

Does economic crisis have different impact on husbands and wives? Evidence from the Asian Financial Crisis in Indonesia

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Introduction

- Utilized regional variation in the severity of the Asian Financial Crisis across Indonesia
- Used drop in district consumption growth as measure of crisis
- Finds significant association between the consumption shock and change in women's working status and business asset
 - Women worked more in districts that were hit harder
 - Women decreased business asset in districts that were hit harder
- This association is different by
 - pre-crisis consumption level
 - whether the household receives social security programs

Literature

- Women and crisis
 - Labor market response: Added worker effect (Skoufias and Parker 2006, Umana-Aponte 2009), Discouraged worker effect (Kim and Voos 2007)
 - Other impacts: Deferred fertility (Adsera and Mendez 2009), Lower school enrollment for girls (Thomas et al. 2004), Higher infant mortality for girls (Baird, Friedman and Schady 2007)
 - This paper adds by utilizing regional variation instead of before/after. Also looks at assets in addition to working status
- Intra-household allocations
 - Adds to this literature by analyzing how husbands and wives allocate risk-coping strategies during aggregate shocks

Data

- Indonesian Family Life Survey (IFLS)
 - individual and household characteristics, pre-crisis village characteristics
- Indonesian Social Economic Survey (Susenas)
 - district level consumption change, pre-crisis district characteristics

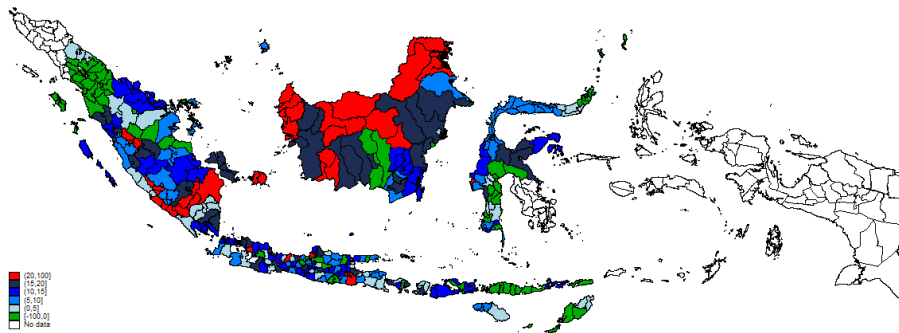
Why consumption change?

- More accurately measured
- Representative data at district level
- Closely related to change in living standards during crisis

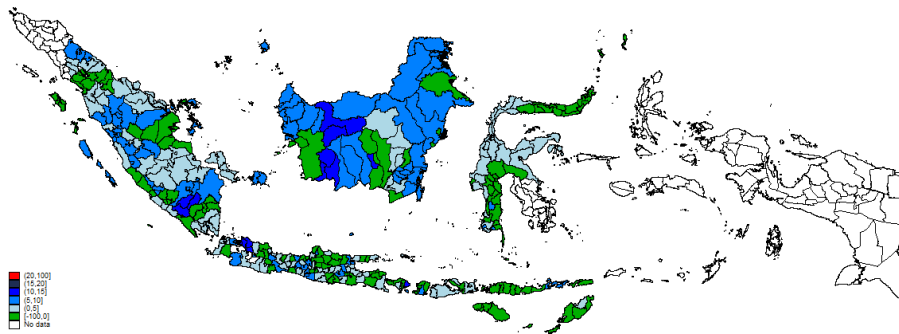
Change in annual growth rate from 1993-1997 annual growth rate (district median consumption)

N=255	1997-1998	1997-2000
mean	-7.96	-1.76
25th percentile	-15.05	-5.76
median	-9.4	-2.09
75th percentile	-2.42	1.7

Drop in 1997-1998 growth rate of district median consumption from 1993-1997 annual growth rate



Drop in 1997-2000 annual growth rate of district median consumption from 1993-1997 annual growth rate



The association with district consumption shock

- Regress change in husband's and wife's work and assets on the change in growth rate of district consumption
- Change in work is change in whether working
- Change in assets include change in business asset and non-business asset
- To address omitted variables, control for
 - age and education of husband and wife
 - pre-crisis household age and education composition
 - pre-crisis location in terms of province (indicator variables)
 - pre-crisis village characteristics including remoteness, access to water and electricity, and main industry
 - pre-crisis district characteristics including unemployment rate, gender and formal/informal composition of labor force, industry composition of labor force

The association with change in working

Shock associated with an increase in women's employment in urban areas

Urban wives		Urban husbands		Rural wives		Rural husbands	
1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock
No control							
-0.26*	-0.43*	0.02	0.08	-0.00	-0.02	0.01	0.09
(0.15)	(0.24)	(0.09)	(0.14)	(0.14)	(0.24)	(0.06)	(0.10)
[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Full control							
-0.42**	-0.40	-0.04	0.31	0.36	0.43	-0.03	0.12
(0.21)	(0.41)	(0.14)	(0.28)	(0.25)	(0.37)	(0.07)	(0.12)
[0.06]	[0.06]	[0.04]	[0.04]	[0.09]	[0.09]	[0.05]	[0.05]

The association with change in business asset(in 10000Rp)

Shock associated with a decrease in women's business asset in both urban and rural areas

Urban wives		Urban husbands		Rural wives		Rural husbands	
1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock
No control							
538	1894**	350	728	239	750*	-937	2636**
(551)	(878)	(591)	(943)	(255)	(433)	(770)	(1311)
[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Full control							
857	2648	946	2564*	185	1037*	-2163	3595
(793)	(1682)	(607)	(1505)	(321)	(536)	(2957)	(2171)
[0.06]	[0.06]	[0.05]	[0.05]	[0.02]	[0.02]	[0.02]	[0.03]

With change in non-business asset(in 10000 Rp)

Shock not associated with change in non-business asset

Urban wives		Urban husbands		Rural wives		Rural husbands	
1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock	1998 shock	2000 shock
No control							
-253	455	2913***	6280***	-223	379	-6	445
(947)	(1511)	(894)	(1420)	(157)	(268)	(169)	(288)
[0.00]	[0.00]	[0.01]	[0.02]	[0.00]	[0.00]	[0.00]	[0.00]
Full control							
-2326*	-154	337	2495	-370	-63	-309	357
(1293)	(3165)	(920)	(2338)	(251)	(348)	(218)	(345)
[0.05]	[0.04]	[0.09]	[0.09]	[0.08]	[0.08]	[0.03]	[0.03]

Effect of shock on change in wives' outcomes: interactions

Shock period	Whether working	Business asset (in 10000 Rp)	
	Urban 1997-1998	Urban 1997-2000	Rural 1997-2000
Interaction with baseline household per capita consumption			
Effect of shock	-0.56*** (0.22)	2098 (1531)	761 (660)
Effect of interaction (Consumption in 10000 Rp)	0.004** (0.002)	0.001 (0.001)	0.001 (0.002)
Interaction with baseline indicator that household consumption is below median			
Effect of shock	-0.66** (0.26)	3816* (2268)	1352 (827)
Effect of interaction	0.44** (0.28)	-2875 (1888)	-575 (805)
Interaction with baseline bargaining power index			
Effect of shock	-0.16 (0.26)	1993 (1264)	1269** (603)
Effect of interaction	-0.84 (0.63)	1933 (1866)	-864 (863)
Interaction with whether receiving social safety net in 2000			
Effect of shock	-0.35 (0.27)	3493* (2012)	1664** (765)
Effect of interaction with subsidy	-0.06 (0.40)	-2793* (1428)	-1485* (830)
Effect of interaction with assistance	-1.07 (1.17)	-1483 (1279)	-4194** (1812)

Conclusion

- The district consumption shock is associated with different responses from married men and women
- Women seem to be the ones who changed their working status and assets as a response to the crisis, and the magnitude is large
- This response does seem to differ by pre-crisis consumption level of the household, although the relationship is non-linear
- Receiving subsidy or assistance seems to be a substitute for married women's response to the shock
- Risk-mitigating policies should take the intra-household allocation of risk-coping into consideration