

# The Global Economic Crisis - Including Children in the Response

Quantifying the impact of past financial crises on the health  
of children and households

Karen A. Grépin

*Robert F. Wagner Graduate School of Public Service*

*New York University*



**NEW YORK UNIVERSITY**

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# OVERVIEW OF PRESENTATION

## INTRODUCTION

- Previous studies

- Rationale for research

- Data and empirical approach

## PRELIMINARY FINDINGS

- Infant mortality

- Immunizations

- Other health seeking behavior

## CONCLUSIONS

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- ▶ Middle-income country case-studies demonstrate mixed effects (e.g. Cutler et al., 2002; Paxson & Schady, 2005; Miller & Urdinola, 2007).
- ▶ Low-income country studies generally show counter-cyclical effects (Bhalotra, 2009; Baird et al., 2007).

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- ▶ Public expenditure contractions likely reduce supply side factors ↓.
- ▶ Direction of effect an empirical question and likely to be different in developed and developing countries.

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- ▶ Study did not investigate the channels through which impact translated to poor health outcomes.



# DATA AND EMPIRICAL APPROACH

- ▶ Pooled analysis using 174 Demographic and Health Surveys from 70 countries (1985-2007) over 3 million live births (only 1.5 million eligible for inclusion).
- ▶ Dependent variable a measure of child mortality as well as health service utilization of households and children.
- ▶ Country-level fixed effect design controlling for time trends as well as country-specific time trends.
- ▶ GDP data taken from the World Bank Development Indicators.

## IMPACT ON INFANT MORTALITY

<b>Dependent Variable</b>	<b>Infant Mortality</b>	
lnGDPpcap	-0.011** (0.005)	-0.012*** (0.004)
Country-fixed effects	yes	yes
Year dummies	yes	yes
Country-specific time trends	yes	yes
Full set of controls	no	yes
Observations	1516789	1516789
R-squared	0.01	0.03

# IMPACT ON INFANT MORTALITY, BY AREA

<b>Dependent Variable</b>	<b>Infant Mortality</b>	
	<b>Urban</b>	<b>Rural</b>
<b>Subgroup: Area</b>		
lnGDPpcap	-0.006 (0.004)	-0.017** (0.007)
Country-fixed effects	yes	yes
Year dummies	yes	yes
Country-specific time trends	yes	yes
Full set of controls	yes	yes
Observations	694708	822081
R-squared	0.01	0.01

# IMPACT ON UTILIZATION OF VACCINES

<b>Dependent Variable</b>	<b>dpt1</b>	<b>dpt3</b>	<b>polio1</b>	<b>polio3</b>	<b>measles</b>
lnGDPpcap	0.084 (0.068)	0.104 (0.087)	0.199** (0.084)	0.231* (0.133)	0.120 (0.088)
Country-fixed effects	yes	yes	yes	yes	yes
Year dummies	yes	yes	yes	yes	yes
Country-specific time trends	yes	yes	yes	yes	yes
Full set of controls	yes	yes	yes	yes	yes
Observations	514280	509455	514790	510797	511047
R-squared	0.11	0.13	0.07	0.11	0.09

# IMPACT ON UTILIZATION OF ANTENATAL CARE

<b>Dependent Variable</b>	<b>Any ANC</b>	<b>Any Tetanus</b>	<b># Tetanus</b>
lnGDPpcap	0.113** (0.049)	0.113* (0.067)	-0.108 (0.083)
Country-fixed effects	yes	yes	yes
Year dummies	yes	yes	yes
Country-specific time trends	yes	yes	yes
Full set of controls	yes	yes	yes
Observations	418794	524573	311267
R-squared	0.17	0.12	0.12

# IMPACT ON UTILIZATION OF MATERNITY SERVICES

<b>Dependent Variable</b>	<b>Any Assistance</b>	<b>Skilled Assistance</b>
lnGDPpcap	0.010** (0.005)	0.077 (0.059)
Country-fixed effects	yes	yes
Year dummies	yes	yes
Country-specific time trends	yes	yes
Full set of controls	yes	yes
Observations	521755	512368
R-squared	0.05	0.26

# IMPACT ON UTILIZATION OF MATERNITY SERVICES

<b>Dependent Variable</b>	<b>Ever breastfed</b>	<b>Months breastfed</b>
lnGDPpcap	0.043** (0.021)	-1.150 (1.269)
Country-fixed effects	yes	yes
Year dummies	yes	yes
Country-specific time trends	yes	yes
Full set of controls	yes	yes
Observations	524573	488011
R-squared	0.09	0.15

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- ▶ The impact of aggregate income shocks on child mortality found to be pro-cyclical and more pronounced in rural areas and among low-asset households. A 1% change in GDP per capita was associated with 0.11 additional deaths per 1000 live births.

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- ▶ Little effect on most EPI vaccines, with the exception of polio which was sensitive to income shocks.
- ▶ Income shocks associated with lower probability of receiving any coverage, but does not appear to be associated with the quality or depth of health service coverage.