

Mother's Labor Force Participation and Children's Nutritional Status

A case of Nepal

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Introduction

- Doctoral candidate in Rural Sociology at the Pennsylvania State University
 - Minor in Gender Studies
- Born and raised in Doti district, Nepal
- Research centers on gender-based violence, gender empowerment, and maternal and child health

This Presentation

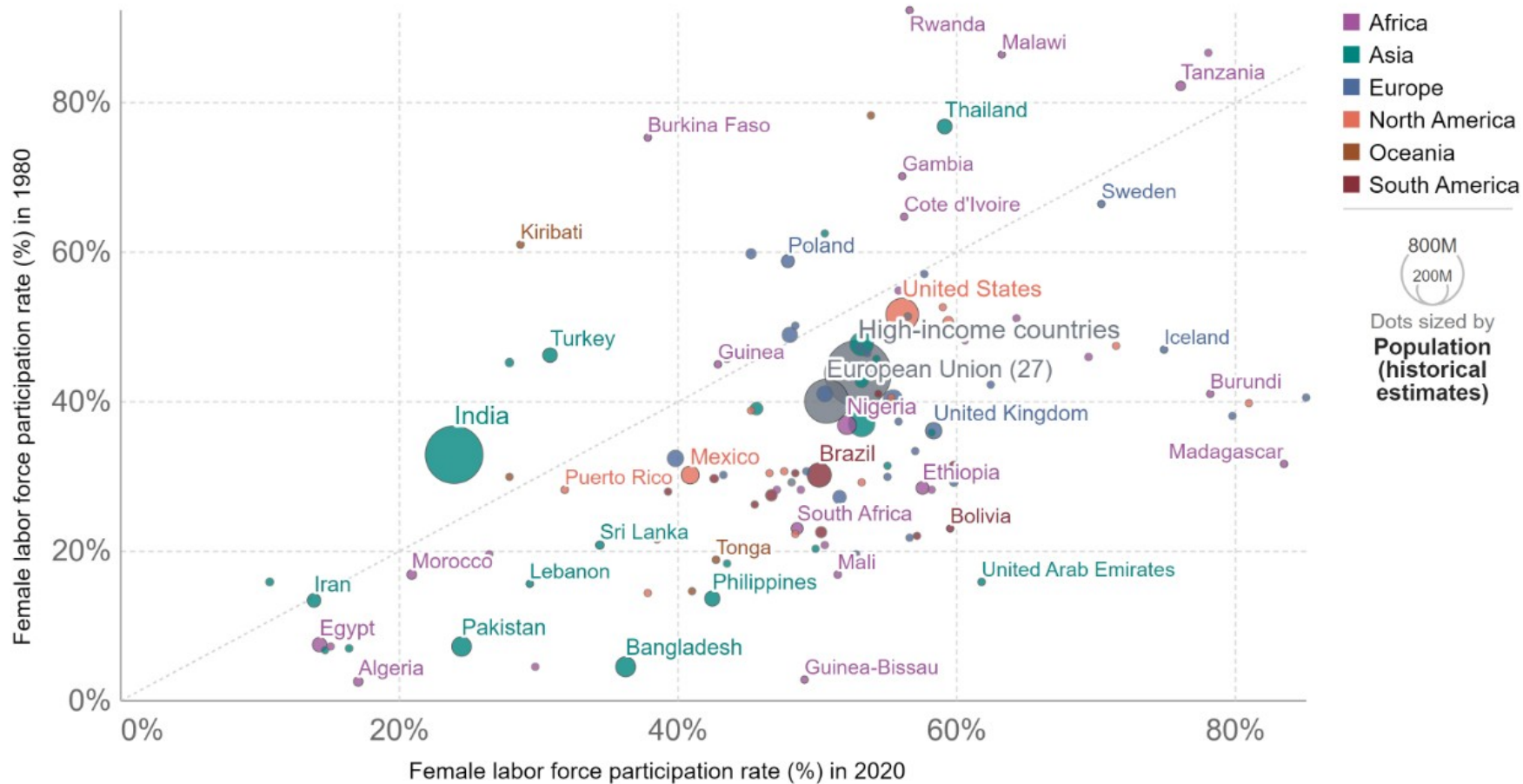
- Overall Objective

- Examine the relationship between the mother's employment and the children's nutritional status in Nepal

- Main Findings

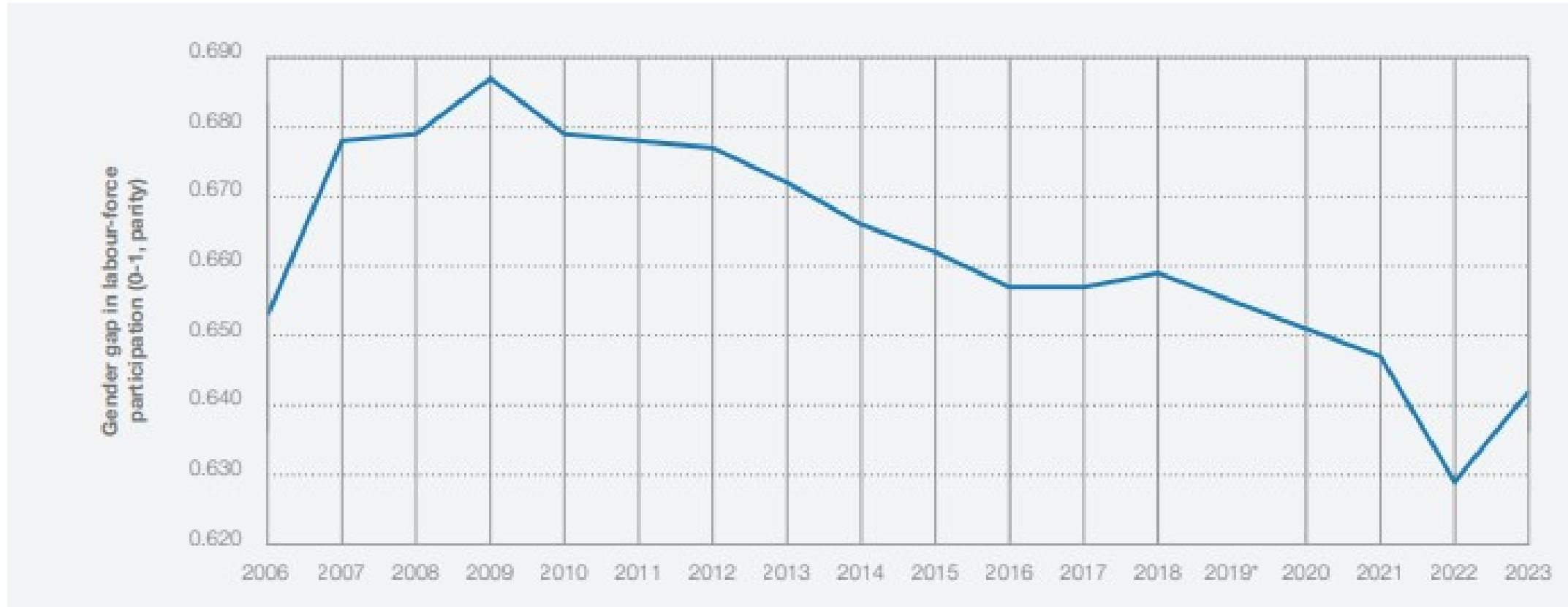
- Mother's employment is negatively associated with children's height-for-age.
- The negative association is stronger for children younger than 12 months and those who are in the lowest two income quintiles.

More Women are Working than Before in Most Countries

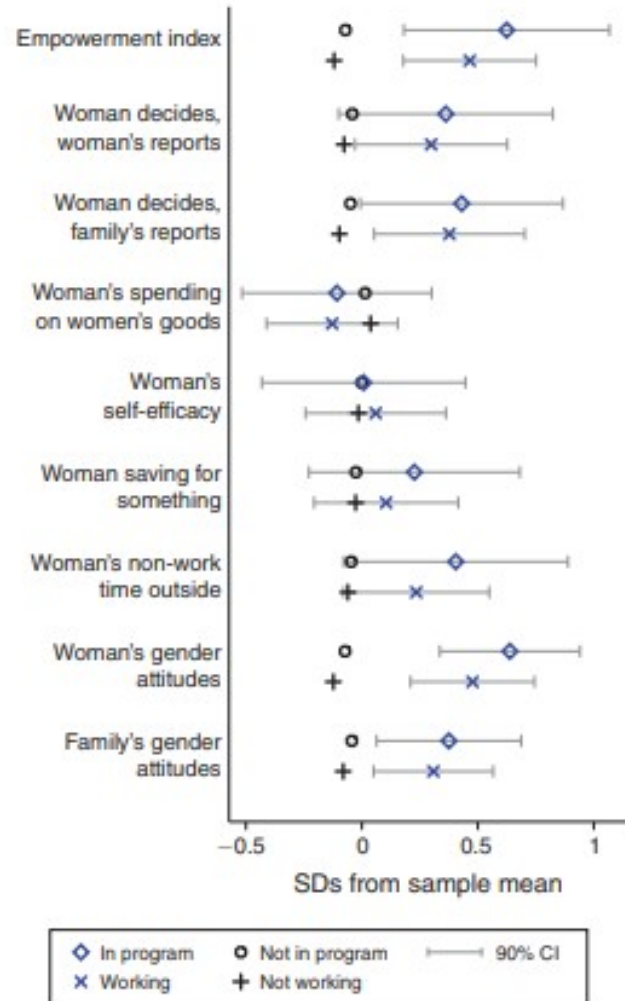


Source: International Labour Organization (via World Bank)
 OurWorldInData.org/female-labor-force-participation-key-facts • CC BY

But the Gender Gap Remains High



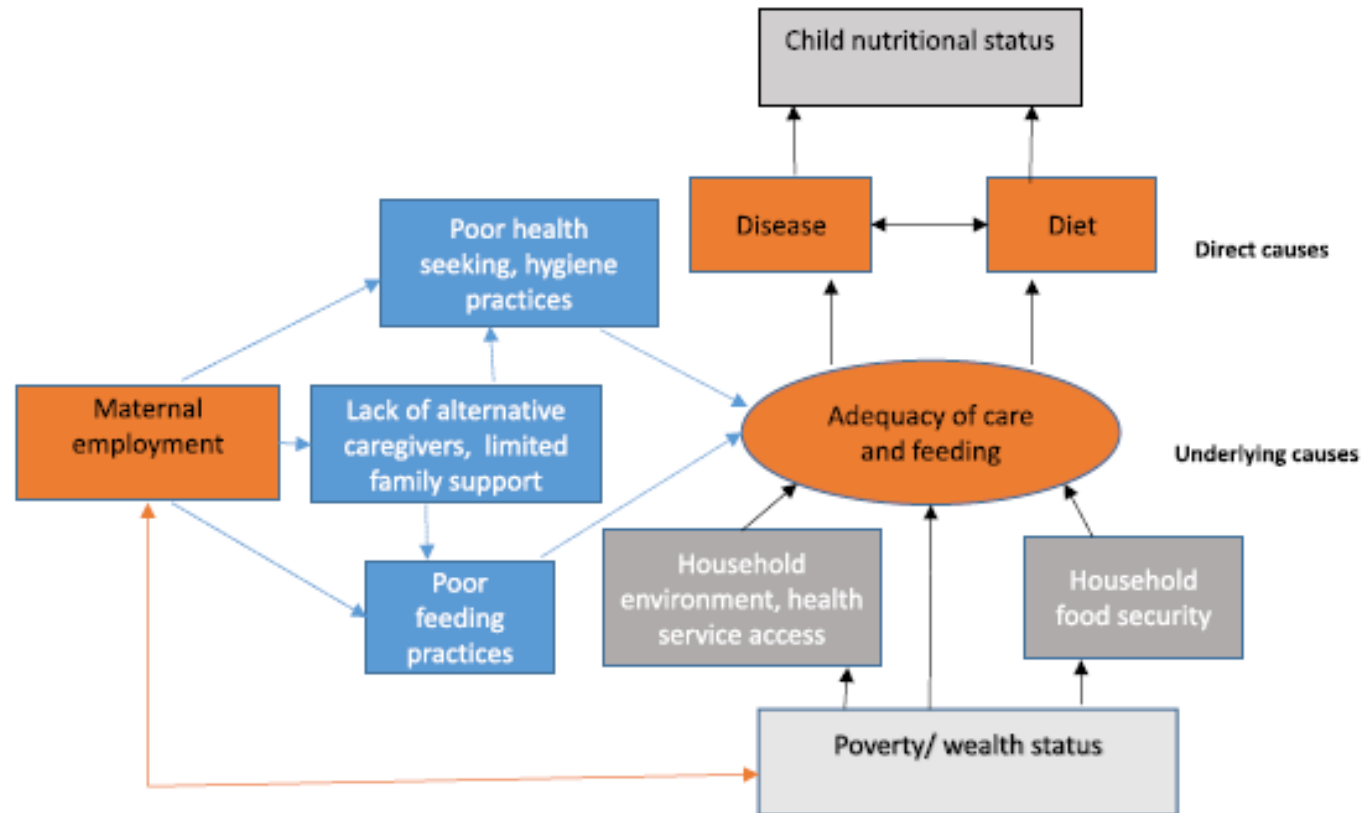
Policy Goal Should be to Continue Supporting Women’s Participation in the Labor Force



- Women’s higher employment better on its own right
- Also benefits women’s themselves, their families, and their children

Mother's Employment may Affect Child Health Theory

- Maternal employment can affect child health through multiple mechanisms

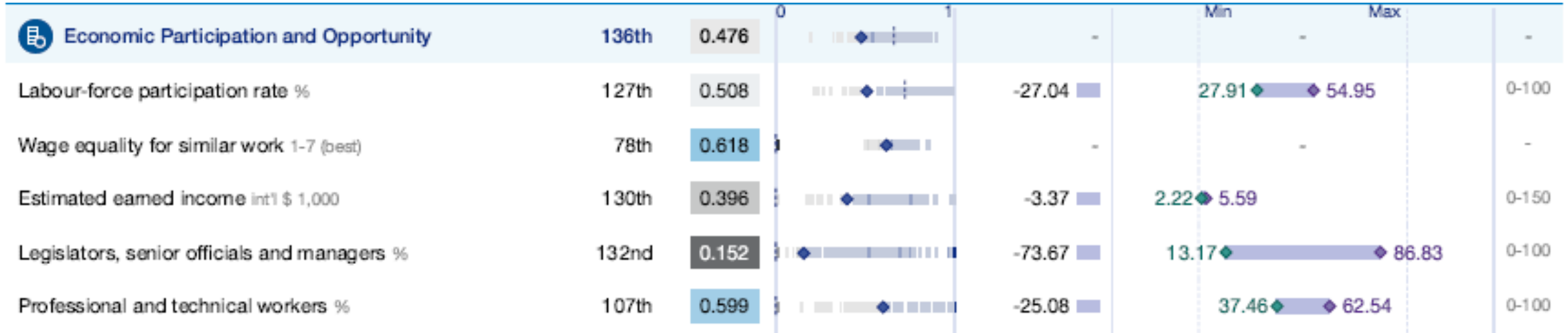


Mother's Employment may Affect Child Health

Illustrative Empirical Evidence

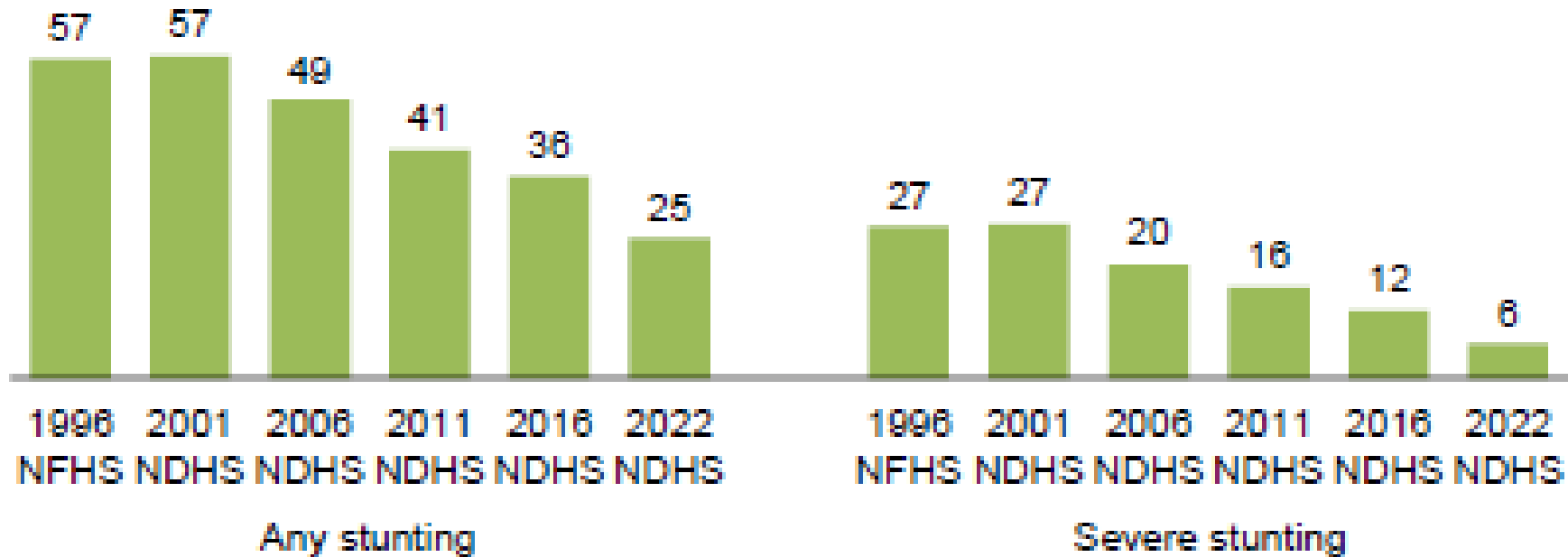
- Nepal [Brauner-Otto, Baird, and Ghimire, 2019]
 - Children of working mothers have mid-upper arms circumference that are 0.25 SD lower than those of non-working mothers
 - They also have lower height-for-age (0.5 SD) if the mother works for wage, implying the type of job matters as well
- Bangladesh [Win et al., 2022]
 - Children of working mothers had twice the odds of being stunted than children of non-working mothers

Gender Gap in Labor Force Participation a Major Problem in Nepal, too



Nepal ranks 136 out of 146 countries in women’s economic participation and opportunity

...And Malnutrition Remains a Problem



As many as 25% children below 5 are stunted, with 6% severely stunted

This Study...

- Examine the association between mother's employment and child's height-for-age
 - Nationally representative data from the Demographic & Health Surveys
 - Compare effects for children *within* a district, rather than *between* children generally—thus reducing potential compounding substantially
 - Examine differences in association by child's age group

Method

- Bivariate and multivariate regressions with height-for-age z-scores and stunting ($HAZ \leq -2SD$) as the outcome
 - District fixed effects included in multivariate regressions
 - Standard errors clustered at the district level
- Primary independent variable: Whether the mother reported working
- Covariates:
 - Child - gender, age
 - Mother – education level
 - Father – education level, whether he worked in last 12 months
 - Household – number of household members, wealth quintile, “distance to health facility is a big problem”

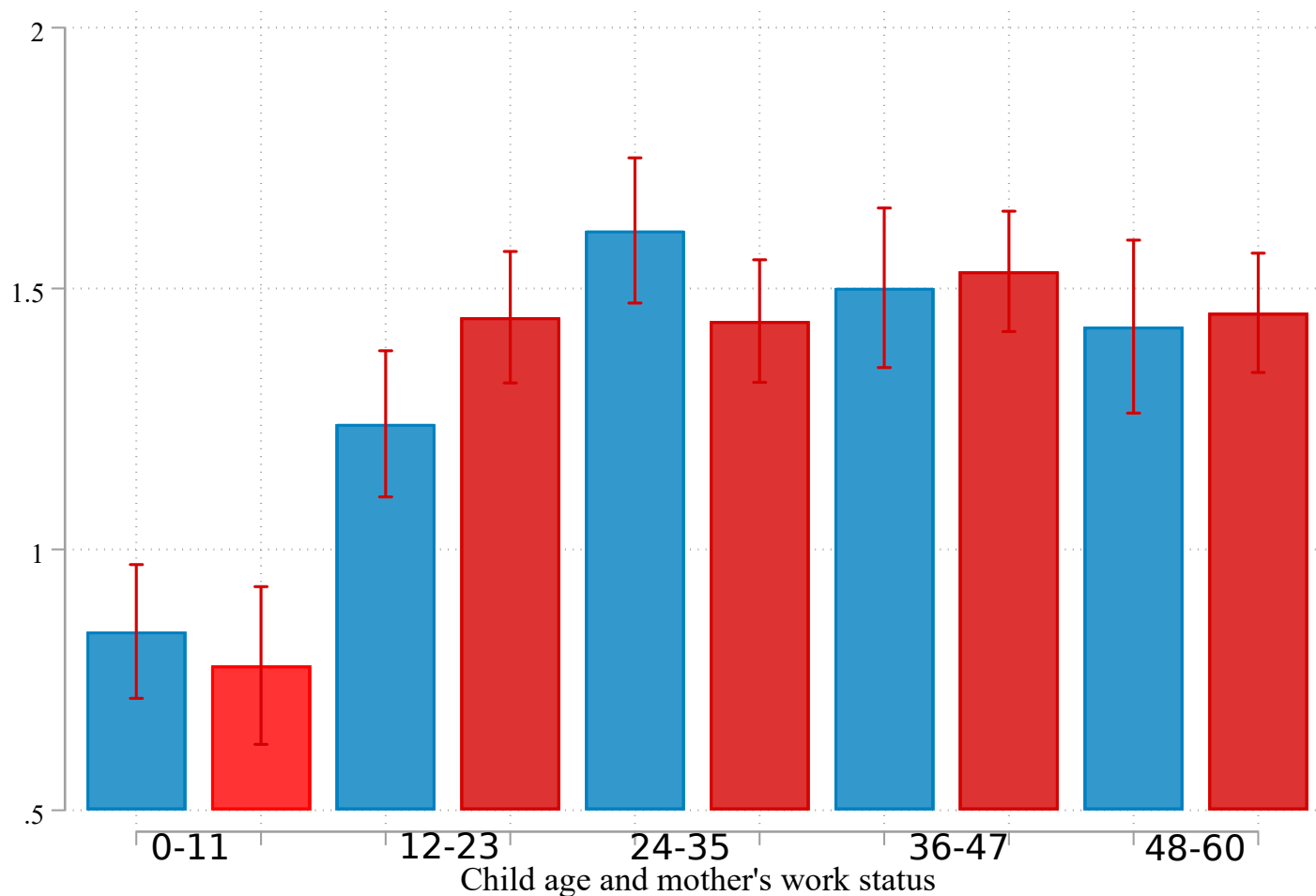
Key Results

Association between Maternal Employment and Child Height

	Height-for-age z-score		Stunted	
Mother working (Ref: mother not working)	-0.180*** (0.046)	-0.091* (0.048)	0.056*** (0.018)	0.031* (0.019)
Child characteristics		X		X
Parents' characteristics		X		X
Household characteristics		X		X
District fixed effects		X		X
R-squared	0.57	0.61	0.61	0.11

- Children of working mothers have 0.1SD lower height-for-age
- Children of working mothers are 3.1 percentage points more likely to be stunted

Heterogenous Associations 1



- Association does not differ by child age group, but difference between working and not working is the most visible for children ages 12-24 months

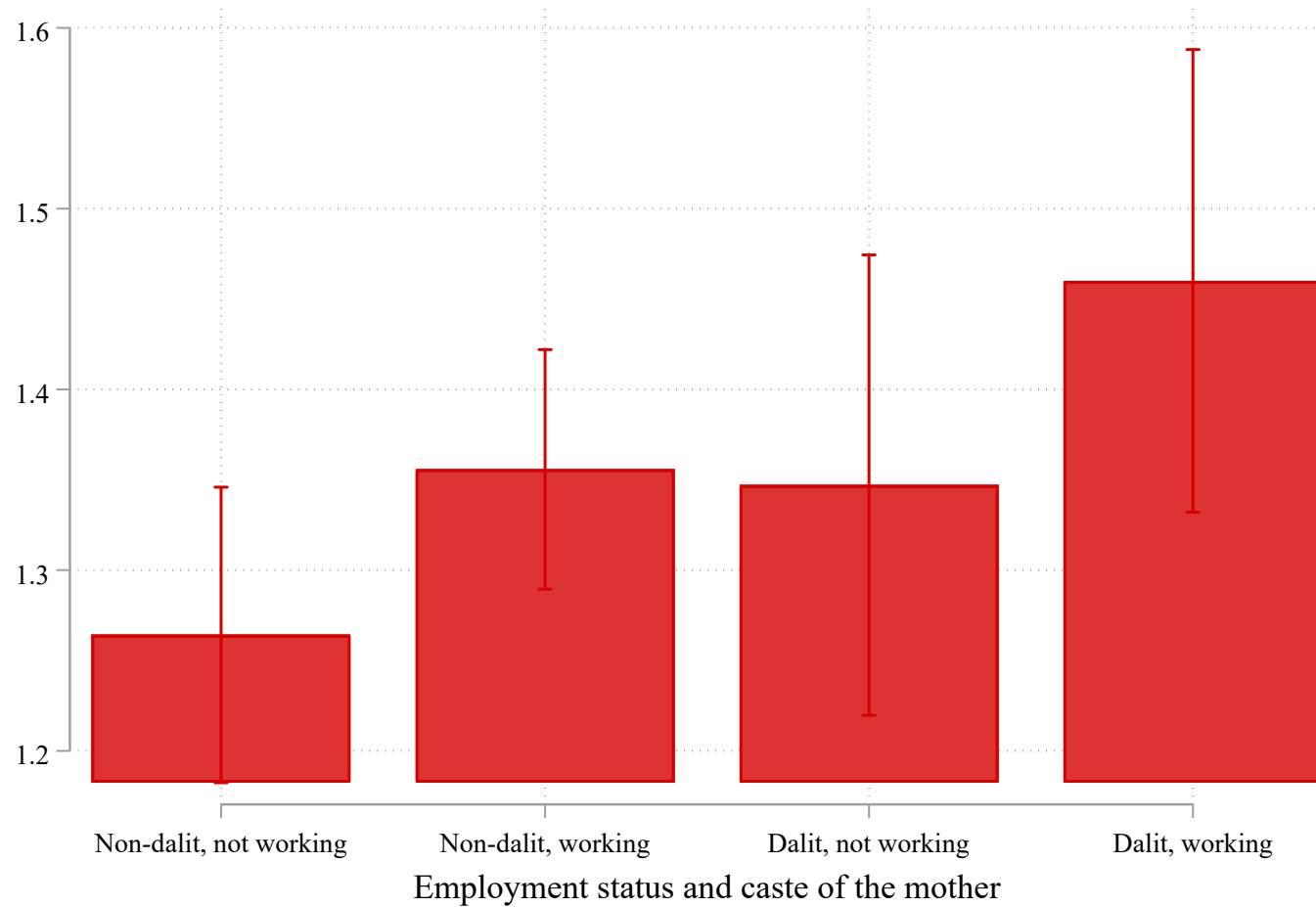
LEGEND:

Blue bar: Not working

Red bars: Working

Note: Y-axis is multiplied by -1, so taller bar means worse nutritional status

Heterogenous Associations 2



No difference in association by caste

Note: Y-axis is multiplied by -1, so taller bar means worse nutritional status

Policy Implications

- Social protection programs targeted to working mothers of young children are critically needed
- Support needs to extend beyond paid and longer maternity leave, as the adverse effects of maternal employment persists beyond infancy

Key Caveats

- These are associations. Although we have accounted for many potential confounders, the findings cannot be interpreted as causal
- Effects may vary by the type of employment and other characteristics of the job (e.g., working hours, industry, etc.) which we are not able to explore given the data
- In sub-group analysis, small sample size is an issue (given imprecise coefficients). Additional studies with larger sample size will be required to assess heterogeneity in association

Thank you!

For questions and comments:
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