Capitalist crises, social capital and well-being

Gindo Tampubolon
ESRC Centre for Research on Socio-cultural Change
CRESC

Poverty and Capital Conference
Manchester 2 – 4 July 2007

22 June 2007

Abstract

Alleviating poverty is among the most laudable aim of the Millennium Development Goals. However, policies aimed at alleviating poverty could only be successful if they are underpinned by clear understanding of mechanisms which contribute to poverty incidences and distributions. This study seeks to investigate the effect of major capitalist crises, such as the Asian financial crisis on health distribution and access; and how social capital, as one of the resources available to all rich and poor, mediates this relationship. The need to focus on major crisis is derived from an understanding that severe crises are very much a feature of modern capitalism.

Using the Indonesian Family Life Survey I investigate the dynamics of well-being prior to and after the crises. Despite the net damage to people's health caused by the crisis, damage to people's ability to pay for health services is even deeper. After the crisis, not all people in need of treatments are able to access health services; there is a marked drop in the number of visits to health facilities despite the reported deterioration of health condition.

However, there is evidence of beneficial effects of community social capital. Social capital as measured in terms of social cohesion and number of community volunteers in health activities show two kinds of beneficial effect on health. First, community social social cohesion has a protective effect on people's health; and so do community volunteers. More over, in the longer run, community social capital in terms of the number of volunteers has a positive provision effect which enables more access to health facilities in the troubled period.

1 Introduction

Major financial crises are increasingly recognised as an inherent feature of current international financial architecture (Bhagwati 1998, 2000, Caprio and Klingebiel 2003, Corden 2002, Eatwell and Taylor 2000, Eichengreen 2002, Krugman 1979, Stiglitz 2002). Based on extensive studies, Kindleberger and Aliber (2005) conclude that it 'is unmistakable that financial failure has been more extensive and pervasive in the last thirty years than in any previous period.' Depressingly, we are nowhere near capable of preventing them; or as Bhagwati (2000 :14) puts it:

> In theoretical terms, we would say that destabilizing speculation can and does break out where the speculators can emerge unscathed ... No one of sound mind can seriously sustain the notion that we have the macroeconomic expertise, indeed the alchemy, to eliminate this important, inherent downside of free capital flows.

Lacking access to the expertise or the concoctions for the alchemy to arrest the downside, I ask instead: What happens to the poor's well being when there is financial crises? In these events, does the social capital of the communities where they live act as buffer to soften the deleterious effects of the shocks? In raising these questions, this paper is firmly set in the lesser realm of 'comforting the disturbed' rather than in the realm of 'disturbing the comforted'. The latter is the subject of vast literature and global activism.

There is by now a voluminous literature on the causes and effects of the Asian crises of 1998. Few readers come to the scene of the event without preconceptions and there are many choices of overview volumes to pick from depending on one's persuasion as to where the lamp post is. The only additional excuse I have for the following is the fact that it is short and handy: Corden (1999).

Interestingly, there is also a parallel and comparably large literature on social capital in developing countries and its role in development, e.g. Dasgupta and Serageldin (2000). This is partly because this specimen of capital has attracted its fair share of critics. Fine (2000), for instance, is at pain to warn us about the 'smooth' danger of the concept of social capital which abandons issues of power and political economy.

Despite these considerable separate literatures, the role of social capital in crises as a buffer protecting well being such as health is, however, a neglected topic. My aim in this paper is to examine whether social capital at the community level is effective in this role. The experience of Indonesia from 1993 to 2000 is perversely ideal for this investigation and I shall make use of a panel survey of Indonesian households for this purpose (Frankenberg and Karoly 1993, Frankenberg and Thomas 1997, Strauss et al 2004). The use of panel data should alleviate the problems dogging much empirical work in the extant literature such as sample selection and endogeneity. On the severity of these problems which throw doubt on current works on systemic financial crises see comments by Goodhart (2003) on manuscripts of Honohan and Laeven (2005).

A random effects Poisson regression is used to model the number of visits to outpatient health services in Indonesia during the period before and after the Asian crisis and to estimate the effect of community social capital. Social capital, measured as community cohesion, significantly reduces the number of visits to outpatient health services. The finding adds to the scant evidence on the beneficial effect of community social capital on health in developing countries. This may be called the preventative effect of community social capital. Next, a somewhat paradoxical finding also emerges: the number of volunteer health activists, another measure of community social capital, significantly *increases* the use of outpatient services. This paradox however is more apparent than real. The increase in use is likely to be the consequence of increase in provision of outpatient services provided by these volunteers. Hence social capital exerts its beneficial effect on health through prevention and provision.

The rest of the paper lays out the literature on social capital and health briefly in Section 2. Method and data are introduced in Section 3. Results and discussion make up the penultimate section before concluding remarks on further works close this paper.

2 Does it really matter where you live?

Ever since public health researchers discover the effect of social capital on health (for insights and overviews into this link see Berkman and Kawachi 2000, Kawachi and Berkman 2003 and Marmot and Wilkinson 2006) work

on this link has continued unabated. Different theoretical origins of social capital, the neo-Tocquevellian Putnam, the rational action Coleman or the relational Bourdieu, put great importance on the community or group or network aspect of social capital. Thus it is somewhat surprising that community social capital effect on individual health receive less emphasis in empirical studies. This is especially so if community social capital is required to be assessed directly to produce an integral or contextual measure (Subramanian et al. 2003) rather than indirectly or artefactually through aggregating individual measures.

Problem of measurement is not the only problem with social capital theory. There is a substantial literature on theoretical critique of social capital; see for instance, Fine (2001). However, I am persuaded that although social capital is not the conceptual cure for everything, its absence can lead to inadequate understanding of important issues such as public health (Szreter and Woolcock 2003). The proviso is adequate solution to measurement problem above.

In the most recent, wide ranging and systematic, review of empirical literature on community social capital and health, Islam et al (2006b) conclude that irrespective of whether one lives in an egalitarian country or not, individual level social capital does have a positive association with better health. However, they find that community level social capital matter less, if at all. One feature that is crucial in all these empirical studies that directly assess the link between social capital and health is the predominance of studies from developed countries. These countries are relatively more egalitarian as measured by their income inequality and public social expenditure as proportion of gross domestic product. The authors suggest that this is a major contributor to the weak effect of community social capital. Two more recent studies reinforce the negligible effect of community social capital in Malmö (Islam 2006b) and New Zealand (Blakely et al. 2006). However, other studies continue to contradict this conclusion, for instance Sundquist and Yang (2007).

In one sense, it is difficult to escape the conclusion that where you live still does matter. Research subjects from developed country such as residents of Canada, New Zealand, or Malmö, Sweden, may not benefit from their community's social capital. On the other hand, it is not easy to brush aside the broad based (mainly positive) development effects of social capital

in developing countries. One acknowledges however the paucity of comparable direct investigation of the effect of community social capital on health in developing countries. This is what motivates this paper in the first place.

The discouraging results reviewed above should not however deter empirical studies on social capital in developing countries. Although one must strive to be clear of the mechanisms and measures involved. Measures and conceptions of social capital both at individual and community levels and their effects are the subjects of many ongoing works.

Here I borrow from Kawachi and Berkman (2000) on mechanisms linking community social capital and individual health. Two of these is especially emphasised by these authors: "access to local services and amenities is a [way] in which neighborhood social capital may affect health . . . [neighbourhoods rich in social capital] are more successful at uniting to ensure access to services such as community health clinics." One of the social capital measures in this paper, number of volunteers in community health clinics clearly captures the latter mechanism of social capital.

The process of development in Indonesia is known to be strongly rooted in local initiatives (Bresnan 2003); something locally known as *swadaya masyarakat* or local self-reliance. These initiatives may take the form of institutions, known as *lembaga swadaya masyarakat* or LSM. They may also take the form of activities such as integrated community health posts, locally known as *pos pelayanan terpadu* or *Posyandu*. I expect therefore that number of volunteers or activists in these Posyandu to be positively related to health.

Kawachi and Berkman delineate another mechanism or pathway linking community social capital and individual health, that is through the promotion of rapid diffusion of health information (:184ff). Invoking the theory of diffusion of innovation they suggest that in more cohesive communities, information diffuse more rapidly. I try to capture this aspect of community social capital through observations about community watch groups, community facilities and community welfare programs. I expect that community evidently possessing high social capital such as this will contribute positively to the health of their local residents.

This study makes another important contribution, this time in terms of measures. In most studies on community social capital, an acute measurement problem is often encountered. Despite their highly desirable feature,

direct measures of community social capital, or what is known as integral measures as opposed to aggregate measures, are often lacking. Kawachi and Berkman note that "using integral variables approach has been scarcely tested." Measures of community social capital above are derived from interviewers direct observations about the communities where the respondents live.

3 Data and Method

I briefly describes the Indonesian Family Life Survey, the data source for this paper, and highlight methodological issues arising from the fact that the response variable in the panel analysis is a count measure which preclude the use of linear panel regression.

3.1 Data

This subsection draws heavily from the description of the surveys available from the RAND Corporation (`www.rand.org/labor/FLS/IFLS`). The Indonesian Family Life Survey (IFLS) is a continuing panel survey of individuals, households and communities in Indonesia. Three plus surveys have been conducted in 1993, 1997, 1998 and 2000; the plus survey refers to an expedient survey of a quarter of the sample in 1998 known as wave two-plus, at the early onset of the Asian crisis. This is not used in this investigation because this will eliminate the majority of the sample in the modelling exercise. The first survey reached more than 22,000 individuals from 7,224 households and 321 communities in 13 provinces spread across the vast Indonesian archipelago. This sample represents 83% of the population. The IFLS 2 surveyed 94% of the original sample and IFLS 3 surveyed 95%; in fact 91% original respondents participate in three waves. In this respect of low attrition rate, IFLS is quite rare among panel surveys in developing countries (Thomas et al. 2001).

Over the years the survey has been funded by the the US National Institute on Aging, the National Institute for Child Health and Human Development, US Agency for International Development (USAID), the Futures Group, the Hewlett Foundation, the International Food Policy Research Institute, John Snow International and the World Health Organization. Rand

Corporation in collaboration with the the University of Indonesia and the Gajah Mada University conducted the surveys.

Health and socioeconomic information are collected by field interviewers. I focus on visit to outpatient health facilities as a measure of health. The interviewers include specially trained nurses and recently qualified doctors for the health part of the survey. Height is measured using Shorr wooden measuring boards. Weight with SECA scales specially designed for fielding anthropometry surveys conducted by the UNICEF. Blood haemoglobin levels are measured using the Hemocue portable photometer. Lung capacity is measured with Personal Best peak flow meters. Blood pressure is measured using an Omron self-inflating meter with a digital read out.

During this context of health measurements respondents were also asked the question: Generally, how is your health? The answer ranges from very healthy to very sick which is dichotomised into very healthy and fair to poor. They were also asked: How many times they use various health facilities which includes (outpatient) public and private hospital, public health centre (*Pusat Kesehatan Masyarakat* or *Puskesmas*), local health post staffed mainly by volunteers (*Pos Pelayanan Terpadu* or *Posyandu*), public and private clinic, paramedic, and traditional practitioner (*dukun, datu*). I sum up uses of these facilities to give one (count) dependent variable.

The focus of this paper is on community social capital and for this I construct two measures. It is important that both measures are not aggregate of individual measures (Subramanian et al 2003); instead they are independent measures of the community as reported by the interviewers. Aggregates of individual measures, such as total number of voluntary associations derived from individuals' responses, are often used as 'community' level measure of social capital. This can lead to difficulty in disentangling the individual from the community level effects. This is known in the public health literature as problem separating composition versus contextual effect. In another context this is known as the problem of 'sorting' versus real effects. This will be touched upon in subsection 3.2 later in the context of this study.

There have been many indicators of community social capital in the literature. All try to capture the capital residing in the interstices of networks that make up a local community. These include average participation rate in general election or aggregate participation rate in local voluntary associations. These measures are often argued to capture the capital that allows

members of the community to benefit from simply being a member in that community which then lifts, boosts or enables them to complement their individual resources in attaining a better outcome. It is implicit in this logic that their use of social capital does not necessarily deplete the community social capital.

Community social capital measures used here are based on the observations of the interviewers about aspects of the community where the respondents live. They are indicators of community cohesion and community voluntary activity. The former is made up of observations including whether there are: community watch group (*Pos Keamanan Lingkungan, Poskamling, ronda*), signs or directions for public facilities, village convention hall (*balai desa*) and signs about family welfare programs (*Program Kesejahteraan Keluarga, PKK*). I add them all up to give a continuous variable. For the second I use the number of volunteers in integrated health activities or posts; activities conducted once or more per month to provide basic health services such as weigh and measure babies and distribute health information.

Unlike in most developed countries, in Indonesia universal cover health service (such as the UK's NHS) does not exist. Health service is generally a paid for service. Measure of economic status or welfare is therefore included as one among many explanatory variables. Deaton and Zaidi (2002) weigh various alternative measures of welfare in developing countries setting and recommend consumption (as opposed to income) based measure. Thus, consumption-based measure of welfare is used. Other explanatory variables include gender, education (pre or post high school), employment status, age, and residence (urban or rural).

3.2 Random effect Poisson regression

The response variable, number of visits to outpatient care facilities, is a non-negative integer. Thus I use random effect Poisson regression to model its association with community social capital and other explanatory variables. Cameron and Trivedi (1998) is a standard text on modelling count data whereas Rabe-Hesketh and Skrondal (2005) is an accessible exposition which embeds this model within the generalised linear mixed model framework. The model is as follows:

$$\Pr(\text{visit}|\mu) = \frac{\exp(-\mu)\mu^{\text{visit}}}{\text{visit!}}$$

and

$$\ln(\mu_{it}) = \beta' X_{it} + \eta_i$$

where X includes: gender, an indicator of post-Asian crisis, education, employed or not, age, residence, welfare (log of per capita expenditure) and two measures of community social capital (number of volunteers and community cohesion).

The individual random effect $\eta_i \sim N(0, \sigma_\eta^2)$ deals with potential endogeneity caused by composition or 'sorting' and reversed causality. Without it, any unaccounted heterogeneity which induces correlation between the residuals and the dependent variable biases the estimates. However, if unobserved heterogeneity, say a predisposition to catch certain illness *and* unable to work or be unemployed, is a constant individual characteristic, then η_i will capture this and allow unbiased estimates to be recovered. Sorting effects are treated similarly; unobserved effect that predisposes the ill to reside in communities lacking in social capital is captured by this term. Furthermore, reverse causality from *individual* health care access to *community* social capital is excluded. For reverse causality to be entertained, one would have to insist that one more visit by *an individual* would increase the number of health volunteers in the village and the neighbouring villages that make up the community. Equivalently, one would insist that an individual additional visit cause community watch group (*ronda* or *kerja bakti*) to be set up, public signs to the village convention hall be erected or women throng to attend PKK programs. As Cartwright (1989, 2007) repeatedly warns, we need to get our causality direction right. Following her injunction, 'no causes in, no causes out', I consider reverse causality of the above sort implausible.

4 Result and Discussion

The motivation for this study has been to examine whether community social capital has a protective role alleviating the severe effect of the Asian crisis. The focus here is the relation between health and community social capital. The massive damage to people's well being as a result of the crisis should be evident on their health. Indeed we see this evidence: prior to the crisis (1993) 15% of the people self-report themselves to be very well; this drops to 9% and 6% post-crisis (1997 and 2000, respectively). Another evidence

is provided by the number of activities of daily living they are able to carry out where higher number means healthier. Prior to the crisis only one in ten is slightly ill i.e. can only do seven or less activities. It rises to 17% and stays there after the crisis. This prima facie evidence of the deleterious effects of crisis on well being is further explored in a multivariate setting. The result is given in Table 1.

I begin with two preliminary points about the four models estimated here. First, regarding the period of post-crisis. The onset of the Indonesian crisis is dated at mid 1997. This date is a reason to suggest that IFLS wave 2 and 3 (1997 and 2000) together make up the post-crisis period. See Suryahadi et al (2003) for the dynamics of the crisis. An alternative is to treat only year 2000 as post-crisis period in the data. It turns out that either choice does not make much difference except in the case of community social capital as measured by the number of volunteers in the community. The meaning of this is discussed later. Second, regarding sample for estimation. Maximum likelihood estimation tend to be robust to imbalance in the panel sample caused by drop out of original sample or joining in of new sample as long as these processes are assumed to be missing at random (Rubin, 1976). In any case, I check the robustness of these estimates by using balanced and imbalanced samples respectively. The results are robust indeed as shown by the comparably similar estimates. In sum, there are four sets of estimates resulting from combination of two periodisation of post-crisis and two kinds of samples. Their similarity then leads me to discuss only the last set of estimates of all samples where only year 2000 is in the period of post-crisis.

Surprisingly, the post-crisis period is characterised by severe drop in visit to outpatient health care facilities. A post-crisis dummy estimate shows a $19\%(100 - 81.3\%)$ drop in the number of visits. This is apparently counterintuitive because more people claim to be ill above. But the resolution lies in the fundamental nature of the crisis which hits people's source of income even harder than their health. Evidently, above, we see that crisis of such magnitude hit people's well being, including their health, severely. However, many people first or primarily lost their source of income which consequentially prevent them from visiting and, in most cases, paying for these services. Eventually people make less use of outpatient care facilities *despite* of the deep and severe illness caused by the crisis.

Now to the main question: do people who live in a relatively abun-

Table 1: Random effect Poisson regression of visit to outpatient care

Sample	original	plus new	original	plus new
Crisis year	1997, 2000	1997, 2000	2000	2000
Post-crisis	0.718	0.678	0.882	0.813
	(-10.02)	(-14.86)	(-4.35)	(-9.17)
Community cohesion	0.997	0.996	0.987	0.985
	(-0.45)	(-0.75)	(-2.00)	(-2.99)
Number of volunteers	0.995	0.997	1.004	1.006
	(-2.21)	(-2.10)	(2.34)	(4.25)
Community neglect	0.995	0.994	0.999	0.998
	(-1.54)	(-2.26)	(-0.43)	(-0.87)
Male	0.693	0.665	0.697	0.663
	(-9.11)	(-14.04)	(-8.95)	(-14.13)
Age	1.009	1.037	1.007	1.040
	(5.91)	(9.79)	(4.59)	(10.52)
Age^2	0.999	0.999	0.999	0.999
	(-2.23)	(-5.91)	(-1.85)	(-6.58)
High school education	1.196	1.176	1.200	1.194
	(2.00)	(2.90)	(2.03)	(3.16)
Employed	0.840	0.849	0.842	0.858
	(-5.41)	(-6.47)	(-5.32)	(-6.03)
Urban	1.119	1.042	1.100	1.021
	(2.87)	(1.41)	(2.42)	(0.71)
Consumption percapita	1.106	1.110	1.059	1.073
	(6.84)	(8.94)	(3.92)	(6.00)
Constant	3.121	3.427	3.132	3.443
	(53.36)	(75.23)	(53.45)	(75.42)
σ_η^2	1.517	1.295	1.304	1.528
Observations	27 470	51 870	27 470	51 870

Exponentiated coefficients; t statistics in parentheses.

Author's calculation from IFLS 1–3.

dant community social capital fare better? The answer is: only just but significantly so. Community cohesion is significantly effective in protecting people from the damaging effect of the crisis. The reduction is about 1.5%. This protective effect is significant both in the immediate term (since 1997, columns 1 and 2) and in the mid term (year 2000). The second measure of community social capital is the number of volunteers involved in integrated health activities. This has both *protective* and *provisional* effects. In the immediate term (since 1997, columns 1 and 2) it reduces the number of visits to health care facilities. This particular pathway is likely to be through two of the three pathways delineated by Kawachi and Berkman (2000): health-related behaviour modification and access to services and amenities. The more volunteers of this kind reside in the community the more information, advice and examples about healthy behaviours are available and exemplified in the conduct of these volunteers. These volunteers, after all, are all local residents. Moreover, due to this residence it follows that, secondly, access to health services and amenities are more reachable.

There is however a puzzling effect of this particular social capital. Notice that in the long run (year 2000, columns 3 and 4) the sign of the effect flipped. A few years into the prolonged crisis, people in communities with more of this community social capital visit *more* of these outpatient care facilities. It is unlikely that *more* people in these communities are ill (compared to people in other communities); or that people in these communities are more ill or less healthy compared to people in other communities. Most likely this is a reflection of the more effective process of provision delivered in these communities by these volunteers. In sum, in addition to protective effect, this particular community social capital also exhibits *provision* effect.

Although the crisis hit Indonesian households indiscriminately, ultimately the damage is visited differently in different group in the population. Consider the case of a household losing its primary source of income due to factory closure, for instance. Various strategies are adopted and members of a households are forced to act differently. Men tend to visit less outpatient care perhaps due to the lesser incidence of morbidity among men. Both coefficients of age captures the well observed differentiation of access to health services in developing countries; that is the curvilinear effect where the very young and the very old are disadvantaged. Adults tend to use health service more which is consistent with their role as bread winners although children

are often asked to supplement family income in times of crisis.

The more educated, probably because of their understanding of the importance of health for productive life, tend to use more outpatient care. Compared to the unemployed, those who are at work tend to need less of these outpatient care. There is no difference between residents of urban and rural population except when the sample is restricted to those who are present in all three waves of the survey. The better off in terms of welfare tend to use more outpatient health facilities due to the fact that such uses require payment. This is consistent with a cross sectional evidence where it is the better off group that gain more from the Indonesian Social Safety Net health card program (Pradhan et al. 2007.)

To close this discussion, a few words of warning is in order. Fine (2001 :20) warns about the danger inherent in the concept of social capital. It can be hijacked to 'smooth the acceptance of marginally altered [IMF and World Bank's neo-liberal] economic policy and to broaden the scope of intervention to [change] the social order' in developing countries. Certainly, the efficacy of social capital as shown here can encourage the offender to increase the scope of its activity. However, any encouragement or discouragement for doing so would have to rest on evidence presented elsewhere. This study takes these community social capital as they are and does not speculate on what would be the best way of accumulating or distributing them across the society. Hopefully, compared to our lack of knowledge about the buffer role of community social capital previously, it is by now clear that investigating their accumulation would be an more worthwhile enterprise.

5 Conclusion

This study contradicts most studies in developed countries systematically reviewed by Islam et al (2006a) on the community social capital effect on individual health. Evidence uncovered here is consistent with saying that place matters after all. In developing countries undergoing severe crisis, community social capital protects residents from the resulting massive upheaval and enables provision of access to health services in those times.

These effects are captured because of two new measures to elucidate community social capital employed in this study. These measures have effectively capture the elusive protective and provision effects of social capital

during severe financial crisis such as the Asian crisis.

Many measurement problems plague empirical social capital literature. Two notable features of these new measures stem from the fact that these are observed at the level of community. The number of volunteer measure is a direct measure of community social capital since these are volunteers staffing voluntary health focused activity. If community social capital is about resource residing in the community and accessible and beneficial to the individual members for specific purpose then this health-related volunteers is as good, if not better, a measure as any. In addition, because the measure of community cohesion is observed by the skilled interviewers instead of aggregated from individual responses then there is one less problem (composition or sorting) to disentangle. Therefore observation by interviewers should perhaps be more systematically used not only in studies on social capital but also in other areas.

There are many limitations to this study, two of them are the focus of subsequent work. First, health measure such as visits to outpatient health facilities is only one component of overall well being. Other measures of well being (Dasgupta 2001 :54) including private consumption and social and political liberties can be investigated in further works. Second, because these respondents live in communities about which there are additional information then a multilevel panel model can be used to partial out the interaction of different levels of causes of health protection

References

[1] Berkman, L.F. and Kawachi, I. (Eds.) (2000) *Social Epidemiology.* Oxford: Oxford University Press.

[2] Bhagwati, J. (1998) 'The capital myth: The difference between trade in widgets and dollars.' *Foreigh Affairs.* **77**(3).

[3] Bhagwati, J. (2000) *The Winds of the Hundred Days.* London: The MIT Press.

[4] Blakely, T., Atkinson, J., Ivory, V., Collings, S., Wilton, J. and Howden-Chapman, P. (2006) 'No association of neighbourhood volunteerism with mortality in New Zealand: a national multilevel cohort study. *International Journal of Epidemiology.* **35**:981-989.

[5] Breman, J. and Wiradi, G. (2002) *Masa Cerah dan Masa Suram di Pedesaan Jawa.* Jakarta: LP3ES – KITLV.

[6] Bresnan, J. (Ed). (2005) *Indonesia: the great transformation.* New York: Roman & Littlefield.

[7] Cameron, A. C. and Trivedi, P.K. (1998) *Regression Analysis of Count Data.* Cambridge: Cambridge University Press.

[8] Caprio, G. and Klingebiel, D. (2003) 'Episodes of systemic and borderline financial crises database.' The World Bank. `www1.worldbank.org/finance/html/database_sfd.html` Accessed 13 June 2007.

[9] Cartwright, N. (1989) *Nature's Capacities and Their Measurement.* Oxford: Oxford University Press.

[10] Cartwright, N. (2007) *Hunting Causes and Using Them: Approaches in Philosophy and Economics.* Cambridge: Cambridge University Press.

[11] Corden, W.M. (1999) *The Asian Crisis: Is There A Way Out?* Singapore: Insitute of Southeast Asian Studies.

[12] Corden, WM. (2002) *Too Sensational: On the Choice of Exchange Rate Regimes.* London: The MIT Press.

[13] Dasgupta P. (2001) *Human Well-Being and the Natural Environment.* Oxford: Oxford University Press.

[14] Dasgupta, P. and Serageldin, I. (Eds.) (2000) *Social Capital: A Multifaceted Perspective.* Washington, D.C.: The World Bank.

[15] Deaton, A. (1997) *The Analysis of Household Surveys: A Microeconometric Approach to Development Policy.* Washington, D.C.: The World Bank.

[16] Deaton, A. and Zaidi, S. (2002) 'Guidelines for Constructing Aggregates for Welfare Analysis.' LSMS Working Paper. Washington, D.C.: The World Bank.

[17] Eatwell, J. and Taylor, L. (2000) *Global Finance at Risk: The Case for International Regulation.* New York: The New Press.

[18] Eichengreen, B. (2002) 'International Financial Crises: Is the Problem Growing?' *Jahrbuch für Wirtschaftsgeschichte.*

[19] Fine, Ben. (2001) *Social Capital versus Social Theory.* London: Routledge.

[20] Frankenberg, E. and Karoly, L. (1995) 'The 1993 Indonesian Family Life Survey: Overview and Field Report.' Santa Monica, CA: RAND

[21] Frankenberg, E. and Thomas, D. (2000) 'The Indonesia Family Life Survey (IFLS): Study Design and Results from Waves 1 and 2.' DRU-2238/1-NIA/NICHD. Santa Monica, CA: RAND.

[22] Goodhart, C. (2003) 'Comments by Charles Goodhart at the Panel Session at the World Bank Conference on Thursday, October 9, 2003' `www1.worldbank.org/finance/html/discussions_sfd.html` Accessed 13 June 2007.

[23] Honohan, P. and Laeven, L. (Eds.) (2005) *Systemic Financial Crises: Containment and Resolution.* Cambridge: Cambridge University Press.

[24] Islam, M. K., Merlo, J., Kawachi, I., Lindström, M., Burström, K and Gerdtham, U. G. (2006) 'Social capital and health: Does egalitarianism matter? A literature review.' *International Journal for Equity in Health.* **5**(3) `doi:10.1186/1475-9276-5-3.`

[25] Islam, M. K., Merlo, J., Kawachi, I., Lindström, M., Burström, K and Gerdtham, U. G. (2006) 'Does it really matter where you live? A panel data multilevel analysis of Swedish municipality-level social capital on individual health-related quality of life.' *Health Economics, Policy and Law.* **1** :209-235.

[26] Kawachi, I. and Berkman, L.F. (2000) 'Social cohesion, social capital and health.' In L.F. Berkman and I. Kawachi (2000).

[27] Kawachi, I. and Berkman, L.F. (Eds.) (2003) *Neighborhoods and Health.* Oxford: Oxford University Press.

[28] Kindleberger, CP and Aliber. R. (2005) *Manias, Panics, and Crashes: A History of Financial Crises.* London: Wiley

[29] Marmot, Michael and Wilkinson, Richard G. (Eds.) (2006) *Social Determinants of Health.* Second Ed. Oxford: Oxford University Press.

[30] Pradhan, M., Saadah, F. and Sparrow, R. (2007) 'Did health care card program ensure access to medical care for the poor during Indonesia's economic crisis?' *The World Bank Economic Review.* **21**(1):125-150.

[31] Rubin, Donald B. (1976). 'Inference and missing data.' *Biometrika.* **63**(3):581-592.

[32] Strauss, J., Beegle, K., Sikoki, B., Dwiyanto, A., Herawati, Y. and Witoelar, F. (2004) 'The Third Wave of the Indonesia Family Life Survey (IFLS): Overview and Field Report.' WR-144/1-NIA/NICHD. Santa Monica, CA: RAND.

[33] Subramanian, S.V., Lochner, Kimberly A. and Kawachi, Ichiro (2003) 'Neighborhood differences in social capital: a compositional artifact or a contextual construct?' *Health & Place.* **9**:33-44.

[34] Sundquist, Kristina and Yang, Min (2007) 'Linking social capital and self-rated health: A multilevel analysis of 11,175 men and women in Sweden.' *Health & Place.* **13**:324-334.

[35] Suryahadi, A., Sumarto, S. and Pritchett, L. (2003) 'Evolution of poverty during the crisis in Indonesia.' *Asian Economic Journal.* **17**(3):221-241.

[36] Szreter, S and Woolcock, M. (2003) 'Health by association? Social capital, social theory, and the political economy of public health.' *International Journal of Epidemiology.* **33**:650-667.

[37] Thomas, D., Frankenberg, E. and Smith, J.P. (2001) 'Lost but Not Forgotten: Attrition and Follow-up in the Indonesia Family Life Survey.' *Journal of Human Resources.* **36**(3):556-592.