

## Viewpoint

## Reassessment of health effects of the Indonesian economic crisis: donors versus the data

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Between the late 1960s and the late 1990s, gross domestic product in Indonesia grew by an average of 6–7% a year and poverty dropped from 50% to 10%—a feat accomplished without increasing inequality.<sup>1</sup> Throughout this period, large investments were made in primary education, leading to almost complete enrolment at schools and sharp declines in illiteracy. In the health sector, a network of health centres and subcentres was established. Between 1980 and 1997, death rates in children younger than 1 year and 5 years fell by about 30% and 40%, respectively.<sup>1</sup> Improved nutrition and access to basic health-care services such as immunisation and treatment of childhood illnesses including acute respiratory infection, diarrhoeal disease, and malaria were key factors in the upward trend in health status.

### Health care during an economic crisis

In mid 1997, an economic crisis that began in Thailand spread quickly through the closely connected economies of East Asia and had a substantial and detrimental effect on welfare indicators in several countries. The crisis had an immediate bearing on the livelihoods and health of people in this region through three main mechanisms. First, income fell while unemployment rose, resulting in a striking increase in the rate of poverty. Second, rising prices for imported goods, such as pharmaceuticals, and in Indonesia's case, the basic staple of rice, led to severe shortages of essential goods. Third, economic collapse precipitated a decline in governments' social expenditures on health and education. However, debate exists about the extent to which health and other social indices were affected by the crisis, with some commentators arguing that the effects were much smaller than initially anticipated.

Indonesia was especially badly affected by the South Asian economic crisis, which posed an immediate threat to the wellbeing of low-income households. In response, the Indonesian government and its donor partners implemented a set of measures known as a plan for a social safety net for the health sector (JPS-BK), which aimed to mitigate the effects of economic decline on the health of poor citizens by protecting their access to effective health care. Opinion from within the international community holds that these measures have worked; the World Bank claimed that "catastrophic results were averted",<sup>2</sup> and other agencies suggested that the dire predictions of the crisis' effects on welfare might have been overstated.<sup>3</sup>

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	1996–97	1997–98	1998–99	1999–2000
<b>Primary care spending</b>				
Total (billion rupiah)	1988.9	1882.3	1677.3	1656.2
Donor	152.8	113.6	299.3	261.3
Government	1836.1	1768.7	1378.0	1395.9
Per person (thousand rupiah)	10.3	9.6	8.5	8.2
<b>Hospital spending</b>				
Total (billion rupiah)	798.9	858.9	915.2	1071.3
Donor	98.9	93.9	278.7	411.8
Government	700.0	765.0	637.5	660.5
Per person (thousand rupiah)	4.1	4.4	4.6	5.3

\*Amounts used are constant 1993 Indonesian rupiah; US\$1=2095 rupiah. Data are from Liberman et al, 2001.<sup>5</sup>

Table 1: Real public expenditure on primary health care and hospital care in Indonesia 1996–2000

In its 2000 report to the Ninth Annual Meeting of the Consultative Group on Indonesia,<sup>4</sup> the Asian Development Bank (ADB) stated that a key JPS-BK objective was to maintain spending on primary health care. They reported that during the crisis, the Government had maintained resources allocated to essential health services at the same level as those before the economic decline. A second key objective was to maintain the quality of services provided to the poorest sectors of the community—quality being defined by indices such as attitudes and qualifications of health personnel, and the availability of basic medical equipment, supplies, and essential drugs.<sup>4</sup> The ADB also uses rates of uptake of health services as a measure of quality of care. A third and related objective was to maintain access of vulnerable groups to essential health services. The ADB emphasised that to protect the health and nutrition of pregnant women, nursing mothers, and children younger than 2 years, community outreach activities need to be strengthened because these groups were less likely than other people to visit health centres.

### Allocation of health spending: an alternative view

In terms of the linkage between public health spending, access to effective health care, and mortality in Indonesia, several pieces of evidence suggest that the ADB's assessment is overly optimistic and is sometimes inconsistent with other data. The ADB's report to the consultative group of donors focused on the crucial aspect of health financing—ie, how scarce resources are allocated within the Ministry of Health. However, data from other sources do not lend support to the claim that resources allocated to essential health services were maintained at precrisis levels.<sup>4</sup> Scrutiny of expenditure on primary care from 1996/97 to 1999/2000 (table 1) shows that there was a 20% reduction in per person spending, and a 25% cut in government spending.<sup>5</sup>

In fact, in August, 1999, the World Bank estimated that spending on the routine part of the health-sector budget

1993	1994	1995	1996	1997	1998	1999
76.3%	78.7%	77.3%	88.2%	91.0%	92.8%	89.8%

Data are from ADB report, 1999.<sup>7</sup>

Table 2: Immunisation rates in children aged 0–4 years in Indonesia, 1993–99

(ie, for operation, maintenance, and procurement of medicines and consumables) dropped by 10% in real terms in 1997–98 and 28% in 1998–99; that real expenditure on communicable-disease control fell from 158 billion rupiah (US\$16 million) in 1997/98 to 88 billion rupiahs (\$11 million) in 1998/99; and that routine spending fell by 28% in real terms.<sup>6</sup>

However, as expenditure in primary healthcare was decreasing, spending on hospital care improved—in fact a 30% rise in hospital spending per person (table 1). This increase seems to have been led by donors: a review of expenditure shows “real donor financing of hospitals in 1998–99 was 3.7 times the 1997–98 levels . . . it appears that much of this financing came from Japan, Korea, and Australia, and other bilateral donors and took the form of investment in hospital equipment”.<sup>5</sup> The misallocation of scarce resources at a time of increased risk of child mortality, especially in marginalised groups, was detrimental to children and to those of the lowest economic status.

The ADB has also stated that priority—ie, essential or basic—health services were maintained or improved. One critical element of the primary health care package, and a good indicator of the delivery of other basic health care services, is immunisation programmes. In its report to the consultative group, the ADB claims that “health outreach activities have been maintained. The MOH [Ministry of Health] has ensured that a package of essential services including basic curative and preventive services such as immunisation has been available to all . . . The continued availability of basic outpatient services through the network of health centres was ensured. Immunisation services for children were maintained.”<sup>4</sup>

These statements are consistent with survey data drawn from the ADB’s Assessment of Poverty in Indonesia report,<sup>7</sup> which show fairly steady improvements in the proportion of children aged between 0 and 4 years who had received any immunisation between 1993 and 1999—ie, an 18% overall increase in coverage (table 2).

However, these data do not correspond with easily accessible WHO data,<sup>8</sup> which provide a fuller picture of the proportion of children fully vaccinated against tuberculosis (with BCG), diphtheria, pertussis, tetanus (DPT), poliomyelitis, and measles in accordance with precise immunisation schedules (table 3). These data show an almost 25% decline in coverage rates between 1995 and 1999, the reduction being most striking in 1997–98. This information in turn, is generally consistent with easily accessible cross-sectional household survey data collected by the demographic and household survey (DHS),<sup>9</sup> a source widely recognised for its quality.

These differences in vaccination rates can be partly explained by the cohorts used to generate data. The ADB

	1995	1996	1997	1998	1999
<b>Antigen</b>					
DPT3	92%	91%	90%	65%	64%
Measles	92%	92%	93%	76%	71%
Poliomyelitis	97%	89%	87%	77%	74%
BCG	100%	100%	99%	85%	85%

Data are from WHO, 2000.<sup>9</sup>

Table 3: Vaccination coverage rates in Indonesia, 1995–99

	1997	1999	% change
<b>Poorest quintile</b>			
Child contact rate	60.3	51.0	–15.4%
Child visit rate	19.9	16.4	–18%
<b>Wealthiest quintile</b>			
Child contact rate	77.1	69.6	–9.7%
Child visit rate	29.9	27.8	–7%

Data from ADB report.<sup>7</sup>

Table 4: Rates of health worker contact and health centre visits for children aged 0–4 years, 1997–99

study<sup>7</sup> uses a cohort of children aged under 5 years, whereas the demographic and household survey used children aged less than 1 year, yielding a picture of trends in coverage rates that is much less clear than a year-by-year charting of trends. Likewise, use of the category “ever immunised” gives much less precise information than does a disaggregation of vaccine by type. Thus, the ADB did not select the best data available to meet its objective of understanding the effect of the crisis and social safety nets on vaccination coverage rates between 1995 and 1999. Moreover, an even greater drawback is that the ADB did not take into account at all these data from WHO or the demographic and health survey data.

Three key points to be noted are that, first, immunisations by antigens listed in table 3 are an important determinant of childhood survival; second, reversals in coverage rates are widely believed to be related to retraction of services from rural areas and are, therefore, detrimental to the poorest sectors of the community; and third, that these declines point to erosion of other basic services for vulnerable and marginalised populations. This third point is particularly relevant in Indonesia, where outreach services and posyandu (ie, a regular community outreach activity organised by community health volunteers with the support of health-centre staff, which focuses mainly on maternal and child health) are essential for maintenance of basic services to the poor. This reality was noted explicitly and incorporated into the JPS-BK mission statement. Taken together, these three points suggest that the economic crisis might have had a very negative effect on childhood survival in low-income households.

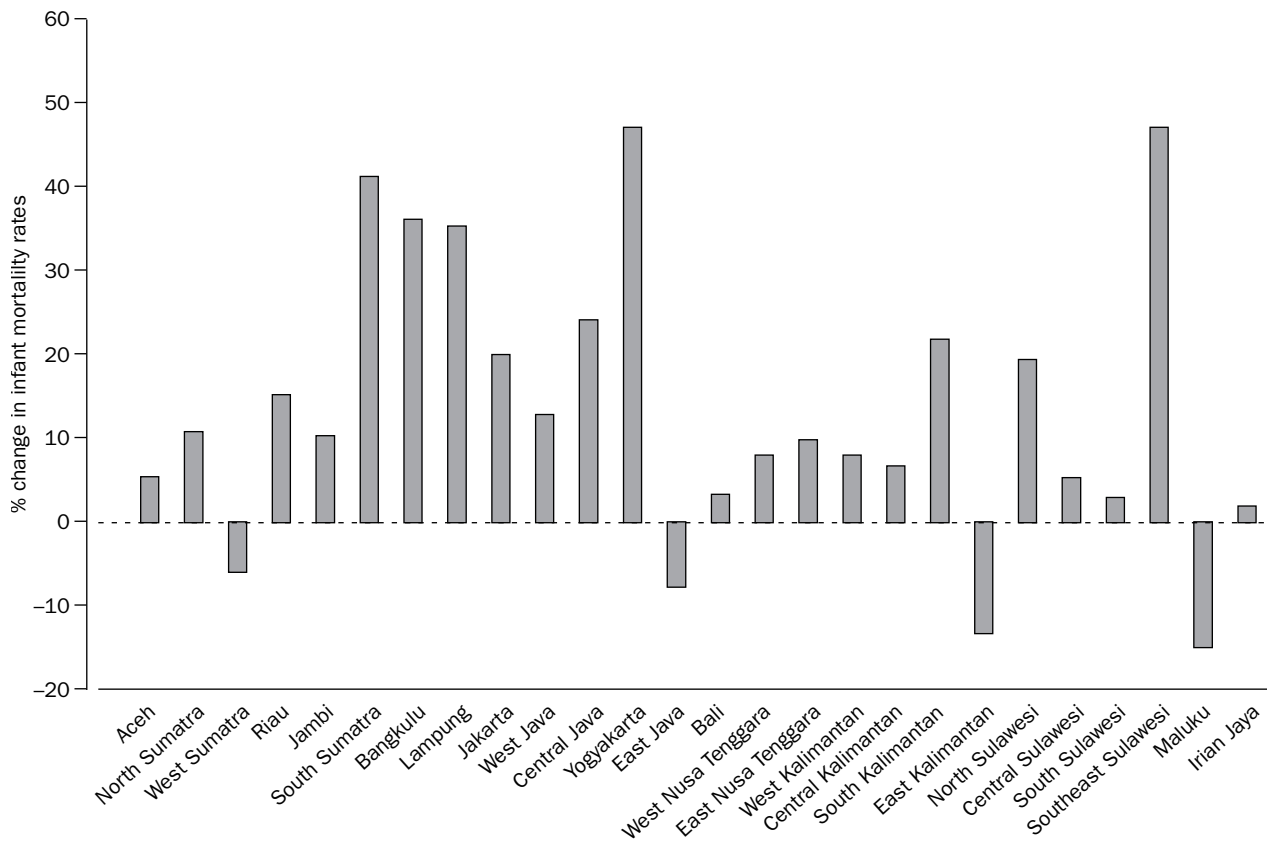
### Low economic status and effective health care

Although the ADB reports that outreach services and posyandus for the poor have been maintained, we have seen evidence to the contrary. Table 4 shows a comparison of rates of contact with health workers and visits to modern health facilities for children less than 5 years of age in the poorest economic quintile, with those in the highest quintile. Between 1997 and 1999, the use of health care services by children from poor backgrounds dropped by about 17%, compared with 8% in children from wealthier settings.

	1995	1997	1998	1999	% change 1995–99
Posyandu	0.19	0.20	0.12	0.10	–47%
Traditional healer	0.73	0.63	0.43	0.40	–45%
Subsidiary health centre	1.69	1.66	1.01	1.01	–40%
Clinic	0.42	0.39	0.34	0.31	–26%
Primary health centre	4.66	4.31	3.25	3.46	–26%
Private doctor	3.01	3.14	2.84	2.63	–13%
Public hospital	0.64	0.60	0.64	0.59	–8%
Paramedical practitioner	2.82	2.93	2.80	2.70	–4%
Private hospital	0.40	0.41	0.40	0.39	–3%

Data are number of visits per head of population. Data are from Pradhan and Sparrow.<sup>10</sup>

Table 5: Contact rate by type of provider 1995–99



Change in infant mortality rates in 26 Indonesian provinces, 1996–99

When changes in the frequency of visits and contact are calculated for 1995–99 and arranged by descending order of decline, the results suggest a sharp fall-off in use of services by poor households. Table 5 shows that rates of use of services such as posyandu, traditional healers, clinics, and health centres, which are most likely to be used by low-income households fell between 26% and 47%. Visits to hospitals and private providers, where user fees were 10–20 times higher than in the previously described health-care settings, and thus are more likely to be used by the non-poor, fell between 3% and 13%, probably because of the cost of care.

There are some signs that JPS-BK did have a positive effect on access to effective health care. For example, the ADB<sup>4</sup> reports a steady increase in the proportion of women receiving assistance during childbirth: from about 40% to 60% between 1993 and 1999, the largest increase being in 1999 as a result of JPS-BK initiatives. However, most low-income households still did not have health-care services,<sup>7</sup> and sceptical donors point out that mortality risk would not have been reduced by much since there were few basic health services to refer to or draw from, which is the downside of not having a comprehensive package of services. The ADB<sup>7</sup> notes that data gathered in late 1999 show increased use of health centres by poor households in regions where JPS-BK was fully implemented, and fragmentary data from public hospitals show large rises in use of hospital outpatient services by poor households. However, the World Bank dismisses these findings, pointing out that although there were small reductions in visits to private providers and small rises in outpatient contact rates in 1999, the “use of modern medical practitioners remained almost a fifth less than in 1997”.<sup>2</sup>

### The cost of care

In addition to difficulties in health-service delivery, is the issue of the rising cost of health care during the crisis. Private health-care expenditure in Indonesia accounts for about two-thirds of total spending, with about 75% of the total being made in cash. Purchase of drugs makes an important contribution to private health-care expenditure, and cash payments account for about 80% of total spending on pharmaceuticals. Between 1996 and 1999, there was a 25% fall in real spending on drugs that happened in parallel with large price increases of about 170%,<sup>2</sup> resulting from the Indonesian rupiah’s massive devaluation during the financial crash. Set against a background of severe economic crisis and falling incomes, these high rates of cash payments obviously put health finance at risk. Although the ADB reports that “targeting and entitlement mechanisms were reviewed to ensure that administrative requirements did not act to prevent access to basic health services by the poor”,<sup>7</sup> user fees seem to be an impenetrable barrier for the poor in use of health services, and evidence from around the world shows that exemptions from fees rarely work as intended, especially for the poor and vulnerable.<sup>11</sup> On top of standard outpatient charges, informal costs, such as travel, food, and accommodation, were usually substantial. The World Bank concludes “these extra charges are, of course, a disincentive for the poor”.<sup>2</sup>

### Rising infant mortality rates

Declining access to effective health care for poor sectors of the community makes the prospect of further improvements in infant mortality rates seem rather remote. However, there were some countervailing policy responses to the crisis that could have had a positive bearing on

infant survival. For example, funding from donor agencies in 1998 and 1999, which amounted to billions of dollars, might have had a substantial effect on mortality rates if directed in the right areas: price subsidies for essential foods alone could have had a large effect on income in poor households, and helped to maintain nutritional status. However, in a setting of poor quality health services, low rates of use, expensive health care, the combined effect of rising drug prices, and sharp reductions in essential health-care services could have been enough to nullify the benefits of health and nutrition investments, especially in low-income households, and to reverse infant mortality rates. The World Bank equivocates on this point, stating that it is “difficult to get a complete and consistent picture of the health impact of the crisis and the effectiveness of policy responses. Some standard barometers suggest catastrophic results were averted. For example, infant mortality rates (IMRs) seemed to have continued a downward trend.”<sup>2</sup> The World Bank, usually meticulous in citing data sources, offers no reference to this important statement. In reality, Badan Pusat Statistik (BPS or, the Central Statistics Bureau) data cited in the UN development report<sup>1</sup> show that for the period 1990–96, infant mortality rates improved in all 26 provinces by about 20%; the figure shows that between the years 1996 and 1999, infant mortality increased in 22 of 26 provinces by an average of 14% (figure).

Overall, these data suggest that the optimistic assessments were inaccurate, and that the World Bank’s claim that a health disaster was averted<sup>2</sup> seems groundless.

## Conclusions

The inconsistencies that we report suggest that the ADB’s and World Bank’s conclusions did not incorporate data that contradicted the notion that the social safety net provided by the JPS-BK had successfully mitigated effects of the economic crisis on the health of Indonesia’s poor citizens. Because the donor process was neither transparent nor consultative, the reasons for this optimistic assessment are unclear. Poor attention to important data sources is one factor. Other possible explanations are that, first, the implementation of exit policies from the social safety net were high on the list of international agencies who were eager to convince international investors that the crisis was over. Second,

because JPS-BK was being proposed as the robust framework in the health sector on which to base decentralisation, its failure would have been problematic. A debate and reassessment of the effect of the Indonesian economic crisis on key health indicators would be helpful, to provide a fresh starting point for consideration of health and economic policy interventions that enhance equity.

### Conflict of interest statement

M Rowson is the executive director of Medact.

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