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HNP DISCUSSION PAPER

RAPID ASSESSMENT OF THE EFFECT OF THE ECONOMIC CRISIS ON HEALTH SPENDING IN MONGOLIA

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Health, Nutrition and Population (HNP) Discussion Paper

Rapid Assessment of the Effect of the Economic Crisis on Health Spending in Mongolia

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Abstract: This rapid assessment examines the effect of Mongolia's economic crisis (which lasted from mid-2008 to first quarter 2010) on government health budgets and health expenditure, household out-of-pocket spending and donor health commitments. This study was part of a larger assessment conducted in four countries on the effects of the economic crisis on health spending. A standardized approach was developed for all country case studies and consisted of a desk review of internationally-available literature and databases, extensive in-country review of data and documents available in government and donor offices, and semi-structured interviews with government staff, health providers and development partners. This assessment in Mongolia reveals a substantial reduction in the government health budget: the 2009 national health budget was significantly lower than the previous year's, and then was further reduced by 10% in a subsequent budget amendment. At national level, budget cuts were concentrated in investment line items. Among recurrent line items, the pharmaceutical budget was hard-hit, but salaries were largely preserved, and there were no retrenchments. Similar patterns were observed at sub-national level for hospital budgets, which depend on the central allocations, but not for primary care facilities, which are funded on a capitation basis. Compared to other sectors, the health sector was relatively protected during the economic crisis and the share of health in the total government budget was higher after the budget amendment than before. To protect households from the effects of the economic crisis on health spending, the government undertook specific policy measures to expand health insurance coverage to vulnerable groups. Donor commitments to the health sector during the crisis largely tracked previously planned commitments.

Keywords: economic crisis, financial crisis, Mongolia, health spending, health expenditure, donor commitments

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INTRODUCTION

The current global economic crisis is unique in both its scale and scope. The crisis began in October 2008 with the collapse of Lehman Brothers in the US, with knock-on effects throughout the world. It precipitated a collapse in the financial and credit markets, global declines in the demand for exports, the contraction of economies around the globe and unemployment rates that have soared to levels not seen in decades.

The effect of the economic crisis on developing countries has been varied, related to how integrated an economy is in the global economy, the proportion of the population living near the poverty line, and the dependency of the economy on remittances and foreign direct investment. Some countries and regions have been relatively insulated from the full brunt of the economic crisis because of policies that were put in place prior to the crisis, some of which were informed by their experience of financial upheavals in the 1980s and 1990s.

In many ways, the pathways and nature of possible effects (if not the magnitude) of the economic crisis on government health spending and out-of-pocket spending is expected to be similar to previous crises. Unlike previous crises, however, the current economic crisis has also affected donor country economies, and it is unclear whether and to what extent this has, and will, affect development aid (World Bank 2010c), including for health.

As soon as the extent of the global economic crisis started to become evident, the World Bank, donors, policy-makers and civil society began to speculate about, and study, the effects that the crisis was likely to have on health spending, healthcare utilization and health status, and what steps various actors could take to mitigate its effect. Initial work (see, for example, Ferreira and Schady 2009; Friedman and Schady 2009; Gottret et al. 2009; World Bank 2010a) relied on the experiences of past crises and economic theory to build hypotheses about the expected effects of this crisis.

As time has passed, and many economies have emerged – at least partly – from the deepest trough of the recession, the question has shifted from one of what the effects of the economic crisis *will be* to one of what the effect of the economic crisis *has been*. In response, some work has been undertaken to analyze the possible effects of the economic crisis on health spending in the aggregate (World Bank 2010a), but in-depth analysis at the country-level has been conducted in very few countries. Zambia is one of the few examples (see Serieux et al. 2010). In addition, quantitative data has been collected through several large-scale household surveys to assess the effects of the crisis in a select set of countries in Europe and Central Asia (Ajwad 2009; Koettl 2010) and qualitative data has been collected from 12 countries across the world to monitor changes position of vulnerable groups (Turk 2010). These contain little health-specific information, though, and results are only preliminary.

PURPOSE OF THE STUDY

This assessment is part of a larger research effort, consisting of a total of four case studies (Jamaica, Kenya, Mongolia, and Tajikistan), to assess the effect of the economic crisis on health spending. These studies draw on quantitative and qualitative data sources to examine changes in health expenditure between 2007/2008 (pre-crisis) and 2009/2010 (post crisis) to ascertain:

- to what extent real health expenditures changed overall, in composition, in geographical allocation, and at national/sub-national levels;
- whether the economic crisis was related to these changes in expenditures; and,
- which actions were, and are being, taken by government and stakeholders to mitigate these effects.

Mongolia was selected as a case study because it was assessed as being highly vulnerable to the effects of the economic crisis. As per the methodology of Cord et al. (2010), "vulnerability" is measured by a combination of the country's overall level of exposure to crisis and a government's capacity to cope with the crisis. Countries are considered to have "high exposure" when (i) real per capita economic growth is expected to be lower in 2008–09 compared to the period 2004–07 and (ii) where 20 percent or more of households were below the US$1.25 poverty line in 2005; "medium exposure" when only one of these conditions holds; and "low exposure" when none of these conditions hold. The government's capacity to cope with the impacts of the crisis on household poverty depends on (i) fiscal capacity (low, some, more) to incur an increased fiscal deficit and (ii) institutional capacity (low, medium, high) to implement programs aimed at mitigating the poverty impact of the crisis. By these measures, Cord et al. (2010) consider Mongolia a highly exposed country with some fiscal space and medium institutional capacity.

ANALYTICAL APPROACH

This study is a rapid assessment of the impact of the economic crisis in Mongolia. It is not a full-fledged public expenditure review or a review of donor assistance. The analytical approach was informed by a research protocol developed to guide and ensure consistency across all country case studies (see Brenzel 2010). A desk review of data and reports available in English in international databases in the public domain was conducted from Washington DC over a two week period. However, data on health expenditure in international databases tend to be available with a considerable time lag. National Health Accounts (NHA) data for 2008, for example, were first available in April 2010 and more recent NHA data are not yet available. Similarly, at the time of writing, data on government health expenditure in the World Development Indicators were available only up until 2008. New data on household (i.e. out-of-pocket) health expenditure are available even less frequently, since they typically rely on the implementation of household surveys which, although they may take place annually in a few select countries, typically only take place every few years.

The desk review was followed by a one-week mission to Ulaanbaatar and surrounding areas (11-17th April 2010). As per the case study protocol, mission activities included

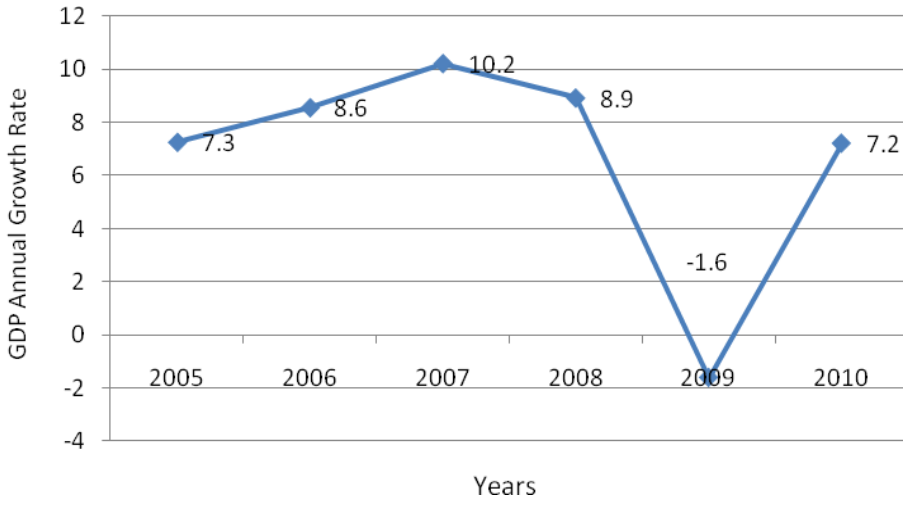
extensive data collection for all types of health spending, as well as semi-structured discussions/interviews with government, donors and other relevant stakeholders to help interpret data, obtain qualitative information on the effect of the economic crisis and learn about government response to the crisis. These activities were supplemented by field visits to a primary health care facility in a peri-urban area of Ulaanbaatar and hospital and primary care facility in Tuv province to examine facility financial documents, health information system data and interview facility staff.

The questions used in the semi-structured interviews were based on a generic survey guide (see Annex 1).

CHARACTERIZING THE ECONOMIC CRISIS IN MONGOLIA

The Economist Intelligence Unit (2010: 9) describes Mongolia as "one of the countries in Asia that was the hardest hit by the 2008-09 global financial and economic crisis". Indeed, there is no doubt that Mongolia has been in a severe recession. Real GDP growth in the country was less than minus 1% in 2009 – down from over 8.9% in 2008, 10.2% in 2007 and 8.6% in 2006 (IMF 2010c). A quarter-by-quarter analysis of the data, coupled with interviews with IMF staff, pinpoints the start of the recession as the second half of 2008, when the economy suddenly slowed sharply, through to the first quarter in 2010 when there some initial signs of recovery.

Figure 1 Real GDP growth in Mongolia, 2005-2010

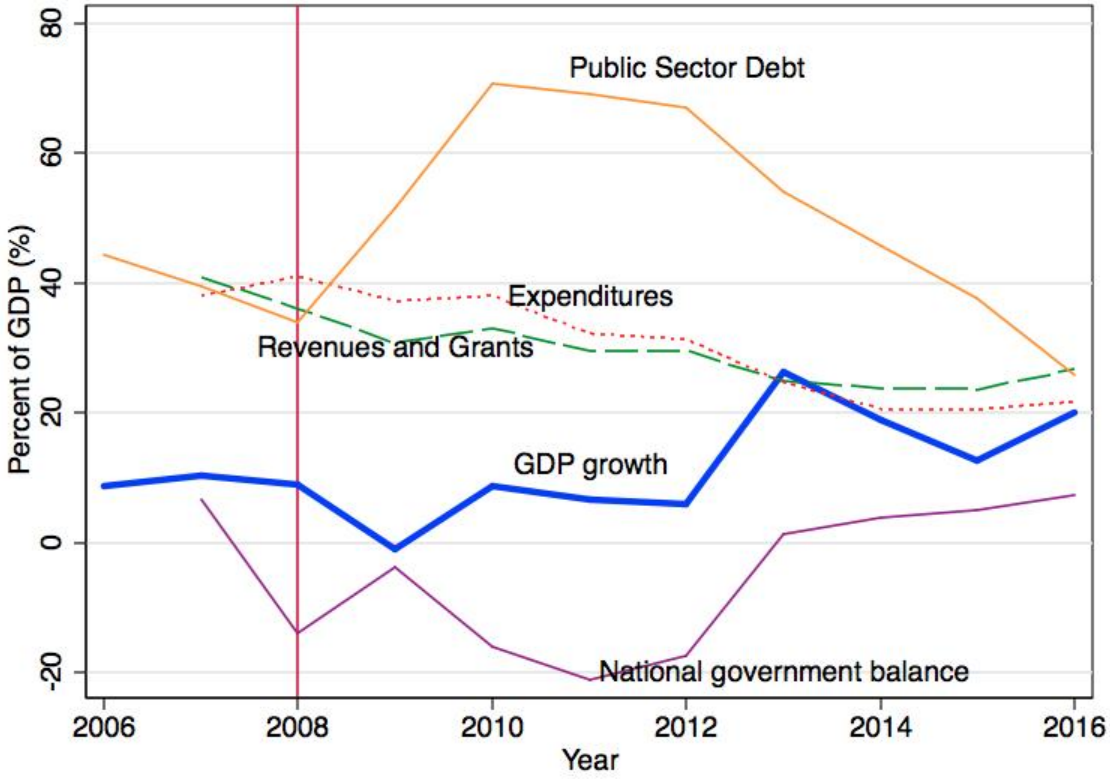


Source: IMF 2010c
Note: Data for 2005-2009 are actual; data for 2010 are estimates

In addition to the decline in GDP, national revenues in 2009 declined to 31% of GDP from 41% in 2007. As a result of declining revenues, the general government balance moved from a surplus of 6.7 % of GDP in 2007 to a deficit of -14% of GDP in 2008, to -3.8% in 2009, and is expected to drop to -16.1% in 2010. Total public sector debt will reach over half of GDP in 2009 and is projected to continue to increase to 70.8% of GDP in 2010, from 39.9 % of GDP in 2008 (see Figure 2). The trade deficit grew five-fold from just under US$-200 million in February 2008 to less than US$-1,000 million in February 2009 (World Bank 2010b)[1]. Inflation has been very volatile, rising from single digits in 2006 and 2007 to a peak of 31% in July 2008 before falling back down to single digits in 2009. It looks set to rise again, though, possibly ending up at 20-30% by the end of 2010 [2]. One private commercial Bank failed in November 2009, but in general it is thought that there is confidence in the financial system (Economist Intelligence Unit 2010a).

[1] The trade deficit has since stabilized..
[2] Predictions of future inflation vary considerable by data source.

Figure 2 Key Fiscal Indicators for Mongolia, 2006-2016



Source: IMF 2010a
Note: From 2009, figures are estimates; actual figures are in Annex 2

Mongolia's vulnerability to the global economic recession was compounded by two critical domestic factors.

The first factor was the sudden and catastrophic collapse of copper prices which, given Mongolia's tremendous dependency on the base metal, created severe imbalances in Mongolia's fiscal and external accounts. After maintaining an average price above US$3 from mid-2005 until mid-2008, the copper price plummeted to US$1.27 (and by 69% in only 124 trading days) in December 2008[3]. By mid-2009, prices had rebounded by only one-third of their initial value. Since Mongolia depends on commodities (chief among them copper) for around 80% of the country's exports and mining revenues, when copper prices fell it triggered a rapid increase in foreign trade, and a budget deficit which caused the currency to fall sharply and foreign net reserves to decrease by 50 percent (Ministry of Finance 2009). Indeed, in its 2010-2012 draft budget, the Ministry of Finance stated that it considered the main cause of the domestic economic crisis to be "high dependency" (Ministry of Finance 2009: 45) – a small economy coupled with a high

[3] This rapid decline was not completely independent of the global economic recession; indeed, tumbling stocks led to a slowing of the demand for copper while copper producers continued to mine, resulting in rapidly growing stockpiles of the metal and plunging prices.

dependency on the mining sector and vulnerable to fluctuations in global commodity prices – rather than the global economic recession.

The second factor was the occurrence of the natural disaster known as a *dzud*. This phenomenon involves a summer drought followed by an unusually harsh winter. The 2009/2010 winter was so harsh that seven of the country's 21 provinces have been declared disaster zones (with a further 12 severely affected). According to the Ministry of Food and Agriculture, livestock losses were already at 4.1 million of the country's 43.6 million livestock by Feb 2010 – a catastrophe in a pastoral nomadic country – and this impacts on private consumption, causes food prices to rise, and exacerbates rural-urban migration.

Finally, this is a very poor country. The national poverty rate is 35.2% in 2007/08 (National Statistical Office 2009). This aggregate figure masks extreme poverty outside of the capital in other parts of Mongolia, such as the Western, Eastern and Highlands regions where poverty rates reach 47%.

BACKGROUND ON THE HEALTH SECTOR[4]

The health system of Mongolia has its roots in the Soviet *Semashko* model which was characterized by complete budgetary financing of health care, service provision by government-owned and operated facilities, an extensive hospital infrastructure and a very large health workforce. Two decades later, the health care system retains many elements of that model, but has also undergone major reforms. These include increasing the diversity of financing sources (through introducing social health insurance in 1994 and creating a system of official user fees), changing the provider payment mechanisms and restructuring the system of service delivery (including hospital restructuring, reducing bed numbers, strengthening primary care and the referral system, and allowing private practice).

HEALTH SERVICE DELIVERY

The health system in Mongolia is organized according to the administrative divisions of the country. In addition to the capital city (Ulaanbaatar), there are 21 provinces (*aimags)*, each of which is split into smaller districts (*soums*), which are further divided into three to four smaller units (*baghs*), depending on the size of their population. On average, each *aimag* has a population of 50,000–100,000, and each *soum* has a population of 2,000–3,000. The total country population was almost 2.7 million in 2009. See Annex 4 for a country map.

Service delivery is through a two-tier referral system of primary care and specialized care, including secondary and tertiary care. Primary services are delivered by family group practices (FGPs), *soum* doctors and *bagh feldshers* (medically-trained PHC workers working mainly with nomadic populations in rural areas). FGPs are required to deliver primary care to the listed populations in their catchment area, *soum* hospitals (which have around 15-30 beds) deliver primary care, a narrow range of clinical services and ambulatory care services, and larger *inter-soum* hospitals service two or more *soums.* Secondary level specialized care, including all major clinical specializations, is delivered by large *aimag* (regional) general hospitals and urban district hospitals. The most specialized tertiary care is provided through the state clinical hospitals and specialized health centers, located mainly in the capital city of Ulaanbaatar, but also in three regional centers.

Among the system's most notable features are the extensive hospital infrastructure and large workforce. Mongolia stands out internationally among lower income countries for its high number of beds per population and, compared to other countries, has a very large number of health workers per population and a high doctor to nurse ratio. The system is also very inpatient-intensive, with one of the highest inpatient discharge rates per capita in the world, similar to Germany, Hungary and France. (World Bank 2009a: 93).

[4] This section draws on the descriptions of the Mongolia health system provided by Bolormaa *et al.* (2007), World Bank (2007) and World Bank (2009a).

Like many other former socialist (*Semashko*) countries, in which health care delivery was heavily oriented towards the hospital sector, Mongolia has implemented major hospital restructuring involving reducing the number of beds and creating a stronger referral system in order to shift the emphasis from curative to preventive care and from hospital to primary care. It also established family group practices (FGPs) which provide primary services on the basis of capitation-based contracts. Despite reforms, the referral system is not yet working well. Patients continue to bypass lower levels of care and too much non-specialist outpatient care is provided at secondary and tertiary levels of care (World Bank 2009a).

HEALTH FINANCING

The system is financed primarily through the state budget that covers fixed costs including salaries, while variable costs are covered by the Health Insurance Fund (HIF). Revenues for the HIF are raised through compulsory payroll contributions from formal sector employees, a flat rate contribution of 500 tugrik[5] per month from informal sector workers and contributions from the state budget for vulnerable groups. Patients also pay official (and sometimes unofficial) copayments or user fees, depending on service type. Primary care is also fully tax-financed with no user fees. The health sector government budget remains driven by historical line-item budgeting (as in the *Semashko* system) and hospital managers are not allowed to re-allocate resources for some line items such as wages and capital investment, while for other line items it is possible with the permission of higher authorities. Hospital managers are not encouraged to produce budget savings and are not allowed to overspend. Expenditures are orientated towards salaries, secondary and tertiary providers and, of these, *soum* and inter-*soum* hospitals consume a large budget share. The wage bill is huge.

For a country of its level of economic development, health expenditure in Mongolia is high, both in per capita terms and as a share of GDP. In 2008, per capita health expenditure was US$ 76, US$60 of which was spent by government (see Table 1). Since 1995 Mongolia has substantially increased its per capita expenditure on health – by more than 350%. A similar magnitude of increase is observed for per capita *government* expenditure on health, suggesting that the latter is driving the former. However, health spending as percentage of GDP shows annual fluctuations, and is well down from its peak of 6% in 2000/01. Health expenditure has also fallen as a share of total government expenditure and in 2008, at 9.1%, was at its lowest level since

[5] The average exchange rate in 2009 (Tugrik: US$) was 1,438:1 (Economist Intelligence Unit 2010b)

Table 1 Health expenditures and financing in Mongolia, 1995 – 2008

Indicators	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Per capita total exp on health at average exchange rate (US$)	20.6	22.3	19.8	19.2	18.8	22.3	25.4	27.1	27.9	33.6	35.1	48.1	63.6	75.9
Per capita government exp on health at average exchange rate (US$)	15.7	17.9	15.7	15.3	14.9	17.9	20.0	21.2	21.8	26.0	27.2	38.4	52.0	59.8
Total expenditure on health as % of GDP	4.9	4.3	4.3	4.6	4.9	4.9	6.0	6.0	4.8	4.7	3.9	3.9	4.3	3.8
General government exp on health as % of total exp on health	75.9	80.0	79.1	79.9	79.4	80.1	78.9	78.3	78.1	77.4	77.5	79.9	81.7	78.7
Private expenditure on health as % of total expenditure on health	24.1	20.0	20.9	20.1	20.6	19.9	21.1	21.7	21.9	22.6	22.5	20.1	18.3	21.3
General government exp on health as % of total government exp	10.7	12.7	9.9	8.8	10.0	10.7	10.9	10.5	10.1	10.3	11.0	9.3	9.1	9.1
External resources for health as % of total expenditure on health	8.3	4.3	4.8	12.0	20.3	27.5	24.6	13.7	4.4	5.1	4.0	4.6	2.6	7.2
Social Security exp. on health as % General government exp, on health	39.0	38.1	33.7	45.7	26.8	24.5	32.2	37.4	25.8	25.0	26.8	32.1	33.0	33.0
Out-of-pocket expenditure as a % of private expenditure on health	76.1	84.9	73.6	80.3	74.4	76.7	79.2	79.2	85.8	86.0	87.2	84.4	84.4	84.4

Source: WHO 2010

Note: Numbers in percentage, except for per capita expenditure

1998. The share of external financing has fluctuated significantly as well, from 8.3% in 2005, to 27.5% in 2000, to 4% in 2005, to 7.2% in 2008. More recent data on trends in health expenditure, including data that captures the crisis period, will be presented in Section 4.

PROVIDER PAYMENT MECHANISMS

Until recently, the payment system for secondary and tertiary hospitals was based on a fixed payment per case ("case-based payment") from the HIF, combined with a highly-detailed line item allocation from the government budget based on both historical allocations, number of beds and bed occupancy rates. This created incentives to have more beds, increase admissions and keep beds occupied, but did not stimulate cost control, quality improvement or efficiency. In 2006, the government introduced reforms to move towards a fully case-based payment system for hospital care. The HIF would reimburse hospitals using tariffs that differentiate according to the type of visit (e.g. inpatient, ambulatory and outpatient), type of institution and type of service. User fees of 10% (at secondary level) and 15% (at tertiary level) of the case payment rate are charged. Pensioners and vulnerable groups are exempt.

Since 2006, the payment system for primary care providers, including family group practices, has been purely capitation-based, with no formal user fees. Capitation creates incentives for cost-control and efficiency, but it can also result in doctors providing fewer services than clinically appropriate or (inappropriately) referring patients to higher levels rather than treating them themselves. Public facilities can use any financial surpluses for the improvement of the working environment and social protection of their health personnel. Capitation is also used to cover the variable costs of *soum* hospitals.

TRENDS IN GOVERNMENT HEALTH BUDGETING AND SPENDING

DATA SOURCES AND QUALITY OF INFORMATION

For this rapid assessment, a range of information was collected that provides a picture of the nature of the crisis and the trends in health expenditure before and during the crisis. Information on government health expenditure for 2009 and government budgets for 2010 were sourced directly from the relevant authorities, including the Ministry of Health, Ministry of Finance, and Ministry of Social Welfare and Labor.

Relevant macroeconomic data were obtained from sources such as the Mongolia Ministry of Finance, IMF, Economist Intelligence Unit and World Bank. These data were not always consistent with each other, especially in the most recent years when most numbers are estimates.

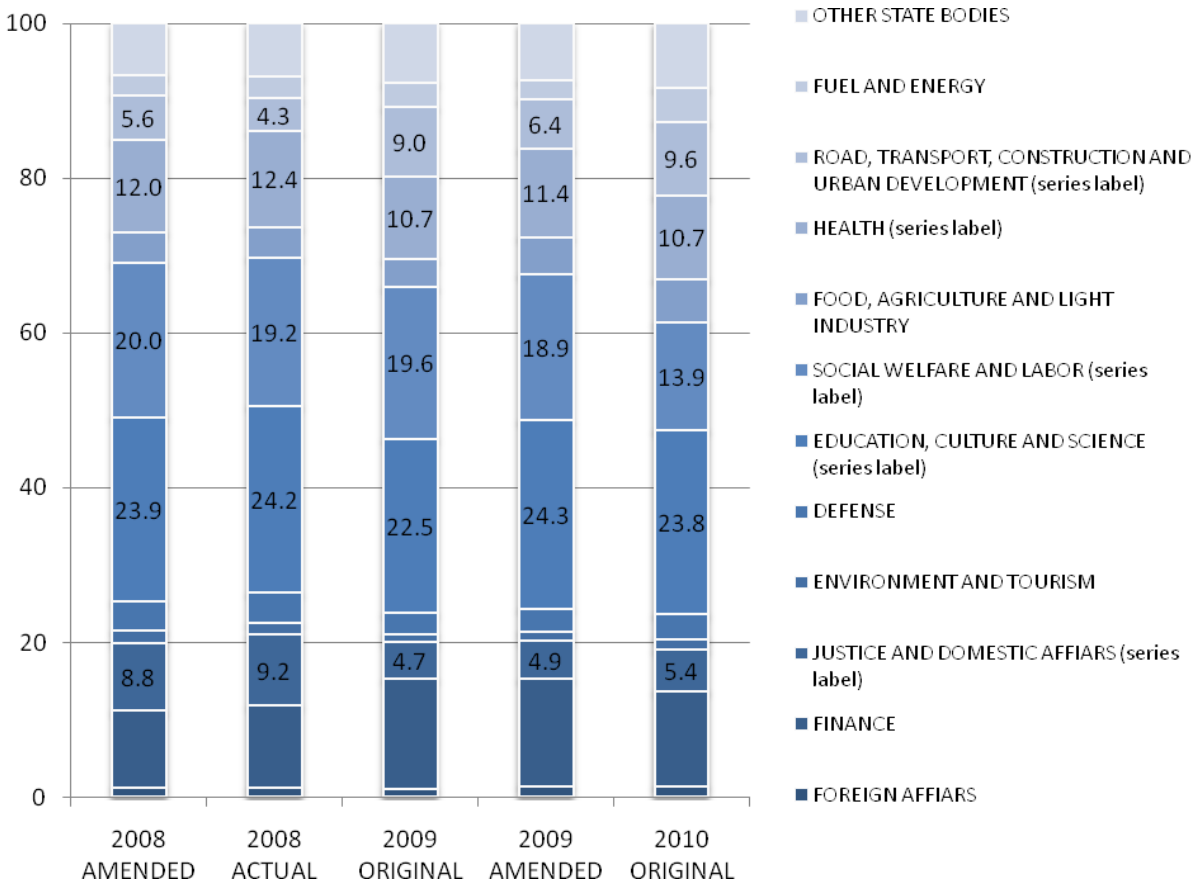
NATIONAL TRENDS IN GOVERNMENT BUDGETING AND SPENDING ON HEALTH

The bleak macroeconomic picture described in section 2 precipitated a large cut in the 2009 general government budget in order to rein in a looming fiscal deficit. The initial general budget was amended in April 2009, reducing the total general budget for 2009 by 20% from that which was originally approved by Parliament, to 2,481 billion tugrik.

The health sector budget was reduced by exactly 10% in the April amendment, falling by 23 billion tugrik, from 230 billion to 207 billion. Moreover, the 10% reduction was made off an already-low base: compared to previous budget increases, the initial health budget approved by Parliament for 2009 represented only a very small increase over the previous year (even in current terms).

The cut in the general budget in the April 2009 budget amendment necessitated cuts across all sectors, but the magnitude of the cuts varied across sectors, thus changing the share of the total budget allocated to each Ministry. With the April amendment, the health sector budget actually rose from 10.7% to 11.4% of the total budget allocation (see Figure 3). An even larger increase was observed for education (from 22.5% to 24.3%), but not for the Ministry of Social Welfare (where the allocation fell from 19.6% to 18.9%). In general, though, relative to other sectors such as road, transport, construction and urban development (whose share fell from 9% to 6.4%), the health and the social sectors were fairly well-protected. It is important to note, however, that while the health sector were protected during the 2009 budget amendment, the initial 2009 allocation of 10.7% was down from its budgetary allocation of 12% in the 2008 amended budget, suggesting that some of the effect of the economic crisis on health spending may have been already been expressed in the initial 2009 allocation.

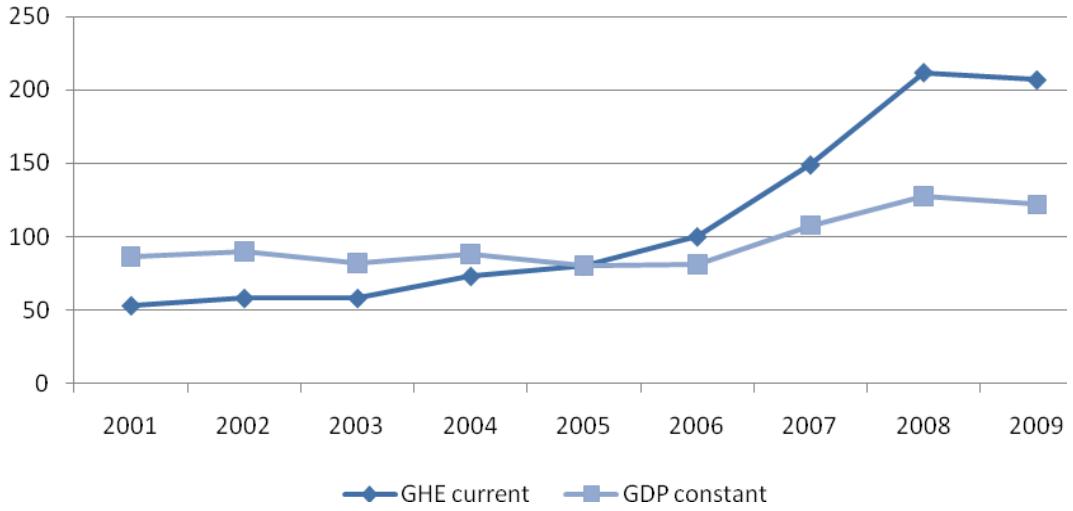
Figure 3 Percentage budget allocated to each ministry, 2008-2010



Source: Data obtained directly from Ministry of Finance (2010)

One measure of the effect of the economic crisis is the magnitude of the 2009 health budget compared to previous health sector allocations. 2009 was the first retrenchment in the government budget allocation to health (as far as back as we have data). According to Ministry of Finance data (cited in World Bank 2009b), between 2001 and 2008 government health expenditure increased from 49 billion tugrik to 138 billion tugrik in constant 2000 prices, including a doubling of real expenditure between 2006 and 2008. This growth was not unique to the health sector, but rather mirrors the growth in total real government expenditure over the same period. Total real government expenditure grew from 454 billion tugrik in 2001 to 1,485 billion in 2008, increasing the size of government from 38% of GDP to 50% of GDP. With the 2009 budget amendment, government health budget in 2009 fell not only in real terms (by about 4% between 2008 and 2009), but also, for the first time, in current terms.

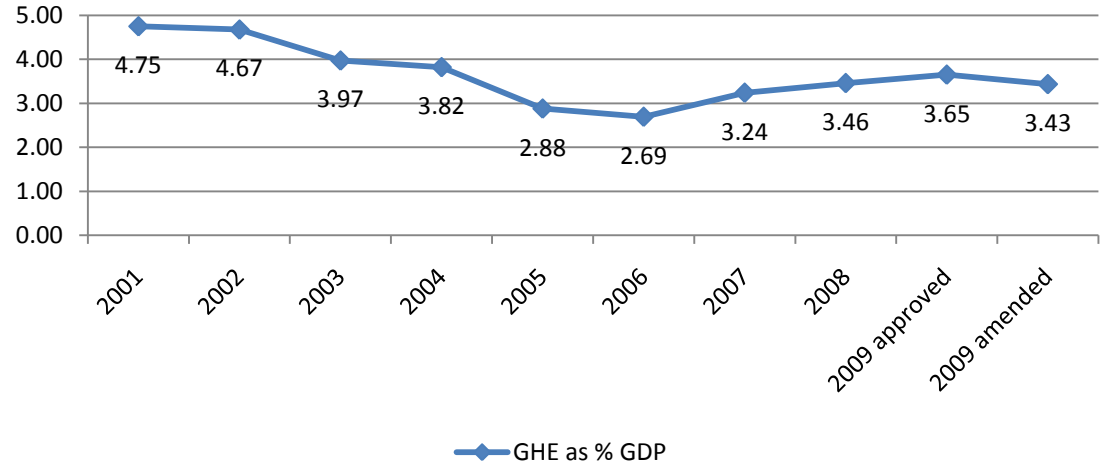
Figure 4 Current and real government health expenditure, in billions of tugrik, 2001-2009



Source: Expenditure data are from Ministry of Health for 2007-2009 and World Bank 200a for 2001-2006; Current expenditure is adjusted using the Mongolia GDP deflator, obtained IMF 2010b.
Note: Figures for 2009 reflect the April 2009 government budget amendment

As a share of GDP, government health expenditure has been on a gentle upward trend since 2006. The initially approved 2009 budget would have continued that trend, but instead the budget amendment of 2009 leaves government health expenditure at a similar share of GDP as in 2008 (equivalent to 3.4% of GDP), assuming that the budget is completely spent.

Figure 5 Government health expenditure as percentage of GDP, 2001 to 2009



Source: Government health expenditure data are from World Bank (2009a) for 2001-2006 and were obtained directly from Ministry of Health for 2007-2009. GDP data are from World Bank (2009a) for 2001-2005 and from the Economist Intelligence Unit (2010b) for 2006-2009.
Note: Authors' own calculations based on the above data. 2009 data represent budget and not expenditures.

A comparison of the 2009 initial and amended budget for the Ministry of Health by line item shows where major cuts were made during the crisis period. Annex 3 provides more detailed budgetary tables.

Salaries and related personnel costs: The share of salaries and other personnel costs in the overall government health budget is high and has been increasing rapidly over the last decade. The share rose from 28.3% in 2001 to 35.1% in 2006 (World Bank 2009) to 44% in 2008 (Ministry of Health 2009). In current terms, expenditure on salaries and related expenses almost doubled between 2007 and 2008, from 48.3 to 93 billion tugrik.

The initially approved 2009 health budget already showed the effects of the fiscal crunch: the budget for salaries and benefits rose only marginally to 97 billion tugrik. In the amended budget for 2009, salaries and wages were reduced by 3% to 94 million tugrik. This was not unique to the health sector, though. Salary cuts of 3% were standard across the board for government employees. The current salary and wage bill (equivalent to 92 billion tugrik) is the same as 2008 levels in nominal terms, and would be eroded in real terms. Despite the salary cuts, there were no cuts in the numbers of employees in the Ministry of Health.

Training: Investment in human resources, in the form of staff training, was cut by over 55%.

Medicines and vaccines: The budget allocation to medicines and vaccines was reduced by 20% from 29.5 billion tugrik to 23.6 billion tugrik.

Other goods and services: The budget for other goods and services was reduced by 17%. The less essential and the more discretionary the services, the larger were the budget cuts. Within the health budget, the water supply and treatment budget was reduced by 10%; electricity, heating, fuel and transportation by 20%; information and advertisement budgets were cut by 20%; the stationary budget was reduced by 30%, postal and telecommunication by 50%, and business trips by around 50%. The budget for operating expenses of scientific research projects was cut by over 55%. The allocation for participation in sporting competitions was cut by 65% and the budget for books and periodicals was completely eliminated. The fact that so many of these reductions are round numbers suggests that the budget cuts were mandated on the basis of percentage reductions for line items across the board.

Domestic investment: Capital expenses accounted for 11.4% of the amended budget for 2009 and there was a 20% cut in domestic investment for capital projects.

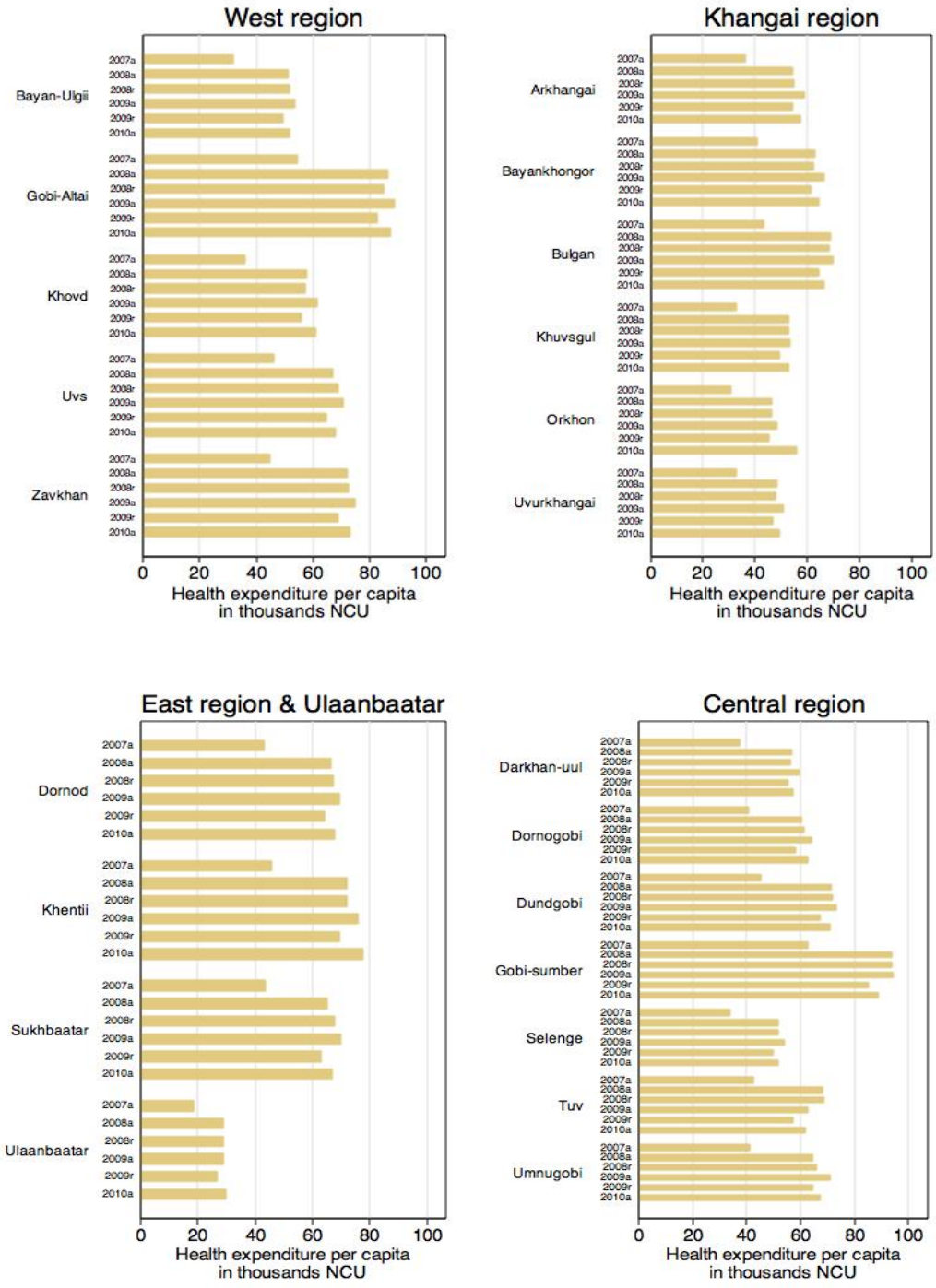
SUB-NATIONAL TRENDS IN GOVERNMENT SPENDING

At the sub-national level, the effect of the economic crisis is clear and the trend in health expenditure (and budgets) at *aimag* level closely mirrors that at the national level.

In all *aimags*, a similar pattern is observed: an increase between 2007 and 2008, followed by the stabilization over the next three years. There was also a very clear reduction in the current per capita health allocation at the *aimag* level in the 2009 health budget amendment. Budgets were increased again for 2010, but still remained lower than the level of the initially approved 2009 budget. Details are provided in Annex 2.

It is also interesting to note that there are significant geographic disparities across *aimags*, as well as regions. For example, per capita health allocations were 90,000 tugrik in Gobi-Sumber in the central region but only 25,000 tugrik in Ulaanbaatar. Many factors are responsible for this variation, including differences in the unit cost of providing services to densely populated areas such as Ulaanbaatar compared to rural areas where the population is dispersed and services are not very accessible, as well as explicit equity objectives (World Bank 2009b).

Figure 6 Health expenditure/capita by aimag and region, thousands of tugrik, 2007-2010



Source: Ministry of Health 2010 for health expenditure data; Mongolia Statistical Yearbook 2009
Note: Population data are 2008 estimates; budget data are 2007 actual, 2008 amended, 2008 actual, 2009 approved, 2009 amended, 2010 approved

TRENDS BY LEVEL OF HEALTH SYSTEM

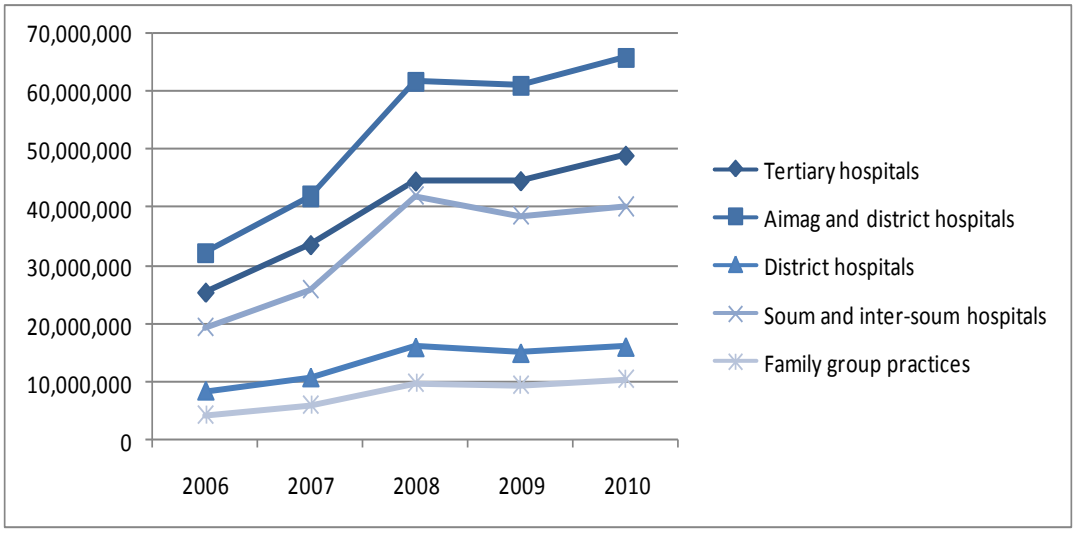
All facilities, regardless of type, appear to have suffered budgetary cuts during the 2008-2009 crisis period. Hospitals bore the brunt of the cuts, though, mainly because of differences in the way the two facility types are funded (see section 3). The effect of national budget cuts on facility budgets can be clearly seen in Figure 7.

Prior to the crisis period, the budgets of hospitals (at tertiary, *aimag*, district, *soum* and inter-*soum* levels) were increasing rapidly. They even doubled in the two years between 2006 and 2008. Between 2008 and 2009, however, budgets not only stopped their upward trend, but were reduced. The budgets of *soum* and inter-*soum* hospitals fell most of all, by about 10%.

At the lowest level of care, the family group practice, the effect of the budgetary increase between 2006 and 2008 as well as budget cuts between 2008 and 2009 can also be seen, but are less pronounced than at higher levels of care. This may be because family group practices, unlike hospitals, are funded on a capitation basis. The per capita allocation to facilities did not change over the period of the crisis.

By 2010, budgets of *soum*, inter-*soum* and district hospitals had returned to pre-crisis levels and budgets of tertiary hospitals and *aimag* hospitals had grown to above pre-crisis (2008) levels, suggesting that there may be some compensation being made for the health expenditure foregone during the budget cuts of the previous years. Family group practice budgets for 2010 remain at approximately the same level as in the previous two years, as was expected given their capitation funding base.

Figure 7 Health expenditure by facility level in thousands of tugrik, 2006-2010



Source: Ministry of Health
Note: The "district hospital" category is a subset of "*aimag* and district hospitals" category; the exact figures are provided in Annex 2

The picture that emerges from the analysis of data on facility budgetary allocations was confirmed by the field visits:

During the 2009 budget amendment (Jan 2009 to April 2009), the *aimag* hospital in Tuv province, had a 162 billion tugrik budget cut, equivalent to around 20% of hospital budget. 31 million tugrik of this was from the Ministry of Health's central health budget. According to informants, the hospital overspent its budget and asked more patients to buy medication by themselves. In addition, the hospital had to seek financial help from the Governor to cover some of their shortfall because patients had taken the hospital to Court for being unable to afford to provide the care that it is mandated by law to provide.

The primary health care facility in Zoonmod, Tuv province, had not experienced any change in funding levels because allocations are made on a per capita basis, but has faced increased demand for its services and financial pressure, in part due to in-migration of unregistered people. Staff claimed that in the last two months of 2009 no money was left in the budget to pay salaries (which usually consume around 78% of the budget) and the facility had to request additional funding from the local government. Funds have not been available to pay for renovations, staff bonuses or staff loans.

A primary health care center in a ger settlement on the outskirts of Ulaanbaatar, Songinokhairhan district, Khoroo 8, also claimed to have been hard-hit by the crisis. Staff noted that the regular visits by medical specialists (e.g. cancer specialists) no longer took place. However, staff were optimistic that there would an increased budget allocations in future as a result of mining investments and anticipated economic growth.

FUTURE HEALTH EXPENDITURE

The improved economic outlook suggests that there may be more scope to expand health expenditure in coming years. Growth rates are expected to recover in 2010 and onwards, and GDP is projected to rise to 8.6% in 2010, 6.5% in 2011, and 26.3% by 2013 (IMF 2010b). In Nov 2009, the legislature passed a budget that sees the fiscal deficit narrow to 5% of GDP in 2010, from 9.2% in the 12 months to October 2009, while continuing to raise planned expenditure on health, pensions and transfer payments (Economist Intelligence Unit 2010a: 9). The government will be helped in this by pledges of aid from the World Bank, the Japanese government and the Asian Development Bank who, together, provided a total of US$204 million in fiscal support in 2009/10.

In the meantime, though, the government health budget for 2010 – at both national and sub-national levels - is up from the amended budget for 2009, but remains slightly below the allocation that was initially budgeted for 2009 (Ministry of Health 2010). This means that national and sub-national health expenditure will continue to decline, both in current and real terms.

TRENDS IN HOUSEHOLD HEALTH SPENDING

During an economic crisis, it is typically expected that out-of-pocket expenditure on health care will decline, especially among the poor. This is due to reduced health care demand driven by falling wage and non-wage income, arising from increasing unemployment, changes in relative prices and decreases in remittances. This can be further aggravated (or mitigated) by changes in the health care needs of the population during (and as a result of) the crisis which, in turn, affects health care utilization and out-of-pocket expenditure. For example, economic crises may increase the incidence of general illness and child under nutrition.

More immediately, the effect of the crisis on health care spending will be affected by the structure of the health care financing system and, specifically, the share of health care financing that is financed out-of-pocket and the extent to which patients are protected from large out-of-pocket expenditure by health insurance coverage or fee waivers.

DATA SOURCES AND QUALITY OF INFORMATION

Answering this question definitively in Mongolia is almost impossible because there is no good source of trend data on household health expenditure that bridges the crisis period. The 2007/08 household survey (National Statistical Office 2009) provides a snapshot of health expenditure patterns, but was implemented before the crisis and health-related analyses have not yet been undertaken. National Health Accounts data are currently only available up until 2008, also pre-dating the worst of the crisis period. A qualitative study (see Turk 2010) was commissioned by the World Bank to measure the impact of economic crisis on welfare and livelihoods, as part of a broader Bank multi-country study on this topic. There were three rounds that covered the crisis period (May-June 2009, June-Sept 2009 and Sept-Jan 2010), but health was not a major area of inquiry, the results of the third round are not yet available and it would in any case be difficult to separate out the effects of structural change from seasonal change.

What can be done, however, is to infer the likely effects based on what we know about Mongolia's health care financing system and the qualitative information obtained during key informant interviews and field visits.

TRENDS IN HOUSEHOLD EXPENDITURE

In Mongolia, most key informants anticipated little effect of the financial crisis at the household level because of (perceived) low levels of out-of-pocket expenditure. Indeed, private health expenditure only accounted for around 21% of all health care financing in 2008 (the latest date for which data are available), and out-of-pocket expenditure for 84% of private health expenditure (or equivalent to 17.6% of total expenditure) (WHO 2010). However, health care payments at the point of service are only a relatively small share of total out of-pocket expenditure on health care and households incur substantial expenditure related to transportation, medicines and informal payments.

Consultations:

There is unlikely to be a major effect on health care expenditure for consultations because consultation costs tend to be low. At the primary health care level, consultations are provided free of charge. At the secondary and tertiary levels, patients with health insurance (equivalent to 80% of the population) pay copayments of 10% and 15%, respectively. Specialist care also needs to be paid for, and one response to the 2009 budget cuts noted in a field visit was a reduction in the referral for specialist care. All patients, regardless of level at which care is sought, have to pay for diagnostic tests since this is not reimbursed by health insurance.

Drugs:

Drugs are a major source of out-of-pocket expenditure. Since primary health care centers keep only vaccines and a limited stock of medication for emergency cases (which are provided free of charge), all drugs are purchased at full price through private pharmacies which may set prices as they choose. At the secondary and tertiary level, patients who receive outpatient treatment are also responsible for all drug costs. Only drugs prescribed as part of inpatient care are covered by the benefit package of the health insurance scheme, and even then patients need to pay a share of the cost, ranging from 50-100% depending on the drug.

Data from the 2003 household survey (reported in World Bank 2007) show that, in aggregate, drugs account for around two-thirds (1,468 tugrik out of 2,214 tugrik per month) of total out-of-pocket health expenditure. The share was even higher in rural areas (around 90%) and *soum* areas (around 75%), mainly because of lower expenditure in those areas on user fees (e.g. for hospital, outpatient and ambulatory care).

During the economic crisis in Mongolia, out-of-pocket expenditure on drugs was affected not only by an income effect (rising unemployment, falling real wages and declining non-wage income), but also by a price effect. As in the East Asian crisis of the late 1990's, key informants reported that prices[6] of drugs rose significantly since imported drugs became more expensive due to currency devaluation. Households had three options: (i) maintain the quantity of drug consumption and incur high out-of-pocket expenditure on drugs; (ii) reduce consumption of drugs so as to keep out-of-pocket expenditure within affordable levels; or (iii) switch to lower cost generic equivalents, including those made domestically. Information from field visits leads us to believe that all responses were adopted. The extent of domestic substitution is constrained, though, because there are only two pharmaceutical companies in Mongolia.

[6] The cheapest available influenza medication costs 5,000 tugrik, treatment for high blood pressure costs around 3,000 tugrik (since it usually involves 2-5 medications) and, if a locally manufactured drug is used, treatment for the common cold is 1,500 tugrik.

Informal payments:

The culture of informal payments that prevails in many of the former *Semashko* countries (see Lewis 2007, for example) is thought to prevail in Mongolia, too. If budget cuts are large, it is reasonable to hypothesize that that there may be an incentive to demand (more) informal payments during the crisis period. Also, although salaries were relatively protected from budget cuts (only falling 3% during the budget amendment), the fact that facility staff clearly had to forgo other resources that are important to facility functioning and certain staff benefits (such as bonuses and loans) increases the likelihood of informal payments. The increased demand for facility services during the crisis period may also have led to the use of informal payments as a rationing device. It is also possible that additional demands were made on patients for other types of out-of-pocket expenditure, especially in-kind, such as the provision of own food and bedding in hospitals stays (already very common even before the crisis).

ROLE OF HEALTH INSURANCE IN PROVIDING PROTECTION FROM HIGH OUT-OF-POCKET EXPENDITURES

Mongolia has a fairly generous social health insurance scheme that covers a large share of the population, either through formal sector member contributions (at a maximum of 4% of wage for formal sector employees), individually paying members (which include herders, students, the self-employed and the unemployed)[7] and fully subsidized members. The benefit package is generous enough to provide a fair degree of financial protection, at least for particular categories of expenditure. Benefits include cover for inpatient and outpatient services at secondary and tertiary level facilities. The degree of cost-sharing depends on the type of hospital: 10 percent in secondary hospitals and 15 percent in tertiary hospitals.

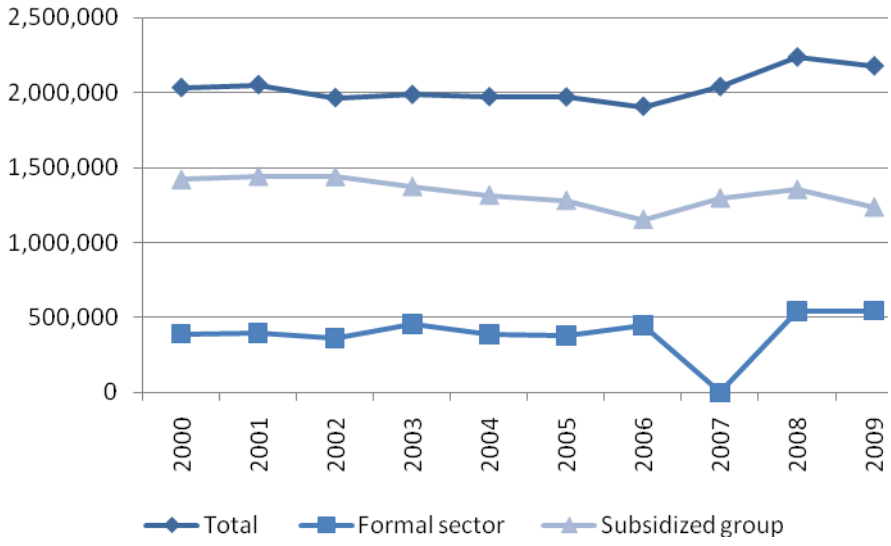
During an economic crisis, it is likely that households lose access to health insurance. Reasons include rising unemployment in the formal sector, a reduced ability to afford to pay premiums among the self-employed and fiscal pressures that limit government's ability to make contributions on behalf of the vulnerable. This, in turn, would raise the burden of out-of-pocket expenditure for those households who seek care.

In Mongolia, health insurance coverage did indeed decline during the crisis period, both in absolute numbers and as a share of the total population, after increasing from 2006 to 2008. In 2008, 84.4% of the population (or 2,233,657 people) was covered by health insurance, but by 2009 this figure had fallen to 81% (or 2,174,449 people). This fall was not driven by declining membership among formal sector employees, thus refuting the notion that declining membership could be due to the rising unemployment associated with the financial crisis. Indeed, insurance coverage among formal sector workers increased in both absolute numbers (from 539,682 to 546,006) and in population share (from 24.2% to 25.1%) between 2008 and 2009. Rather, the fall in coverage appears to be due to a decline in the number and share of vulnerable groups (i.e. groups whose

[7] Contributions for this group are only around 5% of the (maximum) formal sector monthly contribution.

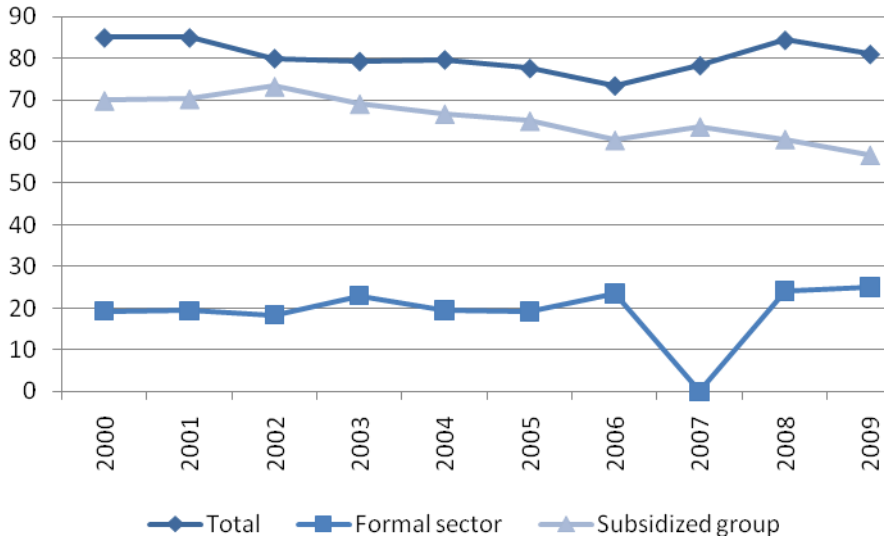
participation is wholly or partially subsidized by the government, together equivalent to 61% of members in 2008). Coverage of this group fell from 60.6% (or 1,353,188 people) in 2008 to 56.8% (or 1,234,994 people) in 2009. Since coverage of vulnerable groups has been falling since the beginning of the decade, however, it would be a stretch to attribute this decline to the crisis.

Figure 8 Trends in health insurance coverage, by membership type, 2000-2009



Source: State Social Insurance General Office, Ministry of Social Welfare and Labor
Note: Data not available for the formal sector for 2007

Figure 9 Trends in health insurance coverage, by membership type, 2000-2009



Source: State Social Insurance General Office, Ministry of Social Welfare and Labor
Note: Data not available for the formal sector for 2007

Now, financial protection through health insurance looks set to expand further following a major policy announcement, ostensibly in response to the economic crisis. The Human Development Fund (created by law in November 2009) pools revenues from strategic mining deposits and plans to use them to distribute several forms of benefits to citizens, including cash, health and social insurance premiums, payments for the purchase of housing, as well as health and education service payments. It has been announced that every citizen will receive the equivalent of 1.5 million tugrik (including up to 500,000 tugrik in cash) during the current election term (ending June 2012). The cash distribution started in February 2010, but the specifics of the implementation mechanisms of the other components have yet to be worked out. In April-May 2010, the Ministry of Health put forward a proposal to Cabinet to use the fund to: (i) pay the health insurance for those groups currently receiving the state subsidy and to increase the amount per person to bring the contribution closer to the level of the contribution of formal sector employees; and (ii) expand the range of services included in the benefit package, e.g. to include oral health. No formal decision has been made on this proposal yet. The announcement of the Human Development Fund made it clear that it is an explicit response to the current economic environment and poor commodity prices. Many vulnerable groups, including herders and the unemployed, stand to benefit from the Ministry of Health's proposal.

DONOR SUPPORT DURING THE ECONOMIC CRISIS

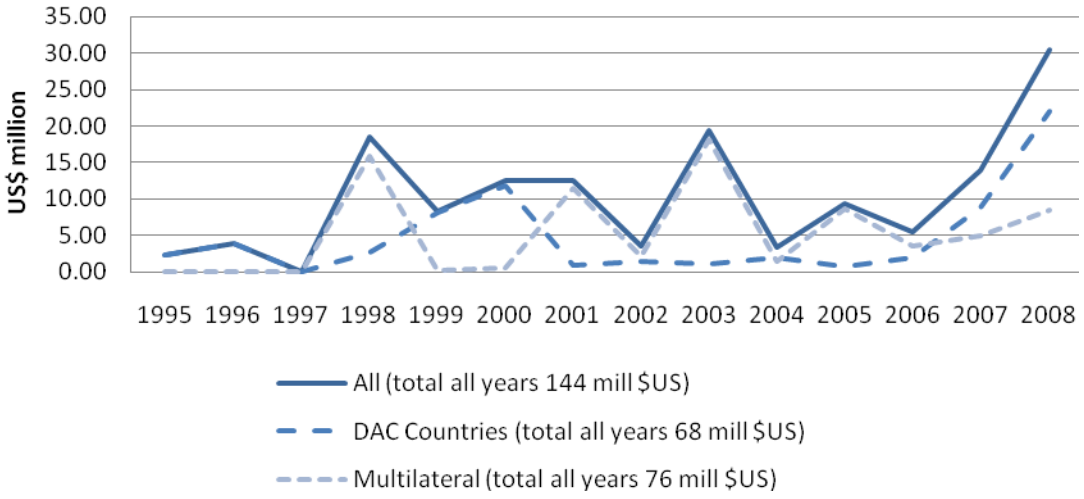
DATA SOURCES AND QUALITY OF INFORMATION

The data and information collected to ascertain potential effects of the crisis on donor support to the health sector in Mongolia were obtained through interviews with donor representatives in Ulaanbaatar, as well as through website searches and reviews of donor reports and other secondary information. Data are incomplete at best but provide some indication of trends before, during, and emerging from the crisis.

DONOR COMMITMENTS BEFORE THE CRISIS

According to OECD DAC (the main agency responsible for collecting statistics on commitments and disbursements from donor to recipient countries), total health commitments for Mongolia fluctuated from year to year between 1995 and 2008. In 2008, though, following a six-fold increase over two years, levels were at their highest ever, equivalent to US$ 30 million in 2008 (see Figure 10).

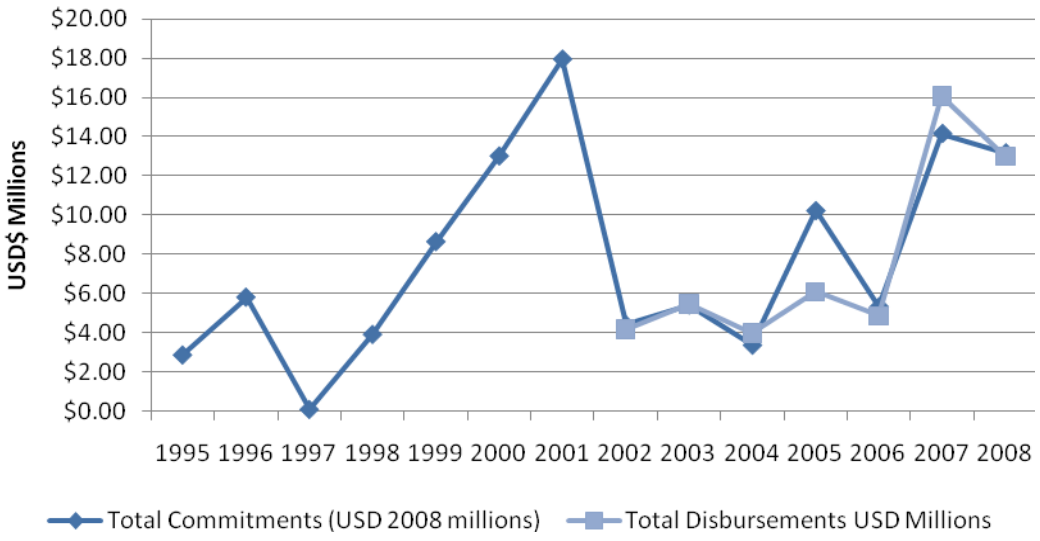
Figure 10 Trends in donor commitments to health, 1995-2008, in current US$ (million)



Source: OECD DAC 2010

In comparing commitments and disbursements by international donors, it can be seen that there is a fairly high level of disbursement overall, including in 2008, the last year for which data are available (see Figure 11). However, the OECD DAC database does not capture all development assistance to Mongolia. For instance, the Asian Development Bank (ADB) does not report commitments for Mongolia to OECD DAC. For this reason, a more detailed analysis by donor agency was carried out.

Figure 11 ODA commitments and disbursements, 1995-2008, current US$, millions



Source: OECD DAC 2010

DONOR RESPONSES TO THE ECONOMIC CRISIS

The main donor agencies for health in Mongolia include the Asian Development Bank (ADB), UNFPA, UNICEF, World Health Organization (WHO), the Millennium Challenge Account (MCA), the Global Fund to fight AIDS, Tuberculosis, and Malaria (GFATM), the GAVI Alliance, and UNAIDS. The World Bank does not have a health sector project in Mongolia, but provides technical assistance.

Table 2 summarizes the support that the major donors give to the health sector in Mongolia.

Table 2 Disbursements by donor by year, current US$, millions

Institution	2006	2007	2008	2009	2010	2011
Asian Development Bank	2.5	2.8	3.9	2.6	-	-
GAVI Alliance	-	0.61	0.64	-	-	-
GFATM	1.696	3.007	4.415	6.199	0.893 [2]	-
Millennium Challenge Account	-	-	0.07	0.95	11.8 [1]	17.2 [1]
UNFPA [1]	-	2.6	1.5	2.1	2.4	-
UNICEF [1]	-	0.8	0.4	0.3	-	-
WHO [1]	3.1		4.9		3.6	

Source: Donor agency reports and websites.
Note: 1= Budget figures only; 2 = up to 2nd quarter of 2010 only. GAVI Alliance is cash-based assistance only and does not include the value of commodities. Year for which data were not available are marked by "-". WHO has a two year reporting cycle.

It appears that international donors have stepped up their development assistance to Mongolia as a result of the economic crisis. The International Monetary Fund (IMF) has estimated that Mongolia will need US$284 million of external financing in 2009 and US$153 million in 2010 to offset the effects of the crisis, across all sectors. The IMF stand-by arrangement will provide US$139 million in 2009 and US$93 million in 2010. The ADB program support will provide $60 million in 2009, the Government of Japan through JICA will provide US$30 million in 2009 and US$20 million in 2010, and the World Bank will provide US$40 million in 2009 and US$20 million in 2010. These combined disbursements will cover most of the financing shortfall, with a gap of US$15 million in 2009 and US$20 million in 2010 which the Government plans to cover through assistance from other donors. In addition, WHO, UNFPA, and UNICEF have all responded with emergency medical supplies, emergency reproductive health support, and food and fuel aid. Most of this support is in direct response to the *dzud*.

The Asian Development Bank (ADB) has been a major supporter of the health and social sectors in Mongolia since 1991. It is a major partner in reforming the health sector through its three Health Sector Development Projects. The emphasis in these projects has been on strengthening primary health care through introducing Family Group Practices and strengthening institutional capacity, including improving health care financing and health insurance policy and practice. Cumulative disbursement in the USD$ 15.52 million 2nd Health Sector Development Project was more than 50% in 2007, increasing to 82% at the end of 2008 and 98% by the end of 2009.

The Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM) currently has five active grants with the Government of Mongolia (3 HIV/AIDS and 2 tuberculosis grants). Total commitments to date are US$20,476,897, with 88% of total committed financing disbursed. Another HIV/AIDS proposal was approved in Round 9 (US$2.78 million) but this is pending final signature before disbursements can begin. Table 3 shows that, except in 2006, disbursements from the GFATM were higher than planned expenditures for any given year. The drop in disbursements between 2009 and 2010 is related to the remaining level of funding on the current grants and is probably not a reflection of the impact of the crisis. However, because of the funding shortfalls of the GFATM globally, the Round 4 continuation was reduced by 10% of the originally approved budget in 2009.

Table 3 GFATM commitments and disbursements over time

Institution	2006	2007	2008	2009	2010	2011
Commitments	2.3	2.4	3.4	4.5	4.8	3.9
Disbursements	1.696	3.007	4.415	6.199	0.893 [2]	
Percent Disbursed	73%	125%	130%	138%	18.6%	

Source: www.globalfund.org

The Millennium Challenge Account (MCA) provides grant assistance to the Government of Mongolia that includes a health project of 37.7 million tugrik between 2008 and 2013. The first disbursement of 73,831 tugrik occurred in 2008. In 2009, the planned

commitment was 6.4 million tugrik, but only 948,425 tugrik was disbursed. In 2010, 21 million tugrik is planned.

The GAVI Alliance supports the introduction of new vaccines, safe injection, and provides cash assistance for strengthening immunization systems. Total disbursements from GAVI since 2003 have been US$1.5 million, of which US$1.36 million was for new vaccines. Mongolia was approved for Health Systems Strengthening (HSS) funding in the amount of US$500,000 but funds have not yet been disbursed to the country because a financial management assessment is still pending.

The budgets for UNFPA, UNICEF, and the WHO all increased over the crisis period. Funding for UNFPA increased directly as a result of the crisis in order to expand programs to other provinces. Increased funding from UNICEF was used to offset the effects of the *dzud* and to increase the quality of primary health care. The WHO budget reflects population increases and the priority given to Mongolia in the overall global WHO portfolio and, thus, are not linked to the economic crisis.

Overall, it appears that donor commitments are rising and disbursements remained largely on track throughout the period of the economic crisis in Mongolia. There may have been some slowing down in disbursement from the GFATM and also from the GAVI Alliance. On the other hand, emergency support from multilateral and bilateral agencies has also been forthcoming. The results from our rapid assessment of donor spending suggest that, unlike in previous economic crisis (Global Monitoring Report 2010), development aid in Mongolia has not been pro-cyclical.

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

DISCUSSION OF FINDINGS

The research undertaken in compiling this assessment has enabled us to define the crisis period in Mongolia more clearly. Economists agree that the crisis period in Mongolia, measured by macroeconomic data, can be defined as lasting from mid-2008 until first quarter 2010. The effects of the crisis, however, are likely to endure far beyond this period.

It has also been demonstrated how critical the interplay of global and domestic factors are in determining the depth of the crisis and the range of its effects. The overall effect of the crisis is determined by the combination of the vulnerability of the economy to the global economic crisis (e.g. its openness, fiscal position, economic policies), independent domestic factors that contribute to poor economic growth and impoverishment (such as the fall in the copper prices and the unusually long, hard winter), and the specific actions taken by the government to mitigate the effect of the crisis (whether these be economic policies, social safety nets, requests for donor aid, or the reallocation of spending). Consequently, any findings need to be attributed to a broad constellation of factors and not solely to the economic crisis.

This assessment shows that the economic crisis had a large effect on government health spending in Mongolia. The initial 2009 budget was already low in comparison to the previous year's budget and in comparison to increases that had been observed in earlier years. Then, in response to the severe drop in government revenues, the government health budget in 2009 was amended, resulting in a 10% cut to the health budget. The analysis suggests that budget cuts were concentrated on investment expenditure. There also appear to have been major cuts in pharmaceutical expenditures. Salaries were largely preserved and there were no retrenchments. The more discretionary expenditure items (such as research and international trips) were cut considerably. This is in line with patterns that have been observed in other financial and economic crises (Global Monitoring Report 2010).

An analysis of sub-national budgets tells a similar story: a rapid reduction in health expenditure, both in real terms in the initial 2009 health budget and then more sharply, and in nominal terms, in the 2009 amendment. Field visits confirmed that cuts in national and sub-national budgets were mirrored at the hospital level, where facilities depend on a central allocation that may vary from year to year, but not at the primary health care level, where services are financed on a capitation basis.

Relative to other sectors, however, the health sector share was protected during the budget amendment of 2009, and its share of total government budget increased from its initial 2009 allocation. It is not clear if this was a specific attempt to preserve health and human well-being. Since a relatively large share of the health budget is spent on salaries and current expenditure, rather than investment, it may simply be the consequence of an overall policy aimed at reducing investment expenditure rather than an explicit attempt to protect health. The share of the health sector was down from its 2008 budget allocation,

however, suggesting that the major effect of the crisis on government health spending may have been absorbed in the change in the initial allocation between 2008 and 2009, rather than through the amendment.

Because of limited data, the effect of the economic crisis on out-of-pocket health expenditure by households could not be fully assessed. However, the analysis suggested mixed levels of financial protection during the crisis period. For instance, the small copayments at the secondary and tertiary level and free consultations at the primary level would probably not result in much of an effect on health spending as a result of the crisis; on the other hand, since drugs account for up to 90% of out-of-pocket expenditure (depending on location), price increases for drugs during the crisis period would likely have an effect on household spending. The study found a small decline in health insurance coverage between 2008 and 2009, especially among vulnerable groups[8]. Improving financial protection through health insurance was one of the explicit policy responses to the economic crisis with the establishment of the Human Development Fund in November 2009 which will cover the health insurance contributions of vulnerable groups and expand the range of services included in the benefit package.

Preliminary findings indicate donor health commitments did not change much over the crisis period, suggesting that donor governments did not withdraw promised support as a result of their own contracting economies. Additional donor financing was made available for humanitarian work in response to the *dzud*, and there was also additional financial support made available in response to the crisis from the IMF, World Bank and ADB, amongst others.

Finally, this research has highlighted the importance of in-country work – including first-hand contact with government officials, analysts and policy-makers, field visits and interviews – in undertaking an assessment of the effects of the economic crisis. The most critical data, and certainly all recent data, are not available through any central repository. Likewise, data on donor disbursements and commitments are not easily and centrally available, despite commitments to harmonized reporting. All information used in this case study had to be obtained from its original source.

RECOMMENDATIONS

The tough budget environments associated with economic crises present opportunities to achieve reforms in the health sector that may improve effectiveness, efficiency and outcomes over the long-term. Latvia, for example, used the current economic crisis to eliminate excess hospital beds, invigorate outpatient care and adjust the benefit package (Lewis and Verhoeven 2010, cited in Global Monitoring Report 2010). In Mongolia, the current crisis may be an opportunity to address some of the more recalcitrant aspects of the country's health care reform. Candidate areas include hospital rationalization and the restructuring of the health workforce.

[8] Since the absolute number of formally employed enrolled increased over the same period, it is unlikely that this reduction is attributable to the global economic crisis.

This period of fiscal contraction may be the opportunity to conduct a thorough needs assessment of the health sector in order to improve the correspondence between central budget allocation and the needs at the *aimag* level. The application of these planning tools could improve the efficiency with which the available (more limited) resources are allocated.

Such a needs assessment would need to be coupled with an improved and accelerated registration process to ensure that primary facilities are funded according to the needs in their catchment area. The rural-urban migration, in part related to the economic crisis and in part related to the *dzud*, has resulted in an increased demand for health services in certain areas, but because these facilities are funded on a capitation basis, the addition of many unregistered migrants (who are not taken into consideration in the calculation of the capitation amount) has brought about budgetary pressures.

The Government of Mongolia and donor partners could also consider how to monitor the effects of the crisis over the next few years. Spending patterns would need to be tracked to ensure that "catch-up" investments that are planned are on track and that essential areas of health service delivery do not stagnate. It would also be important to monitor health outcomes to identify areas where immediate relief and interventions are needed. This will require coordination between the government, donors and NGOS providing short-term relief. One would also need to monitor changes in patterns of health care utilization in order to identify any shifts in utilization patterns that may pose a risk to population health, bearing in mind that some of these consequences will only be felt over the longer term. This, in turn, will require a well-functioning health management information system (HMIS) that collects quality information on a regular basis and uses it for analysis and decision-making. The results of the recent household survey in Mongolia will help to update the information available on household health spending.

Finally, and especially in light of poor donor reporting to international data repositories, it would be helpful to have a centralized database in the Ministry of Health on donor support to the health sector. This would reduce the transaction costs involved in data collection, data-sharing and analysis of the effects of the crisis, enabling the Ministry and donors to respond more effectively and more quickly.

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ANNEX 1: QUESTIONS USED TO GUIDE INTERVIEWS

Interview Guide
Impact of the Economic Crisis on Health Spending
April 11, 2010

The purpose of the interviews

The main reasons for conducting interviews are: 1) to clarify quantitative data and information that we are seeing on health expenditure trends; 2) to supplement quantitative information already obtained; 3) to determine best sources of information when data inconsistencies arise; and, 4) to obtain qualitative impressions of what may be contributing to the trends we are seeing.

Who should be interviewed?

Within each country, interviews should be conducted with key policy makers, and stakeholders that would be responsible for resource allocation and disbursement for the MOH /MoF, and in donor organizations and CSOs.

When should the interview be conducted?

Interviews should be conducted after assembling data and assessing trends, in order to be able to better refine the questions being asked and to identify other questions not in this guide that are context-specific.

How should interviews be conducted?

How the interviews are structured will depend upon each country situation. In some cases, it might make sense to have a group discussion or conversation on some of the issues raised in this document. In other cases, it would make better sense to have a one-on-one discussion.

Examples of Questions to Ask Ministry Representatives

1. How has the economic crisis affected the economy of [COUNTRY]?

2. When did you first start seeing effects of the crisis?

3. When do you expect the economy to be back on track?

4. What was the first sector to get a cut? Was funding for all sectors affected equally? Or were there some sectors that took a harder hit?

   Probe regarding whether there was reduced spending; slow-down in disbursements; budgeting at lower levels; etc.

5. What policies were put in place to offset possible effects of the economic crisis? What specific policies were developed to protect the poor?

6. What has happened to development assistance to [COUNTRY] overall during this period?

7. Do you think the economic crisis has affected the predictability of donor funding?

8. How have households fared during the crisis? Have any new policies or programs been put in place to support households during the crisis?

9. Has the MoH expressed any concerns about a reduction in resources to health?

10. Has the ministry had difficulty obtaining foreign exchange during the economic crisis?

11. Do you have any additional comment on the impact of the economic crisis on health spending in your country?

ANNEX 2: ADDITIONAL TABLES AND GRAPHS

Table 4 Macroeconomic data for Mongolia, 2006-2016

Year	Real GDP growth (%)	Total revenue and grants (% GDP)	Total public dept (% GDP)	General government balance (% GDP)	Inflation rate (GDP deflator)
2006	8.6	n/a	44.3		23.1
2007	10.2	40.9	39.4	6.7	12.3
2008	8.9	36.1	33.9	-14	20.2
2009	-1	30.7	51.6	-3.8	7.5
2010	8.6	33	70.8	-16.1	6
2011	6.5	29.5	69	-21.2	5.6
2012	5.8	29.6	67.1	-17.5	2.9
2013	26.3	24.8	54	1.2	1.4
2014	18.8	23.8	45.6	3.9	3.1
2015	12.7	23.6	37.7	5	n/a
2016	20	26.7	25.7	7.3	n/a

Source: IMF 2010

Note: *From 2009, figures are estimates

Table 5 Allocations to different types of health care facilities, 2006 – 2010, in thousands of tugrik

	2006	2007	2008	2009	2010
Tertiary level hospitals	25,442,641	33,641,486	44,639,181	44,692,420	49,089,143
Aimag and district hospitals	32,384,059	42,064,449	61,808,244	61,024,968	65,823,913
District hospitals	8,364,695	10,716,740	16,067,576	15,044,419	16,142,541
Soum and inter *soum* hospitals	19,398,030	25,947,171	42,046,338	38,591,973	40,243,491
Family group practices	4,309,889	5,941,277	9,758,534	9,368,720	10,481,786
MoH and Health departments	3,772,540	4,646,116	8,992,866	7,702,441	8,715,668
Capital investment	5,721,495	20,889,442	15,930,815	21,729,200	29,107,300
Others	12,139,645	15,995,184	28,493,278	23,719,147	16,152,691

Source: Ministry of Health 2010

ANNEX 3: HEALTH BUDGETS AND AMENDMENTS, 2009

Table 6 Original and amended budget of the Ministry of Health, 2009

	2009 original budget	2009 amended budget	Difference	% Change
MINISTRY OF HEALTH	229,853.0	206,828.9	-23,024.1	-10.0%
II TOTAL EXPENDITURE	229,853.0	206,828.9	-23,024.1	-10.0%
IV CURRENT EXPENDITURE	202,755.1	185,099.7	-17,655.4	-8.7%
Goods and services expenditures	191,092.1	173,410.2	-17,681.9	-9.3%
Salary, wages and supplementary	97,016.9	94,074.7	-2,942.2	-3.0%
Basic Salary	92,907.5	90,088.6	-2,818.9	-3.0%
Wages for contracted out services	3,976.8	3,857.5	-119.3	-3.0%
Compensation for transportation and meal	132.5	128.6	-4.0	-3.0%
Employers' insurance contribution	10,733.1	10,407.7	-325.5	-3.0%
Pension and benefit insurance contribution	8,792.8	8,526.1	-266.6	-3.0%
Pension insurance	6,791.4	6,585.4	-206.0	-3.0%
Benefit insurance	485.1	470.4	-14.7	-3.0%
Industrial accident/occupational disease insurance	1,031.2	999.9	-31.3	-3.0%
Unemployment insurance	485.1	470.4	-14.7	-3.0%
Health insurance contributions from employers	1,940.4	1,881.5	-58.8	-3.0%
Expenditure on other goods and services	83,342.0	68,927.8	-14,414.2	-17.3%
Stationery	1,068.0	729.0	-338.9	-31.7%
Electricity	2,682.7	2,146.2	-536.5	-20.0%
Heating	12,809.3	10,386.7	-2,422.6	-18.9%
Fuel and transportation expenses	5,281.8	4,178.9	-1,102.9	-20.9%
Postal and telecommunication	589.5	294.8	-294.8	-50.0%
Water supply and treatment	3,931.1	3,534.1	-397.0	-10.1%
Domestic business trip	797.6	365.7	-431.8	-54.1%
Foreign business trip	83.2	42.4	-40.7	-49.0%
Books and periodicals	56.1	0.0	-56.1	-100.0%
Inventories and materials	1,679.8	1,343.8	-336.0	-20.0%
Tools	536.9	429.5	-107.4	-20.0%
Labor safety tools	360.1	288.1	-72.0	-20.0%
Low-cost, short-life things	782.7	626.2	-156.5	-20.0%
Clothing and bedding	961.0	468.0	-493.0	-51.3%
Food expenses	8,008.2	8,008.2	0.0	0.0%
Medicines & vaccines	29,450.9	23,560.7	-5,890.2	-20.0%
Current renovation	705.7	576.2	-129.6	-18.4%
Foreign guest expenses	7.2	6.0	-1.2	-16.7%
Sport competition expenses	1,544.3	528.4	-1,015.9	-65.8%
Rent and leasing	129.2	114.2	-15.0	-11.6%
Centralized measures	600.0	216.5	-383.5	-63.9%
Operational expenses of program and projects	1,611.3	1,693.3	82.0	5.1%
Operating expenses of scientific research projects	989.9	422.2	-567.7	-57.4%
Training and practice for vocational purposes	131.5	56.9	-74.6	-56.7%
Special training /degree education for civil servants	858.4	365.3	-493.2	-57.4%
Allocation according to the standard cost per citizen	9,368.7	9,368.7	0.0	0.0%
Payment for services provided by private sector	502.4	466.9	-35.5	-7.1%
Payment for general services	157.2	130.7	-26.5	-16.9%
Payment for IT services	2.5	2.1	-0.4	-16.7%
Payment for auditing and credit ranking services	86.0	77.4	-8.6	-10.0%

Payment of banking and financial services	107.7	107.7	0.0	0.0%
Payment for auditing/credit services (domestic)	44.0	44.0	0.0	0.0%
Property insurance	0.4	0.4	0.0	0.0%
Vehicles insurance	85.8	85.8	0.0	0.0%
Fire insurance	0.1	0.1	0.0	0.0%
Vehicle inspection	18.7	18.7	0.0	0.0%
Information & Advertisement	36.0	28.8	-7.2	-20.0%
Waste management	448.1	448.1	0.0	0.0%
Subsidies and transfers	11,663.0	11,689.4	26.5	0.2%
Intergovernmental transfers	8,110.1	8,110.1	0.0	0.0%
Intergovernmental current transfers	8,110.1	8,110.1	0.0	0.0%
Government health insurance payment for citizen	8,094.3	8,094.3	0.0	0.0%
Transfers from HIF to hospitals	1.4	1.4	0.0	0.0%
Revenue collected at horizontal level	14.4	14.4	0.0	0.0%
Transfers to the households	3,373.4	3,395.2	21.8	0.6%
One time benefit and bonus	78.0	78.0	0.0	0.0%
Non-continuous compensation by the employer	3,295.4	3,317.2	21.8	0.7%
One-time cash compensation for retirement	1,448.8	1,448.8	0.0	0.0%
One time grants	340.3	340.3	0.0	0.0%
Transportation allowance for holiday visit to home country	1.5	1.5	0.0	0.0%
Bonuses and compensation	1,080.5	1,080.5	0.0	0.0%
Compensation to public employees who got laid off due to restructuring	0.0	21.8	21.8	
Compensation to public employees working regularly in rural areas	424.2	424.2	0.0	0.0%
Other payments and fees	163.7	163.7	0.0	0.0%
Land fee	120.0	120.0	0.0	0.0%
Vehicles tax	43.7	43.7	0.0	0.0%
Foreign transfers	15.7	20.4	4.7	30.1%
Membership fees to international organization	15.7	20.4	4.7	30.1%
CAPITAL EXPENSES	27,097.9	21,729.2	-5,368.7	-19.8%
Domestic investment	21,291.9	15,923.2	-5,368.7	-25.2%
Investment to be financed from budget	16,291.9	12,923.2	-3,368.7	-20.7%
Plan and equipment to be financed from budget	5,000.0	3,000.0	-2,000.0	-40.0%
Capital transfers	5,806.0	5,806.0	0.0	0.0%
Capital renovation of Budget entities	5,806.0	5,806.0	0.0	0.0%
Financing resource to cover expenses:	229,853.0	206,828.9	-23,024.1	-10.0%
From health insurance fund	43,675.5	43,675.5	0.0	0.0%
From core activitie's revenue	4,325.7	3,987.1	-338.6	-7.8%
From non-core activitie's revenue	895.3	870.8	-24.5	-2.7%
Financed from budget	180,956.4	158,295.4	-22,661.0	-12.5%
Revenue to be collected in budget 2009	0.0	363.1	363.1	
NUMBER OF ENTITIES	0.5	0.5	0.0	0.2%
TOTAL EMPLOYEES	24.1	24.1	0.0	-0.1%
Management staff	0.6	0.6	0.0	0.0%
Specialist staff	16.1	16.1	0.0	-0.1%
Support staff	7.1	7.1	0.0	0.0%
Contractual employees	0.2	0.2	0.0	0.0%

Source: Ministry of Health 2010

Table 7 Trends in Total Health Expenditure Per Capita by Aimag, 2007-2010 (Tugrik current)

Aimag and Capital	2007 actual	2008 revised	2008 actual	2009 approved	2009 revised	2010 approved	Region	Pop 2008 (1000's)	% Total Population
Total health expenditure per capita	31	48	48	50	46	49	All regions	2684	100
Ulaanbaatar	18	29	29	29	27	30	Ulaanbaatar	1071.7	39.9
Darkhan-uul	38	56	57	60	55	57	Central region	88.2	3.3
Dornogobi	41	61	60	64	58	63	Central region	57.2	2.1
Dundgobi	46	72	71	73	67	71	Central region	48.2	1.8
Gobi-sumber	63	94	94	94	85	89	Central region	12.9	0.5
Selenge	34	52	52	54	50	52	Central region	101.6	3.8
Tuv	43	69	68	63	57	62	Central region	86.8	3.2
Umnugobi	41	66	65	71	65	67	Central region	47.7	1.8
Dornod	43	67	66	70	64	68	East region	73.6	2.7
Khentii	46	72	72	76	70	78	East region	71	2.6
Sukhbaatar	44	68	65	70	63	67	East region	54.9	2.0
Arkhangai	36	55	54	59	54	57	Khangai region	92.5	3.4
Bayankhongor	41	62	63	66	61	64	Khangai region	85.2	3.2
Bulgan	43	68	69	70	64	66	Khangai region	61.4	2.3
Khuvsgul	33	53	53	53	49	53	Khangai region	123	4.6
Orkhon	31	46	46	48	45	56	Khangai region	81.9	3.1
Uvurkhangai	33	48	48	51	47	49	Khangai region	116.6	4.3
Bayan-Ulgii	32	52	52	54	49	52	West region	101.3	3.8
Gobi-Altai	55	85	86	89	83	87	West region	59.8	2.2
Khovd	36	57	58	61	56	61	West region	88.4	3.3
Uvs	46	69	67	71	65	68	West region	79.8	3.0
Zavkhan	45	73	72	75	69	73	West region	79.8	3.0

Source: MoH and Statistics Department, 2010
Note: Population estimate is constant for 2008

Table 8 Trends in Total Health Expenditure by Aimag , 2007-2010 (Tugrik current)

Place	2007 actual	2008 revision	2008 actual	2009 approved	2009 revision	2010 approved	Region
Total health expenditure	83,332,019.40	129,273,362.10	129,266,128.40	132,834,744.00	122,467,592.10	131,810,556.40	All
Ulaanbaatar	19,823,220.00	30,866,847.90	31,219,574.30	30,943,013.20	28,732,538.00	31,769,619.60	Ulaanbaatar
Darkhan-uul	3,325,465.40	4,965,270.90	5,013,849.50	5,248,680.50	4,891,592.40	5,037,591.60	Central region
Dornogobi	2,320,038.20	3,511,652.40	3,447,763.00	3,672,213.00	3,319,494.10	3,596,623.10	Central region
Dundgobi	2,195,979.60	3,461,736.50	3,445,225.00	3,539,637.50	3,240,678.80	3,429,554.60	Central region
Gobi-sumber	811,957.60	1,210,074.90	1,212,897.70	1,218,233.30	1,099,941.50	1,147,198.50	Central region
Selenge	3,465,503.00	5,265,402.50	5,240,034.30	5,504,926.80	5,051,149.90	5,260,291.00	Central region
Tuv	3,705,879.50	5,962,626.10	5,926,536.70	5,430,665.50	4,987,394.50	5,381,430.70	Central region
Umnugobi	1,966,099.90	3,145,320.70	3,080,588.80	3,382,143.50	3,080,564.70	3,211,523.60	Central region
Dornod	3,168,845.60	4,951,160.60	4,890,411.00	5,119,456.60	4,731,132.40	4,997,915.70	East region
Khentii	3,259,273.50	5,128,503.70	5,117,769.40	5,403,028.60	4,941,239.80	5,530,979.70	East region
Sukhbaatar	2,397,763.40	3,724,962.50	3,583,520.60	3,828,030.20	3,471,494.40	3,675,304.80	East region
Arkhangai	3,374,680.10	5,056,373.40	5,039,598.20	5,434,985.70	5,034,285.30	5,289,338.90	Khangai region
Bayankhongor	3,477,860.40	5,291,929.00	5,335,206.00	5,647,371.70	5,214,770.10	5,480,061.30	Khangai region
Bulgan	2,662,402.40	4,194,300.70	4,235,176.00	4,290,117.10	3,941,321.80	4,075,902.20	Khangai region
Khuvsgul	4,045,461.80	6,465,404.90	6,474,197.80	6,556,053.40	6,061,862.30	6,460,196.30	Khangai region
Orkhon	2,524,441.10	3,789,400.90	3,785,425.10	3,936,640.70	3,689,710.60	4,574,253.90	Khangai region
Uvurkhangai	3,808,649.10	5,589,459.90	5,602,849.60	5,909,208.10	5,451,801.20	5,749,997.70	Khangai region
Bayan-Ulgii	3,250,016.70	5,254,593.90	5,218,852.10	5,451,065.30	4,995,643.20	5,262,953.60	West region
Gobi-Altai	3,265,742.00	5,078,281.80	5,165,396.90	5,302,995.30	4,962,865.60	5,216,633.10	West region
Khovd	3,198,881.50	5,069,703.60	5,110,648.60	5,422,665.60	4,930,296.40	5,398,050.30	West region
Uvs	3,691,942.90	5,503,818.70	5,349,951.50	5,628,255.00	5,156,486.20	5,443,138.00	West region
Zavkhan	3,591,915.70	5,786,536.60	5,770,656.30	5,965,357.40	5,481,328.90	5,821,998.20	West region

Source: Ministry of Health and Statistics Department of Mongolia, 2010
Note: Population estimate is constant for 2008

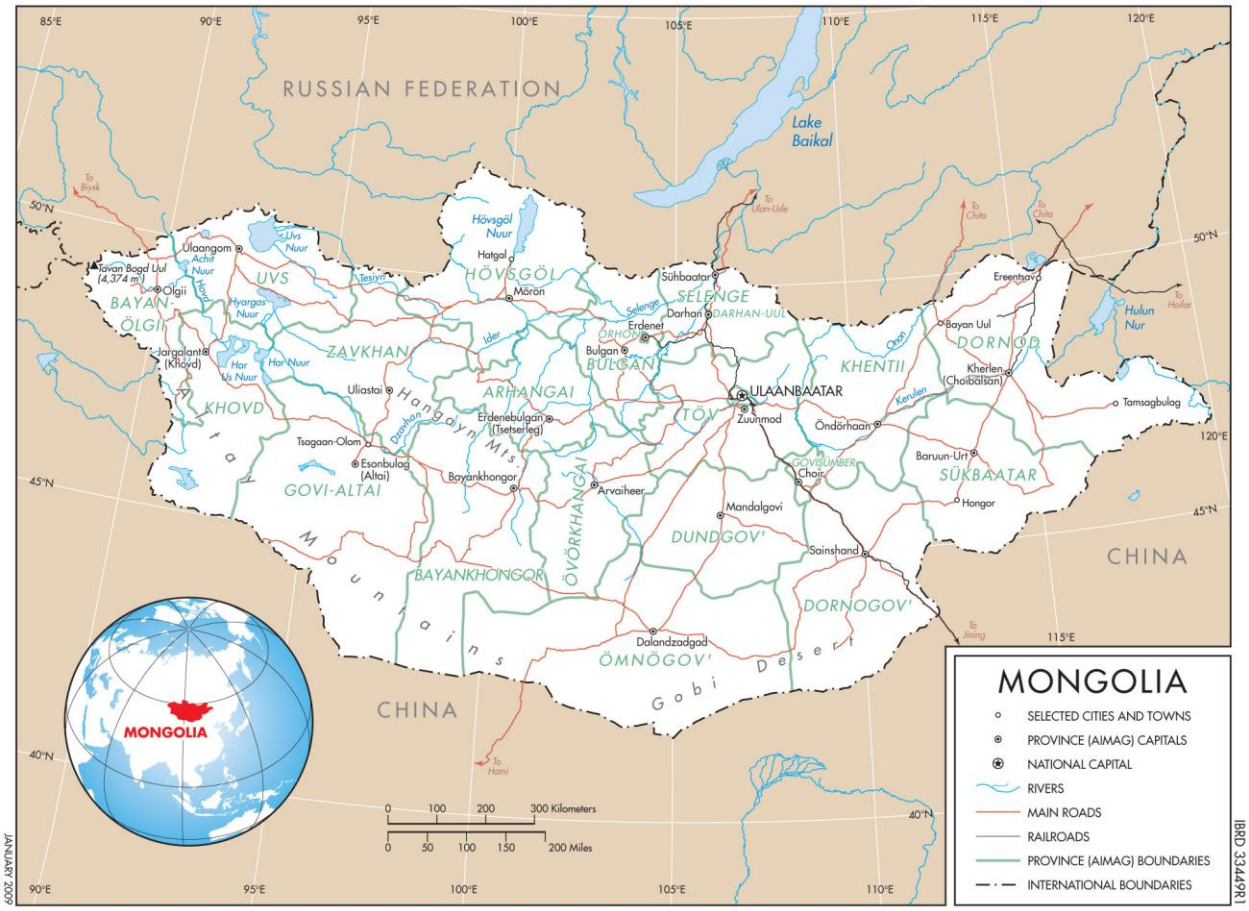
Table 9 Total Health Expenditure Hospitals and Programs, 2007 – 2010, in current tugrik current

Place	2007 actual	2008 revision	2008 actual	2009 approved	2009 revision	2010 approved
Center of Maternity and Children	4,335,085	6,760,599	6,686,197	7,191,242	6,587,332	6,963,930
Center of Maternity and Children	641,109	1,093,426	1,054,377	936,346	831,907	961,929
Clinical hospital I	4,153,875	6,667,727	6,666,678	8,063,716	7,035,850	8,069,313
Clinical hospital II	2,021,320	3,255,906	3,204,168	3,316,232	3,004,133	3,268,159
Clinical hospital III	3,521,713	6,028,873	5,865,186	6,517,906	5,788,299	6,466,392
Clinical Hospital of Traumatology and Rehabilitation	2,897,321	4,358,441	4,300,744	4,792,923	4,286,512	4,710,922
District hospitals	10,716,740	15,832,700	16,067,576	16,577,297	15,044,419	16,142,541
Government fund, Centralized	65,793,105	84,230,790	82,403,126	97,018,209	84,361,277	87,803,435
Health sector development programme	275,674	304,521	304,361	52,000	77,000	0
Hospital for skin diseases	761,523	1,162,894	1,134,919	1,251,414	1,137,493	1,285,991
National Cancer Center	2,253,770	3,620,351	3,577,913	3,882,484	3,469,933	3,989,542
National Center for Communicable Diseases	4,097,598	6,628,819	6,455,653	7,050,952	6,424,343	6,834,302
Pharmacy, private hospitals	4,389,383	0	0	0	0	0
Psychology clinical hospital	2,115,905	3,417,283	3,313,972	3,974,992	3,647,387	3,876,862
Ulaanbaatar Department of Health	398,761	1,334,437	1,628,748	799,402	816,016	1,268,056

Source: Ministry of Health

ANNEX 4: MAP OF MONGOLIA

Figure 12 Map of Mongolia



Source: World Bank Map Design Unit, November 2010

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