, that
which enabled them in the first place to participate as self-employed workers. A second
possible effect is also of importance. Given the low level of asset ownership among poor
households, it may be the case that even small, newly created, asymmetries between men
and women due to asset depletion lower substantially women's "voice". Ill equipped and
shortchanged, women may be disadvantaged or unable to partake in any recovery.

This paper joins in the recent efforts in the literature (Cheryl Doss 1996; Carmen Diana Deere and Magdalena Leon 2001; Agnes Quisumbing and B. de la Briere 2000; Nancy Jianakoplos and Alexandra Bernasek 1996) to investigate gender differences in asset ownership and depletion. In particular, we explore analytically and empirically this type of gender inequality among urban couples of poor households in a developing country, Thailand. The paper seeks to explore the following: 1) is there a gendered pattern of asset ownership among husbands and wives; 2) during times of crises, is there a gendered pattern of asset depletion; and 3) does asset depletion affect men and women differently in regards to their income earning capabilities?

Answers to these questions are especially important as they shed light on the form of coping mechanisms poor households adopt but also on the differential impact such strategies have on women and men. The latter is of significance in understanding intra-household bargaining and power processes. As Amartya Sen's "missing women" brought into sharp focus, being poor does not warrant equitable access to the few available opportunities and entitlements nor evenhandedness in the sharing of burdens and reproductive unpaid labor (Amartya Sen 1999).

A. The Role of Assets in Economic Well Being

It has been argued by feminist economists that any economic inquiry should be done around the concept of the provisioning of human life[2]. Accordingly, the economy can be conceptualized as providing the necessities and conveniences people need in order to nurture and develop their human capabilities (such as food, education, sanitation, childcare, healthcare and housing). The provisioning of these needs may occur through market work, unpaid household work and volunteer work as well as through the government. Economic production that satisfies the material needs of human beings, therefore, takes place in four interconnected sectors namely, in the household sector, the government (public) sector, the volunteer sector and the market sector. If one were to ask "who gets how much" and "which economic sector provides" these necessities and conveniences, one would find extreme variations and asymmetries on the basis of one's country, class, ethnicity, gender and race.

The focus of this paper is on a particular gender asymmetry that, in our view, deserves more attention, namely household asset accumulation and depletion. Economic well being is determined not only by material consumption level but also by the security or risk of maintaining the same level in the future. Thus, any inquiry on well being must take into account the pattern of asset accumulation due to the important role of assets, both financial and tangible, in future earnings and in consumption smoothing. Since households are non-unitary, we also need to understand the gendered pattern of asset ownership and depletion in households.

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[2] See Marianne Ferber and Julie Nelson 1993; Nilufer Cagatay, Diane Elson and Caren Grown 1995.

Accumulated assets may serve as a means of luxury consumption and enjoyment. Often, they serve as resources that can generate income other than what is earned through employment. This is the case of productive, financial and tangible assets that yield a rate of return in the form of interest, profits or rent. Likewise, assets can serve as a buffer to help smooth consumption often referred to as precautionary savings.

Accumulation of financial assets is rare among poor households. Most of their assets are tangible, usually in the form of basic durable household items such as refrigerator or television, and investment goods used for income generating activities such as sewing machine, vendor cart and ice chest. Thus, precautionary saving among the poor may take on the guise of tangible assets, either because financial services are inaccessible or because this specific *form* of asset enables the owner to have direct control over its use.

During precarious economic times, the importance of assets, both as a source of income and as a buffer, becomes magnified. Under harsh conditions, one would expect the second role – that of consumption smoothing – to dominate over the first one. The subsequent liquidation of an asset, particularly one that is used for income generation, tends to increase the vulnerability of the household. The pawning of a sewing machine, for instance, may suggest the end of home based subcontracting work; a rickshaw or a stove, if sold, may imply a drastic reduction in income, forcing the family to shifts from near poverty status to one of starvation.

Ownership, access to, and control[3] over decisions on how to use accumulated assets (financial and non-financial ones) have a direct impact on a person's economic status, autonomy, and economic well-being. Differences in asset holdings matter especially if asset holding influences not only status or increased bargaining power within the household, but also a person's ability to earn income. In Thailand, for example, women comprise the majority of the self –employed particularly in the informal sector (Anant Pichetpongsa, 2004; Aphitchaya Nguanbanchong, 2004) and therefore have a greater need for productive assets, more so than men. It follows that asset depletion is likely to have a differentiated impact on women and men's future earning capacity.

Among couples, tangible assets may be pooled/jointly owned or individually owned. In those cases where assets are pooled, the issue of bargaining and negotiation in the use of assets for women's enterprises becomes relevant. But when assets are not pooled, the question of whose assets are used for consumption smoothing and in what proportion becomes pertinent. If women's assets are depleted more often than those of men and women have greater need for productive assets given the nature of their employment, then the impact of asset depletion is likely to be greater on women's ability to earn income than on men's. In other words, loss of productive assets will have a deleterious effect on the household. But on a woman, it will have two specific effects; it will remove the very basis of self-employment and her ability to generate income and it

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[3] The complexity of the idea that ownership of an asset does not immediately translate into control over its use is explored in Bina Agarwal (1994) and Naila Kabeer (1999)

will decrease her bargaining power because both her income will disappear at the present time *and* her future prospects to generate income will have diminished.

Although gender based differences in asset ownership may be due to customary inheritance or state laws, they are likely to be influenced by differences in earnings and levels of job security. One also needs to consider gender role effects, which may likely account for differences in priorities and motivations that men and women have when it comes to saving, spending and accumulating. The gendered effect of economic fluctuations on asset ownership can be therefore attributed not only to the division of labor and external economic shocks but also to a host of norms that govern property relationships. Norms that are imposed as well as those fully internalized by men and women affect the pattern of accumulation as well as depletion of assets.

B. Rethinking the Meaning of Assets in the Context of Poverty

One of the ideas widely ascribed to within feminist economics is the *context specific* validity and the *non-neutrality* of economic categories that we use everyday and in conducting research (Julie Nelson 2003; Cagatay, Elson and Grown, 1995). Our study of asset ownership among women and men in urban poor households in Thailand points out that identical physical characteristics of an asset may correspond to very different *functions* that the asset plays in one community versus another, thus defying standard notions or categories in the field of Economics.

In particular, our findings invite some rethinking of the savings- investment (goods) -(durable) consumption goods- nexus. These may be viewed as either discrete and detached entities *or* as a continuum in which case the mutually exclusive nature of these categories become somewhat blurred. Among poor households, for example, stockpiles of cans of food intended for resale, originally an investment, become a "liquid" tangible household asset that can be used for consumption smoothing purposes.

Savings also can take the form of "luxury" consumption such as a television set or a radio which at the surface may seem extravagant for a very poor household. But television sets and radios can be easily pawned and used as collateral since the very poor coexist with folk at near poverty and less worse off who readily provide demand for such items. They are also a much safer and useful form of savings in the face of currency devaluation and/or lack of access to banking services. Other forms of savings such as jewelry for example, can be an embodiment of differential control dictated by prevailing norms (Siwan Anderson and Jean-Marie Baland 2001). Indeed, the social relations within which these assets are accumulated and, above all, their intended use define the form and manner of asset ownership.

III. Empirical Analysis

The above discussion suggests that there are gender-related issues that lead to differentiated patterns of asset ownership and asset depletion by women and men. At the

same time, we have suggested that the intended use of these savings and assets influences their asset selection. Poverty, job insecurity as well as control over asset use are likely key factors that determine the asset composition and levels held by urban poor women and men.

The data we use in this paper are both quantitative and qualitative. This information is drawn from a random sample of 152 urban, low-income households in Bangkok (Thailand) in 2002[4]. The multi-purpose survey includes information at the level of the individual respondent on accumulated tangible or physical assets as well as the status of those owned assets six months later. Thus, data are provided for total owned assets and the ratio of pawned or sold assets to total assets owned at the beginning of the period. For our purposes, we focus our investigation on a sub-sample of 135 couples households, with and without dependents. (See Appendix A for characteristics of total sample households). Both husband and wife were interviewed separately and the data gathered from the multi-visit interviews include pertinent household and individual information (see Appendix B), employment, credit as well as household decision making issues, division of tasks and earnings allocation for various expenses.

The average household monthly income for the sub-sample couples data set is roughly 15,553 Thai Baht, or equivalent of $353. (Appendix A) The mean age of the sample respondents are around 42 years old. Women survey respondents, on average, attend 5.42 years in the Thailand school system, compared to men's (6.73 years). The average individual monthly work income is 6,380 Baht, or equivalent to $152, with women earning less on average (4, 885 Baht) than men (7, 969 Baht). (See Appendix B). In terms of employment status, a greater proportion of men were engaged in formal sector, regular wage employment than women. Women, on the other hand, tend to be employed more as contracted or casual home-based workers and as self-employed in the informal sector, compared to men.

A. Gendered Patterns in the Composition and Level of Assets

1. Ownership of Real Assets

Our empirical study will focus on the total physical or tangible assets held jointly and separately by heads of households and spouses, within each household in the Thailand sample. These consist of the following categories: land (in the rural areas), housing, household appliances, jewelry (especially gold), shop or business assets (e.g. sewing machines, barber, leather or jewelry making tools, machine equipment, etc) and transport vehicles (e.g. vending cart, bicycles, truck or car). Interestingly, although more than half

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[4] The data used for our analysis were collected in three urban poor communities in Bangkok during June - September 2002 by American University researchers in cooperation with HomeNet, Thailand, a network of women's and community development organizations. The sample is random in that every sixth household in the community roster (most recent) list was chosen for the interview. The selection of the low income communities was based on the following three criteria: a) representativeness of the population in the Bangkok Metropolitan area, b) presence of informal sector workers particularly home-based ones, and c) contacts with the community leaders and/or members who can help facilitate our entry into the community and the survey of its residents.

of the sample households own the dwelling that they occupy, only a small proportion reported the current house dwelling as an asset. Household appliances, jewelry, shop or business-related assets, e.g. tools, sewing machine and transport vehicles comprise what is referred physical or real assets .

An important caveat to note is that there are both joint as well as individually held assets. There is a general absence of well-defined property rights among urban poor households in Thailand. Although the concept of ownership was explained to the respondents prior to the saving and asset interviews, the majority of those interviewed had not even thought of the issue of ownership seriously. Hence, sole or joint ownership of an asset e.g. appliance, land or housing was based primarily on their perception. The informality of the economy in which many of the poor conduct their day-to-day affairs also implies that the issue of ownership cannot be established solely on the basis of legal contracts or proof of ownership.[5]

[Table 1 about here.]

Table 1 shows the participation or ownership rate of physical or real assets by men and women in urban, poor households. Assets that are individually owned include jewelry, shop/business assets (in cases of single owner business) and most vehicles. Assets that were jointly owned by the head and spouse include land, housing, appliances and some means of transport.[6] There is higher ownership rate of jewelry and business-related assets by women while men have higher ownership rate in transport or vehicle assets. These results may be explained by the nature of employment or income earning activities that these respondents were engaged. While a very small proportion of women (0.7%) are not currently employed, majority of them (92.7%) work in the informal sector, mostly as subcontracted or temporary home-workers , others as self-employed . The latter typically are involved in small, mobile shops or business enterprises that involved some fixed capital e.g. sewing machine, tools, food vending cart, etc. In contrast, 68.9% of men respondents in the same households work in the formal sector as regular workers.

The mean value of total real assets owned by women, whether pooled or not, is higher than that owned by men, although in terms of median value, women's real assets are lower compared to men's. The difference in the distribution of specific types of assets among the poor reflects the variations in the depth of poverty that different groups of poor people experience and the importance of understanding *the processes* through which individuals and households become or remain poor.

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[5] In sum, the responses to the survey questions reflected both the informal basis of ownership (e.g. "I bought this vehicle or watch with my own business earnings") and the respondent's perception in terms of his/her access to and control over the use of the asset ("we both live in this house therefore we both own it").

[6] Valuation of joint assets were reported by the head and spouse separately; any (slight) difference in the reported value reflects the difference in their estimations.

2. Patterns of Asset Depletion by Pawning or Selling.

The prevalence of durable goods assets and their intended use –that of smoothing consumption or meeting specific household expenses- raises several interesting observations. First, the standard notion that real or tangible assets are less convertible, illiquid and less divisible compared to financial or intangible assets does not necessarily hold. Convertibility, liquidity and divisibility are considered important properties of financial assets that make them clearly desirable, only when financial systems provide services that are easily accessible and are suited to the needs of the general population.

The frequency of turnover or relatively shortness of the period in which tangible or real assets are held by poor households in the survey demonstrates that certain assets can and do serve the function that financial assets typically provide, namely to make payments at relatively little cost or delay. Secondary markets for used vehicles, jewelry, watches and appliances tend to be prevalent in low income areas so that there are enough suitable buyers who can be located promptly. As a result, such assets can be sold immediately or serve as collateral that can be pawned. As it turns out, the seller experienced relatively minimal loss of value and oftentimes did not engage in costly and time-consuming search. In the case of pawning, however, the pawnee often lose significant value in return for keeping the option of redeeming the asset.

Second, people in poverty, who have small amounts of savings to begin with, choose to hold assets that can serve a dual purpose – present consumption and precautionary savings. The desirability of tangible or real assets such as jewelry and appliance, as oppose to intangible or financial assets, is that they function as store of value that can be converted into cash to meet future consumption and at the same time, help meet present consumption needs. In the case of transport vehicles and business/tools, these assets serve both current investment and (precautionary) saving purposes. The clear distinction made between consumption and savings categories does not seem to apply in the case of assets among the poor and therefore, consumption and saving cannot be viewed as polar opposites.

[Table 2 about here.]

Family members of urban poor households in Thailand, particularly women, transform or convert certain physical assets they own into money frequently. Table 2 brings into focus the pawning rate and asset depletion in the subsample. We can observe from the data that women pawn or sell their real assets more so than men do. This leads to a decline in their assets, both in absolute and relative terms. Women pawn their jewelry assets three times as much as men. Even more importantly, shop-assets are pawned or sold almost exclusively by women. We find no gender-based difference in the depletion of appliances and transportation vehicles assets, however since these comprise some of the tangible assets jointly owned by husband and wife in the household.

[Table 3 about here.]

There are several reasons why men and women pawn or sell their assets. These include: a) for food and household emergency repairs, b) education expense, c) family or special event, d) migration, and e) other reasons. Overall, as Table 3 shows, the majority of the assets that was either sold or pawned were for food, education and some family event, e.g., funeral, wedding, etc. We conjecture that the gender ascription of women as the primary caretakers of households leads them to internalize their responsibility of household maintenance in terms of raising the necessary cash to meet subsistence needs. This task is even made more onerous when economic and employment conditions bring about greater job insecurity and earnings uncertainty.

In the case of Thailand, the effects of the 1998 financial crisis had lingered in terms of greater informalization of employment and increased volatility in earnings. Accumulation of assets is therefore done with the expectation that these assets can and will be used in the not-too-distant future for consumption smoothing. Another plausible reason is that, in cases where negotiation and bargaining between head and spouse had occurred, the household head, typically men, would have a greater say in whose assets (or savings) should be used first. Women pawn or sell their jewelry more often for food provisioning of their family, at one and a half times than men do; for their children's education at nearly twice men's rate, and for family events, at two times the rate men do. (see Table 3). Overall, the rate of asset depletion, defined as the share of pawned or sold real asset to total owned asset, is higher among women than men as shown in Table 4.

[Table 4 about here.]

The following section empirically examines the varied factors that may affect the gendered pattern of asset depletion and whether there are any significant differences in asset depletion between men and women in the same households. This gender differentiated pattern is important because it is reasonable to assume that asset ownership impacts on the individual's, particularly the woman's, sense of independence and on his/her economic well-being.

B. The Determinants of Asset Depletion Rate

The extent to which a member of the household depletes his/her assets depends on a variety of household and individual characteristics as well as social factors. These include household composition, social or gender norms which are manifested in gender roles performed by the individual within the household as well as factors that may affect the person's decision making power. We perform in this section of the paper two econometric tests namely: 1) a Tobit analysis in determining the rate of asset depletion, and 2) a Probit analysis in determining the probability of pawning or selling a business-related asset as well as real assets.

Prevailing social and gender norms influence the pattern of asset rate of depletion. Although the labor force participation of women in low-income households tends to be nearly as high as that of men, market work is still perceived to be the primary role of men

(Anant Pichetpongsa 2004, Aphitchaya Nguanbanchong, 2004) and that of household maintenance and childcare to be women's principal work domain. These distinct social constructs imply that women, in striving to meet their household maintenance and caregiver roles, are more likely to sell or pawn their assets for consumption smoothing and to meet special household needs.

Household composition, particularly the presence of children, may also play an important role in the rate of asset depletion. Given the intensive nature of children's expenses particularly education, demands on asset resources when schooling starts may be high, increasing the likelihood of selling or pawning one's assets. Educational attainment is yet another factor that may influences an individual's tendency to sell or pawn asset. Those with more education may have higher expectations in terms of their children's future or in terms of meeting minimum consumption needs, even when incomes are low.

The importance of social networks needs to be taken into account as well. Some communities tend to maintain stronger social and community ties than others, creating a tendency for work sharing and extended family networks that provide assistance to a household. The absence or weakening of such ties or mutual assistance mechanisms in more individual-oriented neighborhoods suggests a greater compulsion for those households to either rely on their own members' labor or owned assets during times of need.

In the absence of any substantial public transfers or social safety nets, e.g., pensions or public healthcare, private transfers such as remittances may also influence the rate of asset depletion. As private transfers such as remittances increases, the incidence of pawning or selling of asset is likely to decrease.

At the same time, an individual's contribution to household earnings may influence her/his relative bargaining position in the household—particularly in those areas that are subject to negotiation (Susan Fleck 1998, Bina Agarwal 1994, Martha Roldan 1988). Whose asset is sold or pawned during time of need may be an area more open to negotiation than decisions such as choice of residence, etc. When an individual contributes a larger share of income to the household, he/she potentially wields greater influence.

The rate to which an individual will sell or pawn his/her asset, P_{ij}, is influenced by the above factors and is expressed in the following reduced form equation:

$$P_{ij}^* = X_{ij}\beta + Z_j\gamma + \varepsilon_{ij} \qquad (1)$$

where:

$$P_{ij} = \begin{cases} P_{ij}^* & \text{if } P_{ij}^* > 0 \\ 0 & \text{otherwise.} \end{cases} \qquad (2)$$

X_{ij} and Z_j are vectors of observable characteristics at the individual and household levels respectively, which influence the rate of asset depletion. Both β and γ are unknown parameters to be estimated. The random error term, ε_{ij}, has two components:

$$\varepsilon_{ij} = \eta_j + \mu_{ij} \qquad (3)$$

where η_j is the unobserved household-specific effect, and μ_{ij} a random individual term uncorrelated with the household error component. Since our data contains both husbands and wives, the error terms are not independent across individuals leading to biased standard errors for the coefficient estimates. Consequently, we obtain unbiased estimates of variance by calculating robust (Huber/White) standard errors.

The individual-level independent variables, X_{ij}, in the Tobit Model I are the following: a) gender (Female), b) educational attainment represented by years of schooling and c) a proxy for the individual's bargaining power namely, the individual's income contribution to household income.[7] The household-specific variables, Z_j include: a) household composition, particularly the number of children, b) total household educational expenses, c) private transfers and d) social and gender norms prevailing in the household represented by the dummy variables for whose earnings are used for household expenses. The latter serve as a proxy for gender/social norms that may influence income allocation patterns. Two other variables are added namely a dummy for whether the pawned or sold assets are jointly owned or not. Another dummy represents community neighborhood sites.

[Table 5 about here.]

The regression results are presented in Table 5. As expected, the gender coefficient is significant and shows that women in the urban low income households tend to deplete their assets at a faster rate than men by 26.3 percentage points.[8] The rate of asset depletion tends to increase by 64.2 percentage points if assets are jointly owned. The marginal impact of the proxy variables for social/gender norms show that the rate of asset depletion increases significantly by 38 percentage points if the earnings of the individual solely is used for household expenses and by 27.9 percentage points if joint earnings are used. Educational attainment and household educational expenses as well as proxy for bargaining power, on the other hand, did not seem to have any significant

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[7] There may be potential endogeneity between the rate of asset depletion and the individual's earnings share of household income if the rate of asset depletion affects the level of income of the individual.

[8] The marginal effects estimates are very close to the regression coefficients in the Tobit model. They are calculated at the mean values of the independent variables.

effect on the dependent variable. This may be partly due to the generally low levels of schooling among workers in our sample.

Two Probit models are estimated next in order to determine the effects of various individual and household characteristics on the probability of pawning or selling real assets (Model II) and more specifically, business-related assets (Model III). In addition to the individual and household characteristics, e.g., a) gender, b) educational attainment, c) private transfers (remittances), d) household composition (number of kids), and e) social/gender norms (whose earnings are used for food), e) other daily household expenses) and f) the individual share of household earnings, we add two exogenous variables namely. These variables, namely: g) business ownership type and h) degree of informality of the job, attempt to capture the specific circumstances that additionally motivate or enable the individual to pawn or sell his/her asset. Persons who own their business solely are likely to have a greater need for real assets, whether as collateral for loans or as productive assets that can be directly used as durable capital, e.g., sewing machines or vendor carts. Thus one would expect that the probability of pawning or selling a real asset, specifically a business related asset, is lower for them. Employment that is highly informal or less secure is likely to increase income fluctuations and therefore leads to greater need for resources to smoothen the household consumption.

[Table 6 about here]

Table 6 presents the regression results for Probit Models II and III. In both models, the significant gender dummy coefficients show that women have a higher probability of pawning a real asset as well as a business asset, compared to men. The informality of jobs, educational attainment and private transfers do not seem to have any significant effect on the dependent variable as with the number of children and proxy for bargaining power. Owning one's business solely, however, seems to increase the probability of pawning or selling a business-related asset, by 16.5 percentage points.[9] The results in Table 6 also show that the pattern of earnings use has a significant effect on pawning or selling an asset probability. If the individual makes use of his/her own earnings for daily household expenses such as food, then the probability increases by 31.2 and 23.0 percentage points in Model II and Model III estimations respectively. The marginal effects are significant but slightly smaller if joint earnings were used, with 20.9 and 15.9 percentage points in Model II and III estimations respectively.

C. Effect of Asset Depletion on Earnings

Among Thailand's urban, low-income population, women tend to comprise the majority of the self-employed in the informal sector and therefore have a greater need for access to real assets for credit collateral and for income-generating productive assets, more so than men. Therefore, in some sense they need to accumulate and hold more assets in order for them to contribute directly to household income. It therefore follows

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[9] Note that, as with the Tobit analysis, the coefficient estimates in probit models do not reflect the marginal effects. The latter are computed and discussed in the text. The marginal effects are evaluated at the mean values of the independent variables.

that asset depletion is likely to have a differentiated impact on women and men's future earning capacity. When women's assets are depleted more often than those of men, this is likely to have a greater impact on women's ability to earn income, compared to men. This is also likely to result in further erosion of their future bargaining power over and above what the loss of assets would directly bring.

Ideally, an examination of the relationship between change in earnings and asset depletion requires data on individual earnings in at least two periods. The cross-sectional nature of the data in this study presents a serious limitation, however. To overcome this data constraint, we make use of the respondent's answer as to whether his/her current (or in the past week) profit earnings are lower, higher or the same as in previous months. This provides a rough proxy to the direction of change in the level of earnings of the individual. We perform two probit analyses using the probability of low profits as the dependent variable and pertinent individual, employment and household characteristics as independent variables. The latter include gender, educational attainment, employment informality dummy, business ownership type and number of children. In addition, we include access to loans and the value of depleted business assets in Model II and the value of depleted real asset in Model III.[10]

[Table 7 about here.]

The results in Table 7 show that only the value of depleted business assets and the value of total depleted real assets have any significant positive effect. Calculating the marginal effects, the regression results show that an increase in the value of depleted business assets increases the probability of low profits by 0.39 percentage point while an increase in the value of depleted real assets increases the probability by 0.30 percentage point.

III Concluding Remarks

The preceding discussion sought to explore the following: 1) is there a gendered pattern of asset ownership between husbands and wives; 2) during times of crises, is there a gendered pattern of asset depletion; and 3) does asset depletion impact men and women differently in regards to their income earnings capabilities? Using a random sample of 270 men and women drawn from "couples only" households in three, low-income communities in Bangkok, we discerned several gendered patterns of asset ownership including level, composition and use of these assets.

Our study demonstrates that during periods of low incomes and/or high consumption needs, one can ascertain a gendered pattern of asset depletion for consumption smoothing purposes: women tend to deplete their owned (or controlled)

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[10] The extent to which real assets actually serve as credit collateral suggests that there is possible endogeneity problem in Model III. Fortunately, the multi-purpose survey used in collecting the data included a credit (formal and informal) module. Our examination of the credit information for the same household sample shows that very few actually offer their real assets (e.g. jewelry, transport, appliance, etc) as collateral.

assets more than men. This is supported by the Tobit test result, which shows that women in our household sample tend to deplete their assets at a faster rate than men by 26.3 percentage points. The proxy variables for social/gender norms also show that the rate of asset depletion increases significantly if the earnings of the individual solely are used for household expenses and, to a lesser extent, if joint earnings are used. The results of the probit tests show that women are more likely to pawn a real asset as well as a business asset, compared to men. Finally, probit analysis was performed to examine the factors that may influence the probability of low profits (dependent variable). The results show that the value of depleted business assets and the value of total depleted real assets have a significant positive effect on the dependent variable, which points to the disproportionate impact depletion of (productive) assets has on the earnings potential of women as compared to men. This gendered outcome, we have suggested, is the result of the gendered nature of the economy ranging from the prevailing division of labor to the internalization of norms.

Our analysis of asset building and depletion among the poor indicates that the dynamics of poverty require a more comprehensive set of policy measures so as to address directly the structural conditions that cause these households to remain or become poor. Business asset ownership, much like land ownership, is reversible.

For as long as macroeconomic conditions and economic policies help promote employment that is highly unstable and wages that can not meet subsistence requirements, the need to smoothen consumption will likely persist. This compels household members to pawn or sell their assets, including productive assets, thereby maintaining or increasing their vulnerability and making microlending schemes risky and unstable for the very poor, many of whom are women.

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Table 1

Participation Rate and Mean Total Assets owned by Husband and Wife
in Urban Poor Households,
By Type of Asset and by Sex (Value in Thai Baht)

Type of Owned Asset	WOMEN		MEN		ALL	
	Ownership Rate [a] (Number in parenthesis)	Mean Value (Median)	Ownership Rate [a] (Number in parenthesis)	Mean Value (Median)	Ownership Rate [a] (Number in parenthesis)	Mean Value (Median)
1. Jewelry	59.2% (80)	14,021 (6,000)	25.2% (34)	13,700 (9,000)	42.2% (114)	13,928 (9,750)
2.Transport/ Vehicle	26.7% (36)	76,075 (27,000)	43.7% (59)	59,796 (25,000)	35.2% (95)	69,965 (25,000)
3. Appliance	96.3% (130)	15,709 (14,509)	96.3% (130)	16,184 (14,500)	96.3% (130)	15,947 (13,750)
4. Business	19.2 % (26)	13,611 (5,500)	4.4% (6)	4,516 (1,500)	11.8% (32)	11,906 (4,000)
All Real Assets	**98.5% (133)**	**75,208 (25,500)**	**97.8% (132)**	**49,786 (27,000)**	**98.5% (266)**	**50,066 (26,050)**
5. Land (rural)	7.4% (10)	388,000 (200,000)	7.4% (10)	400,000 (200,000)	7.4% (20)	394,500 (200,000)
6. House	8.1% (11)	194.363 (70,000)	8.1% (11)	196,363 (70,000)	8.1%) (22)	195,364 (70,000)

Notes: a. The percentage of women in the total sample who owned any real asset six
months ago (beginning of specified time period).
b. Exchange rate: 44 Thai baht = $1US.

Table 2

Pawning Rate and Mean Asset Depletion of Husband and Wife
in Urban Poor Households,
By Type of Pawned or Sold Asset (Value in Thai Baht)

Type of Pawned or Sold Asset	WOMEN		MEN		ALL	
	Pawning Rate [a] (Number in parenthesis)	Mean Value (Median value)	Pawning Rate [a] (Number in parenthesis)	Mean Value (Median Value)	Pawning Rate [a] (Number in parenthesis)	Mean Value (Median Value)
1. Jewelry	24.4% (33)	13,166 (6,000)	8.9% (12)	20,150 (9,000)	16.7% (45)	15,028 (8,000)
2.Transport/ Vehicle	14.8% (20)	114,835 (105,000)	15.6% (21)	113,957 (70,000)	15.2% (41)	114,385 (90,000)
3. Appliance	8.9% (12)	7,158 (4,750)	8.9% (12)	2,792 (2,000)	8.9% (24)	4,975 (2,500)
4. Business	14.8% (20)	15,040 (0)	0.7% (1)	20,000 (20,000)	7.8% (21)	15,276 (8,000)
All Real Assets	**49.6% (67)**	**46,536 (250)**	**30.4% (41)**	**65,571 (0)**	**40% (108)**	**53,762 (0)**
5. Land (rural)	1.5% (2)	50,000 (50,000)	2.2% (3)	136,667 (60,000)	1.8% (5)	102,000 (50,000)
6. House	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)

Notes: a. The percentage of women in the total sample who pawned or sold their owned
asset in the past six months.
b. Exchange rate: 44 Thai baht = $1US.

Table 3

Mean Value of Pawned or Sold Asset
by Purpose and By Household Member Sex (Value in Thai Baht)

Purpose of Pawning or Selling of Asset (s)	Women		Men	
	Pawning Rate (Number)[a]	Mean Value of Asset	Pawning Rate (Number)[a]	Mean Value of Asset
1. Household Expenses[b]	33.3% (45)	60,266	20.7 % (28)	88,396
2. For Education-related Expenses[c]	28.1% (38)	69,515	16.3% (22)	109, 313
3. For Special Events or Family Occasion[d]	32.6 % (44)	64,536	17.8% (24)	102, 983
4 Migration and other[e]	24.4% (33)	78,712	16.9% (21)	113, 719

Note: a) Refers to the proportion of wives in the total sample who have sold or
pawned their asset in the past six months.
        b) Refers to food and other day-to-day household expenses.
        c) Refers to tuition fees, uniforms, school contributions, books, transportation and
        other education expenses.
        d) Refers to funeral, weddings, anniversaries, community, family and other
        special events.
        e) Refers to expenses in obtaining visa, employment search, travel and other
        related migration expenses.

Table 4

Rate of Asset Depletion , by Sex of Owner

Mean Rate of Depletion of Assets [a]	Women	Men
All Respondents	22.37%	14.20%
Respondents who sold or pawned at least one real asset	44.73%	46.42%

Note: a) This is calculated as: <u>Pawned or Sold Real Assets Value</u>   x 100
                                                   Total Owned Real Assets Value

Table 5

Coefficient Estimates from Tobit Model: Determinants of Rate of Asset Depletion among Urban Poor Households (robust standard errors in parentheses)

	Model I
Constant	-0.0549 (0.6086)
Female	0.2634 (0.0891)***
Years of Schooling	-0.0054 (0.0123)
Household Educational Expenses	-0.0030 (0.0050)
Earnings Share of Household Income	0.747 (0.0689)
Private Transfers (remittances)	0.01 (0.0002)
Joint Asset dummy	0.6424 (0.1103)***
Own Earnings for Household Expenses	0.3799 (0.1933)**
Joint Earnings for Household Expenses	0.2786 (0.1494)**
Community (Nomklao) dummy	0.0006 (0.0096)
Community (Udomsuk) dummy	0.470 (0.9927)
Sigma	0.5211 (0.0406)
Log Likelihood	-157.954
Chi-squared statistic	54.09***

***significant at 1% level
** significant at 5% level

Table 6

Coefficient Estimates from Probit Model: Determinants of Pawning Probability among
Urban Poor Workers (robust standard errors in parentheses)

	Model II Pr (Pawning Real Asset)	Model III Pr (Pawning Business Asset)
Constant	-1.0256 (0.4012)***	-1.7710 (0.4562)***
Female dummy	0.6595 (0.2021)***	-0.4338 (0.2094)***
Years of Schooling	0.0062 (0.0283)	0.0432 (0.0289)
Remittances		-0.0000 (0.0002)
Vulnerable Job Dummy	-0.0042 (0.1826)	
Share of Household Earnings	0.2024 (0.1826)	
Number of Kids		-0.0605 (.0921)
Own Business dummy		0.5360 (0.2665)***
Own Earnings for Household Expenses	0.8163 (0.4480)*	0.7188 (0.5224)
Joint Earnings for Household Expenses	0.6576 (0.3458)*	0.75156 (0.4149)*
Community (Nomklao) dummy	0.1695 (0.2192)	0.5284 (0.2239)*
Community (Udomsuk) dummy	0.2708 (0.2303)	0.1779 (0.2588)
Log Likelihood	-134.7243	-118.9985
Chi-squared statistic	15.58**	24.96***

* significant at 10% level
** significant at 5% level
*** significant at 1% level

Table 7

Coefficient Estimates from Probit Model: Determinants of Low Profit Probability among
Urban Poor Workers (robust standard errors in parentheses)

	Model IV Pr (Low Profits)	Model V Pr (Low Profits)
Constant	-1.1942 (1.1978)	-1.2426 (0.9172)
Female dummy	0.7942 (0.8654)	-0.6123 (0.7241)
Total Depleted Business Assets	0.0058 (0.0003)*	
Total Depleted Real Assets		0.0048 (0.0031)*
Highly Informal Job Dummy	0.6196 (0.823)	0.4634 (0.7851)
Years of Schooling	0.0467 (0.1105)	0.029 (0.0904)
Number of Kids	-0.2281 (.4318)	-0.0793 (0.3464)
Own Business dummy	1.6034 (1.085)	0.8199 (0.8121)
Loan (first) amount	-0.0000 (0.0000)	0.0000 (0.0000)
Loan (second) amount	- 0.0003 (0.0003)	-0.0002 (0.0003)
Log Likelihood	-10.0373	-11.9396

- significant at 10% level

Appendix A
Selected Characteristics of Households

Household Type	Percentage
Couples only	5.45
Couples + dependents[1]	55.45
Couples + dependents + non-dependents	10.91
Couples + non-dependents	14.55
Female headed[3] + dependents	13.64
Total	100.00

Sample Bangkok Community (low-income area sites)	
Udomsuk (Thanin)	12.73
Nomkalo	45.45
Nawamin (Samukkee Patana)	41.82
Total	100.00

Note.
1. All children under 15 years, not in labor force, and sick or family members are considered dependents.
2. Non-dependent members include those who are 15 years old and older and in the labor force.
3. The marital status of the household head can be either married, divorce, widow, or single.
4. This refers to gross regular income measured in Thai baht from all sources, including informal wage and salaries, business, government pension, subsidized money from any organizations and other sources. Intra-family transfers such as a housekeeping or personal allowance are not included. These income are calculated in monthly basis.

Source of Thailand definition classification: Pichetpongsa (2004).

Appendix B

Selected Characteristics of Individual Respondents

Characteristics	Women	Men
Mean Age (in years)	40.5	43.1
Mean Years of Schooling	5.4	6.7
Mean Earnings (in Thai Baht)	4,885	7,969

Employment Status		Percentage
Regular	45.6	68.9
Sub-contracted, Casual or Temporary[1]	19.7	4.5
Self-employed[2]	33.9	25.6
Total	100.0	100.00

Note: 1. This category refers to those who produce a product (finished or partially-finished) or provide a service to a contractor or an employer but select their own work place.
2. This refers to those engaged in their own business e.g., food vending, running a small grocery store, a barber shop, a beauty saloon, bike repairing, etc.