

**Financial Crises and Social Spending: The Impact of the 2008-2009 Crisis**

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Financial crises disrupt policies and programs, leading to responses that can truncate systematic policy development and undermine long-term objectives. The imperatives in crises are to reduce overall government spending and restructure budgets to return to financial solvency and growth as quickly as possible, but all public programs are implicitly at risk, including those with short-term effects and long-term implications for growth and welfare. When budgets contract, the question is whether that simply reduces programs or severely compromises them. Because the social sectors represent a large segment of government spending—and often a disproportionately large segment of civil servants—they are prime targets for cutbacks and downsizing. The current crisis is no exception.

Crises also increase the vulnerability of households, raising the demand and need for public safety nets. In addition to direct cash payments to households, in-kind social subsidies offer both a countercyclical public investment and an implicit safety net for families with children or facing health care expenditures. The competing objectives of closing the deficit and protecting households from the effects of crisis pose conundrums to policymakers.

The effects of crises on government and household spending are highly variable depending on the severity of the downturn and government preparedness and flexibility in continuing spending and social service delivery under conditions of austerity. The accumulated evidence from cross-country data, household surveys, and qualitative studies suggests that both governments and households protect education over health.

The lowest income countries are most likely to curtail spending in a crisis. Rich countries raise spending, and middle-income countries fall somewhere in between. As countries become richer, they protect social spending more aggressively, as the behavior of Mexico, Latvia, Lithuania, and Romania in 2008–09 shows.

Countries have become more sophisticated at crisis management. This time around countries are (temporarily) expanding safety nets, protecting social sector spending through loans and budget reallocations, and taking advantage of the crisis to achieve major reforms that improve efficiency and quality. Countries are relying much more heavily on data and policy research in making spending allocations when budgets contract, replacing the ax with a scalpel to drive policy and future directions for their country.

Donor funding tends to disappear when high-income countries face a downturn, and in the aggregate rich countries do not respond to the needs of developing countries affected by global or regional crisis. But donor countries have provided relief and support to some countries, and consistency in HIV/AIDS funding has been a departure from past practices of renegeing on promises when banking crises hit donor economies. Providing support to protect the vulnerable in times of financial downturns is one way to enhance development effectiveness. Not doing so may well jeopardize progress toward the MDGs as countries derail investments that deserve to continue—and must continue if the MDGs are to be realized.

This paper examines the impacts of the 2008-2009 economic crisis on social spending, drawing on evidence at the global, national and household levels to provide a sense of the nature and

effects of the worldwide downturn on spending in the social sectors. The following section summarizes existing empirical evidence on the relationship between crises or other serious dislocations on education, health, HIV/AIDS and nutrition as background to the analysis of growth and social spending. Next, the paper analyzes the relationship between GDP growth and growth in education and health spending, and projects expenditure responses to 2012 to illustrate how expected changes in future economic growth are likely to affect both absolute spending and growth in social expenditures. We then turn to an analysis of the effects on HIV/AIDS spending, a relative new funding category and therefore outside the purview of the econometric analysis, and rely on trends and disbursements of funding by global programs and countries to provide insights into the likely effects of the crisis on HIV/AIDS spending. The next section examines the responsiveness of Overseas Development Assistance (ODA) to financial crises in terms of subsequent allocations from the developed world, and the impacts on ODA spending for education and health in developing and transition countries. The final section exploits existing evidence on regional impacts of the crisis on public spending, and the effects on household budgets in Eastern Europe and Central Asia, the region hardest hit by the current crisis.

## **A. Evidence on impacts of economic crises on education, health, HIV/AIDS and nutrition**

The current global downturn generated predictions of rising mortality and closed schools as governments reduced services in response to declines in GDP and public revenues. Household studies from past crises suggest that the impacts are mixed. In the lowest income countries school enrollments fall, health care use drops, and infant mortality rises.<sup>1</sup>

Even modest reductions in food consumption for children between birth and age two can have lasting effects on cognitive and physical development. In Zimbabwe and South Africa the nutritional deprivation of young children led to lower height for age and shorter stature in adulthood. In South Africa it also led to cognitive problems in adolescents, but only among boys.<sup>2</sup> The effects are similar where food becomes unaffordable or in short supply during times of economic contraction.

The food and fuel crisis of 2007 appears to have had reverberating effects in the current crisis. In some countries food prices almost doubled, with no adjustment in earnings. In Mozambique incomes were almost halved and food consumption fell by a fifth, reducing children’s weight for age and body mass index, with no change in height for age, indicating that the price rise of 2007 seriously compromised nutrition. The effects have spilled over into the efficacy of HIV/AIDS treatment, with lower income households showing slower improvements than households with higher incomes and better access to adequate nutrition, which bolsters the effects of antiretroviral therapies.<sup>3</sup>

Analysis of the effects of downturns on infant mortality in Sub-Saharan Africa shows that a 1 percent reduction in per capita GDP is associated with a 0.34–0.48 increase in infant mortality per thousand births, or 34–39 percent of the average annual decline in the infant mortality rate.

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<sup>1</sup> Ferreira and Schady 2009.

<sup>2</sup> Dinkelman 2008; Alderman, Hoddinott, and Kinsey 2006. Other studies of nutritional impact indicate the importance of adequate food and nutrition in periods of recession (Gottret et al. 2009).

<sup>3</sup> de Walque et al. 2010.

Infant girls are more likely to die than boys during downturns, and both rural and less educated women are at higher risk of losing their infants.<sup>4</sup>

For middle-income countries the picture is less consistent. In Latin America school attendance increases during crises, possibly because children are not needed for economic activity, but infant mortality appears to rise. In Indonesia the crisis of the late 1990s had little measurable impact on schooling or health, possibly because the country was better off and perhaps because education and health services were better protected.<sup>5</sup> But the impacts of recession on child health are far more severe than those on education, even in middle-income countries.

In the richest countries more attention to children appears to make them better off in a downturn, the most dramatic example being the United States during the Great Depression, when school enrollment and graduation rates rose and infant and child mortality fell. The better education outcomes reflect a decision to invest in human capital when jobs are scarce.<sup>6</sup> The improvement in child mortality is due to more time for health care and exercise and a reduction in fertility, especially among low-income, higher risk mothers.<sup>7</sup> The difference is the availability of public programs in wealthier countries and their cushion from higher income and greater access to credit.<sup>8</sup> In the United States minority populations are disproportionately affected, which may apply in developing countries as well.<sup>9</sup>

Public spending can mitigate the effects of recession on services by providing in-kind support to families, especially low-income families. So can expanded cash transfers, which if properly targeted can meet the needs of the most vulnerable, making food, education, and health care more affordable. During the 2001 crisis in Argentina the government increased transfers to the provinces by 70 percent in real terms—for nutrition, maternal and child health services, and the acquisition of essential drugs—leading to improved outcomes in 2002.<sup>10</sup> Pharmaceutical supplies often decline in a downturn as prices for imported drugs rise due to currency devaluation.

All public services are not created equal, however. Cuts in some countries may have detrimental effects, while those in others have little impact. Accumulating evidence on the effectiveness of spending and on weak incentives and accountability in publicly provided services suggests that crises may offer opportunities to make difficult decisions and reorient public sector programs.<sup>11</sup> As discussed below, the current crisis has offered many governments opportunity for boosting the efficiency and quality of public programs.

Variability in the effect of crises on the social sectors suggests multiple impacts. What emerges is that more options and greater flexibility in the richest countries through access to credit and alternative activities and their ability to rely on government safety nets and continued public education and health programs. Developing and transition countries have less room to maneuver at the household level, and governments are less able to provide adequate safety nets and

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4 Friedman and Schady 2009.

5 Ferreira and Schady 2009.

6 Goldin 1999.

7 Dehejia and Lleras-Muney 2004.

8 Ferreira and Schady 2009.

9 Dehejia and Lleras-Muney 2004.

10 World Bank 2003.

11 Amin, Das, and Goldstein 2008; Lewis and Pettersson 2009a, 2009b)

services as budgets contract. Better targeting of shrinking public resources to vulnerable populations and taking advantage of crises to improve efficiency and performance in public programs can help countries weather crises better. The recent experience in middle-income countries suggests that as countries become wealthier they can better cope with crises because they have more resources but also because of better policies and more judicious use of public revenues.

## **B. The Current Crisis and the effects on Education and Health Spending**

The impacts of economic crises on social spending in developing and transition economies have generated concern about continuity of services when citizens need them most. This section draws on data for 1995–2007 for 131 developing and transition countries to analyze the impacts of GDP downturns on public and private spending on health, and public spending on education, and then projects the effects of changes in GDP on future social spending to 2014.<sup>12</sup> While growth in social spending is volatile, absolute social spending levels show a steady upward trend for public education and both public and private health spending. Growth in social spending has plunged across many developing and transition economies during the current crises, but an equally dramatic recovery is likely if spending follows patterns in past crises, particularly for education, where expenditure growth is expected to outstrip recovery in GDP growth.

### **Crises and the response in health spending**

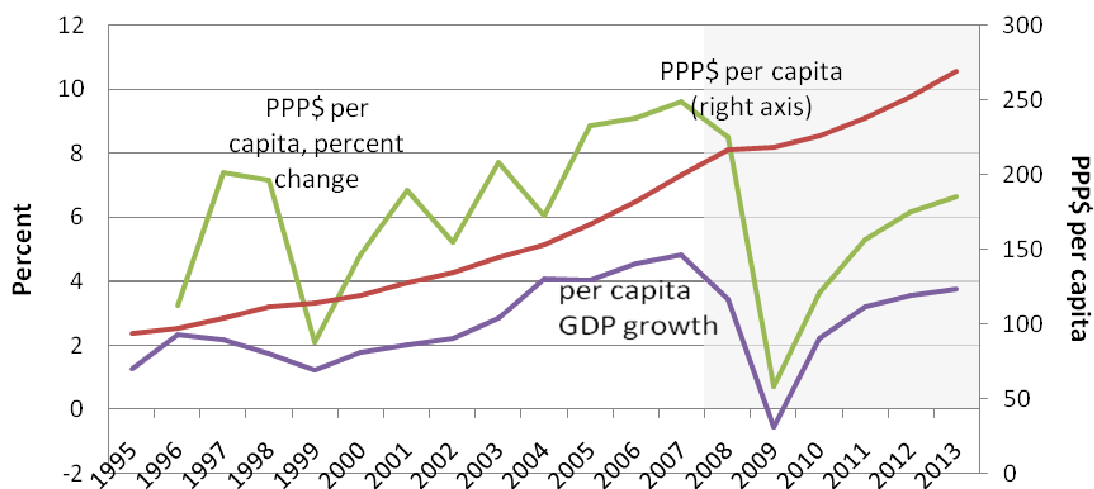
Historically, changes in GDP growth have had an almost proportional effect on health spending growth. Changes in health spending are more volatile than GDP growth trends over time but public health spending has grown faster on average than GDP (figure 1). Additional analysis in Lewis and Verhoeven (forthcoming) shows that in a downturn negative impacts on health spending are somewhat stronger in the low income countries where growth in health spending is more likely to fall further in response to a decline in GDP. The relationship is weakest in the Upper Middle Income Countries where growth in social spending tends to be maintained even in economic downturns.

While growth rates in health spending fluctuate, absolute public health spending levels (red line) continue to rise steadily, although the 2008/09 crises flattened the rise. This outcome is consistent with observed patterns worldwide that health spending at least keeps up with economic growth and often outpaces it.

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<sup>12</sup> The analysis is taken from the econometric results reported in Lewis & Verhoeven, forthcoming, and relies on data from the IMF, World Bank, and spending data from UNESCO for education, and the World Health Organization National Health Accounts for public and private health. The results here are a variant on those reported in World Bank 2010 due to a modified and larger sample size.

**Fig. 1: Public Health Spending and GDP Growth Trends  
(averages for developing countries)**



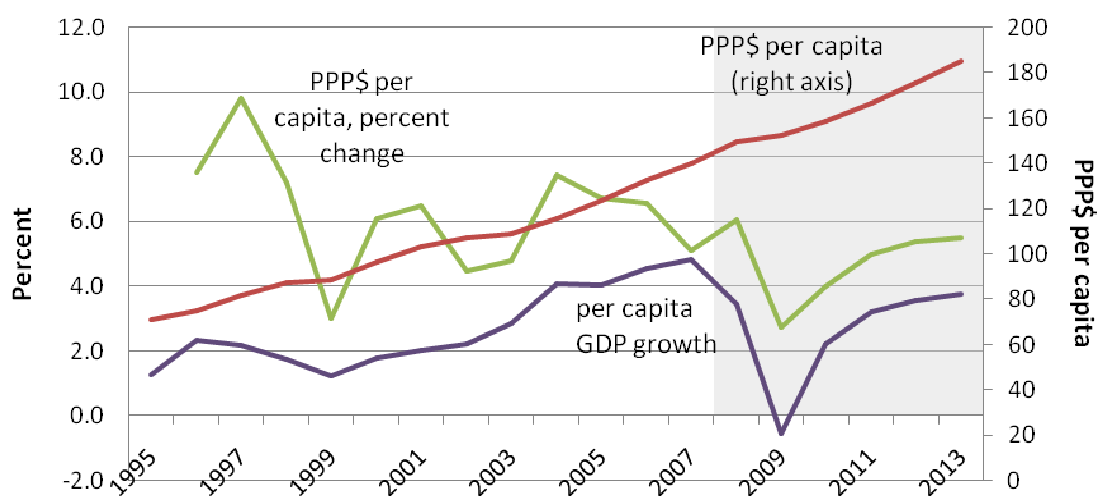
e: Lewis and Verhoeven 2010

Source

The response in the growth of private health spending (insurance and out of pocket payments) to economic growth shifts is less volatile than public health showing rather steady growth especially since 1997 (figure 2). Growth rates of private health spending and economic growth appear to be increasingly aligned—even more so than public health or public education spending and GDP growth.

The trend in absolute per capita private health spending (red line) is positive but rises more slowly than public health spending, and saw some leveling off in the 1998-1999 period. The historical levels of growth have been more contained and positive, the projected decline in private health spending in 2009 is less than the deep reduction expected in public health spending. After 2009 growth is projected to accelerate for national income, and both public and private health spending with public growth outstripping the private recovery. The upsurge in growth is to be expected after a recession, and a leveling off in 2011 is consistent with past patterns.

**Fig. 2: Private Health Spending and GDP Growth Trends  
(averages for developing countries)**



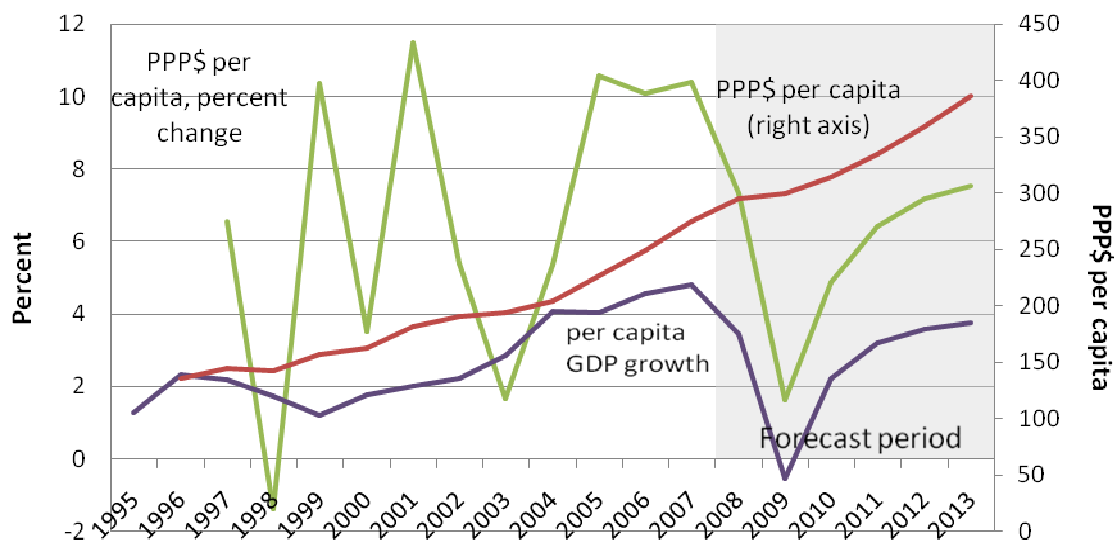
Source: Lewis and Verhoeven 2010

## **Crisis and the response in education spending**

The analysis of education spending is far less robust when compared to health, due in large part to much weaker data.<sup>13</sup> Changes in education spending growth are more volatile than changes in GDP growth (figure 3) and show greater swings than those for health spending, suggesting a relatively greater sensitivity of education spending to changes in GDP. On a per capita basis more is spent on education than on health, and education spending moves steadily upward (red line), although education growth also stagnated in real terms between 1997 and 1998 and again 2002 and 2003, and is projected for 2008-2009 given the most recent crisis. The projections in figure 3 expect large absolute spending increases following the current crisis. Government increase education spending more sharply after a crisis than they do for health, as is evident in the current recession. The boost in education spending in response to GDP growth shifts is more pronounced in the lowest income countries as compared to middle income countries.

<sup>13</sup> The absence of a consistent time series in education spending data required the integration of data from UNESCO, the IMF and the World Bank. This is in contrast to the consistent and much higher quality data from the WHO's National Health Accounts.

**Fig 3: Public Education Spending and GDP Growth Trends (averages for developing countries)**



Source: Lewis and Verhoeven 2010

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**The special case of HIV/AIDS spending and financial crises**

Big increases in funding have made HIV/AIDS one of the most important items on the development agenda. In less than a decade the international community has mobilized talent and financing to address HIV/AIDS with new institutions and long-term financial commitments to countries suffering from an established and growing epidemic. That attention and financing have produced data and information that outstrip what is available for health care generally, allowing a more thorough examination of trends and activities in HIV/AIDS spending and the likely impacts of the current crisis. This is the first global crisis to affect international support for HIV/AIDS spending, and the responses are instructive.

Roughly 33 million people have HIV/AIDS, but only a third of those requiring treatment are on antiretroviral therapy that will extend their life (for how long is situation-specific). Continuing treatment is critical for survival: there is no cure for AIDS, so those who end treatment will die. Discontinuities in treatment because of lack of drugs or treatment capacity also raise resistance to the basic (“first line”) antiretroviral treatment, which can lead to broader drug resistance in the community. The alternative “second line” treatment is 10–20 times more expensive. Thus the ability to continue antiretroviral therapy, which is both a humanitarian and an efficiency objective, is central to meeting MDG 6. Equally important is strengthening prevention, the only way to stem the pandemic.

***Likely short-term effects of the crisis***

Funding for HIV/AIDS has risen sharply over the last decade from six sources: domestic public spending; bilateral assistance (the largest being the U.S. President’s Emergency Plan for AIDS



Relief, or PEPFAR); multilateral agencies such as the World Bank; the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), which is financed by bilateral donors and private foundations, such as the Bill & Melinda Gates and Clinton Foundations; the private sector, including philanthropic donations; and household out of pocket spending.

During 2001–05 aid commitments for HIV/AIDS programs rose almost 30 percent (\$4.75 billion), fueled by the establishment of the Global Fund and by philanthropic efforts by the Clinton Foundation, the Bill & Melinda Gates Foundation, and others. New sources of funding have come on-stream since 2005 with U.S. PEPFAR, and UNITAID, an international effort financed by airline ticket charges that disburses much of its resources for HIV/AIDS through the Global Fund.

In 2008 public and private entities allocated \$15.8 billion for global HIV/AIDS programs, \$6.7 billion from bilateral and EU contributions.<sup>14</sup> Pledges to the Global Fund rose from \$2.5 billion in 2007 to \$3.0 billion in 2008, then declined to \$2.6 billion in 2009. In the last funding cycle, Round 9, demand from countries also fell.<sup>15</sup> The U.S. PEPFAR program, increased its contributions from \$4.5 billion in 2007 to \$6.2 billion in 2008 and has increased its annual budgets subsequently. The 2010 fiscal year allocation is just shy of \$7 billion, suggesting that U.S. support is continuing.<sup>16</sup>

Fueled largely by increased donor resources, public health spending in the high-prevalence countries of Eastern and Southern Africa has risen rapidly in absolute and per capita terms. As a share of GDP, the increases have gone disproportionately to people with HIV/AIDS, ensuring continued access to care.<sup>17</sup>

Government spending in countries that formerly had high HIV/AIDS prevalence, like Brazil and Thailand, have financed prevention and treatment domestically. Other countries, such as Ghana, have legally binding commitments ensuring treatment for people with AIDS.

Of 77 countries recently surveyed, most indicated that they had adequate funding from governments, donors, and other sources, but they raised concerns about the future, especially the availability of external funds.<sup>18</sup> Prevention was identified as the likely victim if funding fell. A further concern was the rise in the cost of imported drugs and supplies with the devaluations in some countries.<sup>19</sup> The Clinton Foundation recently obtained additional price concessions from manufacturers that could compensate for the exchange rate penalty.

The impact of the current downturn is not entirely clear, but the uptick in 2008 and 2009 donor spending is encouraging since the economic crisis was accelerating in 2008 in the donor countries. The Global Fund disburses quickly once allocations are decided, but recipient country spending has been considerably slower. Almost 40 percent of Global fund resources remains undisbursed, a possible source of additional resources if there is a shortfall or delay in funding flows. Almost half of the allocations to Sub-Saharan Africa are undisbursed (figure 4). The \$900 million allocated in late 2009 under Round 9 is unlikely to have been disbursed yet.<sup>20</sup>

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<sup>14</sup> The figure includes international and domestic philanthropic contributions, World Bank financing, government expenditures, and household spending, but excludes other multilateral and private sector funding.

<sup>15</sup> In addition to the traditional funding programs the Global Fund has initiated a new \$2.6 billion funding window for the next two years that funds new programs with new resources, which means there is a significant net increase in funds. The requirements for the new window are not addressed here as the focus is on financing HIV/AIDS prevention and treatment.

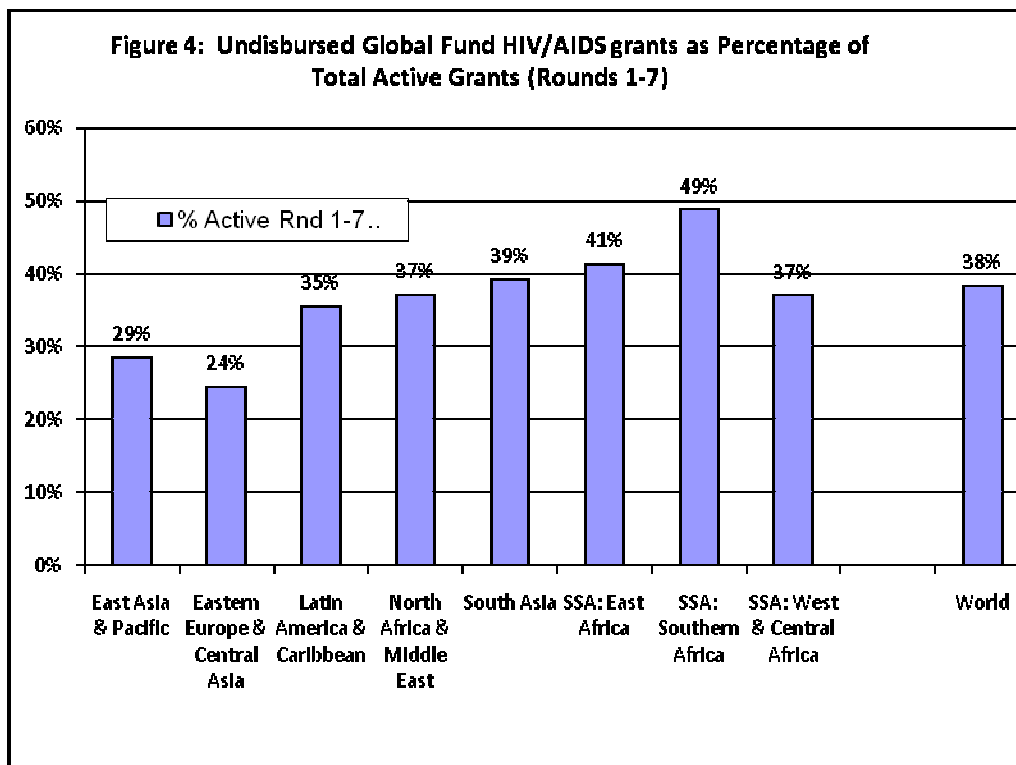
<sup>16</sup> Kaiser Family Foundation 2009, and KKF.org provide updates of spending.

<sup>17</sup> Case and Paxson 2009.

<sup>18</sup> A survey of UNAIDS and WHO health country offices by the World Bank/UNAIDS/WHO in 2009 asked about possible issues as the crisis evolved and the likely impact on HIV/AIDS programs over the next 6–12 months.

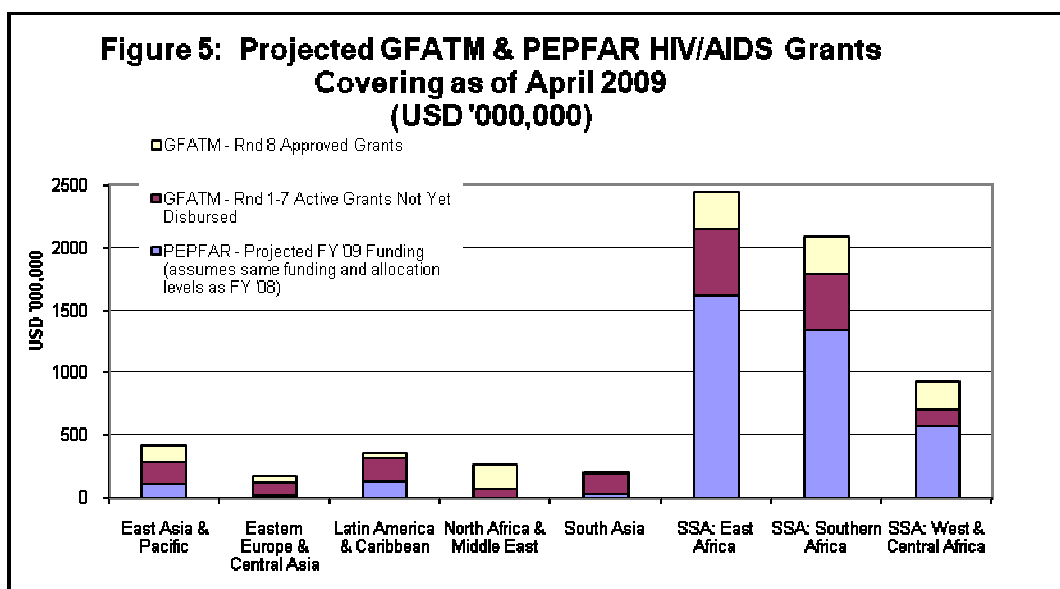
<sup>19</sup> UNAIDS 2009.

<sup>20</sup> <http://www.theglobalfund.org/programs/search/?lang=en&round=9>

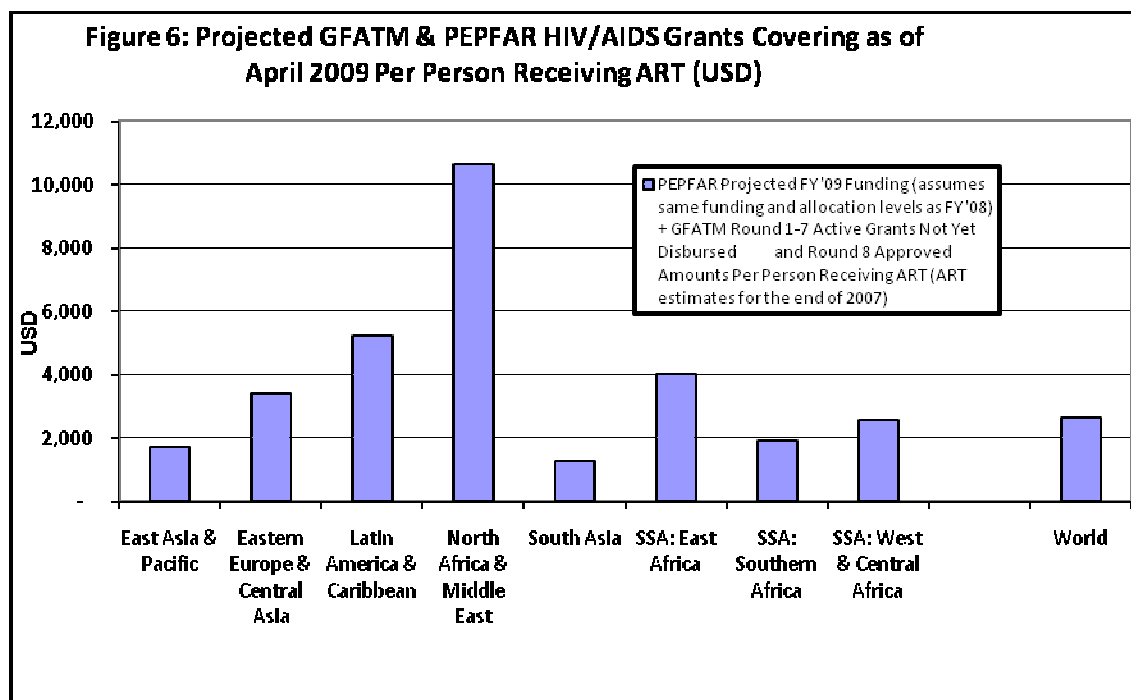


Source: Lewis 2009

The highest prevalence regions of Africa receive the bulk of external funding (figure 5), but financing per current AIDS patient paints a different picture (figure 6), as there is a correlation between the number of patients and funding levels across countries.



Source: Lewis 2009



Source: Lewis 2009.

Greater efficiency is becoming an imperative in HIV/AIDS programs as the agenda has broadened and the pace of infection has not slowed. Both countries and donors are exploring options. Targeting high risk groups and improving management and efficiency in delivery can raise quality and efficiency. The Bahamas plans greater use of generic drugs, better patient adherence to treatment protocols, and a sharper focus on the cost effectiveness of purchases and service delivery (box 1). While not costless, such improvements will boost effectiveness and reduce waste, which are equivalent to reducing costs. They also raise the quality of health care services.

**Box 1. The Bahamas made the crisis an opportunity for improving HIV/AIDS program performance**  
*The Ministry of Health used the looming financial crisis as an opportunity to take stock and streamline the HIV/AIDS program, cutting back on costs while improving productivity and impact. Some of the most important tasks:*

- *Expanding reliance on generic drugs and reducing use of higher priced brand name drugs.*
- *Tailoring the drug distribution to specific needs to reduce drug costs and improve the treatment protocol.*
- *Focusing more on patient adherence to the less costly first-line treatment.*
- *Intensifying Ministry of Health monitoring of program resources and accountability in managing funds and services.*
- *Assessing overall effectiveness of health investments.*

### *And what of prevention?*

Most international resources are earmarked for treatment. The only way to stem the need for treatment and save lives is to push for serious and expansive prevention initiatives.

An in-depth evaluation of the U.S. PEPFAR program concludes that it reduced deaths by 5 percent but had no effect on prevention.<sup>21</sup> The recent multimillion dollar evaluation of the Global Fund noted the organization’s neglect of prevention.<sup>22</sup> A more modest review assessing the programs of the World Bank, Global Fund, and PEPFAR also concluded that prevention was the weak link in each institution’s program.<sup>23</sup> The challenge is that for every HIV/AIDS patient placed on treatment, two or three newly infected people will need treatment for life.<sup>24</sup>

Countries that have prioritized prevention—Brazil, Rwanda, and Thailand—have seen prevalence decline or remain low, despite spiraling levels in the early 1990s (figure 7). Their prevalence rates contrast with those of Botswana and Swaziland, which have struggled to initiate effective prevention programs as prevalence reached epidemic proportions. The long-term trends reflect lack of attention to prevention 5–10 years ago, but current efforts remain inadequate, and the crisis could further curtail such efforts if constrained budgets force cutbacks in prevention. It takes 7–10 years to become symptomatic, so actions now will see results only in the future.

The Bill & Melinda Gates Foundation and others are financing significant efforts in prevention technologies, and considerable ongoing research is exploring how to discourage risky behaviors. But equal attention must go to actually promoting behavior change and rolling out promising approaches in countries where prevention lags. Because current funding and programs for prevention are dwarfed by those for treatment, the balance deserves some recalibration to spare those not yet infected. While neither simple nor easy, a push to expand prevention efforts is warranted if there is to be progress on MDG 6A: halting the spread of HIV/AIDS by 2015.

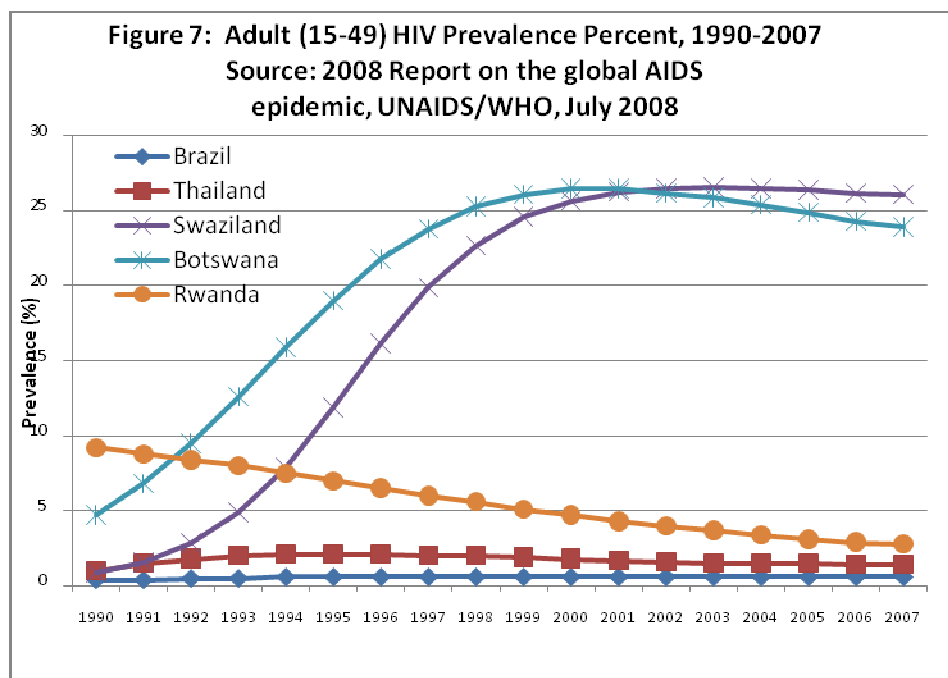
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<sup>21</sup> Bendavid and Bhattacharya 2009.

<sup>22</sup> Sherry et al 2009.

<sup>23</sup> Ooman et al 2009.

<sup>24</sup> Over 2006.



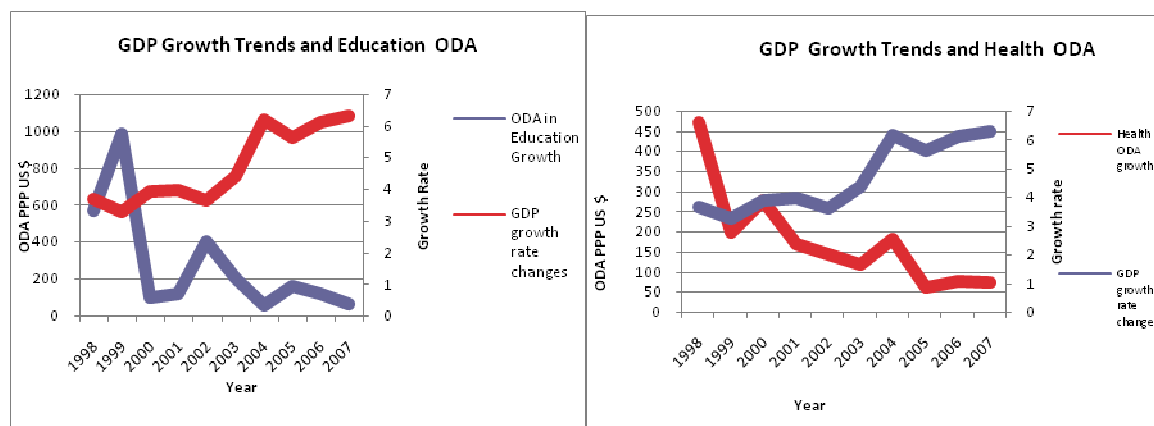
Source: Lewis 2009

## Donor assistance responses to crises

Donor responses to crises are potentially important for offsetting contractions in government social spending in developing countries. Evidence is mixed on this issue. Analysis of the response of growth in official development assistance for education and health to changes in GDP growth in developing and transition economies for 1997–2007 suggests no relationship (Lewis and Verhoeven forthcoming). Figure 8 shows the relationship between changes in real GDP growth rates in developing and transition countries and overseas development assistance (ODA) spending on health and education. Although here too there is little relationship after 2003 there is a small response in ODA to education, with donor financing rising and falling as national education resources fall and rise, respectively. This countercyclical financing suggests modest compensation for GDP growth shifts by donor spending.

But it is one thing to have a regional economic contraction—as in East Asia in the late 1990s and Latin America during the 1980s debt crisis and the 1990s Tequila crisis—and another to have one that originates in developed countries, as with the current crisis. What happens in a global crisis that affects countries at all income levels? What kind of support can be expected from wealthy countries?

**Figure 8: Comparisons of changes in GDP growth and trends in official development assistance levels for education and health, 1997-2007 (Current PPP US\$)**



Source: Lewis and Verhoeven 2010

Evidence on donor funding during financial crises in donor countries is limited. A recent study that tracked donor allocations during and after banking crises (1997–2007) in developed countries suggests that donor funding levels are tied to economic prosperity in developed countries.<sup>25</sup> Aid flows decline 20–25 percent during banking crises in OECD countries and take about a decade to recover. Not all countries or programs are equally affected, as will be discussed, but some combination of the fiscal costs of crises, debt overhang after the end of the crisis, and perhaps erosion in public support acts to reduce aid flows from affected donor countries. The uncertainty in the current environment suggest that such a pattern of contraction in wealthy countries could have serious consequences for aid flows in coming years.

Two deviations from these aggregate trends are instructive—and encouraging. During the Southeast Asian crisis of 1997, donors (most notably DFID), supported core social programs in Indonesia, containing the declines in education and health spending and permitting social services to continue.<sup>26</sup> During the current crisis Mexico sought loans from the World Bank to expand temporary safety nets to compensate for budget reductions. Latvia, Lithuania, Poland, and Romania all received policy loans from the World Bank to support reforms and continued financing of safety nets and education and health programs (see box 2 on Eastern European experience). These aid responses provided the needed financial backing for financing income support and social service programs, both critical for bridging financial gaps during a downturn.

## **What is happening in the current crisis?**

The initial impacts of the economic crisis did not reach most developing countries until 2009, so the effects are not yet conclusive. But there is evidence of sustained national and household impacts based on discussions with governments and rapid surveys. Impacts on social sector budgets for 2008–10 depend on country circumstances, specifically how the global downturn affected the economy and public revenues and whether countries prepared for a possible contraction.

<sup>25</sup> Dang, Knack and Rogers 2009.

<sup>26</sup> Gottret and others 2009.

Effects of the crisis have been relatively modest in East Asia, though qualitative evidence in six countries suggests that informal work has surged and that migrants have returned temporarily, reducing overall income and affecting households’ ability to pay for social services.<sup>27</sup> The impacts of the financial crisis in Africa must be disentangled from the impacts of the earlier food and fuel crises that persist in the region and have affected consumption of food and social services. Aside from Botswana that experienced an eight percent decline in GDP, most countries remained in the black. The effects may also be concentrated at the household level, as recently reported plans for next year’s education and health budgets in African countries with Poverty Reduction Strategy Papers project no change in public social spending.<sup>28</sup> South Asia and the Middle East and North Africa have been mildly affected and, like the other regions mentioned here, along with most of Latin America, have returned to pre-crisis levels of economic activity and growth. The impacts have been felt most acutely in Eastern Europe and parts of Latin America and the Caribbean, and we turn to a discussion of the effects on spending of governments and households.

### ***Eastern Europe and Central Asia***

Because Eastern Europe was the hardest hit of emerging market regions, countries there have been the first to cut all areas of public spending. Neither education nor health has necessarily been spared. Several countries have used the downturn to take on difficult reforms made critical by the circumstances (box 2).

***Box 2: Turning a sow’s ear into a silk purse: harnessing the financial crisis as opportunity***

*Crises create uncertainty in public sector administration. Many countries in Eastern Europe and Central Asia have been deeply affected by the current crisis—GDP in Latvia and Lithuania shrank well over 15 percent—and only a handful of countries have experienced positive growth. While some countries have responded by cutting spending, others are ramping up social spending. Latvia and Romania have seized the opportunity to push ahead with reforms that previously had proven politically difficult.*

*Latvia is using the stringencies imposed by the crisis to right size its teaching force. By shifting the financing and management of the teaching force to local governments and providing per capita student transfers, the government is tackling the overcapacity problem. This translates into an average 34 percent reduction in the number of teachers and roughly a 25 percent reduction in teacher salaries. In health, the government has embraced sources of efficiency gain through restructuring. Drawing on diagnostic work with the World Bank, the government has eliminated unused hospital beds, invigorated outpatient care, and prioritized the financing of effective health care procedures by adjusting the list of ineligible health services. The crisis made all these needed reforms possible, and policy research was used to inform strategic investment decisions that avoided across the board reductions or random cutbacks in social programs.*

*Romania responded to declining enrollments and tighter budgets by substantially reducing school personnel (teaching and nonteaching staffs) in 2009 largely by curtailing supplements to base salaries. Some 18,000 teachers (6 percent) were laid off following reductions in teaching norms and a substantial cut in the funds allocated to each county. The Ministry of Education, Research, and Innovation cut 15,000 additional public positions raising average class size and consolidating schools. The staffing reductions will allow much needed adjustments to class size and better alignment of teachers, students, and budgets. In addition, the ministry has reduced the number of scholarships for higher education as well as the number of fee-paying students. Declines in fee-paying students trim the overall resource envelope for higher education and at the same time that budgets are being cut.*

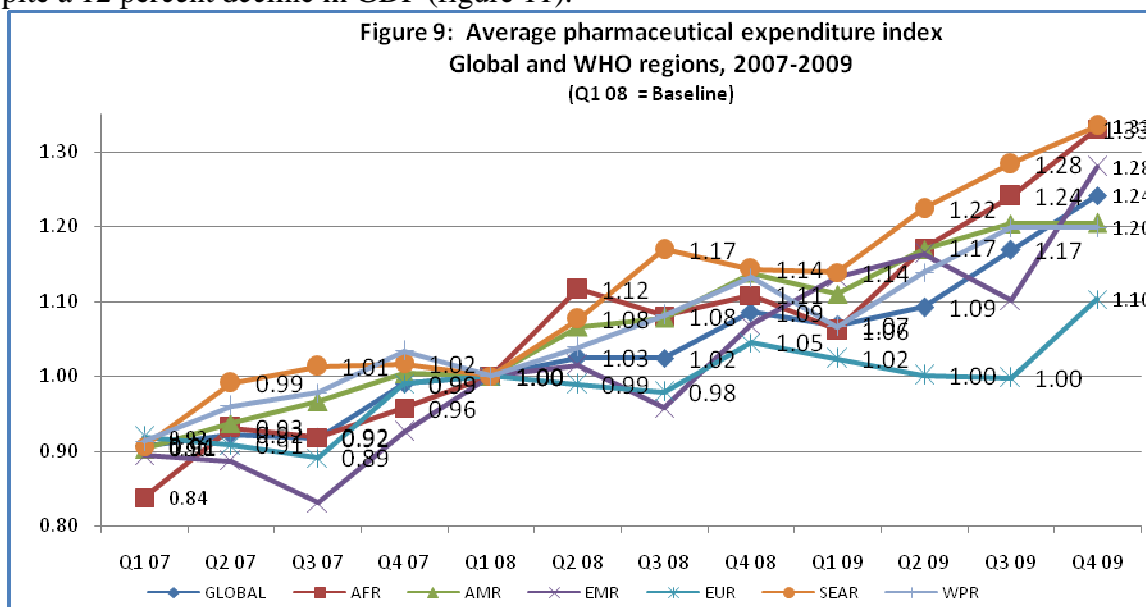
Some countries in the region have chosen to ignore the financial climate by increasing spending. Moldova has raised teachers’ salaries to align entry-level salaries with average national earnings, an increase of almost 75 percent in 2009, but without commensurate increases in class size or shifts in teaching loads. Teachers make up almost two-thirds of public employees. At the same time, the IMF has assumed a decline in the public wage bill in 2010–12. Ukraine raised the minimum wage as a cost of living adjustment in November 2009 and again in January 2010,

<sup>27</sup> Turk 2009.

<sup>28</sup> IMF 2009.

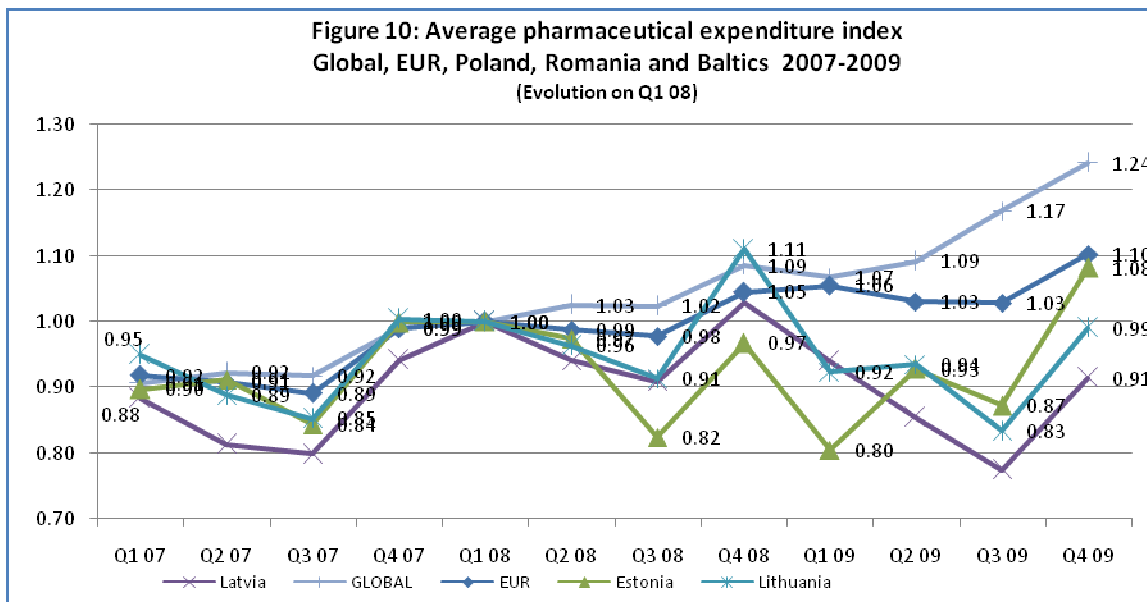
which translates into additional spending of 7 percent of GDP for 2010. The Cabinet of Ministers approved premium pay for secondary, vocational, and university teachers equal to 20 percent of base salary. Both increases were introduced without offsets. Ukraine’s IMF tranche has been suspended until the government can provide a consolidated position on the budget and anti-crisis measures. These signs of increasing spending could make restructuring difficult and prolong the downturn in countries following such strategies.

A good indicator of health spending is pharmaceutical spending, which tends to grow over time to meet rising demand and expand the supply of existing and new medications. Pharmaceutical spending by country and region highlights the difficulties facing Eastern Europe, especially the Baltics. World demand continues to rise from the first quarter of 2007 through the last quarter of 2009 (with the first quarter of 2008 considered the last quarter before the worldwide financial crisis), but European expenditures decline starting in the first quarter of 2009 and fall to pre-crisis levels by the second quarter before recovering at the end of 2009 (figure 9). The decline is most dramatic in the Baltics, with Latvia cutting back pharmaceutical expenditures by more than 20 percent between the fourth quarter of 2008 and the third quarter of 2009, and Estonia experiences a good deal of volatility in its drug purchases across the period, all of the variations are below purchases in the base year (first quarter of 2008) (figure 10). Ukraine, however, continues to increase drug purchases and spending over the same period by about 18 percent, despite a 12 percent decline in GDP (figure 11).



Source: Laing and Buysse 2010.

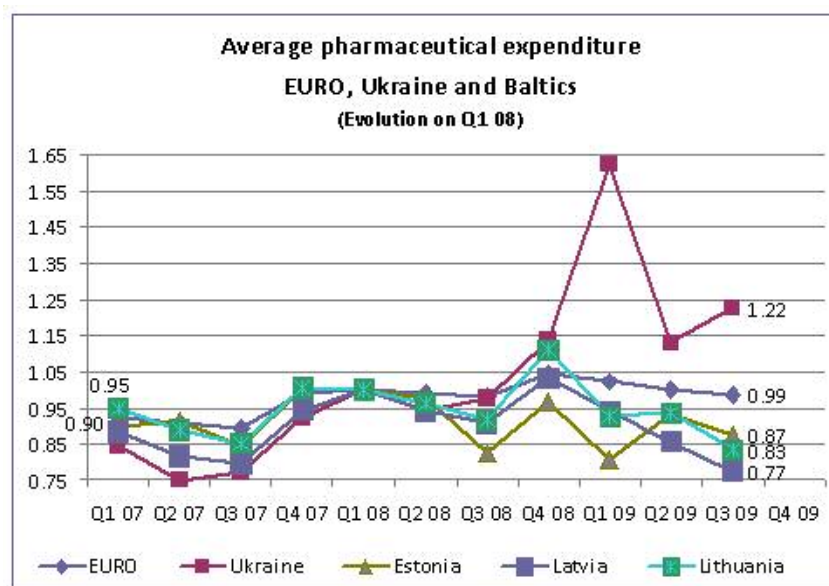




Source: Laing and Buysse 2010.

**Figure 11. Average pharmaceutical expenditure, Eastern Europe, Ukraine, and the Baltics, 2007-2009**

Source: Stephens 2010

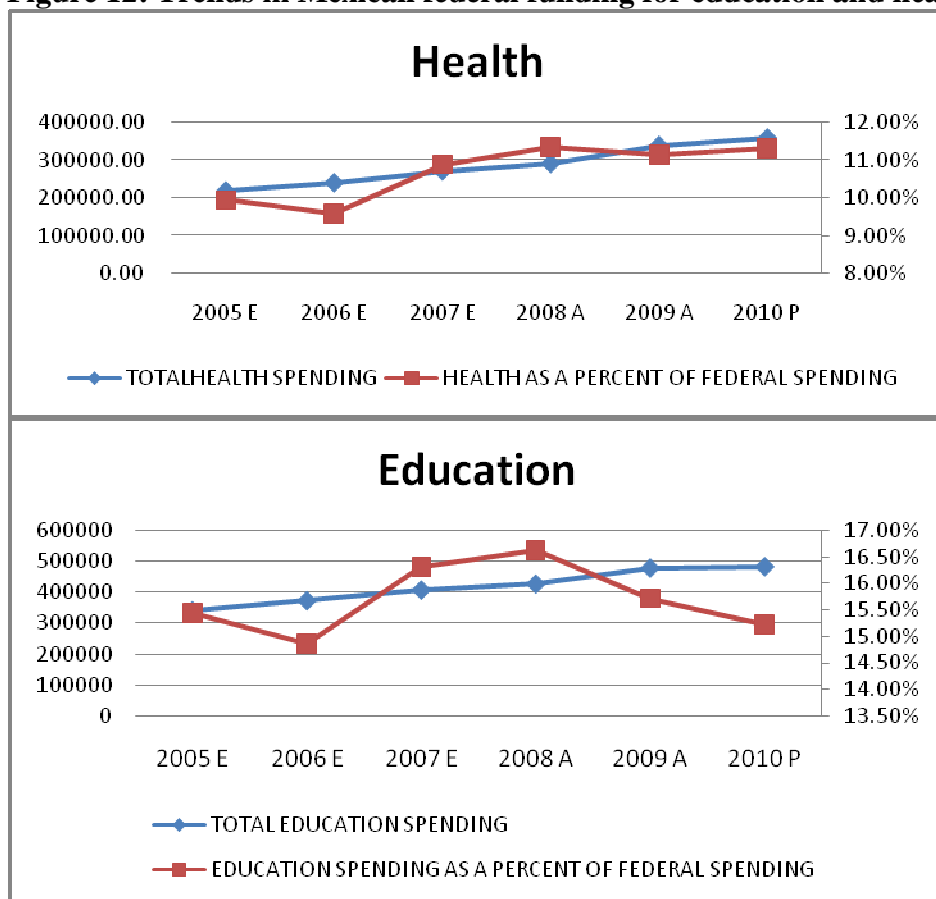


### **Latin America and the Caribbean**

In Latin America social spending remains strong, due partly to the relatively modest size and scope of the downturn in much of the region and partly to efforts to protect social spending. With countries including Brazil, Chile, and Peru projected to show positive growth in 2010, the six largest economies were able to institute emergency social measures aimed at temporary employment financing and temporary transfers to vulnerable populations. Chile’s Social and

Economic Stabilization Fund provided a countercyclical boost in spending, blunting the effect of the external shock.<sup>29</sup> The exceptions are El Salvador and Mexico, where contractions of up to 8 percent have created fiscal pressures.

**Figure 12: Trends in Mexican federal funding for education and health, 2009–10**



E= estimated; A= approved; P=projected.  
Source: Mexican government statistics.

Despite the downturn, Mexico’s structural reforms in education will continue (figure 12). Although education funding is expected to decline in 2009 and 2010 as a percentage of federal government spending, absolute funding will increase more than 10 percent, maintaining the momentum of reform. Health spending will also decline as a percentage of total federal spending though by a smaller amount, and absolute spending will rise by just over 10 percent. El Salvador is not cutting education funding, but health spending is expected to fall from 3.4 percent to 3.0 percent of GDP due in large part to reductions in the Social Security Institute’s (ISSS) health expenditures.<sup>30</sup>

## Household impacts of the current crisis: the evolving experience of Europe and Central Asia

Meeting the MDGs hinges on progress in social investments and earnings among poor households in low- and middle-income countries. The poor have been hurt most by declining

<sup>29</sup> Ferreira and Schady 2009.

<sup>30</sup> El Salvador PER, forthcoming.

employment, rising part-time employment, falling earnings, and shrinking assets and remittances, although the lower middle class in many countries has not been spared. Safety nets have mitigated these impacts in some countries (GMR 2010), but the severity of the crisis has limited the scope and depth of safety nets. The difficulties facing governments place public programs in jeopardy, while the ability of households to cope is seriously compromised by the ripple effects of the crisis.

Rapid response evidence from Europe and Central Asia gives a sense of how households are affected, providing a window into the household effects that underlie the country-level impacts. Drawing down savings and postponing human capital investments where governments are contracting services place disproportionate pressures on low-income families and on the key investments needed to move households out of poverty and to meet the MDGs in nutrition, health, and education.

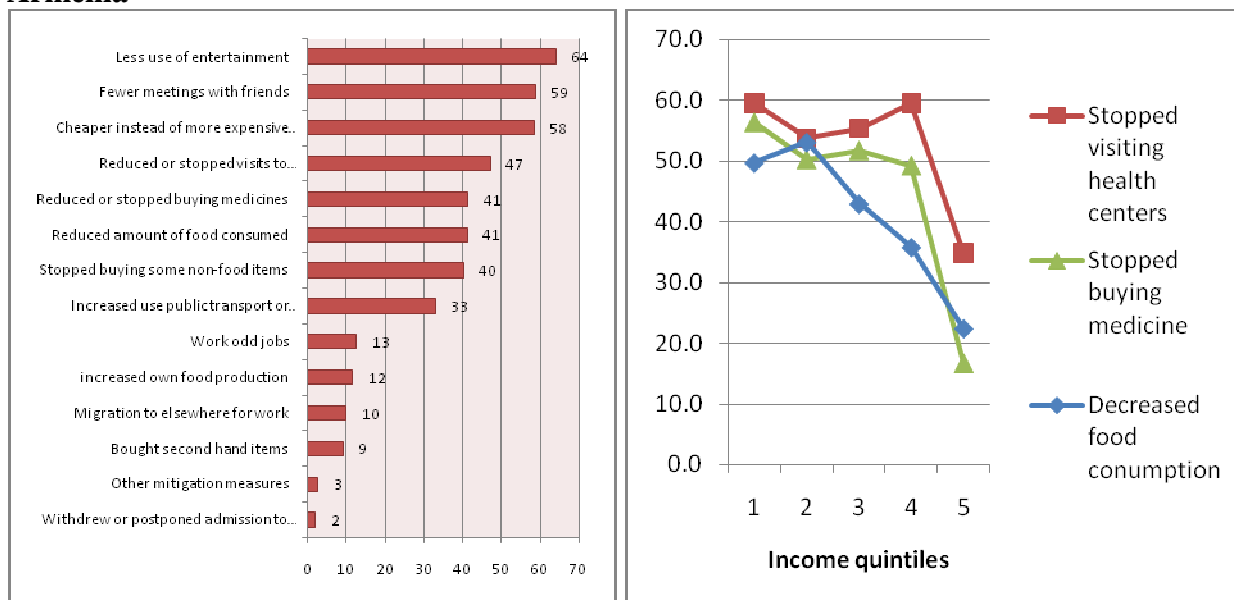
Income declines are reducing household consumption of many commonly purchased items in countries including Armenia, Montenegro, and Turkey. Some 42 percent of households in Armenia and 58 percent in Turkey cut back on food consumption, which has implications for nutritional adequacy for children and adults.

Armenian households have protected education, an encouraging sign, but their food consumption has fallen 41 percent and health care spending is down 47 percent (figure 13). Some 50–60 percent of all households (except the wealthiest 20 percent) have cut back on health care services and drug purchases. Household reductions in food consumption are inversely related to income, with 20 percent of the wealthiest households cutting back (noteworthy in itself) but more than 55 percent of the poorest 20 percent of households are doing so. Even bigger spending cuts are seen for entertainment and expensive foods.

In Montenegro unemployment figures suggest that cutbacks affect almost a quarter of households. Safety nets cover only 18 percent of the poorest 20 percent of households, and informal private transfers are disappearing as remittances and informal safety nets decline. Private investments in education, health insurance, and preventive health care have fallen, reducing resilience to further shocks (figure 13). Overall, 9 percent of households reduced preventive care visits, but 25 percent of poor households did, and the same percentage of poor households cancelled health insurance. In education, the wealthiest households have cut back the most—20 percent compared with 11 percent for the lowest income households.

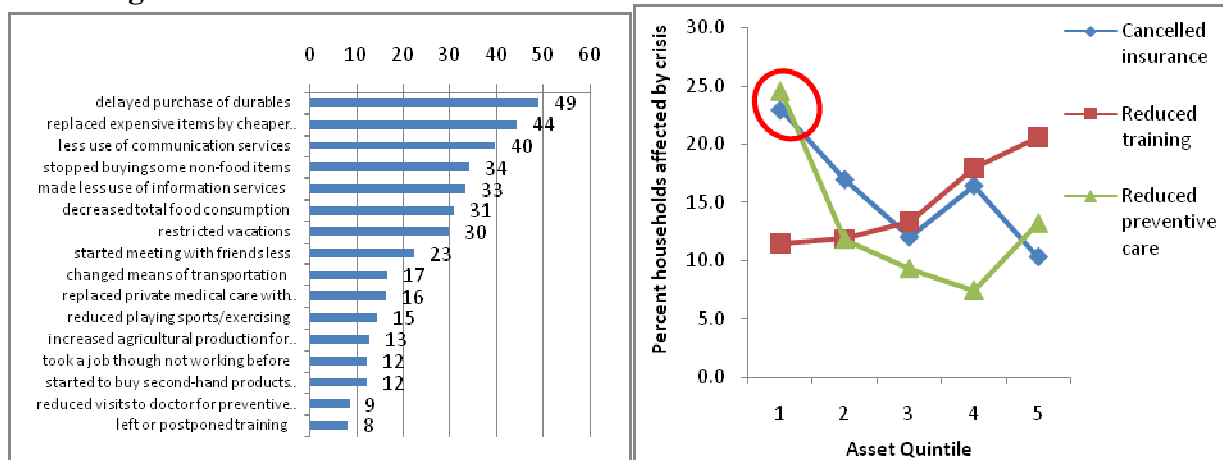
**Figure 13. Spending cutbacks in crisis-affected households are jeopardizing future welfare in Armenia, Montenegro and Turkey: coping mechanisms during the crisis (percent of households)**

**Armenia**



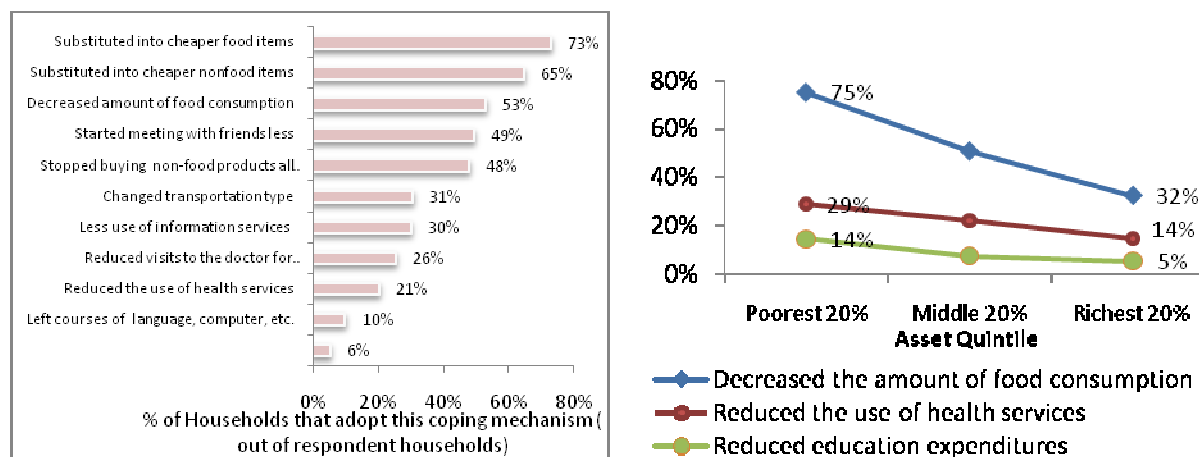
Source: Ersado, L. (forthcoming), “The Global Economic Crisis in Armenia: Policy Responses and Household Coping Strategies”, World Bank Working Paper.

**Montenegro**



Source: Montenegro Crisis Monitoring Survey, 2009 Hirshleifer and Azam, forthcoming Turkey.

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Source: TEPAV; UNICEF World Bank 2009; Turkey Welfare Monitoring Survey.

In Turkey, the poorest households have experienced the largest reductions in wages and self-employment income. Some 91 percent of the poorest 20 percent of households lost income, but even the wealthiest experienced a drop of more than half. Safety nets cover only 20 percent of the poorest households, requiring the rest to sell assets, draw down savings, and find other informal sources of support. Household coping has been severe, with sobering implications for nutrition, health, and education goals. Among the poorest households, 75 percent have reduced children’s food consumption, 29 percent reduced health care use, and 14 percent cut back on education spending. Even middle-class households have cut back on spending, especially in education.

## Conclusions

Crises have a strong effect on government and household spending but effects are highly variable depending on the severity of the downturn, the preparedness of government and its flexibility in continuing spending and social service delivery in the face of austerity. First, the accumulated evidence suggests that both governments and households protect education over health. This emerges from cross country data, household surveys and qualitative studies.

Second, it is the lowest income countries that are most likely to curtail spending in a crisis. Upper Middle Income countries raise spending and Lower Middle Income countries fall somewhere in between. As countries become richer they aggressively protect social spending. The behavior of Mexico, Romania, Latvia and Lithuania in 2008-2009 are good examples of this.

Third, countries have become more sophisticated at crisis management overtime. This time around countries are (temporarily) expanding safety nets, protecting social sector spending through loans, redirecting funding to retain social spending, and harnessing the crisis to achieve major reforms that improve efficiency and quality. A harbinger of this evolution is Argentina’s 2000 redirection of health funding to services for vulnerable populations, in sharp contrast to earlier across the board cuts with little concern for the incidence of government actions. Countries are relying much more heavily on data and policy research in making spending allocations when budgets contract, replacing the ax with a scalpel to drive policy and future directions for their country.

Fourth, donor funding tends to disappear when OECD countries face a downturn, and in the aggregate rich countries do not respond to the needs of countries affected by global or regional crisis. However, there are specific instances where they have provided relief and support to individual countries, and in this crisis consistency in HIV/AIDS funding is a departure from past practices of renegeing on promises when banking crises hit donor economies. Enhancing development effectiveness should include being the source of support in times of crisis. These results may help to inform a useful shift in priorities to protect the vulnerable in times of financial downturns. Not doing so may well jeopardize progress toward the MDGs as countries confronting gaps in progress can derail investments that deserve to continue and must do so if progress toward the MDG goals are to be realized.

The current crisis is not over, but the evidence here provides encouraging evidence that social spending is increasingly a priority for countries. The big challenge is how well countries spend and implement public programs. Spending is only part of it.

## References

- Alderman, Harold, John Hoddinott, and Bill Kinsey. 2006. "Long Term Consequences of Early Childhood Malnutrition." *Oxford Economic Papers* 58, no. 3: 450-474.
- Amin, Samia, Jishnu Das, and Markus, eds. Goldstein. 2008. *Are You Being Served? New Tools for Measuring Service Delivery*. Washington, D.C., 2008.
- Bendavid, Eran. and Jayanta Bhattacharya .2009. "The President's Emergency Plan for AIDS Relief in Africa: an Evaluation of Outcomes" *Annals of Internal Medicine* vol.150 Issue 10.
- Case, Anne, and Christina Paxson. 2009. "The Impact of the AIDS pandemic on health services in Africa: Evidence from Demographic Health Surveys." Princeton University, Princeton, NJ.
- Case, Anne, and Christina Paxson. 2006. "Stature and Status: Height, Ability, and Labor Market Outcomes." NBER Working Paper No. 12466. Cambridge, MA.
- Dang, Hai-Anh, Steve Knack and Halsey Rogers. 2009. "International Aid and Financial Crises in Donor Countries." Policy Research Working Paper 5162.
- Dehejia, Rajeev, and Adriana Lleras-Muney. 2004. "Booms, Busts, and Babies' Health." *Quarterly Journal of Economics* 119, no. 3: 1091-1130.
- Dinkelman, Taryn. 2008. "The Long-Term Effects of Being Born in a Drought: Evidence from the Cape Area Panel Study 2002-06." Paper presented at the 2008 Northeastern Universities Development Consortium Conference, Boston University, Boston, MA.
- Friedman, Jed, and Norbert Schady. 2009. "How many more infants are likely to die in Africa as a result of the global financial crisis?."
- Goldin, Claudia. 1999. "Egalitarianism and the Returns to Education during the Great Transformation of American Education." *Journal of Political Economy* 107, no. 6: S65-94.
- Gottret, Pablo, Vaibhav Gupta, Susan Sparkes, Ajay Tandon, Valerie Moran and Peter Berman. 2009. *Innovations in Health System Finance in Developing and Transitional Economies Advances in Health Economics and Health Services Research*, Volume 21, 23-53.
- IMF. 2009. "Fiscal Policy in Sub-Saharan Africa in Response to the Impact of the Global Crisis." IMF Staff Position Note, SPN/09/10.
- Laing, Richard and Iris Buysse. 2010. Impact of the Global Crisis on the Global Pharmaceutical Sector." Presentation at Utrecht (January 7).
- Lewis, Maureen. 2009. *Likely Impacts of the Crisis on HIV/AIDS Programs*. Presentation to HIV/AIDS Economics Reference Group meeting (November).
- Lewis, Maureen, and Gunilla Pettersson. 2009. (a) "Governance in health care delivery : raising performance." Policy Research Working Paper 5074.

*“Financial Crises and Social Spending: The Impact of the 2008-2009 Crisis”*

- Lewis, Maureen, and Gunilla Pettersson. 2009. (b)"Governance in education : raising performance." World Bank mimeo.
- Lewis, Maureen and Marijn Verhoeven. 2010. “Do Economic Crises affect Social Spending?”. Draft.
- Ooman, Nandini, Michael Bernstein and Steven Rosenzweig (2007) *Following the Funding for HIV/AIDS* CGD Report (October)
- Over, Mead (2009) *How Will the Financial Crisis Affect Foreign Aid Expenditures?* Presentation to HIV/AIDS Economic Reference Group meeting (November)
- Over, Mead et al., 2006. The Economics of Effective AIDS Treatment Evaluating Policy Options for Thailand World Bank, Washington, DC.
- De Walque, Damien, Harounan Kazianga, Mead Over and Julia Vaillant. 2010. “The Impact of the Food Crisis on HIV/AIDS Treatment and Health Outcomes in Mozambique”. Presentation at DECRG Workshop (January 13).
- Sherry, James, Sangeeta Mookherji and Leo Ryan. 2009. The Five-Year Evaluation of the Global Fund to fight AIDS, Tuberculosis and Malaria. Macro International (March).
- Schady, Norbert. 2004. “Do Macroeconomic Crises Always Slow Human Capital Accumulation?” *World Bank Economic Review* 18(2): 131-54.
- Ferreira, Francisco and Norbert Schady. 2009. “Aggregate Economic Shocks, Child Schooling, and Child Health.” *World Bank Research Observer*, vol 24, no. 2 (August)
- Stephens, Peter. 2010. “Tracking the Effect of the Economic Crisis on Pharmaceutical Consumption, Expenditures and Unit Prices.” Third Report prepared by IMS Health for the WHO (January).
- TEPAV, UNICEF and World Bank. 2009. "The Economic Crisis and the Welfare of Families: Results from the Five Urban Centers in Turkey" Ankara, Turkey.
- Turk, Carrie. 2009. “Rapid, qualitative assessments of the impacts of the economic crisis: Overview of findings from eight countries.” Internal discussion paper. World Bank. June
- Hirshleifer, Sarojini and Mehtabul Azam. Forthcoming. "Impact of the Economic Crisis in Montenegro; Evidence from Crisis Response Survey." *ECSHD Working Paper*.
- UNAIDS. 2009. “25th Meeting of the UNAIDS Programme Coordinating Board” Geneva, Switzerland (December 8-10).
- World Bank 2010. *Global Monitoring Report*. Washington, D.C.: World Bank
- World Bank 2009a. *Averting a Human Crisis During the Global Downturn, Policy Options*. Human Development Network. World Bank, Washington, DC.



*“Financial Crises and Social Spending: The Impact of the 2008-2009 Crisis”*

World Bank. 2009b. *Lithuania Social Sector Public Expenditure Review*. Eastern Europe and Central Asia Region, Human Development Department, World Bank, Washington, DC.  
World Bank. 2008. "Lessons from World Bank Research on Financial Crises." Development Research Group, World Bank, Washington, DC.

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