UP School of Economics
Discussion Papers

Discussion Paper No. 2013-05 July 2013

Does economic empowerment protect women against domestic violence? Evidence from the Philippines

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Using data from the 2008 National Demographic and Health Survey, we ask whether women's economic empowerment -defined alternatively as having the ability to decide on (i) daily needs, (ii) major purchases, and (iii) spending own income - protects women against domestic violence. Using a simple model of choice of conflict resolution technology among spouses, we find evidence that economic empowerment protects women in a non-linear way. Low and high levels of empowerment reduce the likelihood of women experiencing domestic violence, possibly reflecting traditional gender roles in Philippine society.

JEL code: J12, J16

Keywords: Economic empowerment, domestic violence, Philippines

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I. Introduction

Domestic violence against women has been widely studied from various perspectives. Sociological theories treat domestic violence as the outcome of social structures rather than individual pathology (Lawson 2012). An important social structure is the family, wherein conflict among members is inevitable and violence is an available option for resolving conflict. How family members interact with one another and the setting in which interactions take place are key to understanding why intimate partner violence occurs.

While the family violence models assume gender symmetry, i.e., that men and women could both be victims of domestic violence, the other strand of sociological models covers feminist theories. These suggest that domestic violence is an offshoot of inequality between men and women. Kurz (1989) argues that the feminist perspective "portrays the realities of battering more accurately (p. 489)" compared to models based on gender symmetry.

Psychological models assume that abusive relationships are due to personal characteristics of the perpetrator, such as personality disorders, problems of impulse or emotional control, low esteem, and cognitive errors (Eckhardt and Dye 2000). These models also point to cognitive factors, such as beliefs on gender roles, which distinguish violent men from the non-violent ones facing similar marital situations.

Economic perspectives of domestic violence have been offered, most of which support the notion that higher incomes of women tend to reduce the level of violence that they experience. As pointed out by Farmer and Tiefenthaler (1997), there are two general classes of economic models of family decision making. One set of models assumes a cooperative family unit, with altruistic spouses making intrahousehold allocation decisions based on a common set of preferences. Cooperative bargaining models were later on introduced, where spouses have a common utility function, governed by different sets of preferences, and arrive at a solution that provides minimum utility levels that can be achieved outside the marriage ("threat points"). The other set of models use a non-cooperative framework. These are less commonly used although arguably more appropriate to understand domestic violence within families. In the non-cooperative model proposed by Farmer and Tiefenthaler (1997), spouses have individual preferences and maximize utility subject to the threat point of the other. The man decides on the amount of transfers and level of

violence while the woman's threat point determines the amount of violence she can tolerate. An important assumption the authors make is that the man's utility is increasing in violence, as the relationship between the man and woman is characterized in the context of an abusive relationship. Thus, the model explains optimal level of violence, not incidence. In fact, there have been few studies that examine the incidence of domestic violence.

This paper proposes a model that attempts to integrate various perspectives and explain the incidence of domestic violence or the likelihood that a woman in a union experiences domestic violence. We assume that the family setting is an important consideration and thus incorporate household-level characteristics in the empirical analysis. Psychological factors, such as the man's personality traits and beliefs on how women should behave, are recognized as possible determinants of domestic violence. We also take an economic perspective by assuming that the choice of conflict resolution method is made by weighing "costs" and "benefits," which are likely to be non-monetary and indirect. Examples of "costs" could include informal social sanctions and formal punishment, whereas "benefits" would include a sense of control exercised over the victim such as that found by Tauchen et al. (1991) for higher income women. The cost-benefit paradigm, in fact, is used outside the economics discipline. Sociologists espousing exchange or social control theories of domestic violence also view this as the outcome of cost-benefit comparisons. They point out that family violence occurs when the "rewards of behaving violently are greater than the costs" (p.577, Lawson 2012).

An important explanatory variable in our model is women's economic empowerment. It has become increasingly common for organized groups to call for "economic empowerment' as a means to end violence against women, and there is indeed some evidence to support this strategy. In rural South Africa, for example, Kim et al. (2007) found significant reduction in intimate partner violence following the implementation of a microfinance program, which included as target outcomes 9 indicators of women's empowerment. In India, Dalal (2011) found that economic empowerment, coupled with higher education and modified cultural norms, may protect women from violence.

Thus, one hypothesis is that economic empowerment protects women from domestic violence as it increases the costs or makes it more difficult for the spouse to use violence to resolve conflict. This is not inconsistent with the notion of threat points in bargaining models - more economically empowered women have less tolerance for domestic violence as they are able to obtain higher utility levels outside the marriage as a result of control over some resources. In short, the decision to opt out of the marriage is easier for more economically empowered women when faced with an abusive partner.

However, it has been suggested that economic empowerment or financial independence is not always protective of women. Jewkes (2002) explains this further: "...economic inequality within the context of poverty is more important than the absolute level of income or empowerment of a man or woman in a relationship...Challenges to the exercise of power by men can be perceived by

them as threats to their masculine identity. Violence against women is a means of resolving this crisis because it allows expression of power that is otherwise denied (p. 1424)." Tauchen et al. (1991) also reported similar findings where income increases in high income families in which most of the income is the woman's are associated with increased violence. Using survey data on Filipino women, Hindin and Alair (2002) found that patterns of household decision-making are significant predictors of domestic violence and women's domination of decision- making tends to increase the likelihood of experiencing violence.

Thus, we ask whether there is indeed evidence to support organized calls for economic empowerment as protection against domestic violence. We test a more generalized statement of the hypothesis, that economic empowerment and incidence of domestic violence are related but possibly in a non-linear way, with violence increasing at higher levels of women's economic empowerment.

In this analysis, economic empowerment is a broad concept that extends well beyond "income." While highly correlated, having a source of income is not a sufficient condition for empowerment. In Philippine society, for example, women are conventionally viewed as the purse-keepers (Aguilar 1989), whether or not they directly participate in income generation.

Following Mason and Smith (2003) who examined multiple measures of married women's empowerment in five Asian countries (India, Malaysia, Pakistan, the Philippines, and Thailand), women's economic empowerment is defined as having the ability to participate in the family's economic decisions, whether major or minor. Direct measures of economic empowerment are used, based on responses to questions on how the wife participates in household economic decision making.

The Philippines' 2008 wave of the National Demographic and Health Survey (NDHS) provides a unique opportunity to test our proposed model. A special block of questions, referred to as Women's Safety Module, includes a question on whether a woman experienced domestic violence in the last 12 months. The survey also included questions on economic empowerment similar to those used by Mason and Smith (2003), as well as questions pertaining to the spouse's personality (such as whether the man is jealous). The NDHS is a nationally representative survey conducted every 5 years by the National Statistics Office and regularly collects a wide range of data, including health-seeking behavior, pregnancy history, and socio-economic profile. The NDHS random sampling scheme allows us to address an important criticism of existing research, which is the use of non-random data for most samples used to study domestic violence.

II. Study Setting

By world standards, the Filipino woman is not considered "disadvantaged" at least in terms of gender gaps in political empowerment, health and education outcomes, and economic participation and opportunity. By the 2012 Global Gender Gap Index, the Philippines is ranked eighth in the world, ranked first in Asia and among lower-middle income countries, and the only country in Asia to

have closed the gender gaps in health and education. It can also be noted that the Philippines has made huge strides in gender equity despite being resource-constrained. Previous studies by Mason et al. (1998), and Estudillo et al. (2001) point to the relatively egalitarian status held by women in Philippine society. Recently and for the first time, a woman had been appointed as Supreme Court Chief Justice (Cabacungan 2012).

Yet, an estimated 1.67 Filipino million women ages 15 to 49 years old (about 8.4 percent) experienced domestic violence in 2008 (NDHS 2009). The most vulnerable women (i.e., with the highest incidence of domestic violence) are those belonging to the 25-29 age group. Their mean number of years of schooling is 9.26 years, about 1 year lower than the national average for women of reproductive age. The majority of these women are poor, with less than 5 percent belong to the highest wealth group. About 40 percent live in urban areas and less than half of these women have some form of employment. The average number of children for these women is 2.4, which 0.6 less than the national average for women in union ages 15 to 49, as these are younger women.

There is little legal recourse for Filipino women experiencing domestic violence. Article 36 of The Family Code of the Philippines (Executive Order No. 209) allows physical violence as grounds for legal separation. At present, divorce is not available to the majority of Filipinos (the exception are Muslim Filipinos, but who comprise less than 10 percent of the population). However, there have been pressures from some sectors of society for Congress to pass the pending bill on divorce, some citing the prevention of domestic violence as a justification for a divorce law (Festin 2011).

The Hindin and Adair (2002) study which used a 1994 sample of women from the region of Central Visayas, showed a higher incidence of domestic violence -13 percent for the Cebu province where the sample was drawn and 18.9 percent for the region where the province belongs. It is useful to re-assess the situation of Filipino women with the availability of newer data with a more comprehensive coverage, and given pending legislative proposals.

The rest of the paper is organized as follows. Section 3 outlines a simple model of choice of conflict resolution technology and the strategy to empirically test the model. Section 4 describes the data while Section 5 presents the estimation results. Section 6 summarizes and briefly discusses the results and then concludes the paper.

III. Model

In general, there are two types of technologies for resolving marital conflict: a peaceful method (technology "*p*") and one which involves inflicting violence on the partner (technology "*v*"). We outline a simple model where a spouse *j* chooses the technology that maximizes payoffs from conflict resolution, subject to the participation constraint of the partner (denoted as ~*j*) and the household budget.

We assume that the returns to conflict resolution can be represented by *R*, which, in the context of a marriage, could be a monetary return (e.g., in case the source of conflict is monetary in nature) or a non-monetary benefit (e.g., increased sense of control over the relationship). *R* is measured subjectively and depends on preferences over the technology choices, personality traits of spouses *j* and *~j*, which we represent by θ. How *R* is defined by spouse *j* also depends on the family situation, which is described by *F*. This would include marital capital, or following the concept of "social capital" (Ravenera and Rajulton 2010), would refer to the ability to secure benefits through membership in the marital union.

$$R_{i=}R_i^j(\theta^j, \theta^{\sim j}, F)$$

The cost of technology *i* is denoted by C_i, which can be interpreted as a measure of the ease by which spouse *j* uses technology *i* to resolve conflict. Technology *i* is a z-good ala Becker (1965), which is produced by combining market goods and time. The input requirements of technology *i* depends on how easy it is to effectively apply this method of conflict resolution on the partner. For example, spouse *j* who is married to a woman who is more "protected," either by a feeling of economic empowerment or by living arrangements could find it more difficult to use technology *v*, thus, increasing C_v. Input requirements thus depend on θ and *F*.

As the use of technology *v* is generally a crime (e.g., rape, homicide, and wife battery), C_v also includes the expected cost of punishment which depends on the likelihood of detection by the police authorities, the cost of litigation, and amount of jail time served and compensation for the victim if convicted. These costs, which are determined either in the market or by institutions other than the family, are represented by *w*. In addition to punishment costs, *w* includes the opportunity cost of time utilized for each technology.

The cost function, then, can be described in general as:

$$C_i = C_i(\theta^j, \theta^{\sim j}, w_i, F)$$

Thus, assuming that both *R* and *C* can be expressed in the same metric, the pay-offs conditional on technology choice can be denoted as:

$$U_p^j = R_p^j(\theta^j, \theta^{\sim j}, F) - C_p(\theta^j, \theta^{\sim j}, F, w_p)$$

and

$$U_v^j = R_v^j(\theta^j, \theta^{\sim j}, F) - C_v(\theta^j, \theta^{\sim j}, F, w_v)$$

The above formulation implies that characteristics such as wife's economic empowerment (in $\theta^{\sim j}$) could affect both *R* and *C* in reverse ways (i.e., positive for R_v as men seek to express power as described by Jewkes (2002) and negative for C_v as women use economic empowerment as a form of protection). Thus,

whether or not women's economic empowerment protects them from domestic violence is an empirical question and could vary across different contexts.

Spouse *j* (in this analysis, the man) chooses technology *i* that maximizes U_i, assuming that there are two constraints - the partner's participation constraint and a budget constraint. The technology choice of spouse j, i^* is then defined as the one that maximizes pay-offs:

$$U^{j*} = max(U_p^j, U_v^j)$$

$$\text{s.t. } U_{\sim j} \geq u^0$$

$$\text{and } M = rG + C_i$$

where *M* is household income, *rG* refers to household expenditure on goods other than conflict resolution. For simplicity, we assume that *rG* is pre-determined.

From the maximization problem, the probability that spouse j inflicts violence on his partner is then defined as

$$P_j = Pr(U_v^j > U_p^j) = f(\theta^j, \theta^{\sim j}, F, w, M, rG, u^0) \qquad (1)$$

which is estimated using a probit model defined in general as

$$P_j = \Phi(\mathrm{X}'\beta)$$

where Φ is the cumulative distribution function of the standard normal distribution and X is a vector of regressors, including the characteristics of the spouses j and ~j, family, market, and marriage institutions as implied by Equation (1).

Definition of variables in the model

The left-hand side variable is constructed from a woman's response to the question of whether or not she experienced domestic violence in the 12 months prior to the survey. It can be noted that the survey was conducted privately with the woman respondent.

Spouse characteristics, θ^j, include personality traits - as reported by the woman - that could indicate sources of marital conflict and therefore possible predictors of domestic violence: whether or not he is (i) jealous, (ii) often drunk, and (iii) involved in extramarital affairs. Arguably, these are endogenous regressors and thus require caution in interpreting estimates.

The variable $\theta^{\sim j}$ includes our central variable of interest, a woman's economic empowerment. We use three alternative measures: whether the wife participates in the decision (i) to make purchases for daily needs, (ii) to purchase

major goods for the household, and (iii) to make purchases out of her own income. These three measures are arguably increasing in degree or intensity, at least in terms of the magnitude of spending (e.g., daily needs versus major household item) and the source of income. Ghuman (2003), for example, assert that having an independent source of income is an important basis for economic empowerment. As explained in the previous sections, the expected signs of these variables could be reflecting the relative magnitudes of their marginal impacts on P_j through R or C.

To address biases resulting from the possible endogeneity of women's economic empowerment, we utilize a bivariate probit model where the economic empowerment variables are instrumented using province level sex ratios and variables that form the basis for inequality in a relationship such as age, education, and employment status. Sex ratios (defined as number of males to females in every province) indicate the relative position of women in the provincial marriage markets.

Family characteristics, which measure the strength of marital capital, include a dummy variable for being married, the duration of the union (in years), and the total number of living children. Presumably, it would be more costly for a man to inflict pain on his partner if they are bound by marriage, as this could trigger costly legal responses, such as legal separation or marriage annulment on grounds of psychological incapacity. Longer lasting marriages are also arguably more stable and thus less prone to violence in the relationship (Tauchen et al. 1991).

Living in an urban area is another family characteristic which reflects the cost of using violence. In urban areas, the expected costs of physically abusing one's partner is arguably higher, as detection by neighbors and thus, police intervention are more likely given the proximity of houses in the urban setting. We also include a dummy variable for women living with their own parent/s as this could act as a deterrent to acts of domestic violence.

Our proxies for the woman's reservation utility, u_0, include a dummy variable for not being allowed to work. Women in this situation have arguably low levels of u_0 and will increase tolerance for domestic violence. In addition, we use number of living children to reflect the willingness of women to leave a marriage, when faced with risk of domestic violence. Having more children implies a lower reservation utility, or alternatively, a higher utility from children within the bounds of a marriage that is intact. This further implies that having more children will also predict a higher tolerance for domestic violence. We measure the term $M - rG$ using a set of dummy variables for wealth quintiles. The base category in all our regression models is the poorest quintile.

Finally, we include region fixed effects to control for market prices of inputs, w, including wages.

IV. Data

Our regression sample set consists of 6,724 women belonging to the 15-49 age group, all currently with a male partner whether legally married or not. Table 1 presents the descriptive statistics for our data set ("spouse" refers to the woman's male partner). Close to 11 percent of the women reported experiencing domestic violence in the 12 months prior to the survey conducted in 2008. Majority of the women (about 60 percent) reported being able to decide on daily needs of the household. Slightly over 20 percent reported making decisions on major purchases and on spending own income. About 40 percent of the women reside in urban areas. The mean age of women and spouses are 34 and 37 years old, respectively. On the average, women have more years of schooling than their spouses (10.1 versus 8.8 years). About 83 percent of the women reported being legally married, and the mean number of years since first marriage is 12 years. Close to 17 percent of the women reported sharing their current place of residence with their own parent/s. This variable is our proxy for marital duration, since there are no data available for duration of the current union. Given the legal system in the Philippines, it is relatively difficult for women to have second marriages. The average number of surviving children is 3.

The wealth quintiles were defined for the entire NDHS sample, which includes women who are not "in union." This explains why the mean number of women belonging to each wealth quintile slightly differs from 20 percent. The numbers also suggest that women "in union" tend to be less wealthy than single women.

Table 1. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Left hand side variable				
Experienced domestic violence	0.106	0.308	0	1
Economic empowerment measures				
Woman decides on daily needs	0.604	0.489	0	1
Woman decides on major purchases	0.208	0.406	0	1
Woman decides on spending own income	0.221	0.415	0	1
Spouse characteristics				
Spouse has extramarital affair	0.019	0.136	0	1
Spouse is jealous	0.296	0.456	0	1
Spouse is often drunk	0.066	0.248	0	1
Family characteristics				
Married	0.829	0.376	0	1
Duration of marriage	12.116	8.027	0	36
Urban	0.432	0.495	0	1
Living with woman's parent/s	0.167	0.373	0	1
Proxy for woman's reservation utility				
Woman is not allowed to work	0.066	0.248	0	1
Number of living children	2.892	2.053	0	13
Household expenditure indicators				

Second poorest wealth quintile	0.227	0.419	0	1
Middle wealth quintile	0.199	0.399	0	1
Second richest wealth quintile	0.181	0.385	0	1
Richest wealth quintile	0.138	0.345	0	1
Variables in the economic empowerment equation				
Sex ratio in the province	1.024	0.034	0.946	1.010
Woman's number of schooling years	10.138	5.010	0	25
Spouse's number of schooling years	8.862	4.046	0	17
Woman's age	33.595	8.158	15	49
Spouse's age	36.932	9.035	15	80
Woman is working	0.539	0.711	0	9
Spouse is working	0.976	0.153	0	1
Number of observations	6724			

V. Results

Table 2 compares the marginal effects of three alternative measures of women's economic empowerment on the likelihood of reporting domestic violence using probit and biprobit models. We note that the probit estimates suggest that economic empowerment promotes rather than mitigates domestic violence. The biprobit estimates, which addresses possible endogeneity of the economic empowerment variables, suggest some amount of protection for more empowered women. The tests of independence would further suggest that two measures of economic empowerment are endogenous regressors ($p<0.05$) - deciding on daily needs and on spending own income.

Table 2. Marginal effects of the economic empowerment variables (Probit and Biprobit Models)

Economic empowerment measure	Probit	Biprobit
Woman decides on daily needs	0.015*	-0.205*
Woman decides on major purchases	0.015**	0.044
Woman decides on spending own income	0.018*	-0.220*

*significant at 5%
**significant at 10%

While generally protective, the effects of economic empowerment on domestic violence are non-linear as suggested by previous studies. If indeed daily needs, major purchases and spending of own income reflect increasing degrees of empowerment, our estimates suggest a U-shaped relationship. Lowest and highest forms of empowerment protect women.

Table 3 shows three sets of biprobit estimates, each using a different measure of economic empowerment. In all models, spouse traits that indicate possible sources of marital conflict consistently and significantly predict domestic violence.

Indicators of amount of marital capital do not predict protection from domestic violence, with the exception of marriage duration for Model 2. It appears that while the ability to decide on major purchases could be a source of conflict that in turn, increases the likelihood of domestic violence, this risk is mitigated by longer marriages. The dummy variable for marriage is consistently negative, although insignificant.

Income appears to be protective, with the two highest wealth quintiles showing negative significant effects for all three models. Models 1 and 2 have jointly significant regional fixed effects, our proxies for market prices and wages.

Table 3. Model Estimates

	MODEL 1 (Biprobit)		MODEL 2 (Biprobit)		MODEL 3 (Biprobit)	
	Empowerment measure: Woman decides on daily needs		Empowerment measure: Woman decides on major purchases		Empowerment measure: Woman decides on spending own income	
Independent Variable	dy/dx	p-value	dy/dx	p-value	dy/dx	p-value
Domestic violence equation						
Woman decides on daily needs	-0.205	0.000				
Woman decides on major purchases			0.044	0.659		
Woman decides on spending own income					-0.220	0.001
Spouse is jealous	0.107	0.000	0.098	0.000	0.105	0.000
Spouse has extramarital affair	0.210	0.000	0.191	0.000	0.206	0.000
Spouse is often drunk	0.134	0.000	0.121	0.000	0.133	0.000
Married	-0.012	0.246	-0.013	0.141	-0.012	0.229
Duration of marriage	-0.001	0.164	-0.002	0.015	-0.001	0.155
Number of living children	0.006	0.010	0.006	0.010	0.006	0.014
Urban	0.011	0.221	0.011	0.200	0.011	0.217
Living with woman's parent/s	-0.011	0.318	-0.010	0.303	-0.008	0.424
Woman is not allowed to work	0.108	0.000	0.098	0.000	0.105	0.000
Woman is working	0.003	0.608	-0.001	0.867	0.006	0.564
Second poorest wealth quintile	0.005	0.654	0.005	0.603	-0.009	0.450
Middle wealth quintile	-0.015	0.203	-0.012	0.270	-0.025	0.062
Second richest wealth quintile	-0.032	0.018	-0.029	0.019	-0.039	0.017
Richest wealth quintile	-0.048	0.004	-0.045	0.003	0.035	0.012
Economic empowerment equation						
Sex ratio in the province	0.911	0.000	-0.135	0.361	0.037	0.799
Woman's number of schooling years	0.001	0.390	0.000	0.966	0.002	0.182
Spouse's number of schooling years	0.000	0.985	-0.006	0.000	0.002	0.117
Woman's age	0.005	0.000	0.002	0.050	0.004	0.000
Spouse's age	0.000	0.708	0.001	0.485	-0.001	0.465

Woman is working	0.017	0.046	0.007	0.291	0.104	0.000
Spouse is working	0.095	0.009	-0.032	0.319	-0.087	0.002
p-value for test of independence		0.0045		0.7716		0.0077
p-value for test of regional fixed effects		0.0281		0.0738		0.2732

*Regional fixed effects are now shown but available upon request from the authors.

The model significantly predicts that women who are not allowed to work are more prone to domestic violence. However, whether a woman actually works is not significant in the domestic violence equation. On the other hand, the equation on economic empowerment in Models 1 and 3 shows that women's employment is positive and significant, implying that women's employment predicts empowerment and thus, indirectly protects women.

The number of living children is positively correlated with domestic violence, as predicted by the model. This result is consistent with the idea that leaving an abusive marriage could also result in a woman's possible separation with the children, at least temporarily until legal custody can be gained following a tedious legal process. Thus, the number of children does appear to be reflective of a woman's reservation utility and therefore, bargaining position.

The incidence of domestic violence does not vary systematically across urban and rural areas. Moreover, living with one's parents does not predict domestic violence, likely because in our sample, there are few who reported having this particular living arrangement.

Estimates of the economic empowerment equation also suggest that older women tend to be more economically empowered. Those with spouses who are employed also are more likely to decide on daily needs but less likely to decide on spending own income. A woman's education does not predict any of the three forms of empowerment. However, a spouse's years of schooling reduces the likelihood that a woman decides on major purchases but increases the probability of a woman deciding on own income. Sex ratios are significant in Models 1 and 2, but have reverse signs. Provinces with relatively more males predict increased likelihood that women decide on daily needs by reduced probability that they decide on major purchases.

V. Conclusion

Our results suggest that economic empowerment is protective of Filipino women, at least at low and high levels of economic empowerment. Women who decide on daily needs and on spending own income have been found to be less likely to report experiencing domestic violence. These findings are useful for the design of social programs intended to protect women.

While our results are not consistent with the earlier study by Hindin and Alair (2002) on Filipino women, we argue that women decision-making tends to be an endogenous regressor and therefore requires instrumentation to reduce biases

including sign reversals. Our analysis uses this alternative estimation approach yields a U-shaped (i.e., non-linear) pattern of protection provided by economic empowerment, which is consistent with the observations of Jewkes (2002) on domestic violence in other settings. This non-linear pattern could, in fact, be reflecting gender roles in Philippine society - where it is accepted that women hold the purse for regular household spending, but men decide on major expenditure items such as housing, cars, and appliances. Aguilar (1989), for example, notes such "gender division of labor at the heart of the (Filipino) family." Indeed, in provinces with more males relative to females and thus, arguably more dominant, it is less likely that women make major purchase decisions. In the same provinces, women are more likely to make decisions on daily needs. Moreover, challenges to these traditional gender roles could result in conflict and a violent resolution of such conflict.

Our results provide other policy implications. Efforts to expand women's employment opportunities economically empower women but will not necessarily protect them from an abusive relationship, possibly if women employment runs counter to prevailing notions on gender roles. A better understanding of gender roles, the nature of conflict, and ways to resolve conflict should be provided particularly through the education system where intervention can begin at a young age when notions on gender roles begin to be formed.

Will a divorce law possibly mitigate Filipino women's risk of domestic violence? Our results, unfortunately, do not provide any clear evidence for this. If a divorce law tends to reduce the duration of marriages, then the law potentially reduces the protective effects on women. However, to the extent that divorce increases options of women outside a marriage similar to the effect of having fewer children,, then a divorce law could result in reduced tolerance for domestic violence by women. Further research is needed to understand the potential effects of a divorce law on the protection of women against violence, given that our results point to negative and positive effects.

Domestic violence is indeed a complex phenomenon, requiring a multi-disciplinary approach to understand its various facets. It also requires high quality data, representative and properly collected to avoid potential biases. Studies still need to be undertaken to further test and understand the non-linearities underlying the relationship between economic empowerment and domestic violence.

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