## THE ECONOMICS OF DOMESTIC VIOLENCE:

#### EVIDENCE FROM BANGLADESH

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## OUTLINE

- Introduction
- 2 Conceptual Framework
- **3** Behavior Experiment
- SURVEY EXPERIMENT

# GLOBALLY, DOMESTIC VIOLENCE IS HIGHLY PREVALENT AND COSTLY

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- 30% of ever-partnered women experienced physical or sexual violence by a partner in their lifetime (WHO, 2013).
- Lifetime exposure to domestic violence is correlated with
  - Adverse economic and health outcomes in victims (Erten and Keskin 2018; Ellsberg et al. 2008; Campbell et al. 2002).
  - Poor developmental outcomes in children (Aizer 2011; Carrell and Hoekstra 2010; Koenen et al. 2003; Huth-Bocks et al. 2001).

# Domestic Violence is negatively correlated WITH GDP

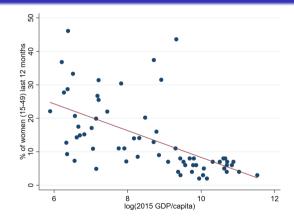


FIGURE 1: Source: World Bank

Introduction 0000000

# Introduction

# The Relationship Between Income and Violence Remains Poorly Understood

• Strong negative correlation between income and domestic violence, both across countries and within countries.

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- Evidence that income-support interventions aimed to alleviate household poverty and empower women may lead to increases in victimization (Green et al. 2015; Hidrobo and Fernald, 2013; Bajracharya and Amin 2013; Dalal et al. 2013; Ahmed 2005; Angelucci 2008).

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  - → Did not consider social image concerns. Correlates

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- Which mechanisms explain the income gradient in the use of violence?
  - $\rightarrow$  First step towards identifying interventions that can reduce violence.

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- 2 Income gradient: Low-income men are up to twice as violent.
- - Low-income wives do not disobey more.

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  - Idiosyncratic violence: Violence increases utility.
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- 2 Survey experiment: Elicit beliefs and norms using vignettes.

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Wife's problem

→ Husband's problem

## 1. Motives for violence: IV-DV-RV

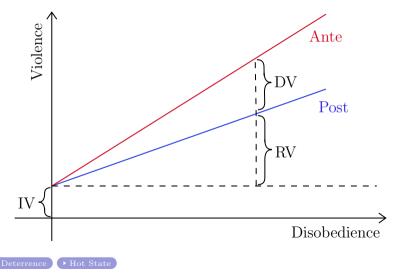
Idiosyncratic Violence	Deterrence Violence	Reaction Violence
V increases utility:		V decreases utility cost of D:
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Disobedience independent

Disobedience dependent

## 1. Motives for violence: Relative importance



## 2. Mechanisms explaining income gradient: $I \Leftrightarrow V$

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- Differences in taste.
- 2 Differences in marginal utility:
  - Consumption: Low-income men have higher MU from consumption.
  - Social image: Low-income men have higher MU from social image.

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- Woman chooses between small and large plate of rice for herself.
- With small probability, man receives the other plate, with large probability, also receives large plate.
- Disobedience: Woman gives herself the large plate.

• Man can punish wife for each choice by seconds of annoying sound he chooses on a slider (triggers sound on earphones without enumerator).



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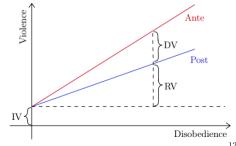
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#### 1. MOTIVES FOR VIOLENCE: DIAGNOSTICS

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• Does hot-state violence matter? - One-shot ex-post punishment.

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  - Beliefs: How will the husband (re-)act?
  - 2 Social norms: What is the socially desirable (re-)action?

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- Show vignettes portraying visibly low- or visibly high-income couple.
- Vary situation portrayed: Husband instructs wife to avoid disobedience that is costly to i) consumption, ii) social image.

#### •00000000000

### THE END

#### Cross-Country Relationship - top 50%

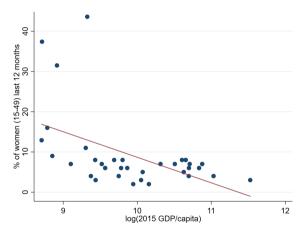


FIGURE 2: Source: World Bank



#### Cross-Country Relationship - bottom 50%

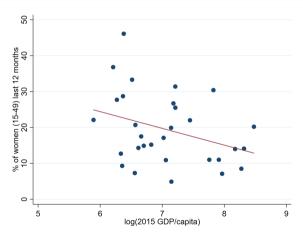


FIGURE 3: Source: World Bank



#### Global Estimates of Intimate Partner Violence

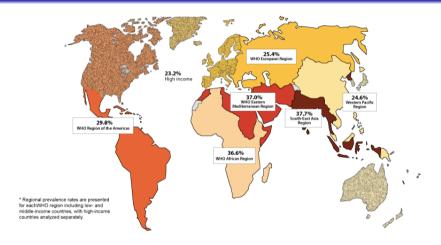
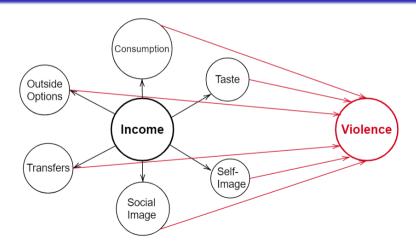


FIGURE 4: Source: WHO, 2013

# THE RELATIONSHIP BETWEEN INCOME AND VIOLENCE REMAINS POORLY UNDERSTOOD



#### LOW-INCOME HUSBANDS USE MORE VIOLENCE

TABLE 1: Types of violence that husbands use against their wives, by income

	Low income (%)		High income (%)		Difference	
He destroys her belongings	13.149	867	9.147	973	4.002***	
He forces her to have sex	27.912	867	21.172	973	6.741***	
He kicks her	18.339	867	10.175	973	8.164***	
He limits her contact with others	17.497	863	11.614	973	5.884***	
He forces her to perform sexual acts	16.148	867	8.941	973	7.206***	
He punches her	13.610	867	8.941	973	4.669***	
He pushes her	17.532	867	11.716	973	5.815***	
He slaps her	38.870	867	30.113	973	8.757***	
He spites her	21.915	867	18.088	973	3.826**	
He stomps her	20.761	867	11.922	973	8.839***	
He twists her wrist	11.188	867	6.578	973	4.610***	

#### DISOBEDIENCE, VIOLENCE AND INCOME

Table 2: Disobedience, violence and income

	Outcome: Violence Index			
	(1)	(2)	(3)	
Disobedience Index	-0.010	-0.035	-0.120	
	(0.039)	(0.039)	(0.136)	
Low Income	0.182***	0.116***	0.115***	
	(0.031)	(0.032)	(0.032)	
Disobedience*Low Income	0.232***	0.216***	0.206***	
	(0.074)	(0.074)	(0.075)	
Age		0.010	0.010	
		(0.008)	(0.008)	
Disobedience*Age			0.005	
			(0.006)	
Secondary Edu		-0.188***	-0.188***	
		(0.036)	(0.036)	
Husband Age		0.006*	0.006*	
		(0.004)	(0.004)	
Husband Secondary Edu		-0.162***	-0.162***	
v		(0.036)	(0.036)	
Observations	1840	1840	1840	

OLS regressions with modified Huber-White SEs.

#### DISOBEDIENCE BY INCOME

FIGURE 5: Without permission she...

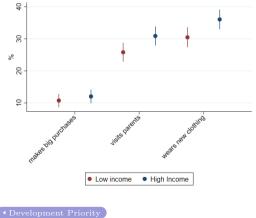
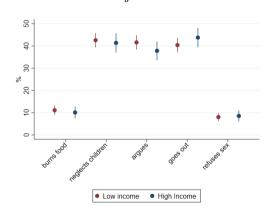


FIGURE 6: It is justified to beat if...



#### Conceptual Framework - Wife's problem

$$\begin{cases} \max_{D} \underbrace{u(C_W)}_{\text{Consumption utility}} + \underbrace{g(D,I)}_{\text{Disobedience utility}} - \underbrace{\frac{h(V(D),I)}{v_{\text{Violence cost}}}}_{\text{Violence cost}} & M = 0 \\ C_W = \alpha I & C_W = \alpha I & C_W = 0 \end{cases}$$

#### Conceptual Framework - Husband's Problem

$$\max_{V,\alpha}\underbrace{u(C_H)}_{\text{Consumption utility}} + \underbrace{\tilde{\theta}(D,V(D),I)}_{\text{Image utility}} + \underbrace{e(V(D),I)}_{\text{Violence utility}} - \underbrace{f(D,V(D),I,\epsilon)}_{\text{Disbodience cost}}$$

$$C_H = (1 - \alpha)I - \underbrace{\lambda(D, I)}_{\text{Material cost}}$$
 $C_W = \alpha I$ 

✓ Set-Up

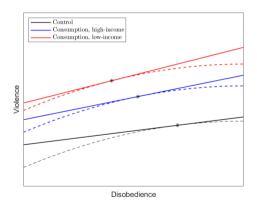
#### DIVORCE IS FINANCIALLY COSTLY

TABLE 3: Costs of divorce to husbands and wives, by income

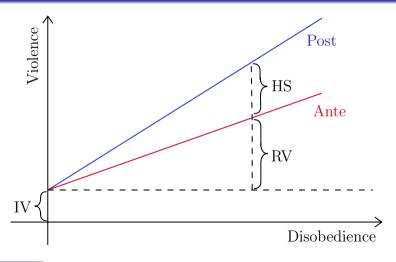
	Low income		High income		
	Mean	N	Mean	N	Difference
Costs to husbands:					
Denmeher (USD)	2074.822	554	1827.005	693	247.818***
Divorced	0.059	809	0.034	917	0.026**
Costs to wives:					
Currently working	0.331	1182	0.261	973	0.070***
Total income	1059.604	1182	1687.091	973	-627.487**
She received money from parents	0.112	886	0.143	774	-0.032*
Money she sent parents last month (USD)	1.699	866	0.854	831	0.844*

Two-sided t-tests.

#### BEST-RESPONSES



#### IV-DV-HS PREDICTIONS



◆ Conceptual Framework