

GENDER AND RESILIENCE

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Households in developing countries use a variety of mechanisms to cope with shocks, such as drawing down assets, accessing capital markets, reallocating labor, and receiving private or public transfers. Whether these mechanisms enable them to manage risk in the long term and to become more resilient, however, may depend on both the context and the specific household circumstances, particularly the household's asset endowments. Studies on risk and vulnerability have shown that in general, poorer households are less able to guarantee their basic needs when faced with negative unexpected events, often disposing of assets to assure consumption, but with negative consequences for future well-being. Similarly, the literature on assets and poverty traps suggests that households with very low levels of assets may be trapped in a low-level equilibrium, from which escape from long-term poverty is difficult.¹ Despite the growing recognition that effective social protection is important to help poor and vulnerable households avoid long-term descent into poverty, there is still relatively little awareness of the differential vulnerabilities of men and women within those households. Men and women may be exposed to different types of risk because of a combination of biological, economic, and cultural factors, including gender roles—the socially determined relationships between women and men. Men and women may also have different ways of insuring against and coping with risk. Understanding differential exposure and response to shocks is key to helping men and women become more resilient in the face of risk and uncertainty.

This chapter attempts to unpack the relationship between gender and resilience by reviewing the evidence on men's and women's differential exposure to risk and the differential impact of shocks on men and women,

1 See the July 2013 issue of *The Journal of Development Studies*, which has a special section on poverty traps and asset dynamics.

and by examining the different types of mechanisms that men and women use to cope with and insure against risk. In reviewing these mechanisms, we assess whether they contribute to building resilience and we suggest gender-sensitive insurance mechanisms that will allow men and women alike to manage and cope with risk and vulnerability.

Do Men and Women Face Different Risks, and Do Shocks Affect Men and Women Differently?

Men and women face different risks throughout the life cycle. Although mortality and morbidity risk is higher for male infants, biological factors related to menstruation, pregnancy, and lactation increase women's and girls' risk of experiencing micronutrient malnutrition and poor health during their reproductive years (FAO 2000). Adolescent girls, owing to their youth and low social status in many societies, are at risk of early marriage or risky sexual behavior during a critical period for investment in their own human capital (Chen, Dunne, and Han 2006). Gender roles in agriculture also influence the different occupational hazards men and women face.²

Men and women may also have different capabilities to manage risk and cope with shocks. It is commonly perceived that women may be less able than men to cope with and overcome crises because they have less access to and control over resources and because they experience gender-based vulnerabilities, including extensive time burdens; threats or acts of violence; and limited legal benefits and protections, decisionmaking authority, and control of financial resources (Quisumbing et al. 2008). In the face of crisis, women are more likely than men to lose assets and formal-sector jobs, and their workloads, both at home and in the informal sector, increase more dramatically than men's (Quisumbing et al. 2008). A recent empirical analysis of 141 countries from 1981 to 2002 found that natural disasters lower the life expectancy of women more than that of men (Neumayer and Plümer. 2007).

Evidence on the differential exposure or vulnerability to shocks by gender comes from studies that compare differences *across* male- and female-headed households as well as those that compare differential exposure and impact of shocks on men and women *within* the same household. We find, for example, that in Ethiopia and Bangladesh, controlling education, household size, asset holdings, and size of land owned, among other factors, female-headed households are more likely to report experiencing a reduction in living standards or asset holdings

2 For a review of different risks that men and women face with implications for their health and nutritional status, see Harris (2014).

as a result of the 2007–2008 food price increases (Kumar and Quisumbing 2013). However, the drawback of studies that use headship as a proxy for gender differences is that they do not examine what happens to men and women *within* households. Another issue with these studies is that female-headed households are intrinsically different from male-headed households in terms of observable as well as unobservable characteristics, arising from the very same processes that make a household male- or female-headed. Therefore, differences between male- and female-headed households may reflect these differences along with the difference in gender of headship.

Whether men and women face different risks would be irrelevant for policy if households shared the same preferences, pooled resources, and shared risk equally within the household. However, accumulating evidence from Côte d’Ivoire, Ethiopia, Kenya, and Ghana suggests that risk is not shared equally within the household. In Ghana, transitory incomes earned by different members of the household have different effects on household expenditure patterns, implying that household members do not completely offset each other’s risk (Doss 2001). In Ethiopia, illness has different effects on men’s and women’s nutritional status, as measured by body mass index. Individuals are generally able to smooth consumption over time when faced with shocks to household and individual incomes in most of the Ethiopian highlands. However, in poor households in the south of Ethiopia, where customary laws on settlement at divorce are biased against women, women fare worse when faced with unexpected illness (Dercon and Krishnan 2000). A preliminary study in Côte d’Ivoire also rejected the hypothesis that shocks do not affect household expenditures. Conditional on overall levels of expenditure, the composition of household expenditure is sensitive to the gender of the household member benefiting from better-than-average rainfall: rainfall shocks associated with high yields of women’s crops shift expenditure toward food (Duffo and Udry 2004). Spouses may also look outside the household for insurance mechanisms, such as in Ghana (Goldstein 1999). It is argued that women pool their risk with other women in the village while men have a wider and less defined risk pool. Indeed, transfers from the spouse and the extended family seem not to be responsive to shocks, but those from nonfamily friends are.

Although this literature has documented that shocks affect men and women differently, evidence on how shocks affect men’s and women’s asset holdings is relatively scarce. Yet attention to assets arguably is important, because assets significantly affect future income streams, consumption, and well-being. Selling off assets to cope with shocks may reduce resilience in the long term.

Gender roles affect the stock, amounts, and types of assets that men and women own, whether individually or jointly, and the extent to which these

asset stocks are affected by shocks. Our ongoing work in Bangladesh and Uganda shows different patterns of household and individual asset ownership (Quisumbing, Kumar, and Behrman 2011). In Bangladesh, most household land is owned by the husband, but the bulk of nonland assets are jointly held by husband and wife, although husbands exclusively own a large percentage of durable assets in the household. Wives are the sole owners of only a very small proportion of household assets. In contrast, in Uganda, the largest proportion of nonland assets is held by the husband (head), followed by jointly owned nonland assets. Similar to Bangladesh, a very low fraction of household assets is owned by the wife alone. Households in Bangladesh and Uganda face shocks owing to droughts, floods, and food price increases, and also illness and death. However, we find that although many shocks are similar in both countries, their impacts differ. The small impact of weather-related shocks on wives' assets in Bangladesh may reflect lower direct exposure to agricultural risk because Bangladeshi women rarely cultivate land independently, combined with effective targeting of emergency assistance as well as the low level of women's ownership and control of agricultural assets. On the other hand, illness has a large negative impact on wives' landholdings in Bangladesh, while the impact of the death of a family member is borne largely by husbands' nonland assets. The differences in the relative impact of the shocks, and their impacts on different types of assets depending on whether they are owned by men or women, show that responses to shocks are context specific and that *gendered* responses to shocks are even more so.

Coping with Shocks through the Gender Lens

In this section we discuss coping mechanisms and how each mechanism can have gendered implications. We can think of coping strategies as *ex ante* (whereby the household prepares for a future shock) or *ex post* (whereby the household reacts to a current shock). When a household is unable to undertake *ex ante* coping strategies or when these are insufficient, individuals are forced to undertake *ex post* coping. Both *ex ante* and *ex post* coping can have long-term gendered consequences.

Adjusting consumption patterns: There is evidence that when faced with economic shocks, poor households adjust their consumption patterns. They do so by eating less and eating poorer-quality (less-preferred) foods. Within the household it has been shown that women often end up absorbing such shocks (Holmes, Jones, and Marsden 2009). Women can be more vulnerable to such dietary shortfalls depending on their age, pregnancy/lactation status, and so on (FAO 2000). Comparisons

across male- and female-headed households show that female-headed households are more susceptible to a shock like the rise in food prices and tend to eat less-preferred foods and cut back on quantities served (Kumar and Quisumbing 2013). Such coping strategies, especially for pregnant and lactating women, can have adverse long-term consequences for children in terms of nutrition and cognitive development as well as for economic outcomes, and thus they do not improve the resilience of households (Alderman, Hoddinott, and Kinsey 2006). To the extent that women often resort to these mechanisms it is important that social safety net policies be mindful of the possibility that coping strategies may have long-term effects on the nutritional status of children and thereby reduce resilience.

Labor supply, migration, and remittances: Shocks can also induce households to increase their labor supply in order to compensate for the increased expenditure or reduced income caused by the shock (Berloff and Modena 2009). In some contexts there are cultural barriers and barriers associated with gender roles that restrict women from entering the labor market. Even when women can enter the labor market, multiple factors do not work in their favor. There is a gender wage differential in labor markets in a large part of the developing world (whereby women get a lower wage for the same job) and women are often subject to sexual and physical abuse (Garcia, Hernandez, and López-Nicolàs 2001; Hinks 2002). Increased labor supply by women in response to a shock, whether in the local labor market or outside, can have important implications for children in these households, particularly for adolescent girls, who then have to take on domestic responsibilities (FAO 2008; Holmes, Jones, and Marsden 2009).

Migration is another coping strategy often used if the local labor market opportunities are not sufficient or perceived benefits from migration outweigh the costs of entering the market locally. Migration may increase resilience for both origin households and migrants. People may move not only to pursue better opportunities but also to escape economic, political, or social distress. Migration benefits the origin household not only because of potential remittances but more immediately because there is one less mouth to feed during hard times. The family's choice of a migrant is gendered, with families investing in different children's migration. Because women are more likely than men to leave their natal villages to marry in many countries, marriage, as well as marriage-related migration, has a prominent role in resilience.³ In Bangladesh, brides from households that are more pro-

3 See the classic article M. Rosenzweig and Stark (1989).

tected from floods due to the construction of an embankment are more likely to marry wealthier husbands and command larger dowries, and less likely to marry their cousins (Mobarak, Kuhn, and Peters 2013). In rural India, where women migrate for marriage but men are lifetime residents in the household and village, daughters-in-law living in the village and daughters of the household head who have married and moved to their husbands' village link families of origin and destination in mutual aid arrangements (Rosenzweig 1993). However, whether maternal migration has adverse impacts on children may be context specific: in Nicaragua, there is evidence of a positive relation of mothers' seasonal migration and children's outcomes (Macours and Vakis 2010).

While remittances may be used to smooth consumption, there is also evidence that they are used to facilitate a transition out of agriculture, whether through encouraging more diverse livelihoods or through financing the education of children in the origin households, both of which can build resilience for rural households (Davis, Carletto, and Winters 2010). The impacts of these remittances can be gendered: in El Salvador, additional income derived from migration increases girls' education and reduces women's labor supply but does not affect activity choices for males 14 years or older (Acosta 2006). While there is yet limited evidence that the *use* of remittances varies according to the gender of the remitter, there is robust evidence that parents rely differently on children of different sexes for support. In the Dominican Republic and the Philippines, where parents rely more on migrant daughters than sons for remittances, remittances are more likely to come from daughters (de la Briere, et al. 2002; Lauby and Stark 1998). Filipino migrant daughters are more likely to send home a larger portion of their earnings if they experience positive income shocks, compared with sons (Quisumbing and McNiven 2010). Evidence from Thailand also suggests that female migrants tend to behave more altruistically than males (Vanwey 2004).

Migration can have important gender implications with regard to not only the decision to migrate but also the consequences of migration in the event that migrants face unsafe working environments, which can exaggerate their vulnerabilities (Singh 2007). Migrant workers are vulnerable due to the obstacles they face in securing alternative employment, their social isolation, and their lack of language skills and financial resources. Although both male and female migrants may be vulnerable, females are more so: the vast majority of workers subjected to sexual harassment are women, particularly those in nontraditional jobs and predominantly male environments, and women who work for male supervisors have been found to be more likely to be subjected to

harassment (McCann 2005). Moreover, because women are overrepresented among those who seek employment opportunities abroad as a means of survival as jobs disappear in their countries of origin, it is not surprising that women make up the vast majority of trafficked persons. Recent estimates from the US State Department place the figure at 80 percent (Chuang 2006).

Asset accumulation: Assets can serve as a buffer when households face economic shocks. Assets can be used to smooth consumption and prevent households from potential long-term impacts of shocks. Therefore asset accumulation is an important *ex ante* risk-coping strategy. The poverty traps literature suggests that a very low initial level of assets can trap households in long-term poverty (Carter and May 2001). Linking the asset poverty trap literature to the literature on gender gaps in asset ownership, and drawing on the evidence that resources within households are not always pooled, we can argue that women, who on average own or control fewer assets than men (Deere and Doss 2009), are more susceptible to being trapped in poverty when faced with shocks. In the case of marital dissolution owing to death or divorce, women's lower asset stocks could leave households being maintained by women at higher risk of poverty. Men and women also prefer and tend to own and accumulate different types of assets (Quisumbing 2011). For example, women are more likely to hold assets that are more liquid, such as jewelry or small poultry, which are also more likely to be sold to smooth consumption (Antonopoulos and Floro 2005; Frankenberg, Smith, and Thomas 2003). Social ties and networks can have implications for asset growth as well, increasing the ability to borrow without having to draw down assets. In Bangladesh, where women own fewer assets than men, interventions that build women's social capital by working through women's groups also help them accumulate physical assets (Quisumbing and Kumar 2011).

Savings, credit, and insurance: Access to financial services can affect the ability of rural households to save and take loans, an effect that can have implications for coping strategies. A review of microfinance in Africa south of the Sahara found positive impacts on savings levels, short-term asset accumulation, health, food security, and women's empowerment (van Rooyen, Stewart, and de Wet 2012). There is also evidence that women utilize borrowed funds for more productive purposes than men (Pitt and Khandekar 1998). Access to formal insurance can prove to be an important coping mechanism as well. In the developing world, various types of insurance products can be useful—life insurance, medical insurance, and agricultural insurance to name a few. Insurance programs, in general, aim to protect the insured individual from the potential negative effects of exposure to shocks. Thus, by

definition, these programs are meant to increase resilience. Because women are more vulnerable to health-related shocks (whether to their own health or to that of a household member) and death of a spouse, and because evidence suggests that women's assets are drawn down to cope with illness shocks, it has been argued that comprehensive health and life insurance can assist women in coping with these shocks better (Banthia et al. 2009). However, the main challenge has been in designing effective insurance programs that are both operationally feasible and affordable. Many agricultural insurance programs are designed without paying attention to gender differences (Fletschner and Kenney 2011). Recent preliminary work on agricultural insurance in Bangladesh suggests that women may be interested in buying agricultural insurance products (Kumar 2014). First, women are just as likely as men to purchase agricultural insurance. Second, financial literacy and understanding of the insurance product are important factors affecting uptake. Women are at a disadvantage as compared with men when faced with an insurance purchase decision because of the gender differential in education. Third, marketing insurance through groups can be beneficial for women—through positive spillovers from higher levels of understanding and financial literacy—and preliminary evidence suggests this does not necessarily result in the group decision's being influenced by a few.⁴ Fourth, when provided with insurance products against risks that are more relevant to women (life insurance for their spouse) they will opt to insure against them.

Social protection: Many national governments (with help from international donor agencies) have set up safety nets to protect chronically poor households from shocks. Because shocks can exacerbate gender inequities (for example, in terms of nutritional status), social protection programs need to be sensitive to gender in their design in order to have gender-equitable effects. Ethiopia's Productive Safety Net Programme (PSNP), which was implemented in 2005, had a gender-sensitive approach. Beneficiary households were targeted using a community-based consultation process that included participation of women to identify the truly poor households. Female-headed households, in which labor is often scarce, were selected into receiving Direct Support, the unconditional transfer component of the PSNP (Coll-Black et al. 2012; R. Holmes and N. Jones. 2011.). PSNP tried to address women's needs by constructing water and fuelwood resources at the community level and allowing women

⁴ While marketing through groups, one may fear that the group decision is made by a select few. However, our work in Bangladesh shows that the group decision does not deviate from the individual decision.

participants in workfare programs to switch to Direct Support when pregnant or lactating (to reduce their time burden) (Holmes and Jones 2011). Another key objective of the PSNP was to help beneficiaries build their asset stock and improve resilience toward shocks, of benefit to households with low asset levels and women-headed households, which tend to start up with a lower level of assets and to be at greater risk of asset depletion (Berhane, forthcoming).

Policy Implications

The preceding discussion shows that different shocks and coping mechanisms can affect men and women in different ways. Policymakers should be mindful of these gendered nuances when designing resilience-enhancing programs. We offer the following insights from our review of the evidence:

- Women, on average, own and control fewer assets than men and are therefore more susceptible to being trapped in long-term poverty, particularly if they need to support their families on their own or if resources are not shared within the household. They may also be prone to using consumption adjustment strategies that have negative long-term impacts, such as distress sale of women-owned assets or sacrificing their own and their families' health and nutritional status. Interventions should therefore be designed to give women a head start in the process of asset accumulation, enabling them to accumulate assets in their own right as well as to save during good times. This means that providing women access to a whole range of financial instruments—both savings and credit—is important.
- Because the demands on women's time are already quite high, safety nets designed to pull households out of poverty should consider providing unconditional transfers to chronically poor female-headed households or pregnant/lactating women (as did PSNP) to assist them in coping with shocks while building assets and thereby increasing resilience toward future shocks. Conditional cash transfers tied to conditions that are easily met by women and female-headed households—such as those conditioned on children's school attendance or on regular visits to health clinics—can also work toward building resilience.
- Migration can have positive or negative consequences for households of migrant men and women depending on the context. However, ensuring the safety of migrants themselves remains an important policy issue, particularly for women migrants, who are in greater danger of being

subjected to trafficking. Provision of accurate information regarding migration prospects and ensuring that migrants have safe work environments and efficient mechanisms for sending remittances are measures that can help male and female migrants alike. But assuring a safe work environment and adequate legal protection is especially important for female migrants, who may face increased risk of gender-based violence outside their own communities.

- There is clearly a case for insurance that meets men's and women's needs, but we know very little about the demand for such products and willingness among insurance companies to actually provide these products. More exploratory work is needed on designing insurance products that are tailored for men's and women's different needs.

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