

The Impact of the Public Finance Management System on Children in Armenia

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Foreword

The profound changes in social, demographic and economic environments in transition countries and the evolving role of development cooperation call for UNICEF and other organizations in the UN system to adopt a strategic shift in their forms of engagement. This has necessitated UNICEF to move into and further expand its efforts in the areas of Public Financial Management (PFM), Public Governance and Social Policy.

Under human rights principles, State parties are obliged to fulfil human rights by taking appropriate legislative, administrative, budgetary, judicial and other measures. Such rights include those enshrined in the Convention on the Rights of the Child (CRC) which stipulates that all children have the right to a core minimum level of well-being including the right to nutrition, basic education, survival, protection, and the right to grow up in a family. Important principles that should be regarded by States in discharging their obligations are: 1) the requirement for progressive realisation; 2) the use of maximum available resources; 3) the avoidance of retrogression; 4) the satisfaction of minimum essential levels of economic and social rights; 5) non-discrimination and equality; and 6) participation, transparency and accountability.

The process by which governments raise revenues and allocate, spend and account for public funds constitutes the core of PFM. It is through the PFM system that national policies for children are transformed into actions and services are delivered. Performance in this area therefore critically affects the capacity of governments to reduce poverty and to fund and deliver high-quality public services to fulfil children's rights to education, health and protection.

The present study is an initial step undertaken by the UNICEF Armenia Country Office in order to assess the PFM system in Armenia through a child-focused perspective and to understand how children's interests are impacted by the PFM system. We hope that this study will contribute to a greater understanding of service delivery in key sectors of health, education and social protection and will provide entry points for UNICEF and other development partners in Armenia for engagement in the policy and budget cycle for the fulfilment of child rights. It is our view that public finance measures need to be specifically aimed towards children and should take into account their specific needs and living conditions, therefore we aspire to have children's rights integrated into PFM.

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Table of contents

Foreword	iii
List of tables and figures	ix
Abbreviations	xii
Executive summary	iii
Main findings of the report	iii
Entry points and recommendations	vi
1 Introduction	1
1.1 Approach and methodology	1
1.2 Structure of the report	5
2 Situation analysis: child poverty overview	6
2.1 Trends in income and consumption poverty	6
2.2 Health	8
2.3 Education	11
2.4 Social protection	13
3 From policy priorities to resource allocation: fiscal space for children's interests	14
3.1 Defining fiscal space for children	14
3.2 Understanding the budget process in Armenia	15
3.3 Trends in the overall resource envelope: aggregate fiscal discipline	19
3.4 Prioritisation of children's interests: allocative efficiency	24
3.5 Understanding the trends in fiscal space: the role of the PFM system	33
4 From resources to results: operational efficiency and equity of spending	34
4.1 Health	35
4.2 Education	39
4.3 Social Protection	42
4.4 Implications for equity	42
5 Implications: policy entry points	43
5.1 Diagnosis: the high-level budgeting outcomes	43
5.2 Understanding the process: current weak links in the focus on results	44
5.3 Entry points: recommendations	45
References/Bibliography	50
Annex A Stakeholders consulted	51
Annex B Basic benefit package	53
Health care services covered under the Basic Benefits Package (2004)	53
Socially Vulnerable Groups covered under the Basic Benefit Package	53
Annex C Supplementary tables and figures by chapter	55
C.1 Situation analysis	55
C.2 Fiscal space	56
C.3 Operational efficiency	62

List of tables and figures

Table 2.1	Poverty measures by number of children and elderly, 2004-2006	7
Table 3.1	Comparison of reported actual state budget expenditure on social sectors in 2006, in billion AMD (current prices), by different sources	19
Table 3.2	Selected Macroeconomic Indicators	20
Table 3.3	Consolidated Government Budget, Percent of GDP	22
Table 3.4	Breakdown of Government Expenditures (percent of total expenditures)	22
Table 3.5	Primary expenditure 2005-2007, budgeted and actual, AMD billion	24
Table 3.6	State Budget Execution Rates (primary spending) across Sectors, 2005-2007	25
Table 3.7	Shares of primary expenditure across sectors (actual), 2005-2007	26
Table 3.8	Shares of additional primary spending over previous year, 2006-7	27
Table 3.9	Shares of primary expenditure, budgeted and actual 2005-2007	27
Table 3.10	Shares of total public expenditure, budgeted and actual, 2006-2008	28
Table 3.11	Total primary expenditure as % of GDP, 2005-2007	28
Table 3.12	Community budget expenditures by functional classification in mln AMD, in 2000 prices, 2004-2006	32
Table 3.13	Expenditure on Education in Communities in Lori Marz, in thousand AMD, 2007	32
Table 4.14	State budget execution within the health sector in million AMD, 2006-2008 (current prices)	36
Table 4.15	Programmes in the health sector with less than 90% execution rates, in mln AMD, 2006 and 2007	36
Table 4.16	State budget execution within the education sector, AMD million, 2006-2008 (current prices)	39
Table 4.17	Programmes in Elementary, basic and secondary education with less than 90% execution rates, in mln AMD, 2006 and 2007	39
Table 4.18	All General Secondary Education Schools	40
Table 4.19	Financing for general education in 2006/2007 in thousand AMD, by marz	41
Table 4.20	State Budget Execution in Social Protection in million AMD, 2006-2008	42
Table C.1	Poverty measures by gender and age groups, 2004-2006 (in %)	55
Table C.2	Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in the Social Sector over 2004-2008	59
Table C.3	Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in the Education over 2004-2008	59
Table C.4	Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in Social Insurance and social security over 2004-2008	60
Table C.5	Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in Health Care over 2004-2008	60
Table C.6	Shares in public expenditure 1997-2007, actual	61
Table C.7	Comparison of shares of actual spending on health from different sources	61
Table C.8	Comparison of shares of actual spending on education from different sources	61
Table C.9	Per capita Funding (PCF) Participating, Protected and PCF Non-Participation Schools	62
Figure 1.1	Policy and reform processes: alignment around a focus on results	4
Figure 2.1	Poverty measures by household size, 2004-2006 (in %)	6
Figure 2.2	Poverty trends by marz, 2004-2006	7
Figure 2.3	Mortality rates of children, 1990-2006, per 1 000 live births	8
Figure 2.4	Variation in uptake of care between quintiles	9
Figure 2.5	Reasons for not seeking primary health care	10
Figure 2.6	Inequities in net enrolment in preschool and college (2004) are significant between richer and poorer households	11
Figure 2.7	Comparison of age-specific completion rates across wealth quintiles, 2004	12
Figure 2.8	Reasons for non-uptake of preschool education by quintile, 2004	12
Figure 2.9	Enrolment Rates by Age and Gender in Armenia, 2004	13
Figure 3.1	Real GDP, AMD 2000 prices	19
Figure 3.2	Inflationary pressures	21
Figure 3.3	Total Expenditures, Revenues & Grants as a percent of GDP	21
Figure 3.4	Financing the Fiscal Deficit	23
Figure 3.5	The external sector	23
Figure 3.6	Comparison of shares of spending, total and primary actual expenditure 2005-2007	26
Figure 3.7	Public sector expenditure on health as % of total government expenditure, WHO estimates	29

Figure 3.8	Real spending on social sectors, AMD (2007) bln	30
Figure 3.9	Priorities in the health sector, actual expenditure, 2002-2006	30
Figure 3.10	Priorities of the education sector, actual expenditure, 2001-2007	31
Figure 3.11	Expenditure on Education and Science in the 113 Communities of Lori Marz, in thousand AMD	32
Figure 3.12	Shares of social protection spending, 2006-2007, actual expenditure	33
Figure 4.1	Financial flows in the health sector	35
Figure 4.2	Comparison of Per-capita funded and protected schools	41
Figure 4.3	Pro-poorness of spending in social sectors	43
Figure 5.1	Main findings on high-level budget outcomes	44
Figure 5.2	The focus on results: weak links in the chain of accountability	45
Figure 5.3	Entry points in the health sector	47
Figure 5.4	Entry points in the health sector	48
Figure 5.5	Entry points in social protection	49
Figure C.1	Main Causes of Death for Children 0-4 years, 2006	55
Figure C.2	External Public Debt	57
Figure C.3	Changing composition of external financing	57
Figure C.4	Total Public Sector Spending, by Country in ECA, 1995 and 2005	57
Figure C.5	Public-Sector Health Expenditures in ECA Countries, 2000 and 2004	58
Figure C.6	Education Spending in ECA Countries, 1995 and 2004	58
Figure C.7	Regional Variation in Revenues, 2005	59
Box 1.1	The policy and budget cycle	2
Box 1.2	High level planning and budgeting outcomes	3
Box 3.3	ARDEP pilot in Gegharkunik and Tavush marzes	18

Abbreviations

ARDEP	Armenia Regional Development Project
AWP	Annual Work Plan
BBP	Basic Benefits Package
CIS	Commonwealth of Independent States
EU	European Union
ILCS	Integrated Living Conditions Survey
IMF	International Monetary Fund
MDGs	Millennium Development Goals
MOF	Ministry of Finance
MTEF	Medium Term Expenditure Framework
OPM	Oxford Policy Management
PCF	Per Capita Funding
PEFA	Public Financial Management Performance Measurement Report
PER	Public Expenditure Review
PFM	Public Finance Management
PRS	Poverty Reduction Strategy
RoA	Republic of Armenia
SHA	State Health Agency
SNCO	State Non-Commercial Organisation
UNICEF	United Nations Children's Fund
WHO	World Health Organisation

Executive Summary

From the perspective of child poverty reduction, PFM systems need to be seen as critical levers linking policy goals to service delivery on the ground. The aim of this short study is to draw out the salient features of the PFM system in Armenia to understand its relevance for children, identify areas for improvement, and suggest entry points for engagement going forward.

Main findings

Fiscal space and expenditure for children

In recent years, Armenia has made significant progress in implementing sound fiscal and monetary policies that have supported a strong macroeconomic performance. This has resulted in a prolonged period of high economic growth (with low inflation) and real GDP growth averaging around 13% between 2004 and 2007¹.

It would appear that the efforts to increase tax revenues have succeeded by raising tax collection rates as a percentage of GDP by 2% in recent years, a significant achievement particularly during a period of double-digit GDP growth². These efforts to improve collection rates have undoubtedly strengthened fiscal policy over this period and the gap between expenditures and revenues has fallen dramatically, to the point where the budget deficit was only 1.8% of GDP in 2007³. Nevertheless, the overall size of government expenditure relative to GDP remains low compared to other countries in the region and therefore total fiscal space is limited by low domestic revenue generation.

In terms of prioritisation of spending on children, between 2005 and 2007 total expenditure increased by 45% in terms of actual spending (compared to 44% as budgeted), while education, health, and social security increased by 50%, 46%, and 42% respectively.

Looking at spending as a percent of GDP, public spending on education was only 2.8% of GDP, health was 1.4% and social security 2.0% in 2007. Along these measures Armenia's spending is much lower than comparative countries. However, this is because government revenue in general is very low compared to other countries, which explains the low level of public expenditure in specific sectors as a percentage of GDP. Nevertheless, increases in spending over the recent period have meant a significant inflow of real resources to the social sectors, increasing education spending by 40% in three years, health by 36% and social protection by 32%.

In diagnosing the underlying issues with the PFM system impacting allocative efficiency and fiscal space more generally, there are three key issues:

- **Lack of linkage between strategy and budgets in reality:** Further improvements to the MTEF process could be made to ensure that line ministries have both technical capacities and incentives for producing strong budget submissions based on the MTEF.
- **Strategic outlook of programme budgets:** Recent movements towards programme budgets should increase the focus on results, however there are presently major issues with both technical capacity as well as incentives.
- **Role of National Assembly:** The National Assembly is a key player in both budget arbitrage and budget accountability, however the short time-frame for debate and amendments means that there is scope for increasing analytical support to allow more thorough analysis of the draft budget law.

Operational efficiency

Health

The health sector is still characterized by overcapacity of health care facilities, low reimbursement of services provided under the Basic Benefits Package (BBP), high informal payments, over-provision of specialists relative to physicians at the primary level, a weak system of referral and low salaries of health care personnel. The ongoing optimization through decentralization and closure of facilities has led to increased inequity in access to primary level care, in particular for rural inhabitants. For patients, decentralisation is associated with corruption, declining access to services and diminishing quality of services⁴.

1 Source: NSS of RA, CBA and EDRC calculations.

2 IMF Country Report No. 08/176 (June 2008), page 3.

3 Ibid, page 4.

4 Hakobyan et al. (2006), p 31.

In the absence of detailed data on inputs and outputs (particularly since most existing detailed studies rely on data only through 2006, after which time there were significant changes), the analysis of efficiency rests on a more qualitative assessment of the PFM system. The key issues revolve around capacity, incentives, and ownership:

Capacity:

- Lack of detailed data on inputs hampers a proper analysis of cost per patient, even though this is the basis of financing under the SHA. This is exacerbated by the fact that funding for facilities comes from both user fees and from SHA financing, so that currently there is no comprehensive view of facilities' total budgets.
- Use of incremental budgets: hospital budget ceilings are a function of the historic budget, scaled up or down in line with the total health budget (Habokyan et al 2006: 58)
- The high levels of off-budget resources limits rationalisation of allocations across facilities (since central ministry officials are not aware of total budgets for each facility), and it also leads to likely inequalities where per capita funding is allocated irrespective of facility own-revenue. (World Bank 2003: 117) This is also true of significant levels of off-budget donor resources which are captured directly by individual facilities.
- Decentralisation of functions to facility level were not matched by capacity-building of managers at various levels, so that in practice management tends to adhere to older styles.

Ownership

- The role of the SHA is to: contract providers for services within the BBP; ensuring the target use of state financial resources and reimbursement of providers; and quality assurance. In terms of contractual agreements, however, the SHA only defines the services that are provided using state property (such as infrastructure, equipment, etc), meaning that the SHA has a limited ability to supervise providers (World Bank 2003: 115).
- The SHA does not have any financial responsibility for performance of facilities, and therefore does not play a role in monitoring the financial performance of contracted providers or in ensuring efficient or effective delivery (Habokyan et al 2006: 54).
- At the same time, the efforts in decentralisation have weakened the vertical links for accountability between the Ministry of Health and regional governments and horizontally between different tiers of the referral network. (Habokyan et al 2006: 28-9)

Incentives:

- Since hospitals are reimbursed on a case-by-case basis up to a ceiling, it is in their interests to provide services up to that ceiling, even if some of that care could be more efficiently delivered in primary care facilities instead.

These bottlenecks in the PFM system for efficient delivery are also likely to have major implications for equity, given (i) the patterns of uptake of care by poverty level (i.e. that the poor are much less likely to use health services, and when they do it is centred on primary facilities due to cost barriers), and (ii) the current per capita financing arrangements (which benefits primary health facilities when there is lower uptake, penalises when there is more).

It will be essential going forward to examine not only the poverty impact of changes in the statutory rights of patients through expansions in the BBP but also how patterns of funding also impact the abilities of different facilities to provide quality care, their incentives for efficiency gains and for their system of informal charges. Only once these supply and demand issues are examined in tandem will it be clear what the impact of changes in the pricing structure is on poverty (and child poverty more specifically).

Education

Currently, funding to schools is a composition of: (i) an annual base grant of 13.5 million AMD per school for maintenance irrespective of the size of the school, and (ii) financing based on the number of students enrolled in each school. This formula has clear advantages: it is very transparent and provides schools with an incentive to become more efficient. However, there are disadvantages as well. Schools are incentivized to grow above their optimal number of students and small schools have little incentive to consolidate due to the fixed component of funding. Further, given the current education curricula of teachers, small schools in remote towns have no other choice than employing a minimum number of teachers in order to cover all the subjects.

More importantly, while the introduction of per capita funding (PCF) led to improvements in efficiency within schools, opportunities for optimization of schools across marzes are still to be exploited⁵. The number of schools has only slightly decreased over time, and PCF schools have significantly higher student-teacher ratios compared to non-participating schools. Similarly, protected schools have lower PCF ratios than PCF participating schools and PCF non-participating schools

As with the health sector, the root causes of these inefficiencies in education can be found in the functioning of the PFM system in terms of ownership, incentives, and capacity:

Ownership:

- Budget allocations to schools are transferred directly to schools through from the central treasury through the local treasury, essentially bypassing the marz level. Schools must have their budgets approved by the marzpetaran but these do not have the de facto authority to hold schools accountable.
- The PER notes that the current budget process for schools currently lacks strong accountability mechanisms, as marzes approve school budgets but generally do not conduct financial audits or budget reports at the end of the year to establish whether budgets were executed as planned. Internal audits are conducted only every three years by the MFE, and there are no external audits. (PER 2008: 12)
- With respect to pre-school education, there are some trade-offs between norms deemed essential at the central level and the power of communities to determine their budgets. Communities are required by law to pay pre-school teachers twice the minimum wage, however this contributes to the difficulty of organising pre-school services with limited resources available, by reducing communities' power to determine salaries of teachers.

Incentives:

- The MOES working group is currently examining the funding formulas for general secondary education, to overcome two identified issues, namely that the formula does not take into consideration needs or particularities of schools (education levels, size of buildings and heating requirements, etc), and it has encouraged schools to grow to sizes deemed too large by the MOES which has identified the optimal size at 700-900 students per school (PER 2008: 21).

Capacity:

- Although readily available from marzes, disaggregated data on enrolment and student performance are rarely analysed and used as a basis for policy making. The 2003 public expenditure review (World Bank: 93) notes the lack of comprehensive budget information for the sector including off-budget grants spent directly at local levels as well as detailed budget reporting to central level on pre-school budget execution (either financial data or enrolment figures). These problems remain today. The research team noted that a surprising level of detail is collected at the marz level (as shown by the analysis possible with data from Lori marz), however this does not yet appear to be consolidated at the MOES or analysed.

Entry points and recommendations

From the analysis of fiscal space and operational efficiency it is clear that the weaknesses identified in the PFM system have major implications for service delivery in health and education and therefore on child poverty. Weaknesses in capacity (in programme budgeting, the linkages between MTEF and state budget classification, the scope for thorough scrutiny of budget bids in the National Assembly, and the availability and analysis of administrative data) and ownership (in the case of marzes) all contribute to the larger issue of weak incentives for line ministries and other budget holders to invest in comprehensive and realistic planning and budgeting exercises.

These problems manifest themselves mainly in the initial formulation of budgets, where the traditional line item budgeting remains the 'real budget' (since the MTEF is not officially part of the budget law nor is it debated by the National Assembly), and in the monitoring and reporting phase, which does not effectively produce reporting on outputs or hold ministries to account for their performance.

In order to improve results in implementation, the efforts of all stakeholders will need to be oriented towards ensuring that capacity, ownership, and incentives are increasingly aligned to improve effectiveness and efficiency of delivery in practice. In terms of policy entry points, therefore, the PFM system must be the essential starting point for increasing the fiscal space for children's interests and ensuring the efficiency and equity of spending in health, education, and other key sectors related to child poverty reduction.

⁵ World Bank (2008), p. 60.

General issues

In order to tackle the bigger issues around the current lack of accountability for results, some recommendations for the wider budget process include:

Most importantly, this will involve addressing the **incentives** of all budget holders:

- **Using the budget execution reporting process as a mechanism for holding all levels of government to account for results.**
- Ensuring that there are more **solid links between the MTEF and annual budget** so that the programme budgets and annual budgets are not separate parallel activities;
- Doing this will require technical improvements in **capacity** including:
 - Ensuring that there are clear and easy linkages between the state budget classification and the programme budget classification in sector MTEFs;
 - Building capacity within the Ministry of Finance and line ministries for analysis of existing administrative data and for formulation and evaluation of budget submissions;
 - Improving the flows and storage of administrative data so that detail held at the marz level is effectively aggregated and analysed within central ministries;
 - Providing support for committees of the National Assembly to undertake rapid analysis of the draft budget law to facilitate evidence- and policy-based debate during the budget approval process.
 - Ensuring that programme budgets and MTEFs are adapted retrospectively to reflect the final Finance Law passed by the National Assembly at the end of the arbitration phase, so that year one of the MTEF can then serve as an accurate reflection of the budget and reporting against programme budgets can take place.
- In terms of **ownership**, it should also involve an evaluation of the role of marzes as deconcentrated units in order for them to play a greater oversight role in the performance of service delivery.

Health

Within the health sector, there are some more specific entry points that emerge throughout the policy and budget cycle. The two main constraints are at the level of problem identification (which has a knock-on effect to policy formulation) and operational efficiency.

It is therefore recommended that some diagnostic work is undertaken to better understand the current situation and to provide the necessary evidence base for the current policy debate around health financing. The type of study most likely to be useful will be a service delivery survey which includes a sample of facilities and households, combining an analysis of resources, service delivery (including quality of care), the beneficiaries, the management hierarchy supporting service delivery and the effectiveness of the public expenditure that finances it. An expansion of the current National Health Accounts exercises to allow for more detailed sub-accounts would help fill the data gap to allow a more focused look at total flows of funds in relation to services provided across facilities.

Education

The story is much the same in the education sector. In terms of pre-primary education, the biggest bottleneck is at the stage of problem identification. A study is currently being finalised which will hopefully address this gap and help to build the evidence base for policy dialogue.

In terms of the prioritisation of pre-school education within community budgets, support could be given to the consolidation of communities. The high number of communities increases the administrative burden and limits the potential for spending on service delivery. By merging, communities would have larger budgets at their discretion and might also have a greater number of pre-primary-age children to further justify such expenditure.

With respect to basic education, the biggest constraints are in operational efficiency. This suggests that further support to decentralised service delivery is warranted, including technical support to the Ministry for administrative data collec-

tion and analysis in order to improve on programme budget formulation. At the local level, such support would also be important, combined with greater ability of marzes to make efficiency gains across schools through consolidation where appropriate.

Social Protection

In terms of social protection, the bottlenecks seem to be mainly at the stage of problem identification and policy formulation. There is currently a lack of clear policy on the priorities for expansion of social services for children. Before a cost-benefit analysis of potential options is undertaken, it will be essential to first undertake a robust needs assessment and open a policy dialogue within the Ministry of Labour and Social Issues and the Ministry of Finance on the rationale for such spending. This evidence base should include an analysis of the entire sector to better understand the poverty and welfare impact on children of the entire current system of financial support to families, pensions, unemployment payments and how these interact with non-financial benefits such as institutional care, foster care, and other services such as access to health care through the BBP for children over 7.

1 Introduction

Moving away from projects towards policy engagement opens up new opportunities for UNICEF to pursue the interests of children – especially the poor – through the potential to influence national policies, for example in health, education, water and sanitation, and gender. While PRSs may be the most obvious manifestation of government policy, it is increasingly recognised that budgets and medium-term expenditure frameworks (MTEFs) provide the mechanism through which policy is translated into actions and the delivery of services. Indeed, it is in budgets and MTEFs that real prioritisation takes place; it is within sector and line-ministry budget decisions that specific goals are pursued or missed; and it is in budget execution that service delivery changes are made and capacity constraints become apparent.

The public finance management system therefore provides the 'infrastructure' through which poverty reduction can be achieved. Budgets – their preparation, articulation, agreement, and execution – are essential policy levers for UNICEF's pursuit of child rights and poverty reduction. Good PFM systems therefore

- promote economic stability which encourages investment, and promotes economic growth;
- encourage better decision-making processes regarding the allocation of resources for financing public services; and
- promote better use of finances so as to achieve value for money in government spending,

all of which can help to increase resource availability and capacity for spending on poverty-reducing programmes and, in turn, help achieve the MDGs.

From the perspective of child poverty reduction, therefore, PFM systems need to be seen as critical levers linking policy goals to service delivery on the ground. The aim of this short study is to draw out the salient features of the PFM system in Armenia to understand its relevance for children, identify areas for improvement, and suggest entry points for engagement going forward.

1.1 Approach and methodology

With these aims in mind, the approach used here is both diagnostic and dynamic, meaning that it:

- is oriented around the policy and budget cycle in order to identify bottlenecks in the process at a given point in time between understanding the child poverty situation, formulation of policy, allocation of resources, budget execution, and service delivery; and
- is based on an understanding of the PRSP, MTEF, and budgets as ongoing *processes to increase accountability and the focus on results*.

By keeping the emphasis on the process – and changes in the process over time – this approach allows a clearer identification of the policy entry points for government, UNICEF, and other development partners that are likely to have the greatest potential for reducing child poverty. This diagnostic and dynamic view of policy and budgets will ensure that the report addresses both the initial question of whether the PFM system 'incorporates' children's interests but also the more important – and more nuanced – questions about *how* the policy and budget process can be improved to bring about changes to service delivery in health and education, and therefore children's life chances, on the ground.

1.1.1 Understanding the policy and budget cycle

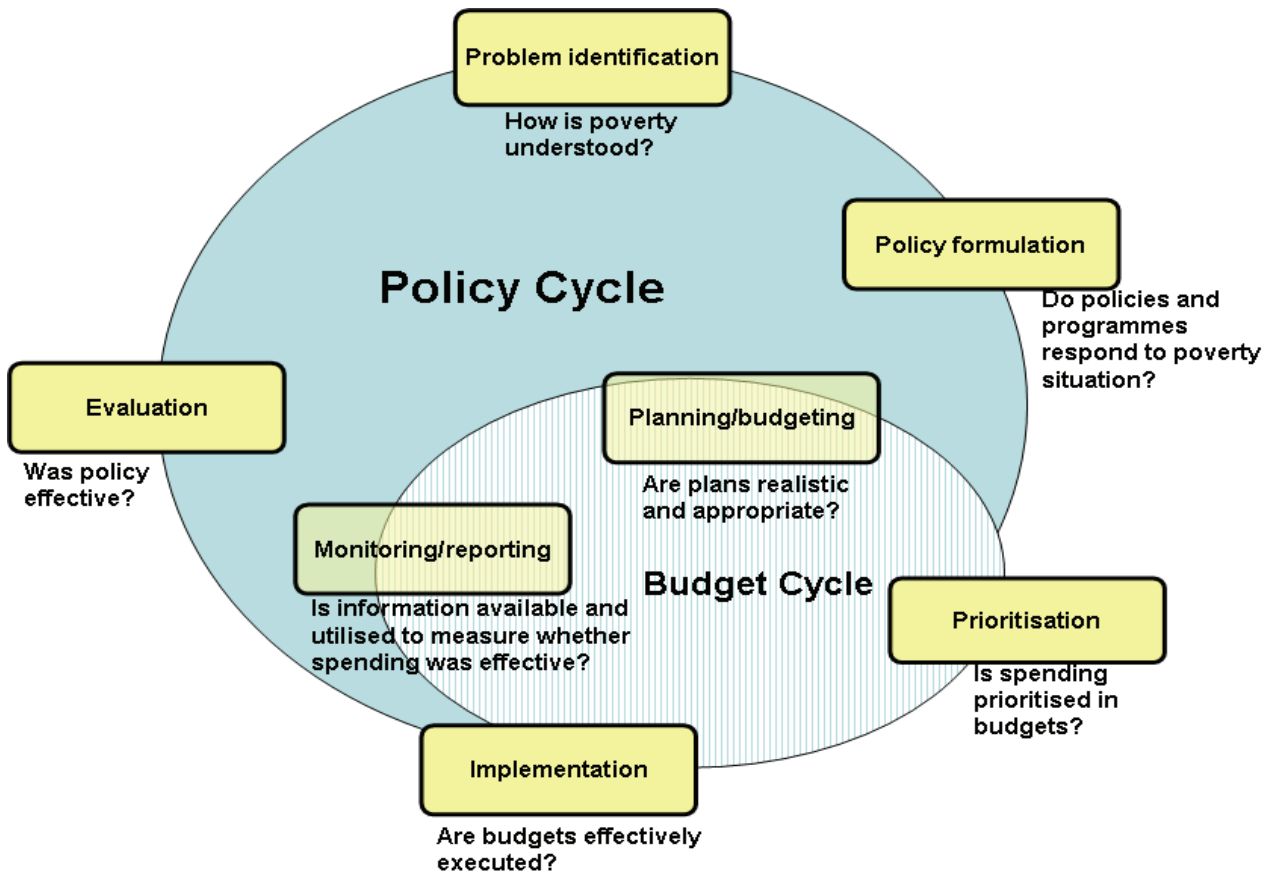
The diagram below outlines the key stages in the overlapping policy and budget cycles.

- Problem identification: an analysis of the poverty situation.
- Policy Formulation: policy and programmes developed to respond to poverty situation.
 - o Prioritisation: policies and programmes prioritised within medium term expenditure frameworks and annual budgets.
 - o Implementation: budgets are executed each year
 - o Monitoring and reporting: assess whether spending was effective.
 - o Annual planning and budgeting: realistic plans which reflect an appropriate mix of inputs developed

- Evaluation: impact of policies and programmes assessed.

The full policy cycle generally spans over a longer time frame in order to allow the results of policy to take effect and the impacts to be measured, whereas the budget cycle is repeated annually⁶. It is therefore within the budget cycle that implementation unfolds and services are delivered.

Box 1.1 The policy and budget cycle



The first step in identifying policy entry points is in pinpointing gaps in the translation from one stage to the next. For example, policy may not respond appropriately to the poverty situation; budgeted allocations may not match stated policy commitments; or actual spending may not match either the amount budgeted, or the intent of the policy. In each of these cases, the disconnect between one phase of the cycle and the next raises a red flag that there is an underlying problem.

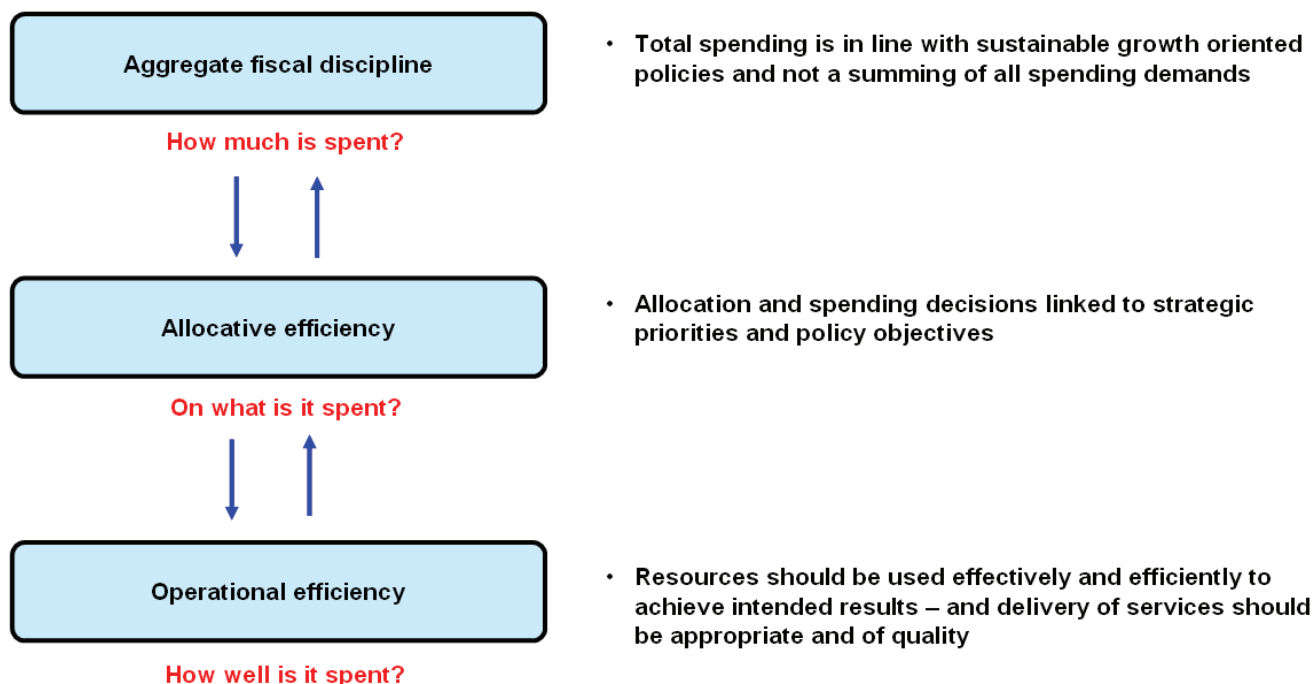
Measuring budget outcomes for children: the role of the public finance management system

The objectives of public finance management are to achieve the three high-level budget outcomes outlined in the box below: aggregate fiscal discipline; allocative efficiency; and operational efficiency. These essentially refer respectively to the size of the overall resource envelope; the distribution of spending shares across sectors (or ministries) and within these sectors to specific programmes; and, within this pattern of allocation to sectors or programmes, the level of outputs that are achieved for a given level of inputs.

These three levels are inherently inter-linked, so that changes to one level may impact the others. For example, achieving aggregate fiscal discipline may limit the ability to allocate resources towards priority areas. Alternatively, poor operational efficiency due to poor expenditure controls may in turn limit aggregate fiscal discipline.

⁶ Within the budget cycle there are of course further steps that could be outlined to provide more detail; this is just to provide the broad picture.

Box 1.2 High level planning and budgeting outcomes



Source: adapted from IDASA framework in IDASA (2003) *Monitoring Government Budgets to Advance Child Rights – A Guide to NGOs*, Cape Town

As an essential part of the public finance management system, Medium Term Expenditure Frameworks (MTEFs) are intended to improve on these three planning and budgeting outcomes through⁷:

- Improved macroeconomic balance, especially fiscal discipline;
- Better inter- and intra-sectoral resource allocation;
- Greater budgetary predictability for line ministries;
- More efficient use of public monies;
- Greater political accountability for public expenditure outcomes through more legitimate decision-making processes; and
- Greater credibility of budgetary decision-making (political restraint).

These final elements of credibility and accountability, while perhaps intangible, are crucial. PRSPs and MTEFs must therefore be seen as inherently political; rather than merely serving as technical instruments they may – if effective – be able to serve as instruments for building and reinforcing legitimacy and, hopefully, accountability⁸.

1.1.2 Understanding PFM as process: implications of a dynamic view

In order for the PFM system to achieve the three high-level outcomes, three essential dimensions of accountability are required:

- **Ownership⁹:** PRSPs must be owned not just by the executive or Ministry of Finance, but by government as a whole. Similarly, budgets and responsibility for implementation must be owned throughout all levels of government, from line ministry down to local level health and education units.
- **Incentives:** Individuals must have incentives to carry out their responsibilities. These are fostered through sanctions and rewards, and are normally put in place through pay and management structures within the civil service but also through reporting and accountability mechanisms at all levels. Where reports on execution and performance are de-

⁷ World Bank 2002: 4

⁸ ODI 2005; CABRI 2004; Alonso et al 2005

⁹ This also assumes that the interests of government are aligned with poverty reduction agendas.

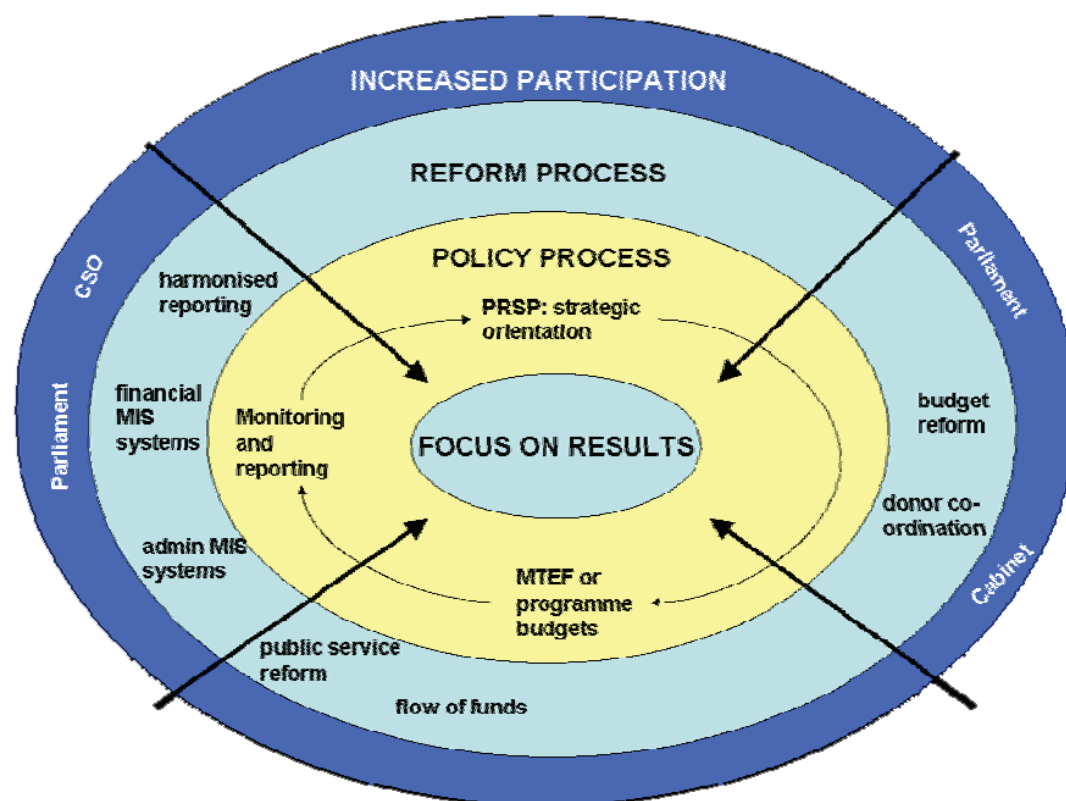
manded and scrutinised – by line ministry from local units, by Ministry of Finance from line ministries, or by Parliament from Ministry of Finance – the incentives to deliver are far higher.

- **Capacity:** Finally, individuals must have the ability and the means required to carry out the actions. This includes individual capacities – knowledge and know-how – but more often have to do with the capacity granted by the system – rules and regulations for engagement, decentralisation or deconcentration of responsibility, ability to generate pertinent information on inputs and outputs to hold to account, and so on.

In this way, accountability critically depends on ownership and incentive structures within government and between government and donors that are mutually reinforcing. In the context of policy and budget implementation, these three dimensions are absolutely essential; addressing one without addressing the others will mean that reforms are unlikely to succeed.

These three dimensions will form the basis for the analysis of the PFM system from the perspective of children's interests, in order to try to assess whether over the long term reforms have led to shifts in the ability of Government to deliver on its commitments to children.

Figure 1.1 Policy and reform processes: alignment around a focus on results



As shown in the figure above, the increased focus on results should in theory increase the demand for information in a virtuous circle so that the links between strategic orientation, resource allocation, and reporting grow ever stronger. In this iterative fashion, small changes over time can have a large impact on results. In practice, however, these three dimensions of accountability tend not to work in tandem, so that often technical reforms - for example to public finance management of the budget process or establishment of a management information system (MIS) - are undertaken without concomitant reforms to the dimensions of ownership and incentives. Similarly, the linkages between PRSPs, MTEFs, budgets, and monitoring and reporting are often weak, limiting the potential for capacity building and synergies from their integration. To the extent possible, the study will therefore aim to draw out not only assessments of capacity but also the more intangible – but crucial – dimensions of ownership and incentives and the impact these have on efficient and equitable policy implementation.

1.1.3 Principles of good PFM systems

When analyzing the Armenian PFM system and its impact upon children, a good PFM system should encompass the following principles:

- **Comprehensiveness:** The budget must encompass all activities of all levels of government, including those of non-commercial state-owned enterprises and extra-budgetary funds (and donor-funding) to get a complete picture of government revenue and spending. It is also important to consider both capital and recurrent expenditure together to ensure the right mix for sustainable service delivery.
- **Predictability:** The budget should be a dependable source of information regarding how much funding will be available to public-sector managers for the implementation of their policies and programmes. Therefore, revenue forecasting should be as reliable as possible and reallocations of expenditure within a financial year, as well as non-budgeted expenditure, should be kept to a minimum. Lack of predictability undermines strategic prioritisation and makes it hard to plan effective service delivery.
- **Contestability:** ensures that existing policies are subject to constant review and evaluation. Line ministry performance is thus also subject to continuous improvement. Countries should have a mechanism in place whereby Cabinet (or a Cabinet sub-committee) can review policies and expenditure trade-offs to ensure that priorities are reflected in the budget and that no ad-hoc "parachute projects" are instituted for short-term political gain.
- **Transparency:** information about budget decisions must be clear, accessible and communicated to the wider community. Both financial and non-financial information must be made available on a regular and timely basis so that decision-makers have the relevant information to guide their decision, legislators have information to hold the executive accountable and the public has information to hold government accountable for service delivery.
- **Accountability:** implies that decision-makers be held responsible for the exercise of the authority provided to them. There are two forms of accountability:
 - internal accountability where operational managers are accountable for spending finances and delivering services according to budget rules and regulations
 - external accountability where line ministries are accountable to Parliament and the citizens of the country for spending public funds in order to achieve agreed objectives
- **Legitimacy:** decision-makers who can change policy during implementation must take part in and agree on original policy decisions. In other words there should be political commitment to the budget which reflects government allocation of resources to policy priorities. Thus, the budget becomes a real tool for service delivery and not just a wish list. Expenditure policies need to be well-defined, properly costed and affordable with available resources.

All of these principles are essential for ensuring the focus on results, for each of the three dimensions of capacity, incentives, and ownership. Although the Public Financial Management Performance Measurement Report (known as the PEFA, RoA (2008)) report looks at the PFM system along these dimensions in much more detail, these principles will also be used here to identify areas where they have an impact on public spending from the angle of service delivery for children.

1.1.4 Methodology

Putting this diagnostic and dynamic approach into practice is, however, not always easy, especially given the limitations on the scale and scope of this exercise. The analysis here rests mainly on secondary data sources as will be outlined in more detail in each chapter for each case study, but which generally include the PRSP, sector policies and strategies, MTEFs, budget and budget execution data, sector reviews, public expenditure reviews, the PEFA and any other relevant sector analysis. These were supplemented by stakeholder interviews with key informants (see Annex B for list of persons met). The aim was to combine the understanding from the quantitative analysis with a more qualitative understanding of the underlying processes.

1.2 Structure of the report

The report proceeds along the following structure:

- Chapter 2 presents the situation analysis, outlining the key features of child poverty in Armenia upon which much of the rest of the analysis relies;
- Chapter 3 looks at fiscal space for spending on children, addressing both levels one and two of the high-level budgeting outcomes;

- Chapter 4 examines issues of operational efficiency in the three key sectors; and
- Chapter 5 summarises the findings by identifying the key entry points and recommendations for further work in this area.

2 Situation analysis: child poverty overview

Poverty takes many forms, whether through deprivations in income, health, nutrition, education, or even participation in society. Children experience poverty differently from adults and are affected by it more deeply. Deprivations experienced in childhood – especially in the first few years of life – have lifelong consequences in their physical, intellectual, and emotional development. Child poverty is therefore especially pernicious because it represents not only the immediate denial of a child's rights to survival, development, participation, and protection, but is also the cause of intergenerational transmissions of poverty. Deprivation is recreated in tomorrow's adults due to insufficient investments in the health, education, and overall well-being of today's children.

In understanding child poverty, therefore, it is important to understand the broad trends in consumption poverty at the household level as well as the way in which this impacts other dimensions of poverty through the imposition of financial and physical barriers to uptake of health, education, and other key services. These barriers are the product of both household-level factors as well as the supply of services including geographical proximity of facilities, pricing policies, and the quality of care, all of which will be addressed in this chapter.

2.1 Trends in income and consumption poverty

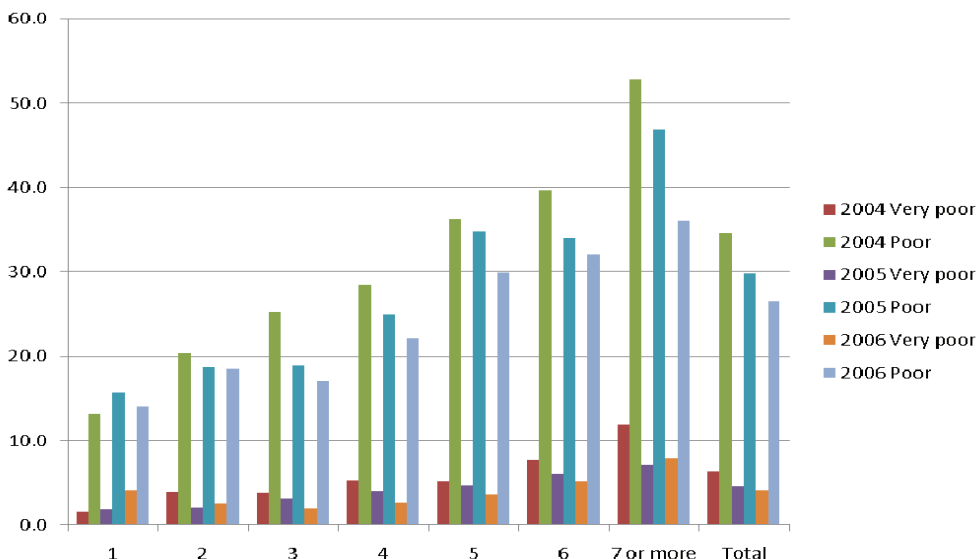
Poverty in Armenia has fallen rapidly over recent years, from 35% to 27% in just three years from 2004 to 2006. There are however still wide disparities in the incidence of poverty according to household size and characteristics as well as geographic location, as will be outlined below.

Poverty by household characteristics

Children under five are the age group with the highest level of poverty overall, and this holds across time periods (see Annex Table C.1). In 2006, 5.6% of children under five were classified as very poor and 35.5% of children under five were classified as poor. Poverty incidence among children aged 6-14 years is lower, with 4.3% very poor and 26.3% poor; however, since a higher percentage of the population is in this age group, 6-14 year old children account for 13.9% of the poor. Out of the total number, children from 0-14 years account for almost a quarter of the poor, which is just slightly higher than their share of the total population.

Figure 2.1 below illustrates that poverty incidence is increasing with household size. While poverty incidence has been falling over time, the percentage of very poor increased for smaller households (1-2 members) from 2005 to 2006.

Figure 2.1 Poverty measures by household size, 2004-2006 (in %)



Source: ILCS for 2004, 2005 and 2006.

It is worth pointing out that this does not prove a causal link between household size and poverty; the data simply shows that poverty incidence is higher among larger households. When looking in more detail at the household composition, table 2.2 shows that poverty incidence in households with 3 or more children is 45.9%, compared with 35.7% and 33.2% for households with 1 or 2 children, respectively. Households with 3 or more children account for 3.6 % of the poor, and 2.1 % of the population. Thus, households with 1 or 2 children account for about 40% of the poor, while 56 % of the poor have no children.

Table 2.1 Poverty measures by number of children and elderly, 2004-2006

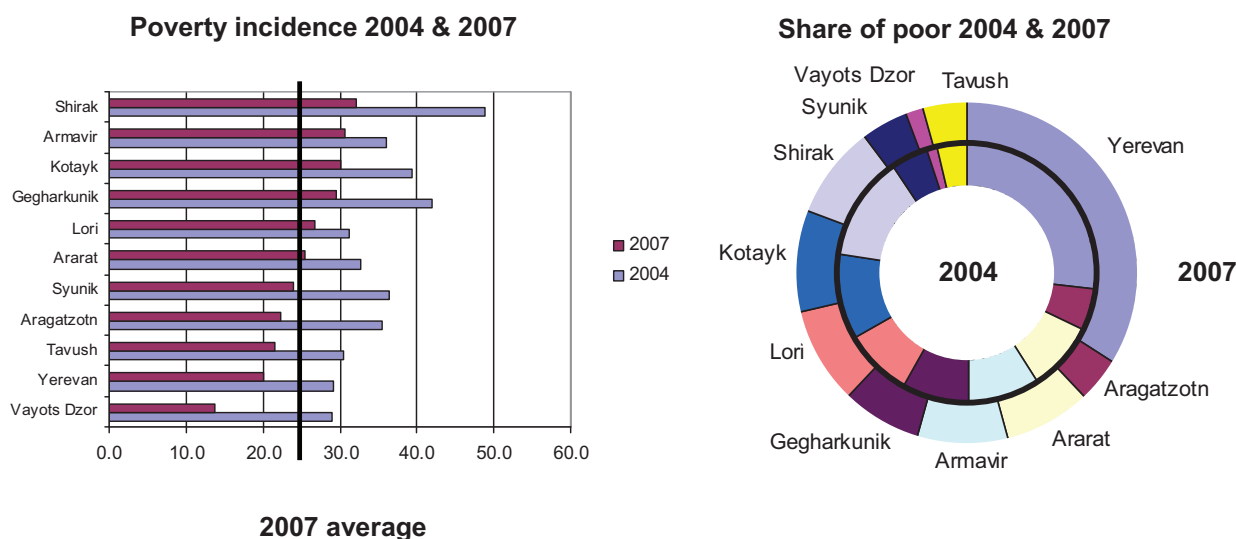
	2004		2005		2006		% of poor	% of population
	Very poor	Poor	Very poor	Poor	Very poor	Poor		
Number of children								
0 child	5.4	30	4.2	26.9	3.3	22.3	56.0	66.6
1 child	7.6	42.7	5.2	34.1	4.6	33.2	25.5	20.3
2 children	9.4	42.6	5.7	37.4	7.7	35.7	14.8	11.0
3 or more children	9.4	54.3	3.3	51.7	6.3	45.9	3.6	2.1
Number of elderly								
0 elderly	6.0	33.3	4.7	27.6	3.8	25.8	55.6	57
1 elderly	7.0	34.4	5.2	32.8	4.1	28.3	30.7	28.7
2 or more elderly	6.7	39.6	3.2	32.8	5.2	25.4	13.7	14.3
Total	6.4	34.6	4.6	29.8	4.1	26.5	100	100

Source: ILCS for 2004, 2005 and 2006.

Geographical Distribution of poverty

Both poverty and extreme poverty have reduced rapidly between 2004 and 2007. Poverty incidence nationally fell from 35% to 25% over the period, and extreme poverty fell from 6.4% to 3.8%. Digging below these aggregate figures, there are clear geographic patterns to poverty incidence in Armenia. As shown in the left-hand chart in Figure 2.2 below, although poverty levels have converged since 2004 there are nevertheless wide disparities between Shirak, Armavir, Kotayk, Gegharkunik, and Lori marzes which have above-average poverty, and Yerevan and Vayots Dzor which have much lower incidence. Given the differences in populations sizes across marzes, Yerevan nevertheless accounts for the largest number of the poor, and the right-hand chart in the figure below shows that this share has increased between 2004 and 2007.

Figure 2.2 Poverty trends by marz, 2004-2006



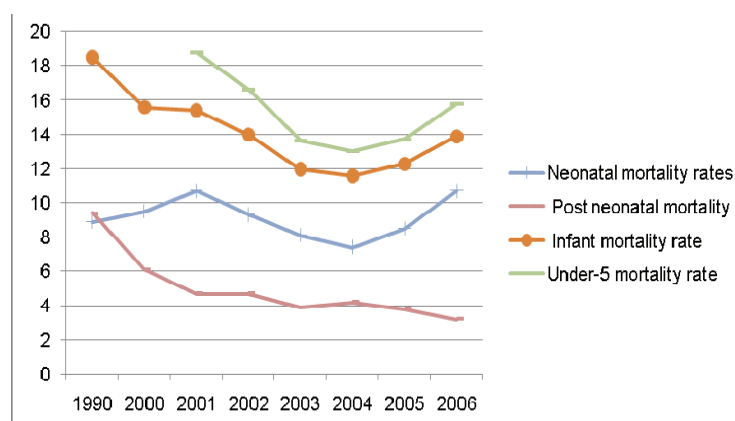
Source: ILCS 2004 & 2007

These geographic differences will be important to bear in mind throughout the remainder of the report.

2.2 Health

Although health indicators for Armenia generally compare favourably with other countries in the region, there have nevertheless been some worrying trends in child mortality in recent years, as shown in the figures below.

Figure 2.3 Mortality rates of children, 1990-2006, per 1 000 live births



Source: NSS (2007), p. 63.

Figure 2.3 above shows an increase in stillbirth, perinatal mortality (22 weeks of gestation-7 days after birth) and neonatal mortality (0-28 days), infant (0-1 year) under five mortality rates have been rising since 2004¹⁰. Combined with the decrease in post neonatal mortality (28 days-1 year), this indicates that the steep increase in deaths during the first 28 days of live are driving the increase in under five and infant mortality rates.

Roughly 51% of under five deaths are caused by conditions originating in the perinatal period (see Annex Figure D.1). About one fifth of children who die before the age of five die from congenital malformations, deformations and abnormalities. From this it follows that an increased focus on antenatal care and increase in neonatologists is crucial to bring down neonatal mortality.

2.2.1 Health system¹¹

Armenia has inherited a health system following the centrally managed *Semashko* model which guaranteed universal access to care to all citizens. Following the dissolution of the Soviet Union, Armenia's health system has undergone substantial restructuring. Since 1997 reforms have focused on three areas: decentralisation including devolution and privatisation; implementation of new approaches to health financing; and optimising existing health resources to achieve greater effectiveness.

The responsibility of service provision, ownership, and management of primary and secondary facilities has been devolved to regional (marz) level governments, and some rural outpatient clinics are under the responsibility of local level governments. The Ministry of Health remains responsible only for tertiary level facilities.

At the same time, financial responsibility was decentralised from governmental to facility level, as health units were established as State Non-Commercial Organisations (SNCOs), Closed Joint Stock Companies (private entities owned by the Government) and some of them are partially or fully privatised. User charges were introduced as well as a Basic Benefits Package (BBP) which consists of a list of services that are publicly funded for the whole population. Further, it determines under which criteria certain groups are entitled to free health care services. Annex C presents a list of services covered under the BBP and as well as who is entitled to free health care. Facilities have discretion over their budgets, through price-setting of services not included in the BBP to generate own-revenue, and to decide on staffing and conditions of service, as well as purchases of equipment and capital investment.

In 1998 the State Health Agency was established as a semi-autonomous entity under the Ministry of Health to monitor the effec-

¹⁰ WHO (2008) highlights that the increase in stillbirth, perinatal and neonatal mortality is partially due to transition to a new WHO classification. It is also worth pointing out that the mortality rates recorded in the ADHS are substantially higher than the ones collected from administrative data by the National Statistical Office.

¹¹ Hakobyan et al. (2006) present an excellent review of health sector financing. This part draws on their report.

tive utilization of state budgetary allocations to health from the Ministry of Finance. Its main functions are to contract health care providers for the delivery of publicly financed health services, report on activities and signed contracts, allocate funds, supervise the quality and quantity of services contained in the Basic Benefit Package (BBP), and participate in the development and introduction of standards, norms, modern approaches to organization, management and financing of health services (WHO, 2006).

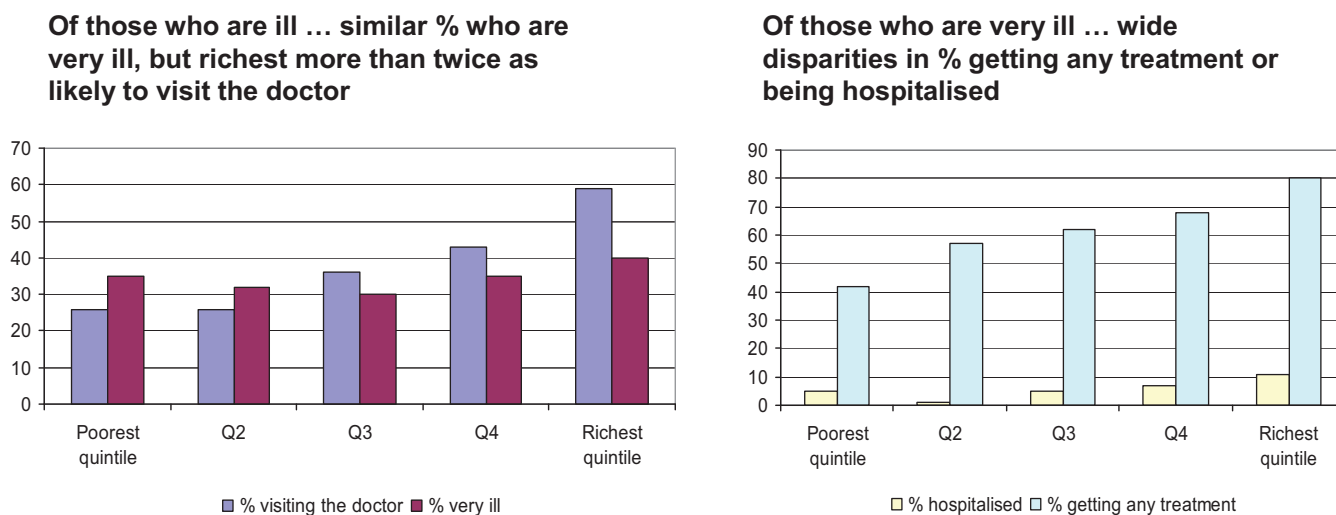
However, the powers of the SHA are rather limited. First, it has to contract with every licensed health provider, not allowing for performance-related contracts. Second, the Ministry of Health sets the price payable to facilities for services included in the BBP for the State Health Agency, further decreasing the State Health Agency's authority. Third, it is not possible for the SHA to shift funds across programmes. The ongoing 'Armenia Health system modernization project' by the World Bank aims to strengthen the capacity of the SHA.

2.2.2 Uptake of health services

Compared to other countries in the region, Armenia has very low utilisation rates of outpatient and inpatient services. Average rates for inpatient admissions in the region range between 15 and 20 per 100 inhabitants, whereas in Armenia the figure is less than 8. Outpatient admission rates are also roughly half the regional average, at 3% per year compared to 6-10%.

Financial barriers to access are a major contributor to these rates of uptake, leading to wide disparities between quintiles in terms of use. According to 2004 ILCS survey data, individuals across quintiles were roughly as likely to have reported being sick (at around 20%), but of those reported sick only 45% of the poorest quintile were treated compared to 95% of the richest, with about half of these across quintiles being treated formally (by a doctor or in a polyclinic), with the other half receiving informal treatment by a healer or at home. The figure below shows further detail on uptake of care, emphasising the same trend whereby the richest quintile is around twice as likely to take up care than the poorest for both visits to the doctor (if sick) or hospitalisation (if very ill).

Figure 2.4 Variation in uptake of care between quintiles



Source: ILCS 2004, calculated by Angel-Urdinola et al. (2006: 28).

Unfortunately the Social Snapshot for 2008 does not include these same calculations so it is not possible to understand more recent trends. Given the extensive changes to primary provision and the BBP during that time, it would be extremely interesting to see what changes in uptake patterns can be seen in the household survey data

A major contributor to these financial barriers is the level of reimbursements made by the State Health Agency and the low wages of health care staff. As will be discussed further in later chapters, reimbursements are too low to cover costs incurred by health facilities, leading to a high share of out-of-pocket payments requested for services that should be free under the BBP and especially for hospital care¹².

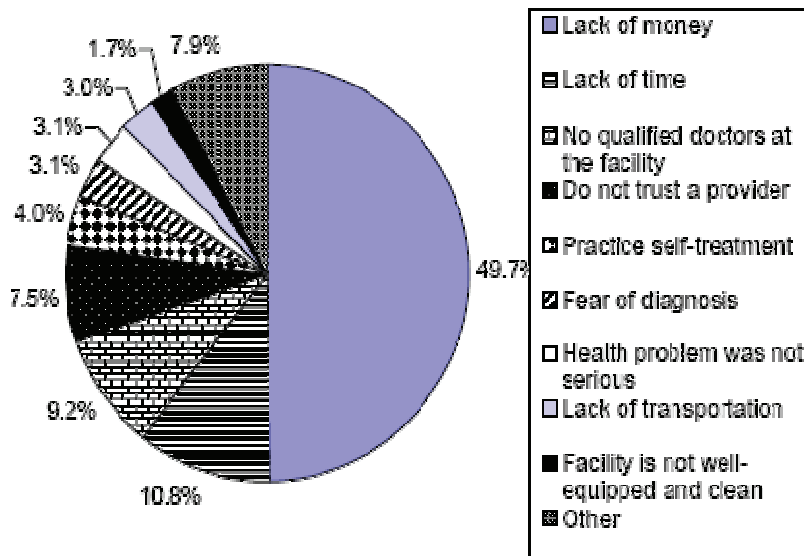
These informal payments are significant, though figures vary as to the magnitude. A study from 2002 found that about 93% of

¹² It is important to note that the low ratio of reimbursement to costs has two causes: first, reimbursements are not enough to cover the cost even if services were delivered efficiently; second, because of the inefficiencies, the gap between reimbursements and actual cost is even wider. Thus, optimization has the potential of narrowing this gap even if reimbursement amounts are not increased.

out of pocket payments are informal payments to providers¹³, whereas 2004 ILCS data showed that as a percent of total medical treatment informal payments were 6.3% for the poorest quintile and 10.7 for the richest. As a percentage of the total hospital bill these figures were much higher: 40% for the poorest quintile and around 25% for the other 4 quintiles (Angel-Urdinola et al (2006: 33)¹⁴. As a result, utilization of health services has decreased drastically over time.

A recent survey showed that 49.7% of respondents gave 'Lack of money' as a reason for not seeking primary health care.

Figure 2.5 Reasons for not seeking primary health care



Source: Emerging Markets Group, Ltd. (2006), p. 42

Quantitative evaluations of the BBP have not yet shown a strong impact on utilization rates. Chaudhury et al. (2003) use data from the 1996 and 1998/99 Armenia Integrated Survey of Living Standards, the period directly before and after the introduction of the BBP. They find that utilization rates have declined despite the introduction of the BBP, and this was equally true for the rich and the poor. The sharpest drop was noted for families with more four or more children. Analyzing data from the 2004 Armenia Integrated Living Standard Survey (ILSC), Angel-Urdinola and Jain (2006) show that although poor individuals covered under the BBP (through registration in the family benefits system) paid less per outpatient visit, utilization among BBP beneficiaries remains low. These figures, however, refer to the very early period long before the significant expansion in 2006.

Uncertainty around BBP benefits may have been a factor in this, as there were frequent changes made. Results of a 2004 survey showed that among households for whom at least one family member was a beneficiary, only 40% were aware of their entitlements under the BBP. On the other hand, awareness of the regulations generally entailed greater uptake: those who were informed were 4.5 times more likely to take up care. (Atshemian 2005 cited in Hakobyan et al 2006: 35).

This data is, however, quite dated and given the wide range of changes that have occurred, a new analysis of the more recent surveys is urgently required. This is particularly true given the fact that recent National Health Accounts found that unofficial user fees were found mainly at the level of hospital care, suggesting that cost barriers to access are likely to be most binding at this level now that the BBP has been in place and funding to primary facilities has increased steadily in recent years.

In 2006 the health sector was found to be characterized by overcapacity of health care facilities, low reimbursement of services provided under the BBP, high informal payments, overprovision of specialists relative to physicians at the primary level, a weak system of referral and low salaries of health care personnel. The optimization through decentralization and closure of facilities led to increased inequity in access to primary level care, in particular for rural inhabitants. For patients, decentralisation was associated with corruption, declining access to services and diminishing quality of services¹⁵.

¹³ Aristakesyan 2002 cited in Hakobyan (2006), p 47.

¹⁴ Interestingly, users who receive benefits under the BBP were less likely to pay informal payments compared to those in the same quintile not covered by the BBP.

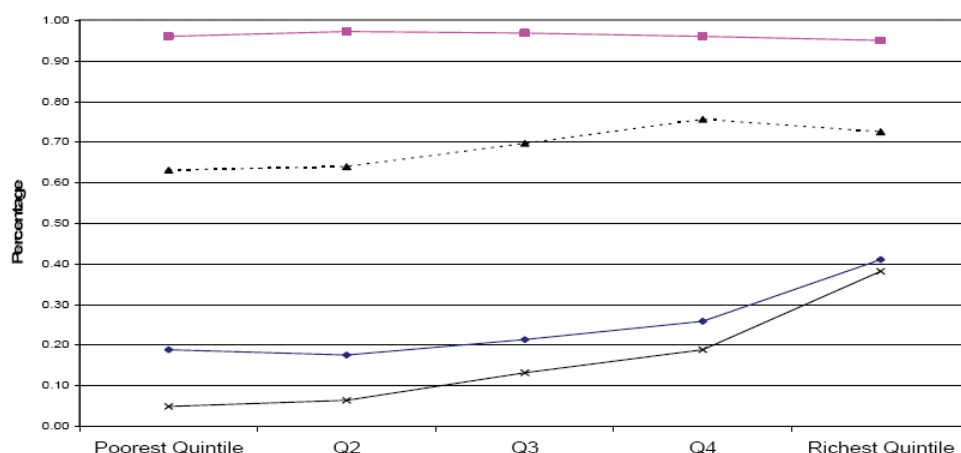
¹⁵ Hakobyan et al. (2006), p 31.

It will be essential to re-assess these aspects in 2009 at primary, secondary, and tertiary level in order to better understand the impact of reforms that have been undertaken in the past several years and to identify the remaining steps that will need to be taken to improve equity, quality of care, and efficiency of service delivery in future.

2.3 Education

While enrolment in basic education is similar across wealth quintiles at close to 100%, there are significant differences for enrolment in pre-school, upper-secondary and tertiary education, as shown in the figures below. Pre-school enrolment is below 20% for the poorest quintile, increasing slowly to just over 40% for the richest.

Figure 2.6 Inequities in net enrolment in preschool and college (2004) are significant between richer and poorer households.



Source: Angel-Urdinola et al. (2006:10).

2.3.1 Education system

Armenia's Education sector underwent two major reforms in the past decade¹⁶. The first stage (1998-2002) entailed a decentralization of general education and a corresponding restructuring of financing flows, while the second stage (2002-ongoing) focuses on the content of general education. As a result, in the academic year 2001/02 compulsory education was extended to nine years¹⁷. Further, the approval of the General Education National Curriculum Framework in 2004, led to an extension to 12 years of general education¹⁸. The three levels of the new curriculum, whose implementation started in the academic year 2006/07 consist of (i) 4 years of primary school, (ii) 5 years of middle school, and (iii) 3 years of high school.

Following these reforms, all levels of government are involved in delivering education services in Armenia. Local level governments are responsible for delivering pre-school education, while primary, secondary, professional and technical education services are delivered jointly by the regional and local governments. Central government authorities deliver higher education and trainings, together with central government authorities and regional administration.

Another feature of the decentralization process was that schools have been turned into State Non Commercial Organisations (SNCOs)¹⁹, granting them increased authority and responsibility to manage their funds. Per capita funding was introduced first in a 154 pilot schools in Yerevan City and Kotayk and Vayots Dzor marzes, and then gradually expanded²⁰.

In terms of pre-primary education, since it became a mandate of local level governments in 1996²¹, many communities have continued to lack the necessary funding flows to fulfil these responsibilities. There was a significant drop (68 percentage points) in enrolment at pre-school level between 1991 and the 2005 level of 22% (PER 2008:6).

16 Harutyunyan et al (2008), p. 35.

17 World Bank (2008), p. 3.

18 Harutyunyan et al (2008), p. 13

19 Law of the Republic of Armenia on Non-Commercial State Organizations (2001).

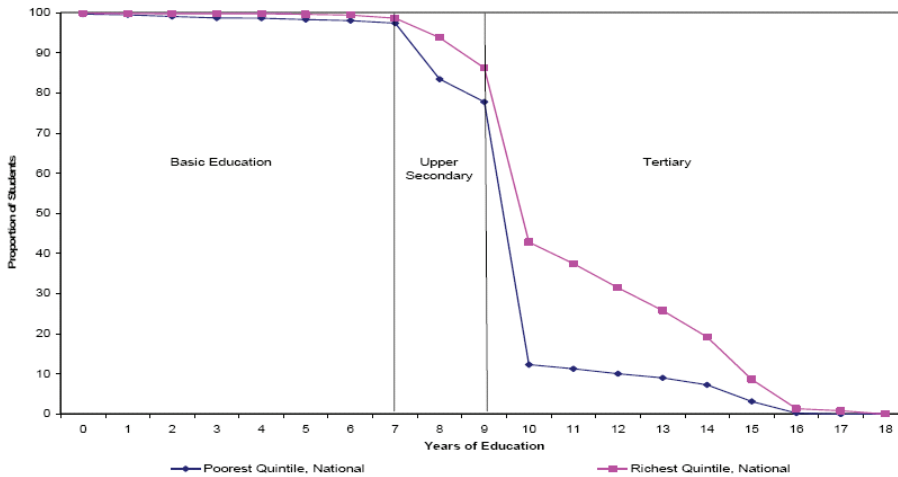
20 World Bank (2008), p. 11.

21 Art. 41 of the RA Law on Local Self-Government (1996).

2.3.2 Uptake of education services

Although net enrolment rates for basic education fall slightly below 100% for some groups, the figure below shows that this is largely because of children who start the first year of basic education either early or late. Age-specific completion rates in Figure 2.7 below show that only a very small number of children do not complete basic education. At the upper secondary level, however large differences emerge between the poorest and richest quintiles, with gaps widening through the tertiary level.

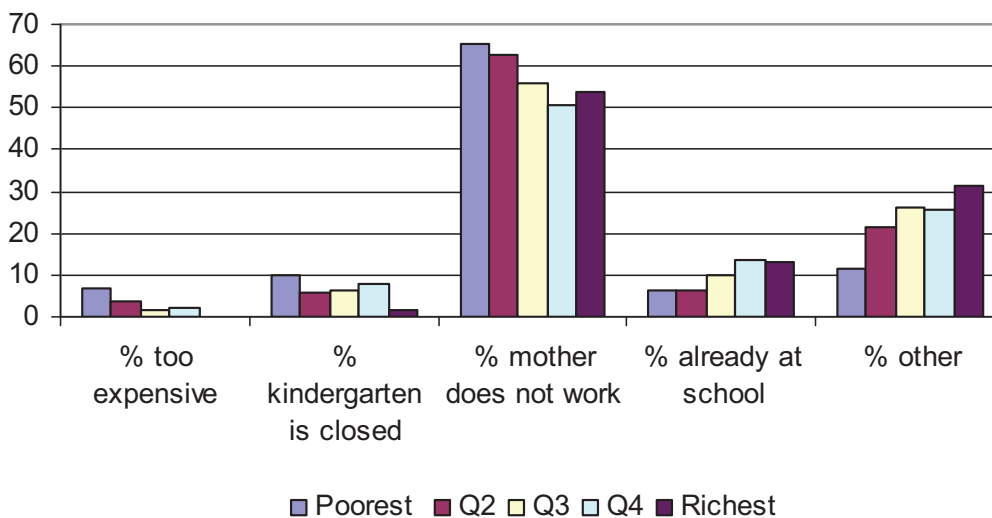
Figure 2.7 Comparison of age-specific completion rates across wealth quintiles, 2004



Source: Angel-Urdinola et al. (2006), p.17.

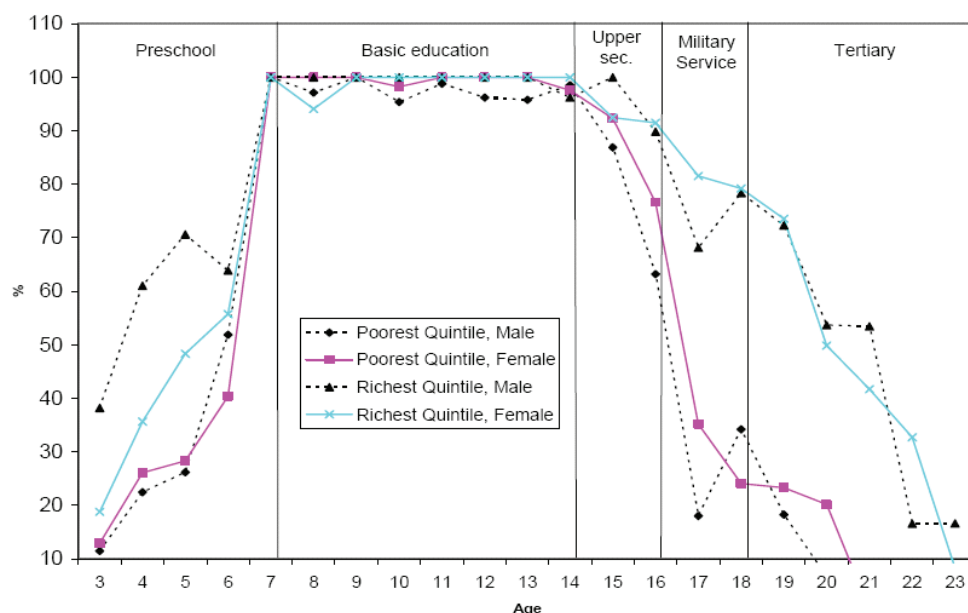
In terms of differences in pre-school uptake, the gap between poorest and richest quintiles might at first glance imply that financial barriers to access are a major factor. Survey data on the reasons for non-uptake of preschool education however reveals that for all quintiles the main reason is that the mother is not working outside the home. Cost does seem to be a factor for the bottom two quintiles, while the lack of physical access (where kindergartens are closed) is somewhat more important for the richer quintiles than the poorest. A significant number of children are already at school, though again this trend varies between the poorest and richest quintiles, as is also illustrated in Figure 2.7. While 80% of children in Yerevan live within 1 KM and 97% live within 3KM of a preschool, these figures are only 45% and 61% for rural areas respectively, whereas 35% of children are more than 6KM from the nearest preschool²².

Figure 2.8 Reasons for non-uptake of preschool education by quintile, 2004



Source: ILCS 2007

22 Using 2004 ILCS data, cited in Angel-Urdinola et al (2006:13).

Figure 2.9 Enrolment Rates by Age and Gender in Armenia, 2004

Source: Angel-Urdinola et al. (2006: 11).

2.4 Social protection

The social protection system in Armenia consists of many different programmes, but these can be summarised under a few main headings:

- **Social insurance:** including old-age, disability, and survivor's pensions as well as sickness, maternity, and unemployment benefits;
- **Social assistance:** including the family poverty benefit, the social pension (non-contributory assistance to 'vulnerable' groups (such as the elderly without a normal pension, invalids, etc), on-off payments to families with newborn children; child care allowance for children up to two years of age, and public works employment; and
- **Social services:** including institutional care for individuals including children without birth parents or those from destitute or dysfunctional families, children and adults with disabilities, home-based services for the elderly, and medico-social rehabilitation for veterans and the disabled.

In terms of scale, at least 1/3 of households receive some type of social protection benefit. Among these the largest are pensions and the family poverty benefit. An analysis of 2002 data in the 2003 PER found that the poverty family benefit was generally found to be a well-administered and targeted programme, with a significant positive impact on consumption in beneficiary household consumption. Between 1997 and 2002 the system underwent reform to increase the targeting efficiency (reducing both errors of inclusion and exclusion), and decreasing the benefit amount (World Bank 2003: 129-130).

More recent survey data from the ILCS show that while targeting indicators remained favourable overall there is also a significant degree of errors of inclusion, with 10.5% of the non-poor receiving family benefits. Inclusion has increased substantially, especially among the very poor, with 40.6% receiving family benefits in 2004 compared to 64.6% in 2007. Coverage of the poor is lower, however, with only 28.6% receiving the benefit. The average size of the benefit has more than tripled in real terms between 2002 and 2007, rising from AMD 6,700 to AMD 17,500 (in current prices) over the period, and the number of benefit recipient families has more than doubled (National Statistical Service (2008: 108 and 156).

Aside from these monetary benefits, another important reform related to children is the policy of deinstitutionalisation. As part of these efforts, pilots in several marzes have been established to develop a system of foster care.

3 From policy priorities to resource allocation: fiscal space for children's interests

The prioritisation that takes place within the budget is of utmost importance, as it is where the crucial trade-offs are made between these many competing priorities. For the budget to adequately balance the need for both aggregate fiscal discipline as well as the priorities outlined in the PRSP a strong budget process is required. The functioning of the PFM system therefore has a determining impact on both of the first two high-level budget outcomes, ultimately setting the boundaries on the fiscal space that is made available for children's interests.

This chapter will begin with a definition of fiscal space. It will be followed by a section providing the building blocks for understanding the budget process in Armenia. The third section will then provide an analysis of aggregate fiscal discipline and the trends in the overall resource envelope, followed by an analysis of the relative prioritisation of children's interests and allocative efficiency of the budget. The final section will then take a look at the budget *process* to provide an understanding of the role of the PFM system in the determination of fiscal space for children.

3.1 Defining fiscal space for children

In the international human rights instruments, obligations to fulfil particularly economic, social and cultural rights are closely connected to the notion of fiscal space. Governments are obliged to fulfil children's rights to education, health, social security etc to *the maximum of its available resources*, in other words to the point where it has no fiscal space for spending on children in the budget. However the concept of fiscal space often tends to be rather fuzzy and it is therefore important to define it more clearly.

For the purpose of the current exercise we can define fiscal space loosely to mean the room government has to manoeuvre in the budget. More technically, fiscal space is best defined as:

"the availability of budgetary room that allows a government to provide resources for a desired purpose without any prejudice to the sustainability of a government's financial position." (Heller 2005: 3).

Governments can create fiscal space through raising additional revenue from tax measures or making tax collection more efficient; borrowing resources from domestic or external sources; the receipt of grants from external sources; or the re-prioritisation of resources away from lower-priority expenditures towards higher-priority ones. These decisions about fiscal space are inherently linked to sustainability – the future ability to finance desired expenditure, service debt obligations, and ensure solvency. A complex array of considerations is therefore involved, including:

- **The costs of borrowing and the sustainability of debt payments over time.** These trade-offs are particularly important – if difficult to measure – for investments in health and education which would be expected to increase GDP and hence future government revenue. In all cases, however, current borrowing reduces future fiscal space because it increases interest payments and therefore lowers discretionary spending. **The medium- and long-term implications of increased spending.** Many spending decisions in the current period create obligations going forward, whether through the explicit reduction in discretionary spending (through increases in statutory pension payments, for example) or simply because it is inefficient or politically difficult to scale-back programmes once they have begun. For example, capital expenditures often have counterpart funding requirements attached and also imply the need for ongoing recurrent spending in future periods (especially in health and education, for drugs, textbooks, etc), and increases in salary are rarely easy to scale-back once they are made (whether through increases in the number of workers or the size of the pay packet).
- **The predictability and sustainability of external grants.** Where these are not assured, scaled up programmes may not be easily cut back even if grants do not materialise, so that current spending may reduce fiscal space in future if the government is forced to replace grant funding with domestic revenue.

Bearing all these factors in mind, fiscal space essentially involves two separate policy decisions, the first over fiscal policy (the level of revenues raised and used) and the second over budget policy (the distribution of revenues raised). It is therefore useful to separate the research question into these two parts:

- What is the size of overall government spending, and is this unduly constrained?
- Within this overall resource envelope, is spending on child rights related programmes prioritised relative to other spending?

Looking at these two questions separately allows a more nuanced understanding of the policy choices involved and therefore a more useful identification of the potential entry points. By approaching it in this way it is immediately clear that, although advocating for 'more fiscal space' (i.e. more spending) for children may seem like an obvious strategy for child rights advocates, in practice this must be accompanied by clearer answers to critical questions such as: from what sources could additional spending be allocated towards children's interests? What implications do these spending commitments have for fiscal space in the future? How sustainable are these expenditures?

In practice it is difficult to formulate definitive opinions on fiscal space (in particular issues of sustainability) without falling back on theories of economic growth and development or making value judgments with regards to what should be considered 'worthwhile' spending. The approach used here is to return to the high-level budgeting outcomes presented in the introduction, as the two components of fiscal space correspond to the first two levels: the size and sustainability of the total resource envelope relates to the goal of aggregate fiscal discipline, whereas the extent to which children's interests are prioritized within the budget relates to allocative efficiency (the extent to which resource prioritization matches with policy commitments). Within these two areas there are some specific pieces of evidence that will be used in the assessment:

Aggregate fiscal discipline and evolution of resource envelope

- Changes in the fiscal aggregates expressed as a percentage of GDP to provide a picture to the reader of the size of government in the economy, the efficacy of tax collection and the dependence on borrowing and aid flows;
- Accepted international summary indicators for when a government would be considered to be in a fiscally precarious position;

Allocative efficiency: distribution of resources across policy priorities

- The distribution of resources (both budgeted and actual) across different ministries. Given that our interest is in spending on children, the analysis of the distribution of spending assumes that spending on public goods and services that do not directly benefit children should be balanced with spending in areas that do, such as health, education, water and sanitation, social protection, gender issues, etc;
- The distribution of resources across economic categories (salaries, goods and services, capital, interest payments) to assess the impact and sustainability of commitments for spending on children's interests (i.e. to assess whether development spending has occurred at the expense of necessary recurrent spending);
- The distribution of resources across sub-sectors within health and education to gauge the extent to which priorities within sectors matches with the policy commitments outlined in the previous chapter.

3.2 Understanding the budget process in Armenia

Before proceeding to the analysis of the budget, this section will briefly outline some of the key features of the budget in Armenia, including the administrative context, components of the budget, the budget process, and the different types of budget data available.

3.2.1 Administrative context

The territorial administration of Armenia is conducted through marzpets (regional governors) appointed by the central government to implement national policies of the government through the coordination of rural and urban municipalities. Armenia has 926 communities, of which 60 are urban (including the 12 districts of Yerevan) and 866 are rural (comprised predominantly of poor communities with populations of less than 1000)²³. Local self-government is administered through municipalities and regulated by the same law, irrespective of population size²⁴. They are elected legal entities having a territory, population, property, administration bodies and budget.

²³ National Statistical Service (2008), p. 17.

²⁴ Municipality populations range from the largest urban municipality at 151,000 to the smallest at 300, and rural municipality populations from 9,700 inhabitants to 30.

3.2.2 Components of the budget

Fiscal functions under state and community budgets are fulfilled through the treasury system (subdivision of the Ministry of Finance and Economy, with territorial offices in the regions and Yerevan). The treasury system operates on the basis of a single unified account, and serves as an agent for receiving reports and statements, as well as a tool for implementing single financial policies; it also provides communities' with their financial resources and accounting systems, facilitates the implementation of community budgets and provides methodological instructions on community budget implementation.

Consolidated Government Budget

The consolidated government budget has three components: the state budget, community budgets and social insurance. Since 2008, the social insurance fund has been incorporated as part of the state budget.

State Budget

The state government continues to provide a very large share of services, with only a few functions actually provided by the local or regional government. In law there are 19 powers delegated to the local communities, although insufficient funds, weak capacities, poor governance and undefined delivery mechanisms prevent the implementation of most of these powers²⁵.

Community budgets

Community budgets are made up of their own revenues, borrowings, and official transfers from the state government. The process of political and fiscal decentralisation has only partially been undertaken in Armenia and compared with other similar countries in the region, local budget expenditures are a small proportion (5.7% in 2002) of the overall budget expenditures.

Communities' *own revenues* as a percentage of official transfers has decreased in recent years to around a 40:60 split, as there have been larger (and more consistent) official transfers provided by the state government. The main sources of finance are land tax and property tax. Revenues to the communities from income tax stopped around 2000/2001 as the government designated income tax as entirely state revenue, with the intention of replacing the forgone revenue with increased subsidies. Although there are provisions for income and profit taxes to be levied once again at the community/municipality level, this has not occurred in practice. The main reason being the state tax authorities have not completely transferred the necessary information contained in state property and income tax databases to the communities, because of concerns with corruption and bribery at the community/municipality level²⁶.

A further source of own funds that communities receive are receipts from all privatisation proceeds of real estate (except land) of 30% which while they have increased significantly in recent years will at some point end. In terms of duties and fees, there are also provisions within the law for communities to generate revenues by charging for services, although this is constrained by the limited number of services that communities actually provide. Some community budgets are spent entirely on the salaries and mandatory social insurance of public servants without any actual services being provided by the communities.

If the community council decides to approve a budget deficit for the year, then budget credits and loans are extended by the state. *Debt financing powers* are also provided for in legislation but have rarely been used.

In terms of official transfers, the Law on the Budgetary System of Armenia governs the distribution of revenues from the consolidated budget to the community budgets, and the Law on Financial Equalisation is an attempt to provide discretionary funds to communities in a transparent manner that can be applied based on their climatic, demographic, geographic, or economic needs. Stemming from these two pieces of legislation, the two main types of transfers are Subsidies ('financial equalisation and other'); and 'Subventions'.

- **Financial Equalisation Subsidies** - Allocated to community budgets to cover recurrent costs, these are discretionary funds allocated according to the 'Financial Equalization Law';
- **Other Subsidies** – Allocated to support funding of recurrent expenditures, these are also discretionary; and
- **Subventions** – Very small allocations used infrequently (totalling only around 0-3% of total official transfers), these are for specific purposes (i.e. non-discretionary) and targeted programs of the communities to fund capital expenditures.

25 According to 'Local Self-Government Reforms in Armenia', 2004, local governments only fulfil on average around 30% of their delegated powers.

26 The ways of local self-government system development in the Republic of Armenia, 2005.

The total amount of subsidies available to local budgets is defined in the law on Local Self-Government and has to be no less than 4% of the aggregate revenues of the consolidated budget of the previous year. From this sum, subsidies are provided to municipalities based on formulas that distinguish between those that have populations of more than 300 people and those that have less than 300 people. For small communities of less than 300 people, the subsidies are estimated in proportion to the size of the population. For larger communities, the formula is more complicated and takes into consideration the capacity of the municipality to raise revenues within the community (land and property tax) and the size of the population. In practice, the actual share of subsidies as a percentage of community budgets ranges from 37.5% to 50%, with the remainder coming from land and property taxes raised by the community as well as any subventions.

The largest areas of spending are on recurrent staffing costs with few provisions made for capital expenditure²⁷. This is evident in the decreasing trend of resources being provided to the delivery of services (pre-school groups, communal and household services, culture, sports) as compared with an increasing administrative budget²⁸.

3.2.3 Budget process

The Budget Process itself lasts for about two years, beginning in June of the previous year and ending in May of the following year (when the budget execution report is approved), with the fiscal year starting on 1 January and ending on 31 December.

Between 2000 and 2008, state and community budget formulation and execution were presented according to the GFS 1986 standards, by functional (including sub-functional), economic and administrative classification²⁹. From 2008 the state budget will conform to GFS 2001 standards, and this will be applied to community budgets from 2009.

State budget³⁰

There are two main phases to the state budget preparation. The first is the preparation of the MTEF, which has been in place since 1999. This initially served mainly as a mechanism to articulate a realistic macro-fiscal framework, with a limited number of key ministries undertaking pilot exercises in sectoral MTEFs. This has now been extended to include all budget agencies (i.e. all ministries as well as Marzes).

The second phase is the annual budget preparation. Currently the MTEF and the annual budget are separate; the MTEF is presented in an annex to the budget however it is only the annual Budget Law that is approved by the National Assembly.

There is no fixed budget calendar; the budget process begins at the announcement of the Prime Minister; at this point the major deadlines for the preparation of the MTEF and state budget proposals are set out. Methodological guidance including budget ceilings is provided by the MOF to state bodies at least six weeks ahead of the deadline for budget submissions to the MOF, normally in August. The state budget proposal is then discussed within Government in September, and the final budget proposal is sent to the National Assembly on the 3rd of October by a constitutional requirement. The national Assembly then has roughly six weeks to review and debate the draft budget law before approval (in the last three years by the end of November).

The major reform undertaken in the budget/MTEF process is the introduction of programme budgeting. After a pilot of key ministries, the programme budgeting approach has now been extended to all state bodies for the 2009 budget round. The aim of the programme budgets is to improve the strategic linkages within the budget, so that resources are allocated against specific outcomes. It is, however, important to note that the new programme budget format used in the MTEF does not currently match that of the state budget, which continues to be set out according to the same functional classification. In the 2009 round this has meant that state bodies have had to prepare both their programme budget (in the 3-year MTEF) and their annual budget in the format of the state budget. Programme budgets are therefore to be submitted only as annexes to the draft budget law for the 2009 budget, however it is envisaged that for the 2010 budget these will be harmonised.

27 According to 'Local Self-Government Reforms in Armenia', 2004, 80% of communities do not have capital budgets.

28 The ways of local self-government system development in the Republic of Armenia, 2005.

29 Ministry of Finance of the Republic of Armenia (2008).

30 This section draws on the PEFA, RoA (2008)

Box 3.3 ARDEP pilot in Gegharkunik and Tavush marzes

DFID funded ARDEP has supported Gegharkunik and Tavush regional administrations in developing capacities for pro-poor planning and implementation. The work has been construed around design and implementation of medium-term Marz Development Plans (MDP), annual work plans, and monitoring and evaluation systems.

MDPs are strategic documents of the two marzes designed on the basis of bottom-up and participatory approaches, compliant with the PRSP (now SDP), MTEF and national sector strategies, at the same time influencing the national policies through setting out better regional and community perspectives. The MDPs have been discussed in accordance with the existing budget processes, and incorporated in the State Annual Budget Laws for 2006, 2007 and 2008. It is desirable that these practices are sustained and, when other marzes produced their plans, the latter were also incorporated in the annual budget laws.

The MDPs form the basis for MTEF submissions of the two marzpetarans. The AWP is a means to follow implementation of the MDPs on an annual basis, and the M&E systems in place are to identify and address weaknesses and shortcomings of the planning activities in the previous periods.

The comprehensive M&E framework established, piloted and efficiently operated in the two marzes is based on the PRSP M&E framework enriched with community and regional data collected, analysed and operated within institutional framework established with support of ARDEP. It consists of four main components: policy review, review of indicators, participatory M&E, and impact assessments, i.e. a combination of internal and external M&E approaches, which allows improved efficiency, transparency and awareness of operations of the regional administrations.

The ARDEP experience has been approved by the Government in September 2008 (See: Government Decree 38-A, September 18 2008) for roll out across Armenia, which will complement the current sector-based distribution of resources with territorial dimension.

Community budget process

The head of the community drafts the local budget on the basis of annual objectives stated in the community's three-year development plan and then submits the draft budget to the community council either before or after approval of the state budget. The community council can then make amendments or additions to it before finally approving it. In practice the capacity to prepare budgets is often not in place and thus the budget is often undertaken by a finance officer at the governor's office. The community head is responsible for implementation of the local budget, and the local authorities exercise the full right to manage their own financial resources.

3.2.4 Budget data

The budget data presented in this and the next section originate from a number of sources:

- **Ministry of Finance Budget Execution Reports:** State Budget including on-budget external resources spent. The research team had access to budget and actual figures for 2006, 2007, 2008 (partial year execution).
- **Public Financial Management Performance Measurement Report:** Primary Spending (=State Budget minus external resources), available for 2005-2007 budget and actual.
- **Medium Term Expenditure Frameworks from various years:** Consolidated government expenditure, providing two prior years (actual and budget) plus the 3-year MTEF forecasts. Available from 2005-2008, with actual data from 2004 to 2006.
- **Community Finance Officers Association:** Reports on aggregate community budgets by functional classification
- **Lori Marzpetaran:** Data on community expenditures by functional classification, hospital and school revenue and expenditure data for 2007.

These sources are not always consistent, and therefore it is important to be aware of the differences between them in order to ensure trends are drawn from consistent and comparable series of data.

Table 3.1 Comparison of reported actual state budget expenditure on social sectors in 2006, in billion AMD (current prices), by different sources

	MOF budget execution reports	PEFA (primary spending) ^a	MTEF ^b	Education PER ^c	EDRC Website ^d
Total	477.9	433.5	481.2		481.2
Education	70.5	70.4	67.3	67.3	72.1
Health	35.9	35.9	39.3		39.4
Social Protection	52.1	51.9	52.3		52.3

Source: authors' compilation.

a PEFA, p. 24-25

b MTEF 2008-2011 p. 29, 70, 88, 130

c Education PER, p. 19

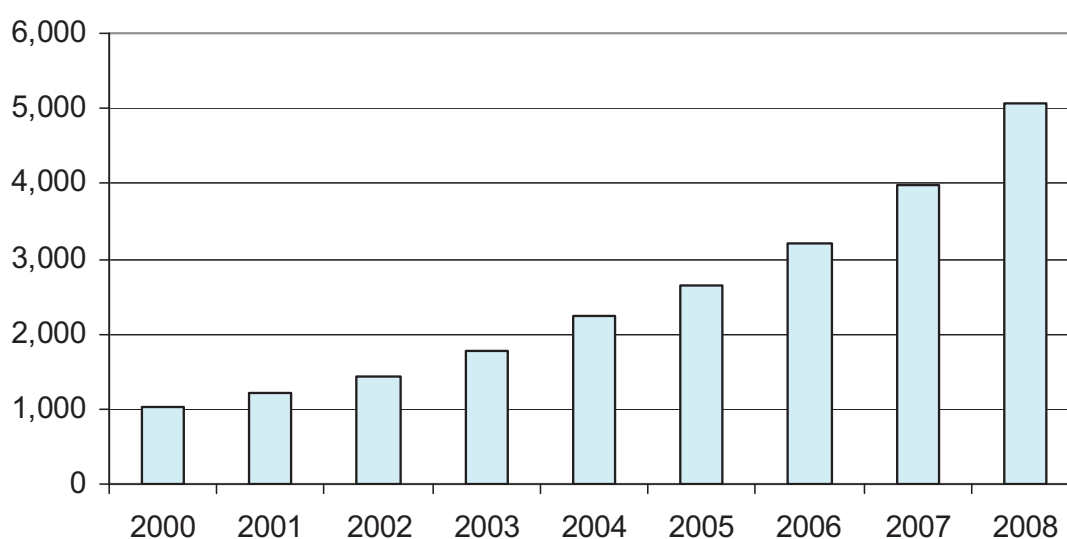
d <http://www.edrc.am/project.html?cat-id=68>, accessed October 2008

An analysis of these sources in terms of their reported values for 2006 *actual* expenditure shows that, as would be expected, the MOF budget execution reports and the PEFA are consistent with each other (with the difference being the MOF budget execution report reflects total expenditure and the PEFA reflects only primary expenditure). The MTEF, however, which is often used by sector analyses as the main data source, varies from the MOF budget execution report (for both total and sector-level data) even though these sources should in theory match exactly. The EDRC is another commonly-cited source for budget data, however it seems that this uses data from the MTEF (with some variation in reported education expenditure).

It is hoped that during the validation phase of the research further investigation will reveal the sources of difference between the actual spending reported in the MTEF and that of the MOF budget execution reports.

3.3 Trends in the overall resource envelope: aggregate fiscal discipline

In recent years, Armenia has made significant progress in implementing sound fiscal and monetary policies that have supported a strong macroeconomic performance. This has resulted in a prolonged period of high economic growth (with low inflation) and real GDP growth averaging around 13% between 2004 and 2007³¹, leading to an increase in real GDP of around five-fold between 2000 and 2008 as shown in Figure 3.1 below.

Figure 3.1 Real GDP, AMD 2000 prices

Source: IMF (2008)

The progress made in strengthening the macroeconomic situation can be seen most dramatically during the period 1995 to 2006 (see Table 3.2), where strong real GDP growth has led to GDP per capita growing from US\$396.1 to US\$1981.7. Looking at the time series data it is clear that most of the growth was actually achieved during the last five years. This growth in the real

31 Source: NSS of RA, CBA and EDRC calculations.

economy has led average monthly wages to increase from around \$17 in 1995 to \$150 in 2006 (whilst exchange rates remained largely the same) and to a reduction in the overall poverty rate from around 56% of the population in 1998/99 to 26% in 2006.

Table 3.2 Selected Macroeconomic Indicators

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Real Sector													
Real GDP Growth (%)	6.9	5.9	3.3	7.3	3.3	5.9	9.6	13.2	14.0	10.5	13.9	13.3	13.8
Nominal GDP (AMD bn)	522.3	661.2	804.3	955.4	987.4	1031.3	1195.2	1362.5	1624.6	1907.9	2242.9	2657.1	3148.7
GDP (US\$ mn)	1286.7	1599.3	1638.9	1892.3	1845.5	1911.6	2153.3	2376.3	2807.1	3576.6	4900.5	6386.7	9204.5
GDP Per Capita (US\$)*	396.1	492.7	506.1	585.5	571.9	594.5	670.2	740.2	873.9	1112.2	1522.3	1981.7	2043
GNP Per Capita (US\$)*	408.4	506.5	536.5	604.2	588.9	611.0	690.3	767.7	903.3	1145.6	1563.4	2048.4	
Unemployment rate (%)	6.7	9.3	10.8	9.4	11.2	11.7	10.4	10.8	10.1	9.6	8.2	7.5	
Monetary Sector													
Inflation, av. %	176.0	18.7	13.9	8.7	0.6	-0.8	3.1	1.1	4.7	7.0	0.6	2.9	4.4
Exchange Rate (AMD/US\$ av.)	405.9	413.4	490.8	504.9	535.1	539.5	555.1	573.4	578.8	533.5	457.7	416.0	342.1
Av. monthly wage (AMD)	7062.7	9466.9	13595.2	18024.9	20173.3	22713.0	24479.9	27351.2	34785.9	43426.9	52040.5	62275.2	
Av. monthly wages (US\$)	17.4	22.9	27.7	35.7	37.7	42.1	44.1	47.7	60.1	81.4	113.7	149.7	
Reserve Money (AMD bn)	29.4	41.3	50.6	53.8	53.9	72.4	80.4	111.3	118.6	132.1	200.6	283.0	
Broad Money (AMD bn)	40.3	54.4	70.2	97.1	111.1	151.7	172.2	203.1	233.8	285.9	365.6	485.7	
External Sector													
Current Account Balance, % GDP	-17.0	-18.2	-18.7	-21.3	-16.6	-14.6	-9.3	-6.2	-6.7	-0.5	-1.1	-1.8	
External Debt (US\$ mn)	-	536.3	682.5	775.3	870.3	859.5	905.5	1025.5	1097.7	1182.9	1099.2	1205.6	
- as % of GDP	-	35.3	42.0	42.4	46.2	46.0	42.6	44.0	38.2	30.1	22.1	16.5	
Domestic Debt / GDP (%)	0.0	1.5	2.9	2.1	2.3	2.9	3.0	3.0	2.7	2.4	2.3	2.2	

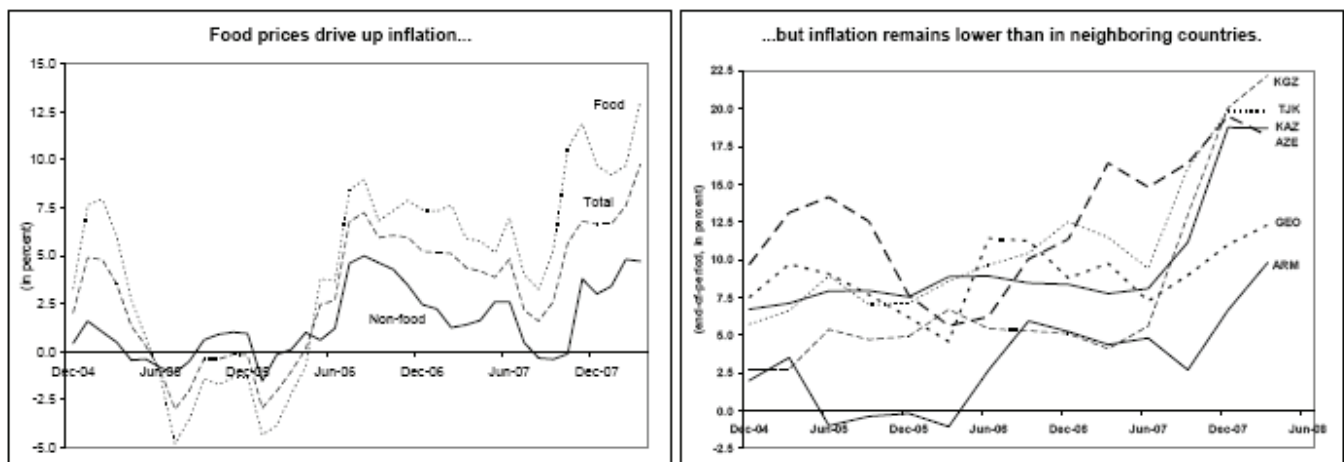
Source: NSS of RA, CBA and EDRC calculations through 2006; National Statistical Service (2008b) for 2007 figures
* EDRC estimations.

Amongst its peers Armenia is in an enviable position of not having large or unsustainable deficits in either the fiscal balance or the current account, areas that typically lead to chronic macroeconomic instability³².

While the short-term macroeconomic position remains strong, potential pressure points exist. These include high commodity import prices, which by the end of 2007 had already started to feed into higher domestic inflation (see Figure 3.2). In 2008, the ability of the government to contain inflation expectations, for political and economic reasons, will be very important as the second round effects of higher food prices start to impact upon consumers' purchasing power. Other areas of concern include the potential economic fallout from the domestic political crisis, donors may yet decide to withhold grants, and wider concerns about regional economic and political instability given Armenia's reliance on Russia for direct foreign investments, energy and remittances.

32 A comparison with other CIS countries is provided in Annex table.D.2.1.

Figure 3.2 Inflationary pressures

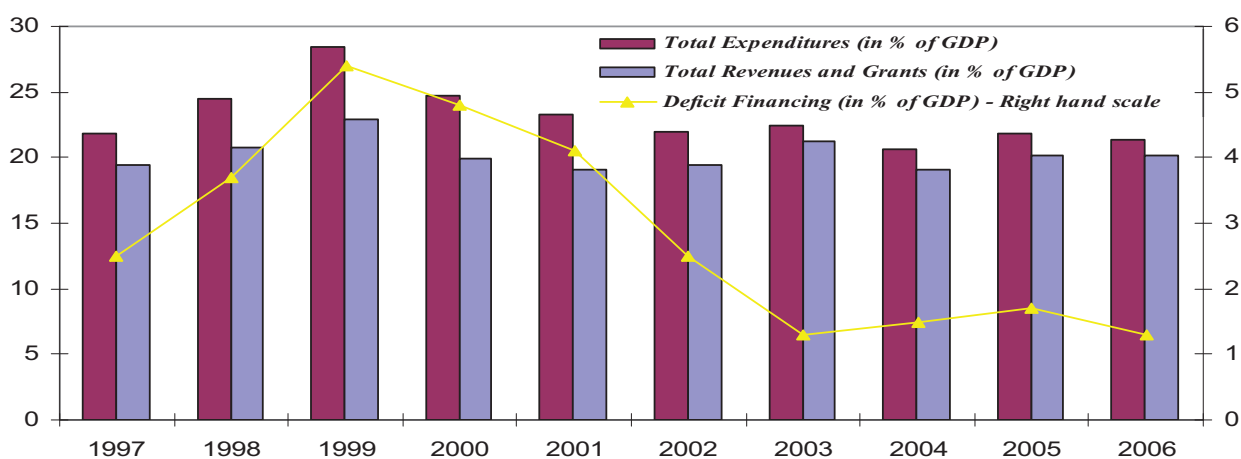


Source: IMF(2008:4)

If inflationary pressures do get out of control and lead to widening current account or fiscal deficits, there are real concerns that weaknesses in tax policy and administration could come unravelled in the face of a crisis. Whilst a series of tax revenue reforms have been undertaken in recent years, concerns remain that low tax revenue collection rates due to 'persistent weaknesses in tax and customs administration' could undermine the ability of the government to deal adequately with a crisis³³. Such concerns about the need to strengthen governance and tax/customs administration have been raised over a number of years³⁴.

Notwithstanding the above, it would appear the efforts to increase tax revenues have succeeded by raising tax collection rates as a percentage of GDP by 2% in recent years, a significant achievement particularly during a period of double-digit GDP growth³⁵. These efforts to improve collection rates have undoubtedly strengthened fiscal policy over this period and the gap between expenditures and revenues has fallen dramatically, to the point the budget deficit was only 1.8% of GDP in 2007³⁶. This fall was largely due to a 50% increase in VAT collections. However, concerns remain that this may not be sustainable given the use of advance tax payments requests and unprocessed VAT refunds that could in theory quickly unwind in the face of a crisis.

Figure 3.3 Total Expenditures, Revenues & Grants as a percent of GDP



Source: Economic Development Research Center

The reductions in the fiscal deficit were achieved through simultaneous cuts in spending and improvements in tax collection, such that while total expenditures declined from 44% of GDP in 1994 to 26% in 1996, budget revenues (without grants) increased

33 Ibid, page 13.

34 World Bank (2003: 17).

35 IMF (2008:3)

36 Ibid, page 4.

from an extremely low level of 13.5% in 1995³⁷. The fiscal adjustment that was undertaken from 1997 can be seen below in Table 3.3 and highlights the improvements in revenue performance (tax revenues and non-tax revenues) that occurred at the same time as expenditures were kept largely under control. Of particular significance is the considerable increase in capital expenditures that occurred over the period, increasing from 3% of GDP in 1997 to 7% in 2007 although this includes net lending.

Table 3.3 Consolidated Government Budget, Percent of GDP

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Revenue (including grants)	15.7	17.7	19.3	16.7	16.2	16.8	18.0	15.8	16.7	16.6	18.7
Tax revenue	12.8	13.6	16.1	14.8	14.1	14.6	14.0	14.0	14.3	14.5	16.1
Non-tax revenue	1.1	2.3	1.7	1.1	1.3	0.9	0.9	1.1	1.9	1.6	1.8
Grants	1.8	1.7	1.5	0.8	0.8	1.2	3.1	0.7	0.5	0.6	0.8
Total cash expenditures and net lending	18.3	21.4	24.6	21.6	20.4	19.4	19.2	17.5	18.6	18.1	20.2
Current expenditures	15.3	15.3	17.7	16.3	15.8	16.1	13.7	13.8	14.7	13.4	13.2
Capital expenditures and net lending	3.0	6.1	6.9	5.3	4.7	3.3	5.6	3.7	3.9	4.7	7.0
Overall cash balance	-2.6	-3.8	-5.2	-4.9	-4.3	-2.6	-1.3	-1.7	-1.9	-1.5	-1.5

Note: Actual numbers and preliminary figures for 2007

Source: Economic Development Research Center

If capital expenditures are analysed separately, and net lending is taken out, as a percentage of total expenditures the increase is even more dramatic, rising from 6.5% in 1997 to around 31% in 2007 (see Table 3.4). The large increases in capital expenditures are accommodated within the budget through decreases in current expenditures, made possible by dramatic decreases in interest payments, wages and net lending.

Table 3.4 Breakdown of Government Expenditures (percent of total expenditures)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Expenditures	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current Expenditures	83.7	71.6	71.8	75.6	77.2	83.1	71.1	78.7	78.8	74.1	65.5
Wages	13.3	12.4	7.1	8.7	8.1	7.8	4.4	7.2	7.9	8.4	7.2
Interest Payments	13.5	9.0	8.2	6.2	6.1	5.9	3.6	2.9	2.4	1.9	1.6
Subsidies	2.0	0.7	5.7	3.3	2.7	3.1	4.6	5.4	3.5	4.1	3.5
Current Transfers	18.4	16.7	17.4	16.4	17.2	17.9	13.4	15.0	17.3	18.4	16.1
Goods and Services	36.4	32.8	33.4	41.0	43.1	48.3	45.1	48.1	47.7	41.4	37.1
Capital Expenditures	6.5	21.7	17.4	17.4	16.3	13.0	26.8	18.1	18.0	22.2	30.8
Net Lending	9.9	6.8	10.8	7.0	6.5	3.9	2.1	3.1	3.1	3.7	3.7

Source: Economic Development Research Center

The difficulty of undertaking reforms to raise taxes whilst reigning in spending should not be understated, particularly following a period of near economic collapse in the early 1990's and the Russian financial crisis in 1998. Often such periods of intensive fiscal squeeze lead to the creation of extra-budgetary accounts or 'off-budget' expenditure, the extent of which is not known in Armenia and is obviously not captured in the tables above. However, a comparison between the actuarial deficit of the government sector and the conventional budget deficit, undertaken for the Public Expenditure Review 2003, indicated that since 1997 meaningful fiscal adjustment did take place and hidden off-budget liabilities did not grow in the face of improving revenue collection and increasingly restrictive spending commitments.

As there is still a gap between expenditures and revenues, Armenia has for a long time relied on external sources of financing to bridge the budget deficit. Although the ratio of external financing to domestic financing has fallen from around 93% in 2003 to a projected 84.5% in 2008³⁸, Armenia's external debt stock at the end of 2006 was an estimated US\$1448 million or 23% of GDP

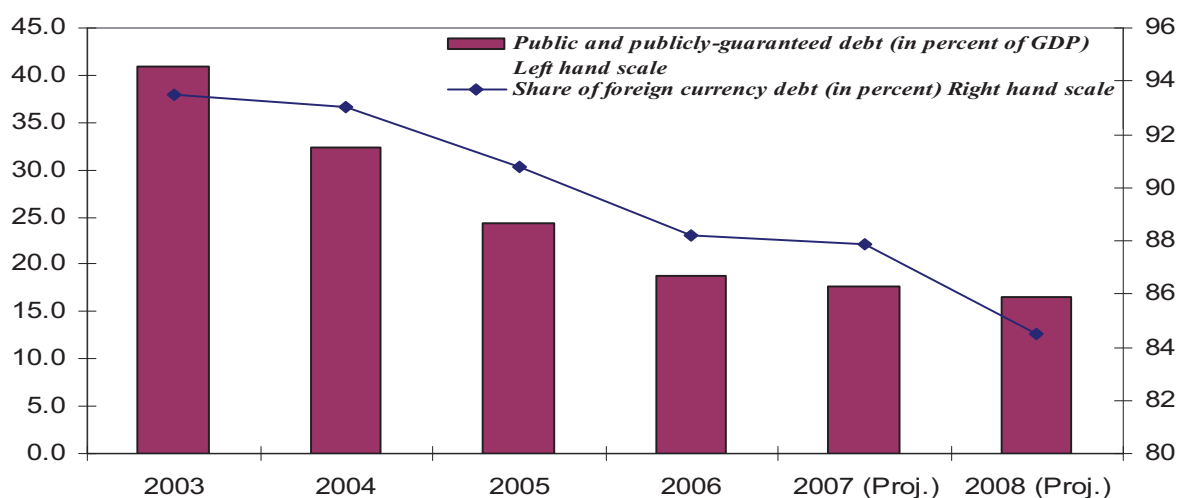
37 World Bank (2008: 18)

38 IMF (2008: 17).

(a fall from 27% in 2005). This is comprised mainly of public and publicly guaranteed debt and is mostly owed to multilateral organisations such as the World Bank and International Monetary Fund, which comprised 59% and 11% respectively of total external debt stock.

As for domestic financing, in the five years prior to 2003 more than 90% of the net domestic financing came from the privatisation of state assets. However, since the most valuable state owned enterprises have now been sold there has been an increasing pressure to deepen domestic financial markets by switching external for domestic sources of finance³⁹ (see Figure 3.4). Domestic markets have traditionally been extremely thin and in 2006 the public and publicly guaranteed debt owed to domestic creditors was only 2% of GDP. Despite this reliance on external financing the overall amounts of debt are not large and Armenia is only classified as being at a 'low risk of debt-distress'. This is due to successful efforts in recent years to reduce the amount of public and publicly guaranteed debt as well as the dependence on external financing sources (see Figure 3.4)⁴⁰.

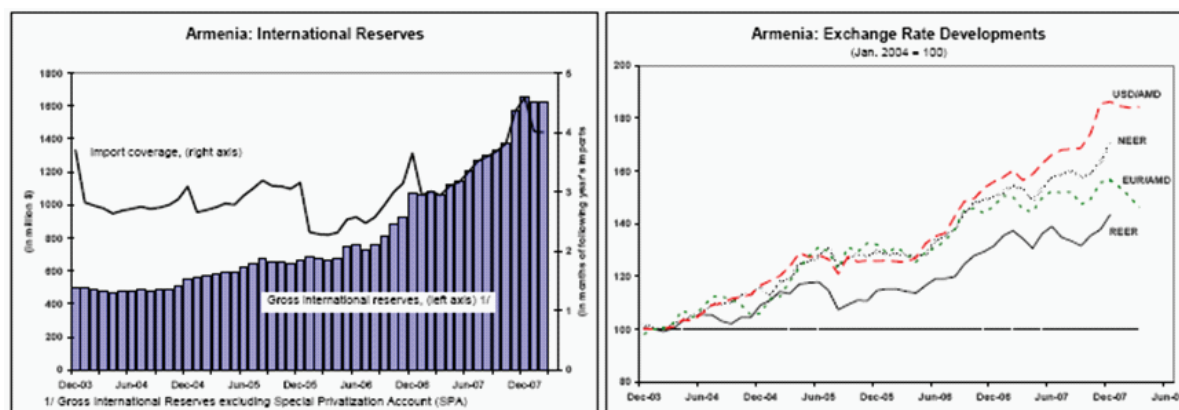
Figure 3.4 Financing the Fiscal Deficit



Source: IMF Country Report No. 07/377

The other key area of potential risk to the macro economy is the current account deficit. In recent years a strong external sector, due to strong exports, inflows of remittances, foreign direct investment inflows and donor financing, has helped Armenia insulate itself from potential shocks and there has been a large build up in international reserves (see Figure 3.5). At the end of 2007 the current account deficit was 6.4% of GDP, a decrease from 17% in 1995, and gross international reserves were equivalent to 4.6 months of import cover, up from 3.6 in 2006⁴¹. Inevitably, these conditions have led to an appreciation of the Armenian dram, up by 16.3% in 2007, which if this continued in the absence of structural reforms over the medium to long term could have macro-economic implications as export competitiveness is undermined and remittances fall.

Figure 3.5 The external sector



39 World Bank (2003: 22).

40 Joint IMF/World Bank Debt Sustainability Analysis, November 9 2007

41 IMF (2008: 22)

In conclusion, the real growth in the overall resource envelope that has occurred over the last 10 years has been achieved through tax reforms, the sale of state assets, and a reprioritisation of expenditure from current to capital expenditures that has boosted growth. Assuming that the government is able to maintain this stance aimed at ensuring macroeconomic stability and fiscal sustainability, and continues to be a net beneficiary of foreign resource flows (through donor support) the potential for creating greater fiscal space going forward should be positive. If however weakening international demand for Armenian goods and services (and remittances) increase domestic pressure to boost spending, without increasing efficiency or reprioritising expenditure towards more productive assets, there is a very real risk that by increasing domestic or non-concessionary borrowing to finance consumption, fiscal space will be curtailed over the medium to long term. Ensuring continued debt sustainability and increased tax revenue collection is therefore of paramount importance for children's interests.

3.4 Prioritisation of children's interests: allocative efficiency

With this understanding of the total resource envelope in place, the next step is to understand how resources are allocated across different priorities. This is done in a number of different ways, including a look at trends in nominal expenditure, overall credibility of the budget, relative shares of spending, and finally how these translate into changes in real levels of spending and spending as a % of GDP. These will be taken in turn.

3.4.1 Trends in nominal expenditure

The first look is at the budget in current prices to show trends in nominal spending. The table below shows that between 2005 and 2007 total expenditure increased by 45% in terms of actual spending (compared to 44% as budgeted), while education, health, and social security increased by 50%, 46%, and 42% respectively. The largest increases were seen in the economic sectors of industry and transport, but these were from relatively smaller bases.

Table 3.5 Primary expenditure 2005-2007, budgeted and actual, AMD billion

Category	2005		2006		2007		Growth 2005-2007	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Total Expenditure	345.4	368.6	413.4	433.5	496.5	533.2	44%	45%
General Public Services	38.3	41.2	46.2	45.4	53.1	57.1	39%	38%
Defense	61.0	64.4	74.1	78.3	100.4	95.8	65%	49%
Public Order, National Security and judiciary	29.1	29.9	36.0	35.9	45.5	45.8	56%	53%
Education and Science	58.5	58.0	71.6	70.4	88.4	87.1	51%	50%
Health	30.6	30.4	36.0	35.9	44.5	44.5	46%	46%
Social Insurance and Security	45.4	43.9	54.5	52.0	63.9	62.2	41%	42%
Culture, Information, Sports and Religion	10.5	10.4	13.6	13.6	15.5	16.7	48%	60%
Housing and Utilities	15.1	13.0	15.6	16.0	12.8	16.0	-15%	23%
Fuel and Energy	1.5	1.4	1.5	1.5	1.5	1.5	3%	4%
Agriculture, Forestry and Water	8.7	9.9	11.5	10.8	13.3	15.3	53%	55%
Economy, Fish Breeding								
Industry, minerals (except fuel), construction, and environment protection	1.5	3.2	3.7	4.8	4.1	5.7	173%	78%
Transport, Roads and Communications	21.3	20.7	24.8	30.2	26.2	38.9	23%	88%
Other Economic Activities	3.0	3.0	3.7	3.6	3.8	3.2	26%	8%
Other Expenditure	21.0	39.2	20.6	35.0	23.6	43.7	12%	11%

Source: Ministry of Finance (2008: 24-27)

3.4.2 Budget credibility

As suggested by the comparison in nominal growth between budgeted and actual figures in Table 3.5 above, overall budget credibility in Armenia is high. Table 3.6 below shows that total execution rates were slightly above budget at 106.7%, 104.9% and 107.4% of budget in 2005, 2006, and 2007 respectively. This was due to higher than expected revenue collection rather than a lack of fiscal discipline, as explained in the previous section. Execution rates within sectors is also quite high, with deviations in most cases under 5% of the budgeted amounts. Execution rates in education, health, and social security are all very high (detailed execution rates within these sectors will be addressed in more detail in the next chapter).

Table 3.6 State Budget Execution Rates (primary spending) across Sectors, 2005-2007

	Execution Rate		
	2005	2006	2007
Total Expenditure	106.7%	104.9%	107.4%
General Public Services	107.7%	98.3%	107.5%
Defence	105.6%	105.7%	95.4%
Public Order, National Security and judiciary	102.5%	99.7%	100.7%
Education and Science	99.1%	98.3%	98.5%
Health	99.5%	99.7%	100.0%
Social Insurance and Security	96.7%	95.4%	97.3%
Culture, Information, Sports and Religion	99.4%	100.0%	107.7%
Housing and Utilities	86.1%	102.6%	125.0%
Fuel and Energy	99.2%	100.0%	100.0%
Agriculture, Forestry and Water Economy, Fish Breeding	114.2%	93.9%	115.0%
Industry, minerals (except fuel), construction, and environment protection	213.3%	129.7%	139.0%
Transport, Roads and Communications	97.3%	121.8%	148.5%
Other Economic Activities	97.5%	97.3%	84.2%
Other Expenditure	186.9%	169.9%	185.2%

Source: Ministry of Finance (2008: 24-25)

The only category with significant deviations from budget is that of 'other expenditure', as it was this category into which the additional revenues were channelled. The PEFA explains that this was to increase the reserve fund, although the sums involved are likely to be more than necessary to build sufficient levels of reserves and this category will therefore merit some further investigation⁴².

3.4.3 Shares of expenditure

The share of government expenditure is a good measure of the extent of prioritisation given to different policy priorities. There are different ways to look at spending shares, each providing a different window on prioritisation decisions. Both actual and budgeted shares are relevant, as differences between these reveal problems with budget credibility and indicate whether priorities shift markedly during budget execution.

Trends in shares of actual spending

Table 3.6 illustrates shares of primary expenditure across sectors. As primary expenditure excludes interest payments, it reflects the spending over which government has discretion. About a quarter of the state budget is spent of Defence and Public Order. Education and Science receive the second largest share of the overall budget at 16.3% in 2007, followed by social security (11.7%) and general public services (10.7%). Health receives 8.3%. During the period of 2005-2007 shares were fairly constant across sectors.

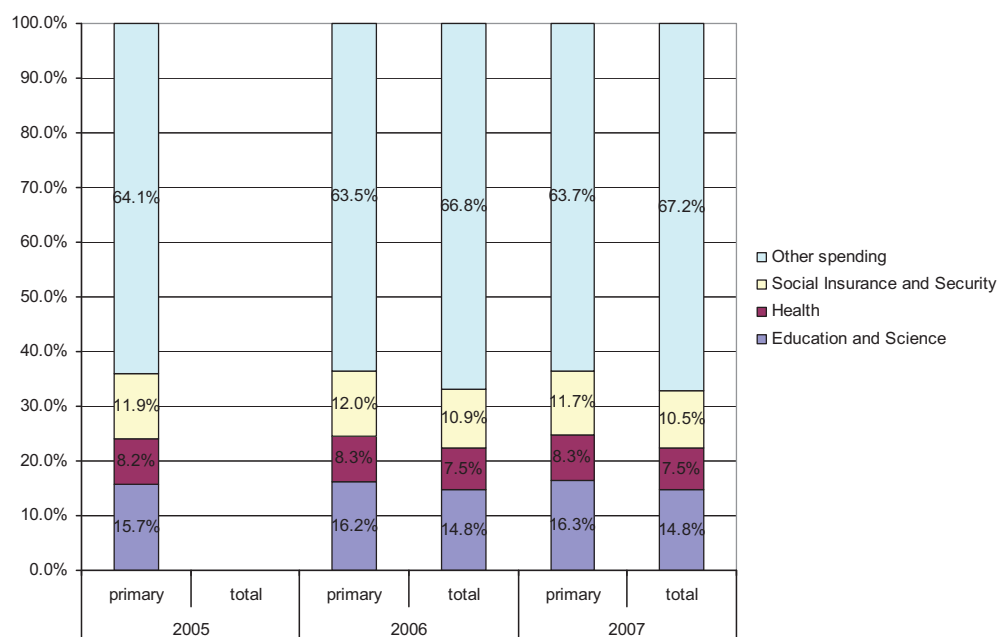
⁴² The 2003 PER suggested that this category (at least up through the 2002 data reported there) caught programmes initiated during the budget year that had not been previously envisaged but which should have been recorded under the functional classification of the relevant line ministry in order to ensure transparency. In the validation process it will be important to understand whether this practice has continued.

Table 3.7 Shares of primary expenditure across sectors (actual), 2005-2007

	2005	2006	2007
General Public Services	11.2%	10.5%	10.7%
Defence	17.5%	18.1%	18.0%
Public Order, National Security and judiciary	8.1%	8.3%	8.6%
Education and Science	15.7%	16.2%	16.3%
Health	8.2%	8.3%	8.3%
Social Insurance and Security	11.9%	12.0%	11.7%
Culture, Information, Sports and Religion	2.8%	3.1%	3.1%
Housing and Utilities	3.5%	3.7%	3.0%
Fuel and Energy	0.4%	0.3%	0.3%
Agriculture, Forestry and Water Economy, Fish Breeding	2.7%	2.5%	2.9%
Industry, minerals (except fuel), construction, and environment protection	0.9%	1.1%	1.1%
Transport, Roads and Communications	5.6%	7.0%	7.3%
Other Economic Activities	0.8%	0.8%	0.6%
Other Expenditure	10.6%	8.1%	8.2%

Source: Ministry of Finance (2008: 24-25).

When the shares of total public expenditure (including interest payments) are analysed, the picture changes somewhat, as would be expected. Shares of actual spending in 2007 fall to 14.8% for education, 7.5% for health, and 10.5% for social insurance and security, while other spending increases to reflect the additional spending on interest payments. A comparison between the two sources is provided in the figure below.

Figure 3.6 Comparison of shares of spending, total and primary actual expenditure 2005-2007

Source: Ministry of Finance database (total expenditure), and PEFA (primary expenditure)

A longer time series is presented in Annex Table C.5 showing a general increase between 1997 and 2007 in spending on the social sectors. Education gained the most over time, though health also increased after a contraction between 1997 and 2000. It is important to remember, however, that the data sources are not directly comparable, as these trends are found in EDRC (2008), which at least for later years appears to pull from data in the MTEF (which, as noted earlier differs from that reported in the PEFA or by the Ministry of Finance). Nevertheless, the broad trends in increasing social sector spending are indicative.

For a complete comparison of differences in reported shares of expenditures across sources, see Annex Table C.6 and Table C.7. It is important to note that in health and education sector reports (such as the PER or national health accounts), the shares reported differ from both Ministry of Finance total expenditure data and the primary expenditure data reported in the PEFA. The Education PER figures appear to generally align with the data provided on actual expenditures in various MTEF documents, whereas the WHO data for health spending diverge from all other sources.

Given that total expenditure was increasing over the period, another way to measure the relative prioritisation of sectors is to look at the shares of additional spending captured from one year to the next. This incorporates both the size of the sector as well as the change in share from year to year, and essentially gives a sense of where additional resources are being channelled. The table below shows that Defence, Education, and General Public Services were the biggest winners between 2006 and 2007, gaining 18%, 12%, and 10% of additional resources respectively (as they received small increases in shares and are also the largest sectors), while Health received 9%.

Table 3.8 Shares of additional primary spending over previous year, 2006-7

Category	2006	2007
Defense	21%	18%
Education and Science	19%	17%
General Public Services	6%	12%
Social Insurance and Security	12%	10%
Public Order, National Security and judiciary	9%	10%
Other Expenditure	-7%	9%
Transport, Roads and Communications	15%	9%
Health	8%	9%
Agriculture, Forestry and Water Economy, Fish Breeding	1%	5%
Culture, Information, Sports and Religion	5%	3%
Industry, minerals (except fuel), construction, and environment protection	2%	1%
Housing and Utilities	5%	0%
Fuel and Energy	0%	0%
Other Economic Activities	1%	0%

Source: PEFA, author's own calculation

Budgeted vs actual spending shares

Turning to a comparison of budgeted and actual spending shares, looking at trends between 2005 and 2007 shows a prioritisation away from the social sectors during budget execution. As seen above, this is not because of poor execution of budgets in these sectors, but rather because additional revenue allowed for an expansion of total expenditure. Rather than allowing a related expansion in social sectors, the table below (looking at primary expenditure) shows that this was largely diverted to the category of 'Other expenditures', which received a much larger share of spending in these years, with smaller increases seen in Transport, Roads, and Communication.

Table 3.9 Shares of primary expenditure, budgeted and actual 2005-2007

	2005		2006		2007	
	budgeted	actual	budgeted	actual	budgeted	actual
Total Expenditure	100%	100%	100%	100%	100%	100%
Education and Science	16.9%	15.7%	17.3%	16.2%	17.8%	16.3%
Health	8.8%	8.2%	8.7%	8.3%	9.0%	8.3%
Social Insurance and Security	13.2%	11.9%	13.2%	12.0%	12.9%	11.7%
Other spending	61.1%	64.1%	60.8%	63.5%	60.4%	63.7%
<i>of which:</i>						
<i>Other Expenditure'</i>	6.1%	10.6%	5.0%	8.1%	4.8%	8.2%
<i>Transport, roads, and communication</i>	6.2%	5.6%	6.0%	7.0%	5.3%	7.3%

Source: PEFA, p. 24-25.

Similar patterns are seen in reductions in shares in total expenditure⁴³. Note that the budgeted shares change drastically in 2008, however this is not due to a substantive shift away from health end education but rather because of a change in the budget data itself. In 2008 the Social Insurance Fund was incorporated into the State budget, thereby shifting the denominator for total spending and increasing the numerator for Social Insurance and Security.

Table 3.10 Shares of total public expenditure, budgeted and actual, 2006-2008

	2006		2007		2008
	budgeted	actual	budgeted	actual	budgeted
Total Expenditure	100.0%	100.0%	100.0%	100.0%	100.0%
Education and Science	16.0%	14.8%	15.2%	14.8%	11.8%
Health	7.8%	7.5%	7.5%	7.5%	6.1%
Social Insurance and Security	10.9%	10.9%	10.2%	10.5%	24.8%
Other spending	65.4%	66.8%	67.2%	67.2%	57.3%

Source: Ministry of Finance

Extending the analysis of changes in prioritisation to include a look at the MTEFs reveals further interesting patterns. The tables in Annex section C.1.1 compare projections across successive MTEF rounds, compared with reported actual and budgeted figures. These reveal that overall outer-year credibility of the budget is high, with deviations between MTEF, budget, and actual spending fairly small in nominal terms. In terms of shares of spending, however, allocations to the three key social sectors projected in the MTEFs are higher than the subsequent budget allocation and actual expenditure shares. For example, the 2005-2007 MTEF projected a spending share for education of 15.4% in 2005 whereas it ended up being budgeted at 14.6% (as presented in the 2006-2008 MTEF document), and actual execution was only at 13.5% (as reported in the 2007-2009 MTEF document)⁴⁴.

This would imply that during the budget arbitration phases between MTEF finalisation and the subsequent approved budget law changes are made which shift prioritisation away from the social sectors. This points to the critical role of the National Assembly in the budget process, as will be developed further in the chapter on conclusions and recommendations.

Shares of GDP

Looking at spending as a percent of GDP, public spending on education was only 2.8% of GDP, health was 1.4% and social security 2.0% in 2007.

Table 3.11 Total primary expenditure as % of GDP, 2005-2007

	2005	2006	2007
Total Expenditure	16.4%	16.3%	17.3%
General Public Services	1.8%	1.7%	1.9%
Defence	2.9%	2.9%	3.1%
Public Order, National Security and judiciary	1.3%	1.3%	1.5%
Education and Science	2.6%	2.6%	2.8%
Health	1.4%	1.3%	1.4%
Social Insurance and Security	2.0%	2.0%	2.0%
Culture, Information, Sports and Religion	0.5%	0.5%	0.5%
Housing and Utilities	0.6%	0.6%	0.5%
Fuel and Energy	0.1%	0.1%	0.0%
Agriculture, Forestry and Water Economy, Fish Breeding	0.4%	0.4%	0.5%
Industry, minerals (except fuel), construction, and environment protection	0.1%	0.2%	0.2%
Transport, Roads and Communications	0.9%	1.1%	1.3%
Other Economic Activities	0.1%	0.1%	0.1%
Other Expenditure	1.7%	1.3%	1.4%
Nominal GDP, in billion AMD ^a	2244	2665	3076.5

Source: PEFA, p. 24-25, author's calculation using GDP data from: ^a MTEF 2008-2010, p. 19.

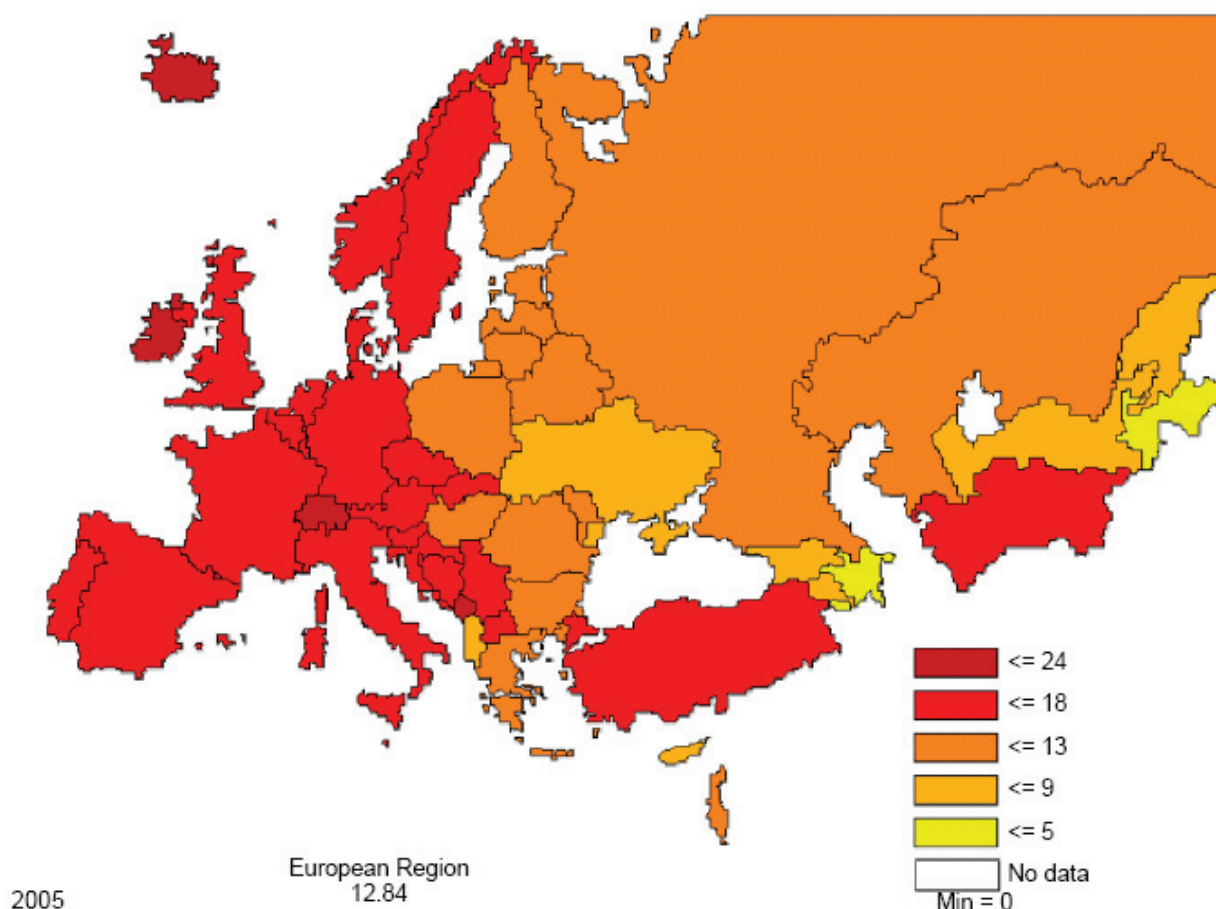
43 Note that the data on total expenditure available to the research team did not provide a disaggregation for each sector, therefore only health, education, and social protection are shown here.

44 Note that, as explained above, the shares reported in the MTEF differ from those in the PEFA or Ministry of Finance database. However, for comparisons between MTEF documents, it is these shares that should be compared in order to ensure consistency in interpretation.

Tables in Annex D.2.4 show Armenia's low rank in public spending, education and health government expenditure as a percentage of GDP compared with other countries. These reveal that along these measures Armenia's spending is much lower than comparative countries. However, as Annex Figure C.7 highlights, government revenue in general is very low compared to other countries, explaining the low level of public expenditure in social sectors as a percentage of GDP.

The comparison of health expenditure as a percentage of total government expenditure is therefore a more powerful way to show prioritization across different sectors in international comparisons. By these measures education spending is roughly in line with the OECD average of 13.4% (in 1998)⁴⁵. By contrast, Figure 3.7 indicates that in comparison with other countries in the European region, the fraction of total government spending allocated to health (8.2%) is low in Armenia. Only Azerbaijan, Tajikistan, Georgia, Cyprus and Uzbekistan spend less than 8.2% of total government expenditure on health.

Figure 3.7 Public sector expenditure on health as % of total government expenditure, WHO estimates



Source: WHO/Europe, European HFA Database, accessed November 2008.

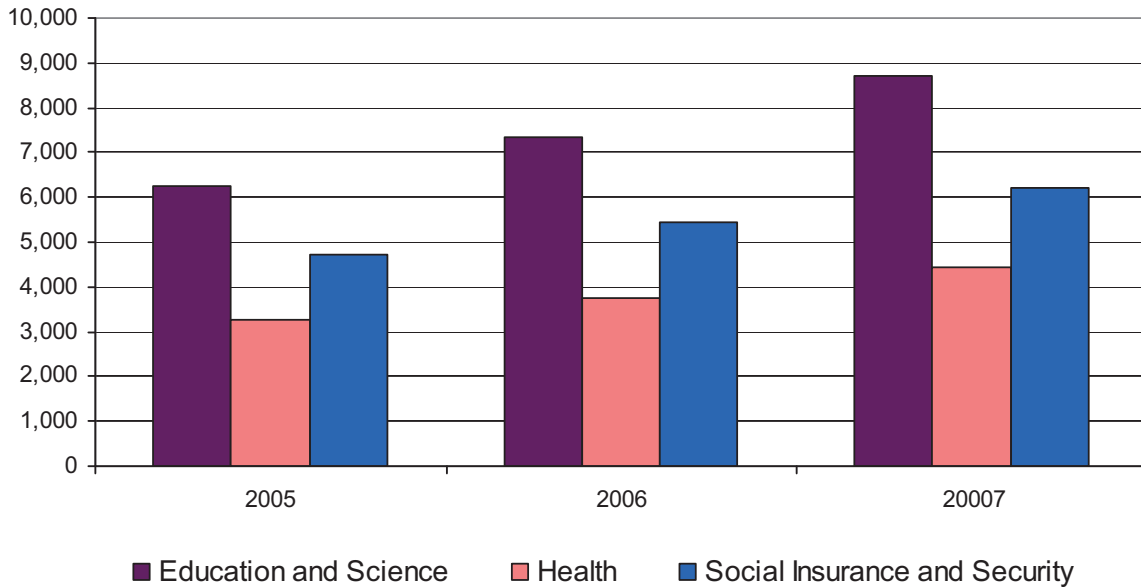
Real increases in spending

Nevertheless, despite the low level of expenditure compared to GDP, increases in spending over the recent period have meant a significant inflow of real resources to the social sectors.

Figure 3.8 shows steady increases in real levels of expenditure from 2005-2007 in the social sectors, equivalent to a 39.8% increase in education, 36.3% increase in Health and 31.8% increase in social insurance and security over the period. These increases were slightly more than proportional to increases in total spending which increased by 34.6% in these three years. The biggest increase was in the transport sector (75%), followed by Industry and Culture (50%).

45 Cited in World Bank (2008: 17)

Figure 3.8 Real spending on social sectors, AMD (2007) bln



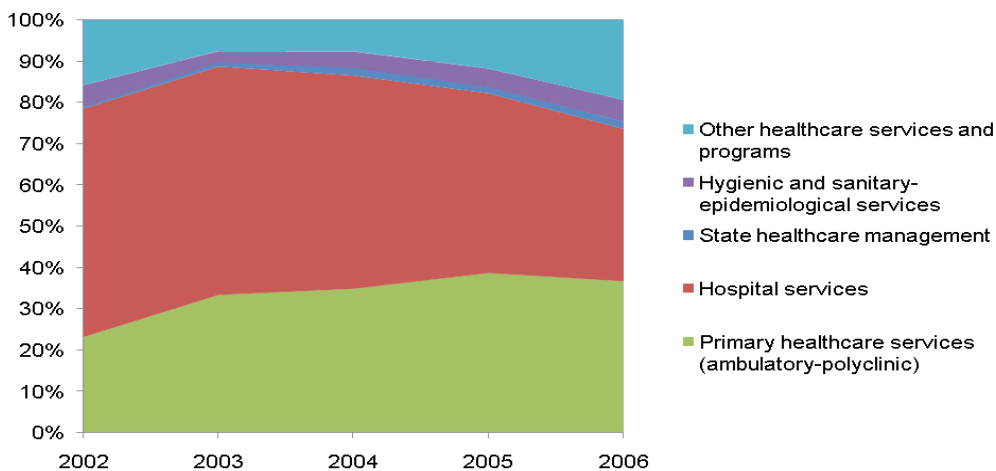
3.4.4 Allocations of spending within sectors

From the perspective of allocative efficiency, it is also important to look at how spending is distributed across programmes within the key social sectors.

Health

Tracking expenditures according to the tier of health service (whether primary, secondary, or tertiary) is difficult because of shifts in the functional classification of the budget over time. Nevertheless, as Figure 3.9 illustrates, it is clear that Armenia's health care system underwent a major transformation by shifting more resources out of hospital services to primary healthcare services. While primary services accounted for a mere 15% of total public health spending in 1997⁴⁶, they account for about 37% of spending in 2006, with an equal share allocated to hospital services.

Figure 3.9 Priorities in the health sector, actual expenditure, 2002-2006



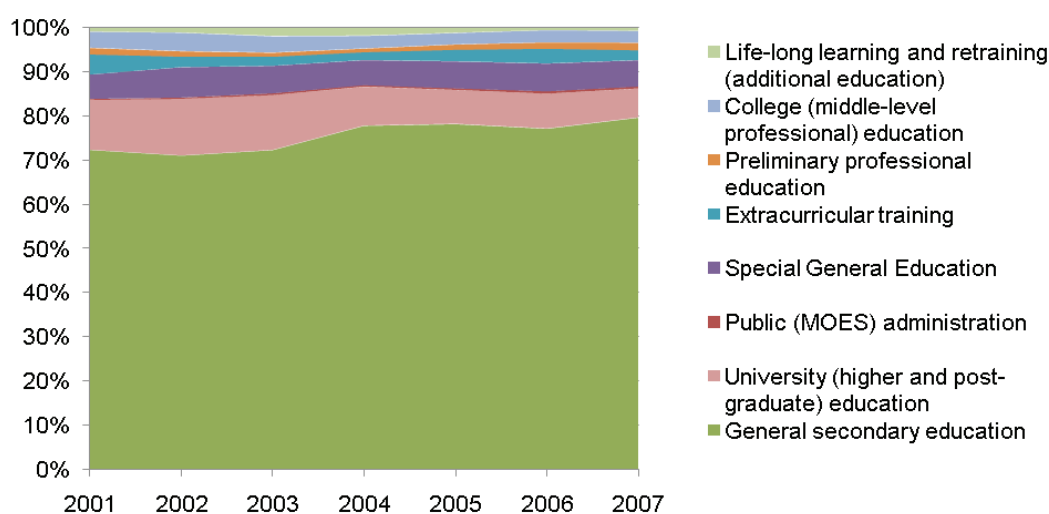
Source: Torosyan et al. (2008: 187)

Since 2006, policy as articulated in the PRSP was to increase the share of primary care relative to hospital care even further. These increases reflect the expansion in coverage in 2006 of the basic benefits package⁴⁷.

Education

In education there is also a prioritisation of the primary level; Figure 3.10 illustrates that General Secondary Education accounts for the largest share in the education budget, with about 72% in 2001 and about 80% in 2007⁴⁸. The figure shows that while most categories received fairly constant allocations as a proportion of the budget (see parallel lines), university education has been squeezed in favour of a larger allocation to General Secondary Education. Increases in general secondary education have meant that per-student spending has increased from AMD 29,600 in 2001 to AMD 106,700 in 2007, equal to a shift from \$53 to \$270. (World Bank 2008: 21)

Figure 3.10 Priorities of the education sector, actual expenditure, 2001-2007



Source: Education PER, World Bank (2008: 19)

The budget classification is consistent in 2006 and 2007, but changes in the classification in 2008 mean that a direct comparison across years is not straightforward and are therefore 2008 is not included in the analysis here. The two main differences in 2008 are:

(i) 'Elementary, basic and secondary education' are divided into 'Pre-school and elementary general education' and 'Secondary general education; and

(ii) Auxiliary Services is a separate category which absorbs 30% of the education sector's resources. Within this category of auxiliary services, 44% are allocated to capital renovation of education facilities and about 5-7% to capital renovation of high school buildings, Yerevan municipal expenditures, the World Bank supported Education Quality and Relevance Project, construction of education facilities and reforms in preliminary and secondary vocational education.

The 2003 PER found that in general the allocation across the education system was in line with the OECD averages for shares at different levels. However, where Armenia differed was in its balance between capital and recurrent, with Armenia allocating more towards to recurrent spending, and as a result under-funding maintenance costs, utilities, and teacher training (World Bank 2003; 91). Increases in the recurrent budget in general secondary have been as a result of increases in wages (187 percent between 2001 and 2007).

As discussed in the previous sections, certain responsibilities have been delegated to local communities. Therefore, in order to investigate the amount of resources spent on pre-school education, Table 3.12 presents community budget expenditures by functional classification.

⁴⁷ Further analysis would need to be undertaken to determine whether continued shifts away from hospital care in the 2010 budget would be beneficial, as primary care may be relatively well-funded at this point.

⁴⁸ Note that this figure relies on data from the Education PER in order to look at trends over a longer time period. These differ somewhat from the Ministry of Finance detailed budget execution data for the two years for which we have comparable data; according to that source in 2007 General Secondary Education received 75% of education funding rather than 80%. It is important to bear these variants in mind, although the general trends are likely to be consistent across sources.

Table 3.12 Community budget expenditures by functional classification in mln AMD, in 2000 prices, 2004-2006

	2004		2005		2006	
	as % of total		as % of total		as % of total	
Expenditures, total	22,312	100%	27,756	100%	32,726	100%
<i>including</i>					0	
<i>Administrative budget</i>	19,266	86.3%	23,066	83.1%	26,078	79.7%
<i>Fund budget</i>	3,937	17.6%	5,808	20.9%	7,650	23.4%
<i>by functional classification</i>						
<i>Education and science</i>	3,708	16.6%	4,233	15.3%	5,218	15.9%
<i>Health</i>	15	0.1%	46	0.2%	30	0.1%
<i>Social security and social insurance</i>	544	2.4%	837	3.0%	820	2.5%
<i>Other</i>	17,908	80.3%	22,640	81.6%	26,658	81.5%

Source: Shahbazyan, Vahram (2008), p. 206.

Note: nominal figures are deflated using the annual average consumer price index (2000=100, 2004=116.697, 2005= 117.453, 2006=120.859), IMF (2008).

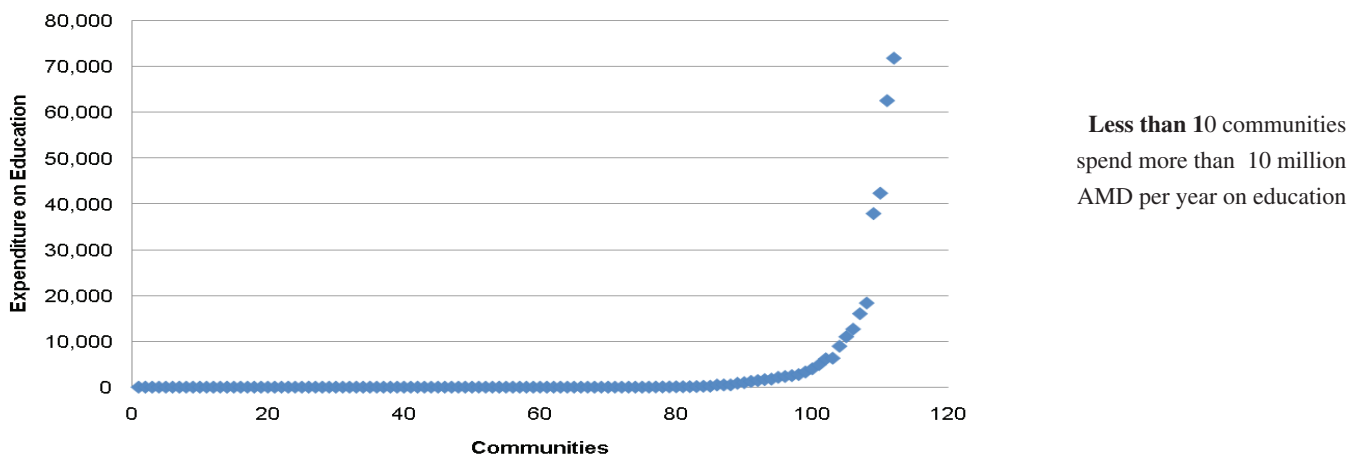
In order to get a better picture of allocations to education and science within schools, Table 3.13 shows a summary of spending on education by communities. Only slightly more than a third of all communities spend part of their budget on education. For these communities, education expenditures amount to on average 29,418 thousand AMD, and the highest expenditure is 522,747 AMD. As a percentage of the total community budget, communities which spend part of their budget on education spend 14.8% on average, and the highest allocation of spending to education as a percentage of total budget is 39.9%.

Table 3.13 Expenditure on Education in Communities in Lori Marz, in thousand AMD, 2007

Number of communities in Lori Marz	113
Number of communities with positive spending on education	39
Number of communities with no education expenditure	74
Average spending of communities with education expenditure, thousand AMD	29,418
Maximum, thousand AMD	522,747
Average % out of total community budget of those with education expenditure	14.8%
Maximum % of total community budget of those with education expenditure	39.9%

Source: Lori Marzpetaran (2008).

In order to get a better picture of the distribution of expenditure on education and science, Figure 3.11 plots expenditure on Education and Science for the 113 communities of Lori Marz. One community is an outlier with an education spending of 522,747 thousand AMD, and is excluded from this graph for presentation purposes. The graph illustrates how few communities – less than 10 - spend any resources on education and even in those communities that do spend the allocations are very small .

Figure 3.11 Expenditure on Education and Science in the 113 Communities of Lori Marz, in thousand AMD

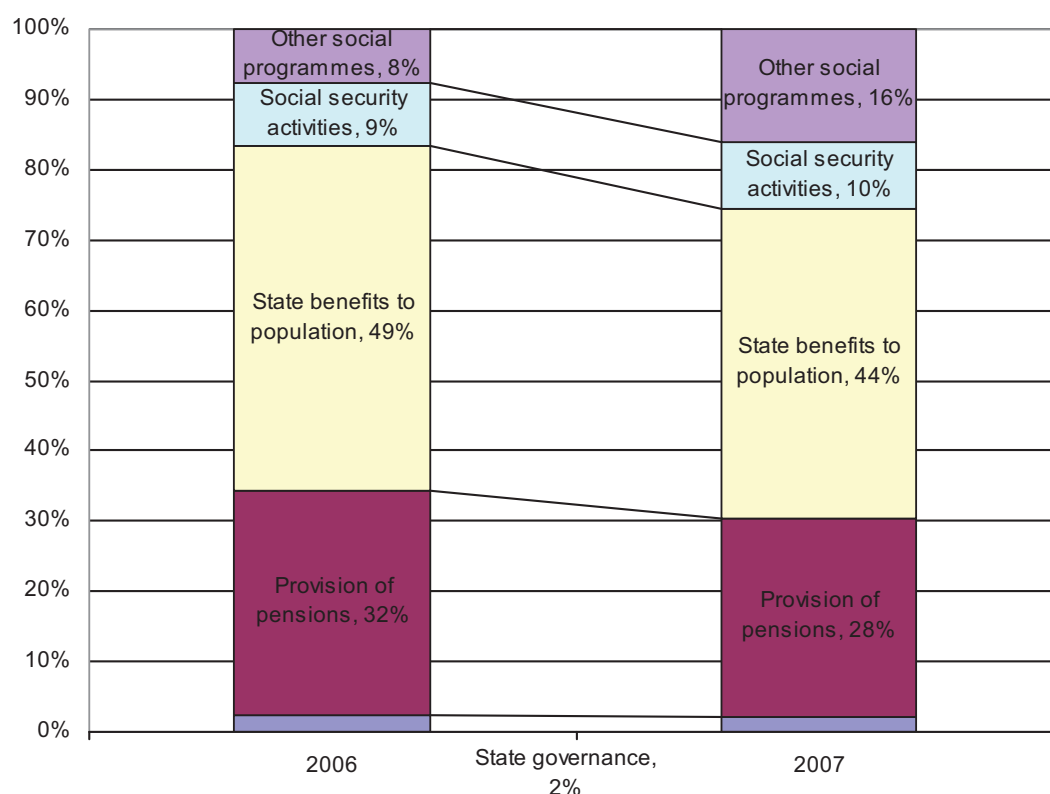
Source: Lori Marzpetaran (2008).

Without further detailed study it is impossible to know whether this is due to genuine lack of prioritisation of pre-school education by communities, or merely the fact that they generally have extremely small budgets especially those with very small populations. The majority of community budgets is spent on administration, as shown in Table 3.12 above.

3.4.5 Social protection

In terms of social security and social insurance, the research team was able to draw on the two years of Ministry of Finance execution reports to look at detailed sector spending. As the figure below shows, the major shift between 2006 and 2007 was that 'other social programmes' doubled its share of expenditure from 8% to 16%, while state benefits and provision of pensions decreased as a result.

Figure 3.12 Shares of social protection spending, 2006-2007, actual expenditure



Source: Ministry of Finance

The increase in 'other social programmes' was due to the introduction of funds to provide flats for homeless families of disabled or deceased military staff, homeless people in rural areas, and flats for purchase through certificates.

3.5 Understanding the trends in fiscal space: the role of the PFM system

The results of the analysis in this chapter have found that overall aggregate fiscal discipline has been achieved and revenue and expenditure were increasing as a percent of GDP, although these figures remain very low compared to the region and the OECD averages.

In terms of allocative efficiency, therefore, although spending on health and education as a percentage of GDP are low, this is partially due to low total government spending. As this chapter has shown, as a percentage of total expenditure the social sectors have done relatively well in recent years.

Within this overall picture, however, there are some issues with allocative efficiency that need to be considered from the perspective of children's interests.

In a general sense:

- Despite the overall strong prioritisation of social sectors, there does seem to be some re-prioritisation in the budget process between the finalisation of the MTEF and final budget law that shifts resources away from social sectors⁴⁹.

49 Given the differences in classification and reported figures between the MTEF and annual budget documents, however, this will require further investigation

- The use of the 'other expenditure' category' would merit special attention, as additional resources are disproportionately allocated to this line item.

Turning to specific issues within education and social protection, at first glance it would appear that there is relative underfunding of pre-school and social services for children respectively. However, in both these cases the real problems arise earlier on in the policy cycle even before the prioritisation stage. The current lack of a solid evidence base and/or policy discussion on priorities with respect to these two areas suggests that further work is required in clearly identifying the problems and articulating a policy response before any trade-offs with other policy priorities are made.

In diagnosing the underlying issues with the PFM system impacting allocative efficiency and fiscal space more generally, there are three key issues:

- **Lack of linkage between strategy and budgets in reality:** As it is only the annual budget that is passed into law and the Budget Law does not currently use the same classification as the MTEF/programme budget, there is currently some further scope for better linking the strategic focus of the MTEF with the budget. Reforms in this area are ongoing with the shift to programme budgets, and therefore in health and education there will be many potential improvements that can be made to ensure the MTEF reflects the strategic priorities of the sectors.
- **Strategic outlook of programme budgets:** Recent movements towards programme budgets should increase the focus on results, however there are presently major issues with both technical capacity as well as incentives.
- **Role of National Assembly:** The National Assembly is a key player in both budget arbitrage and budget accountability, however the short time-frame for debate and amendments means that there is scope for increasing analytical support to allow more thorough analysis of the draft budget law.

As will be seen in the next chapter, these issues also have an impact on operational efficiency.

4 From resources to results: operational efficiency and equity of spending

While the previous chapter focused on the first two budgeting outcomes and the way in which PFM, particularly the budget process, impacts results in these areas, the focus of this chapter will turn to the final outcome of operational efficiency. PFM issues will again be explored (indeed many of these overlap with those in the previous chapter), but the lens here is on the way in which budget formulation, execution, and reporting impact the *quality* of expenditure rather than its broad pattern of allocation. The question for this chapter is therefore: how does expenditure translate into results in service delivery?

This is of course not an easy question to answer. In order to facilitate the analysis we can identify a few key types of bottlenecks that are likely to have a major impact on the quality of spending:

- **The combination of inputs:** Of particular importance is the balance between capital expenditure (notably construction of new facilities), equipment, and other recurrent expenditure. When these are not in balance there are likely to be high levels of inefficiency, since spending on construction of new schools or health posts is not effective if there are insufficient staff or supplies for these to be functional.
- **The execution of budgets:** A second bottleneck can arise in the execution of allocated budgets. Delays in expenditure have repercussions on physical execution and therefore on the optimal use of inputs, particularly when bottlenecks in expenditure skew the balance of different types of inputs (for example, if delays in hiring new medical personnel lags behind construction of new facilities or vice versa).
- **The effective use of inputs:** Finally, even if an optimal combination of inputs is planned and budgets fully executed, there are inefficiencies that can be caused if resources are not cost effective, or in other words if more outputs could be achieved from a given input. In terms of physical inputs this could be related to unnecessarily high unit costs due to poor procurement practices or technical specifications. In terms of human resources this is often related to problems of 'ghost workers'; public employees who work fewer than their required hours.

Ideally research into these three types of bottlenecks would involve a quantitative examination of inputs (especially financial inputs), outputs (for example teachers employed, classrooms built, textbooks purchased, children taught), and ultimately the way these are translated into outcomes (children's learning). There are limitations to the extent of this type of analysis in the current

to document more accurately the evolution from the finalised MTEF, draft budget law, and final budget law.

Armenian context due to limitations on data availability including a lack of disaggregated budget or administrative data, however there are a range of secondary data sources from sector public expenditure reviews and analytical studies that will be drawn on here.

Where further detailed quantitative data are not available we can also rely on an examination of the PFM process to understand in a more qualitative sense of the extent to which the processes in place help or hinder an optimal combination of inputs, timely execution, and the efficient use of each of these. Indeed, the lack of data is itself often a major 'red flag' that there are likely to be serious inefficiencies in the system, as it signals that planning and budgeting officials are unable to effectively use necessary information to arrive at an optimal allocation.

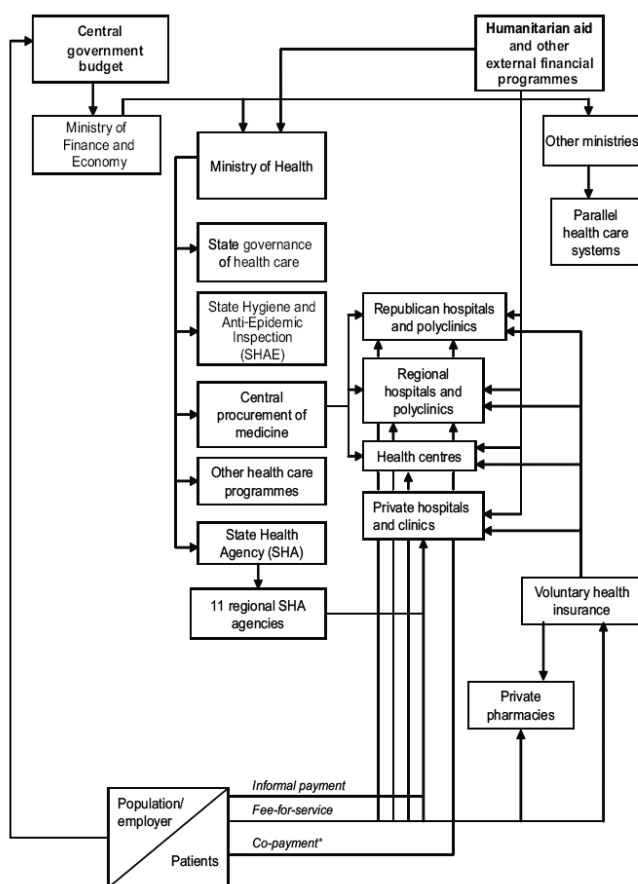
The previous chapter provided an overview of the budgeting process, upon which this chapter will also build. In order to complete the view of the PFM system, the following two sections will look at issues with operational efficiency in health and education in more detail. These sections will begin with a detailed look at disaggregated budget execution rates within sectors, as these are often a good starting point for identifying major bottlenecks in the use of allocated resources. They will then proceed to a discussion of the budget and execution processes and flows of funds within each sector as well as a presentation of available data on efficiency and effectiveness. The next section will then discuss the implications for child poverty reduction and equity as well as identify the key aspects of the PFM system that influence these results.

4.1 Health

4.1.1 Understanding funding flows in the health sector

The health system is financed from a number of sources: (i) the State Budget, (ii) direct payments, (iii) co-payments, (iv) medical insurance, and (v) external sources⁵⁰. The figure below outlines financing flows within the health sector.

Figure 4.1 Financial flows in the health sector



*As of September 2003, Yerevan hospitals only.

Source: Hakobyan et al. (2006), p 42.

For ambulatory care, budget allocations are made according to catchment area population size and capitation rates approved by the Ministry of Health. This budget forms a ceiling of the total amount of the contract between the State Health Agency and the health service provider, irrespective of the services provided. While the provision of a base stream of income for health service providers facilitates better planning and budgeting, it does not give incentives for competition, and does not reward expansion/contraction of facilities based on performance⁵¹. Further, it does not allow for adjustments for age, sex, demographic indicators, health risks, utilization targets and the profile of health care expenses.

For hospital care, the budget ceiling is a function of the (i) historic budget and (ii) the overall budget allocation to the health sector. Hospitals get reimbursed retrospectively, every month, depending on the services they provided which are contained in the BBP. Therefore, hospitals have an incentive to provide reimbursable services up to their budget ceiling. With regards to efficiency of spending, there is no mechanism that ensures the appropriateness of admissions and effectiveness of treatment compared to alternatives. Hospitals therefore have an incentive to admit patients instead of referring them to a lower level of care. Nevertheless, many services covered under the BBP do not require inpatient treatment.

Further issues concerning the payment of health care providers relate to the limited quality of population statistics (which are needed for capitation rates), lack of capacity within the Ministry of Health and the State Health Agency to monitor quality of care, lack of demand induced incentives, and lack of statistics on utilization of type of service and provider.

4.1.2 Budget execution

Budget execution rates in the health sector were relatively high overall, at 90.5% and 94.5% in 2006 and 2007, respectively, and with execution rates of almost 100% in primary health care and hospital care.

Table 4.14 State budget execution within the health sector in million AMD, 2006-2008 (current prices)

Functional classification	2006			2007		
	Actual	% of total	% Execution	Actual	% of total	% Execution
Total	477,959	100%	93.6%	591,494	100%	94.1%
5 HEALTH	35,962	7.5%	90.5%	44,430	7.5%	94.5%
1 State governance in health sector	733	2.0%	99.9%	843	1.9%	57.6%
2 Hospital care	15,165	42.2%	99.9%	17,646	39.7%	100.0%
3 Primary health care (out-patient and policlinics)	13,862	38.5%	99.9%	15,874	35.7%	100.0%
4 Hygienic and anti-epidemic services	2,060	5.7%	88.6%	2,345	5.3%	80.3%
5 Other health services and programmes	2,904	8.1%	45.7%	6,117	13.8%	81.8%
6 Other health services and programmes	1,238	3.4%	98.7%	1,605	3.6%	97.8%

Source: Ministry of Finance (2008).

In both years, there are a few categories that contribute to bringing down the overall budget execution rate in the sector. In 2006, the 'World Bank Health Sector Modernization Project' contributed to 87.2% of the under-execution in the health sector. In 2007, three main programmes contribute to under-execution of the budget: (i) The World Bank Health Sector Modernisation Project' (46.6%) (ii) 'Strengthening the National Programme of Combat against Tuberculosis', (22.6%) and (iii) 'The World Bank Avian Flu Project' (19.7%).

Table 4.15 Programmes in the health sector with less than 90% execution rates, in mln AMD, 2006 and 2007

	Budgeted	Actual	Execution Rate	Difference Planned-Actual	% contribution under-execution
2006					
5 HEALTH	39,728	35,962	90.5%	-3,767	100.0%
4 Hygienic and anti-epidemic services	2,324	2,060	0.9%	-264	7.0%

51 Once a facility has reached its ceiling in terms of reimbursable services offered, there are no more incentives to offer services covered under the BBP.

<i>The World Bank Avian Flu Project</i>	317	83	0.3%	-235	6.2%
<i>The World Bank Avian Flu Project, Japanese grant component</i>	40	10	0.3%	-29	0.8%
5 Other health services and programmes	6,359	2,904	0.5%	-3,455	91.7%
<i>The World Bank ASIF-III, small-scale rehabilitation of social and economic infrastructures</i>	12	0	0.1%	-12	0.3%
<i>The World Bank Health sector modernisation project, Japanese grant component</i>	169	9	0.0%	-160	4.2%
<i>The World Bank Health Sector Modernisation Project</i>	3,456	173	0.1%	-3,283	87.2%
2007					
5 HEALTH	47,026	44,430	0.9%	-2,596	100.0%
1 State governance in health sector	1,464	843	0.6%	-621	23.9%
<i>Strengthening the National Programme of Combat against Tuberculosis</i>	587	0	0.0%	-587	22.6%
<i>n.a.</i>	30	0	0.0%	-30	1.2%
4 Hygienic and anti-epidemic services	2,922	2,345	0.8%	-577	22.2%
<i>The World Bank Avian Flu Project</i>	632	121	0.2%	-511	19.7%
<i>The World Bank Avian Flu Project, Japanese grant component</i>	66	0	0.0%	-66	2.5%
5 Other health services and programmes	7,477	6,117	0.8%	-1,360	52.4%
<i>The World Bank Health Sector Modernisation Project</i>	1,487	278	0.2%	-1,209	46.6%
<i>The World Bank Health sector modernisation project, Japanese grant component</i>	98	7	0.1%	-91	3.5%
<i>The World Bank ASIF-III</i>	190	132	0.7%	-58	2.2%

Source: Ministry of Finance (2008).

Aside from these issues with donor-funded projects, therefore, there do not appear to be any major issues with budget execution.

4.1.3 Efficiency

Ideally an analysis of efficiency in the health sector would involve a detailed look at both physical (numbers of staff, equipment purchase, use of consumables, etc) and financial inputs compared to outputs (patient visits, treatments given, etc). However, despite the detailed level of data available at facility or even marz level, this type of data is not presently easily available or analysed centrally by the SHA or the Ministry of Health, as it is not within the mandate of the SHA to obtain full financial information from facilities (including locally-generated fees).

As a result, the analysis of efficiency rests on a more qualitative assessment of the PFM system. It is also important to note that most of the existing analytical work relies only on data through 2006 when the major changes to the BBP were undertaken. As a result, the findings are likely to be indicative but by no means conclusive. It does, however, point strongly to the need for more updated analysis to better understand the impact of policy changes on both equity and efficiency.

The key issues identified in prior sector reviews that continue to be the most relevant revolve around capacity, incentives, and ownership:

Capacity:

- Lack of detailed data on inputs hampers a proper analysis of cost per patient, even though this is the basis of financing under the SHA (World Bank 2003: 119). This is exacerbated by the fact that funding for facilities comes from both user fees and from SHA financing, so that currently there is no comprehensive view of facilities total budgets. Furthermore, there is an extensive amount of detailed information collected by the SHA on volumes of services, but there are remaining difficulties with regards to measuring quality.
- Use of incremental budgets: hospital budget ceilings are a function of the historic budget, scaled up or down in line with the total health budget (Habokyan et al 2006: 58)

- The high levels of off-budget resources limits rationalisation of allocations across facilities (since central ministry officials are not aware of total - SHA plus user fee - budgets for each facility), and it also leads to likely inequalities where per capita funding is allocated irrespective of facility own-revenue. (World Bank 2003: 117) This is also true of significant levels of off-budget donor resources which are captured directly by individual facilities.
- Decentralisation of functions to facility level were not matched by capacity-building of managers at various levels, so that in practice management tends to adhere to older styles.

Ownership

- The role of the SHA is to: contract providers for services within the BBP; ensuring the target use of state financial resources and reimbursement of providers; and quality assurance. In terms of contractual agreements, however, the SHA only defines the services that are provided using state property (such as infrastructure, equipment, etc), meaning that the SHA has a limited ability to supervise providers as they remain private commercial firms (World Bank 2003: 115).
- The SHA does not have any financial responsibility for performance of facilities, and therefore does not play a role in monitoring the financial performance of contracted providers or in ensuring efficient or effective delivery (Habokyan et al 2006: 54).
- At the same time, the efforts in decentralisation have weakened the vertical links for accountability between the Ministry of Health and regional governments and horizontally between different tiers of the referral network. (Hakobyan et al 2006: 28-9). Marzes could play a larger role in measuring efficiency and effectiveness and for holding facilities accountable.

Incentives:

- Since hospitals are reimbursed on a case-by-case basis up to a ceiling, it is in their interests to provide services up to that ceiling, even if some of that care could be more efficiently delivered in primary care facilities instead (though the magnitude of this problem may be small, given the low rates of hospital utilisation).
- Currently there are no incentives for doctors to work in remote hospitals, leading to a sub-optimal allocation of doctors in Yerevan. Increases in doctor pay have been planned to alleviate some of these disincentives.

These bottlenecks in the PFM system for efficient delivery are also likely to have major implications for equity, given (i) the patterns of uptake of care by poverty level outlined in Chapter 2 (i.e. that the poor are much less likely to use health services, and when they do it is centred on primary facilities due to cost barriers caused by high levels of unofficial fees and low levels of SHA financing), and (ii) the current per capita financing arrangements (which benefits primary health facilities when there is lower uptake, penalises when there is more).

Adding to these are the complexities of Armenian geography in rural areas, where patients may be officially registered with a polyclinic in a town that is geographically closer to their village, but due to transportation difficulties may in fact prefer to use a clinic further away but easier to reach. There are also likely to be differences in patterns of uptake of care by different age groups which may have an impact on the efficiency and equity of funding depending on the demographic profile of different geographic areas.

Understanding the impact of changes in health financing on the quality of care in the context of equity (especially geographic) would therefore depend on: patterns of uptake of care by different populations, own-revenue generation of facilities, reimbursement patterns from the SHA, and the response of facilities to these (i.e. efficiency gains). It would therefore be interesting to test empirically differences between facilities in poorer versus better-off areas in terms of:

- utilisation rates of facilities (disaggregated by type of service);
- input and efficiency measures (staffing ratios by output levels, availability of equipment and consumables, investments)
- quality of care

The key point is that it will be essential going forward to examine not only the poverty impact of changes in the statutory rights of patients through expansions in the BBP but also how patterns of funding also impact the abilities of different facilities to provide quality care, their incentives for efficiency gains and for their system of informal charges. Only once these supply and demand issues are examined in tandem will it be clear what the poverty impact of changes in the pricing structure is on poverty (and child poverty more specifically).

4.2 Education

Overall budget execution rates in education improved from 86.4% in 2006 to 94.1% in 2007. Both in 2006 and in 2007, budget execution is weakest in 'Elementary, basic and secondary education'.

Table 4.16 State budget execution within the education sector, AMD million, 2006-2008 (current prices)

Functional classification	2006			2007		
	Financing	Financing as % of total	% Execution	Financing	Financing as % of total	% Execution
1 State governance in education and science	389	0.6%	98.1%	493	1%	99.9%
3 Elementary, basic and secondary education	50,366	71.4%	82.2%	65,211	75%	89.2%
4 Special general education	4,245	6.0%	98.1%	4,634	5%	98.8%
5 Off-school training	2,307	3.3%	99.8%	2,037	2%	99.9%
6 Preliminary vocational education	965	1.4%	96.4%	1,292	1%	98.7%
7 Secondary vocational education	1,813	2.6%	99.9%	2,218	3%	99.6%
8 Higher and post-graduate education	5,295	7.5%	99.9%	5,612	6%	99.8%
10 Science	5,161	7.3%	99.8%	5,857	7%	99.0%
Total Education and Science	70,540	100.0%	86.4%	87,355	100%	91.6%

Source: Ministry of Finance (2008).

Table 4.16 takes a closer look at this category in 2006 and 2007, highlighting programmes within Elementary, Basic and Secondary Education that exhibit lower than 90% execution rates. In 2006, two programmes account for almost all the under-execution in this category: (i) the Lincy foundation, rehabilitation of education facilities and (ii) The World Bank supported Education Quality and Relevance Project, both coming from external resources.

Similarly, in 2007, most under-execution takes place in the following programmes: (i) Lincy Foundation, Rehabilitation of Education Establishments, (ii) The World Bank supported Education Quality and Relevance Project, (iii) The World Bank ASIF-III.

Table 4.17 Programmes in Elementary, basic and secondary education with less than 90% execution rates, in mln AMD, 2006 and 2007

	Planned	Actual	% Execution	Deviation	% contribution to under-execution
2006					
4 EDUCATION AND SCIENCE	81,633	70,540	86.4%	-11,092	100%
3 Elementary, basic and secondary education	61,308	50,366	82.2%	-10,942	98.6%
<i>Lincy foundation, rehabilitation of education facilities</i>	8,358	0	0.0%	-8,358	75.3%
<i>The World Bank supported Education Quality and Relevance Project</i>	2,330	141	6.0%	-2,189	19.7%
<i>State support to ASIF for capital renovation and construction of education facilities</i>	118	0	0.0%	-118	1.1%
<i>The World Bank ASIF-III</i>	210	108	51.2%	-103	0.9%
<i>Construction of education facilities BOP</i>	89	6	6.6%	-83	0.7%
<i>DFID grant component of the ASIF-II programme</i>	24	0	0.0%	-24	0.2%
<i>Printing school graduation documents, certificates, journals, medals, curricula and pedagogical manuals</i>	111	93	83.6%	-18	0.2%
<i>Construction of education facilities BOP</i>	23	18	75.6%	-6	0.1%
2007					
4 EDUCATION AND SCIENCE	95,408	87,355	91.6%	-8,053	100%
3 Elementary, basic and secondary general education	73,106	65,211	89.2%	-7,895	98.0%
<i>Lincy Foundation, Rehabilitation of Education Establishments,</i>	4,560	0	0.0%	-4,560	56.6%

<i>The World Bank supported Education Quality and Relevance Project</i>	1,886	64	3.4%	-1,822	22.6%
<i>The World Bank ASIF-III</i>	1,719	264	15.3%	-1,455	18.1%
<i>Acquisition of buildings and structures</i>	8	4	48.2%	-4	0.1%
<i>State procurement of training of Diaspora Teachers</i>	1	1	81.6%	0	0.0%

Source: Ministry of Finance (2008).

As with the health sector, therefore, there are no apparent issues with budget execution aside from donor-funded projects.

4.2.1 Understanding funding flows in education and efficiency

Currently, funding to schools is a composition of: (i) an annual base grant of 13.5 million AMD per school for maintenance irrespective of the size of the school, and (ii) financing based on the number of students enrolled in each school. This formula has clear advantages: it is very transparent and provides schools with an incentive to become more efficient. However, there are disadvantages as well. Schools are incentivized to grow above their optimal number of students and small schools have little incentive to consolidate due to the fixed component of funding. Further, given the current education curricula of teachers, small schools in remote towns have no other choice than employing a minimum number of teachers in order to cover all the subjects. Recognizing that keeping schools in remote areas is a government priority, efficiency could be improved by developing curricula to increase the number multidisciplinary teachers or through multi-grade classes.

A number of difficulties in the implementation of the new funding scheme remain. First, while per student financing provides schools with a strong incentive to allocate their budget efficiently, laws governing the salaries of teachers (schools can deviate from the laws by a certain percentage) limit room for manoeuvring of the school management. Second, possibilities for performance based contracting of teachers are constrained by labor market rigidities and the fact that salaries are not based on hours taught (but rather on occupying a certain post). And finally, while the introduction of per capita funding led to improvements in efficiency within schools, opportunities for optimization of schools across marzes are still to be exploited⁵².

The above discussed funding formula is in the process of revision in order to take school characteristics and optimal school size into account. Viewed in the context of a declining number of school-aged population⁵³, efficiency gains are crucial for delivering quality education.

The two tables below show student teacher ratios of general secondary education schools across time. From these it is clear that the number of schools has only slightly decreased over time, and that PCF schools have significantly higher student-teacher ratios compared to non-participating schools. Similarly, protected schools have lower PCF ratios than PCF participating schools and PCF non-participating schools

Table 4.18 All General Secondary Education Schools

	2001	2002	2003	2004	2005	2006	2007	2001-07	2006-07
No. of schools	1,389	1,391	1,392	1,359	1,354	1,362	1,362	-1.9	0.0
No. of classes^{1/}	27,059	25,861	24,332	22,016	21,365	20,878	20,494	-24.3	-1.8
No. of students^{1/}	560,637	533,398	513,621	493,433	477,011	464,063	446,140	-20.4	-3.9
No. of staff positions	77,536	75,680	72,247	62,316	56,218	53,880	50,974	-34.3	-5.4
Teachers	48,666	47,280	47,411	37,338	34,204	33,496	31,765	-34.7	-5.2
Non-teaching staff	28,870	28,401	24,836	24,978	22,015	20,384	19,209	-33.5	-5.8
Administrative staff	n.a.	n.a.	3,913	4,476	4,355	4,358	4,297	9.8 ^{2/}	-1.4
Support staff	n.a.	n.a.	20,923	20,502	17,660	16,027	14,912	-28.7 ^{2/}	-7.0
Memo									
<i>Classes per school</i>	19.5	18.6	17.5	16.2	15.8	15.3	15.0	-22.8	-1.8
<i>Students per class</i>	20.7	20.6	21.1	22.4	22.3	22.2	21.8	5.1	-2.1
<i>Student-teacher ratio</i>	11.5	11.3	10.8	13.2	13.9	13.9	14.0	21.9	1.4
<i>Student non-teaching staff ratio</i>	19.4	18.8	20.7	19.8	21.7	22.8	23.2	19.6	2.0

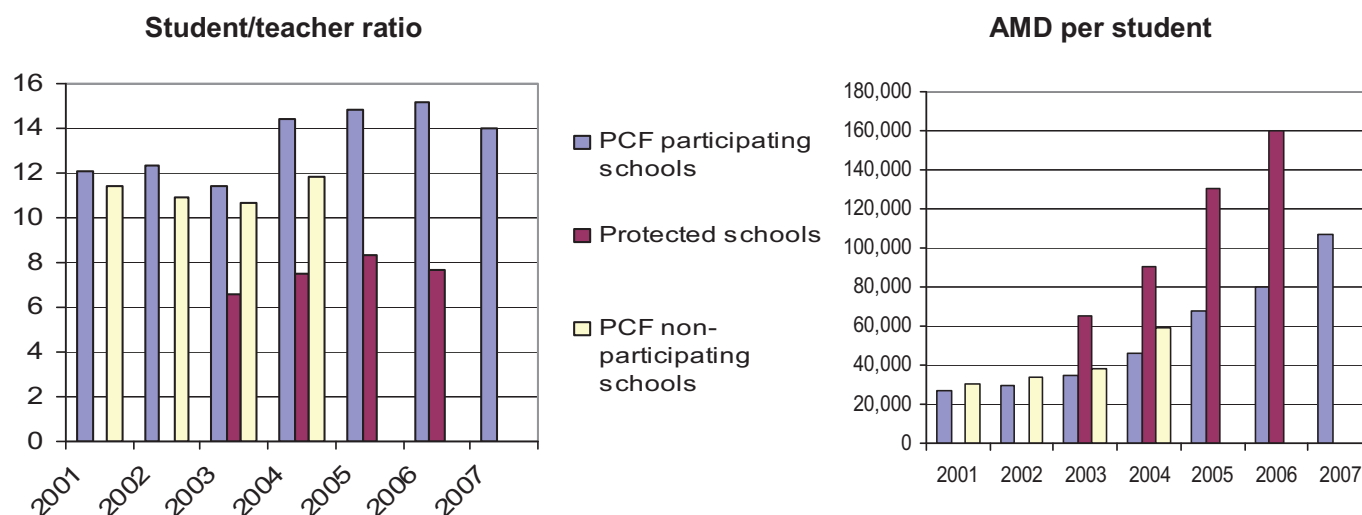
Source: World Bank (2008), p. 43

52 World Bank (2008), p. 60.

53 This is a serious concern. For example in Spitak, the decrease in school-aged children would make on school redundant each year.

Efficiency gains since 1999 in general education (mainly occurring between 2003 and 2005) were seen in the fact that while student numbers fell by over 20% due to demographic shifts, the number of classes was reduced by 24%; teaching staff positions were reduced by 35% and non-teaching staff positions by 34%. This led to an increase in the student-teacher ratio from 10.8 in 2003 to 13.9 in 2006. (World Bank 2008: 42)

Figure 4.2 Comparison of Per-capita funded and protected schools



Looking at variations across marzes, these different funding patterns for PCF and non-PCF schools result in wide disparities in pupil/teacher ratios and funding per student. Yerevan, with the largest number of students is the most efficient with a pupil/teacher ratio of 11.6 and per-student funding of 65,000 AMD. By contrast, Aragatzotn, Syunik, and Vayots Dzor have low pupil/teacher ratios and the highest spending per student.

Table 4.19 Financing for general education in 2006/2007 in thousand AMD, by marz

	Actual 2006	% Execution	Share of total	Pupil - Teacher Ratio 2006/07	Funding per school	Funding per student
Yerevan	8,895,613	100.0%	22.2%	11.6	33,824	65
Aragatzotn	2,739,890	99.9%	6.8%	8.6	21,574	112
Ararat	3,512,982	100.0%	8.8%	12.6	31,366	85
Armavir	3,678,058	100.0%	9.2%	12.2	29,662	82
Gegharkunik	4,152,042	100.0%	10.4%	10.5	32,438	102
Lori	3,965,414	100.0%	9.9%	10.3	23,604	95
Kotayk	3,331,741	100.0%	8.3%	11.7	30,016	82
Shirak	4,320,603	100.0%	10.8%	10.0	24,410	93
Syunik	2,349,631	100.0%	5.9%	8.2	18,949	113
Vayots Dzor	1,046,249	100.0%	2.6%	9.0	20,515	111
Tavush	2,012,987	99.9%	5.0%	9.4	24,549	102
Total				10.8		

Source: National Statistical Service (2008), p. 111-112.

Note: While school data are for the academic year 2006/07, budget data are for the year 2006.

A recent study on school wastage commissioned by UNICEF highlights another dimension of inefficiency: the very high levels of absenteeism of students, in particular for higher levels, and in most recent years (Hua, 2008).

As with the health sector, the root causes of these inefficiencies in education can be found in the functioning of the PFM system in terms of ownership, incentives, and capacity:

Ownership:

- Budget allocations to schools are transferred directly to schools through from the central treasury through the local

treasury, essentially bypassing the marz level. Schools must have their budgets approved by the marzpetaran but these do not have the de facto authority to hold schools accountable.

- The PER notes that the budget process for schools currently lacks strong accountability mechanisms, as marzes approve school budgets but generally do not conduct financial audits or budget reports at the end of the year to establish whether budgets were executed as planned. Internal audits are conducted only every three years by the MFE, and there are no external audits. (PER 2008: 12)
- With respect to pre-school education, there are some trade-offs between norms deemed essential at the central level and the power of communities to determine their budgets; communities are required by law to pay pre-school teachers twice the minimum wage however this contributes to the difficulty of organising pre-school services with limited resources available, by reducing communities' power to determine salaries of teachers.

Incentives:

- The MOES working group is currently examining the funding formulas for general secondary education, to overcome two identified issues, namely that the formula does not take into consideration needs or particularities of schools (education levels, size of buildings and heating requirements, etc), and it has encouraged schools to grow to sizes deemed too large by the MOES which has identified the optimal size at 700-900 students per school (PER 2008: 21).

Capacity:

- Although readily available from marzes, disaggregated data on enrolment and student performance are rarely analysed and used as a basis for policy making. The 2003 PER (World Bank: 93) notes the lack of comprehensive budget information for the sector including off-budget grants spent directly at local levels as well as detailed budget reporting to central level on pre-school budget execution (either financial data or enrolment figures). These problems remain today. The research team that a surprising level of detail is collected at the marz level (as shown by the analysis possible with data from Lori marz), however this does not yet appear to be consolidated at the MOES or analysed.

4.3 Social Protection

Budget execution in social protection is high, as shown in the table below, with no major bottlenecks evident in the execution stage.

Table 4.20 State Budget Execution in Social Protection in million AMD, 2006-2008

Functional classification	2006		2007	
	Budget	Execution%	Budget	Execution %
1 State governance in social security and insurance	1,190	98.1%	1,360	98.4%
2 Provision of pensions	16,700	98.6%	17,500	95.9%
3 State benefits to population	25,515	95.6%	27,561	99.9%
4 Social security activities	4,767	99.1%	5,926	99.5%
5 Other social programmes	3,964	68.1%	9,944	92.0%
TOTAL SOCIAL INSURANCE AND SOCIAL SECURITY	52,136	94.0%	62,291	97.3%

Source: Ministry of Finance (2008).

In terms of an analysis of efficiency, detailed administrative data were not available to the research team, nor was there scope in this short study to undertake such an analysis. Views on efficiency are therefore limited to the general findings on targeting outlined in Chapter 2 above.

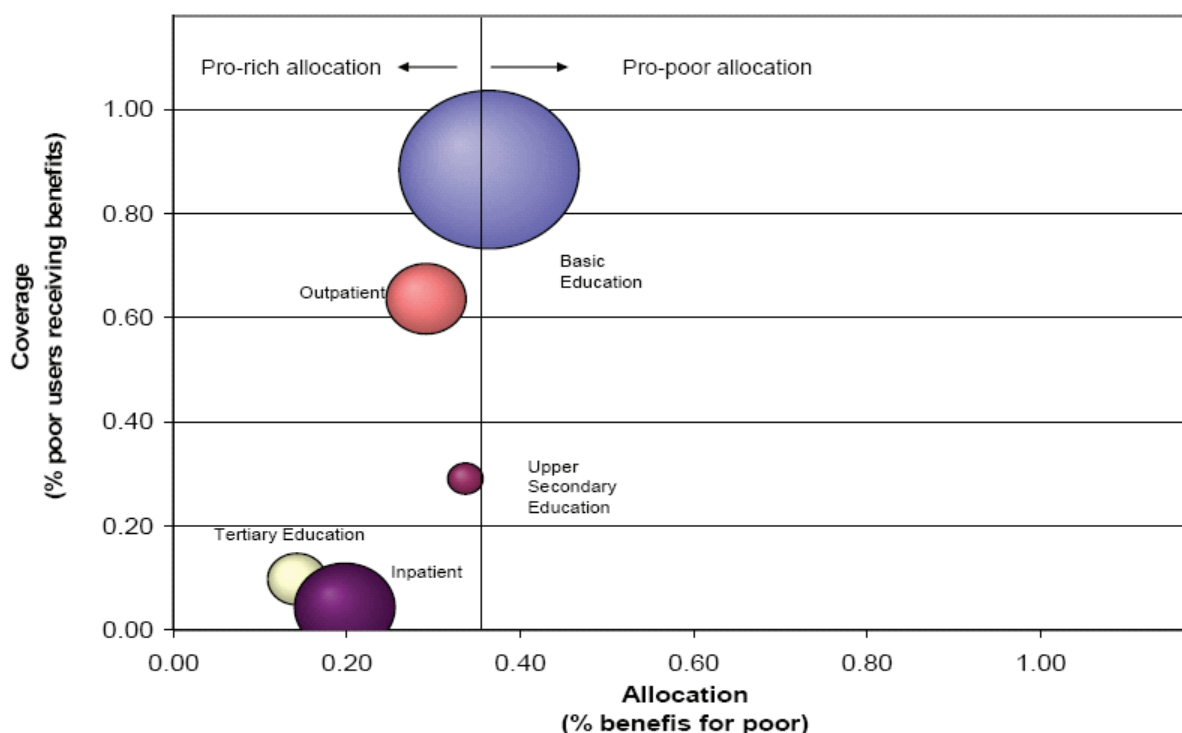
4.4 Implications for equity

Based on this understanding of both uptake of services from Chapter 2 and the specific nature of the flows of funds and related efficiency issues, it is important to understand the overall benefit incidence of spending on health and education. Angel-Urdinola et al (2006) undertook such an analysis using 2004 ILCS data and found that basic education was slightly pro-poor while upper

secondary education was mildly regressive and tertiary education was highly regressive, benefitting a small portion of the poor. Similarly, outpatient care was seen to be mildly pro-rich but with a relatively high coverage of the poor, while inpatient care benefits only a small proportion of the poor and is fairly pro-rich.

These patterns are important to bear in mind with respect to any proposed changes in the funding structure for either health or education; without addressing the barriers to access of the poor, increasing spending on tertiary education or inpatient services may serve only to benefit the better-off.

Figure 4.3 Pro-poorness of spending in social sectors



Source: Angel-Urdinola et al. (2006), p.7.

5 Implications: policy entry points

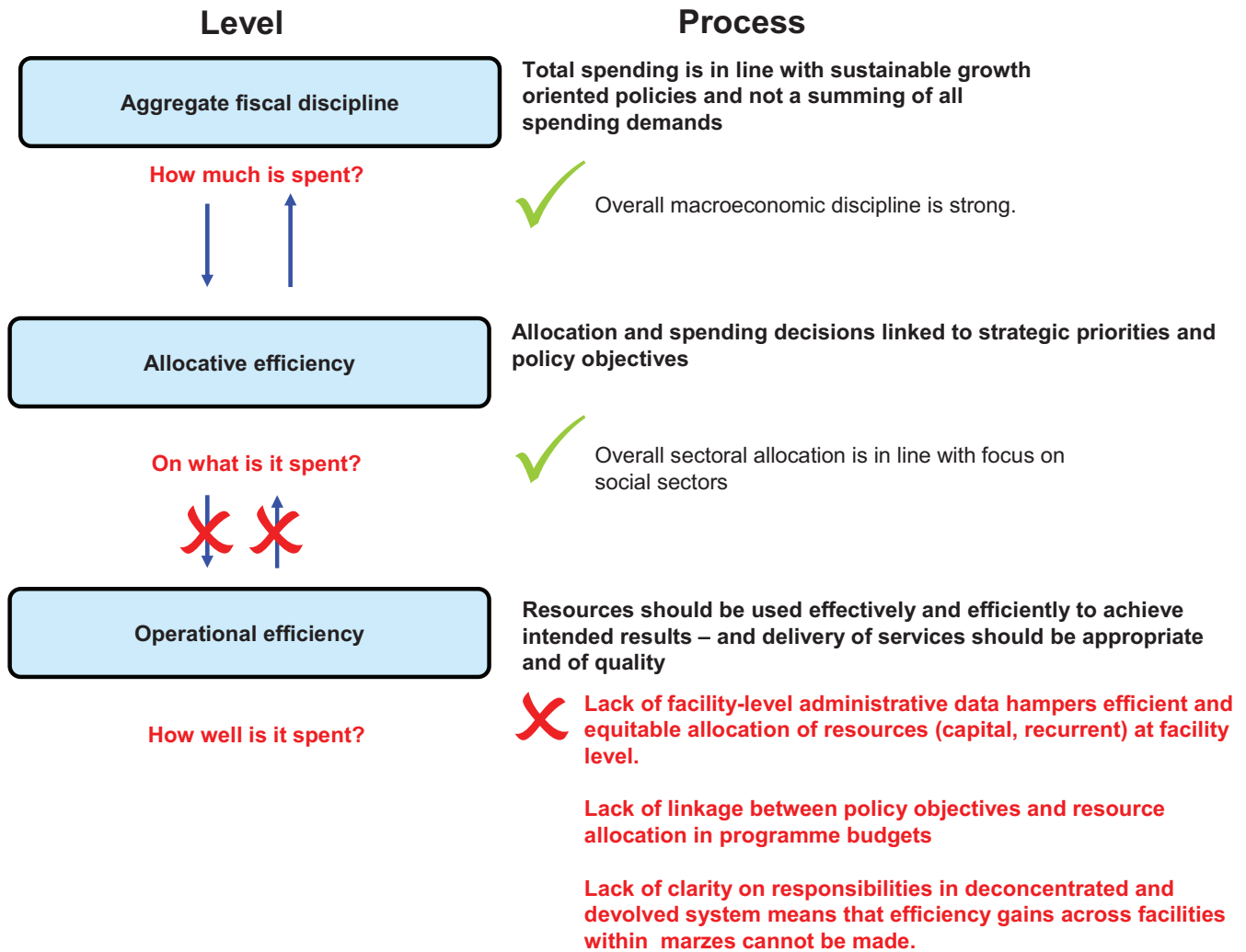
The preceding analysis has examined the PFM system in terms of both the high-level budgeting outcomes while at the same time attempting to draw out the underlying issues in the PFM system that are at the heart of the diagnosis. This chapter will pull the key findings back into the conceptual framework presented in chapter one, beginning with a summary of the outcomes and process in order to identify the main entry points and recommendations for engagement going forward.

5.1 Diagnosis: the high-level budgeting outcomes

The previous two chapters showed that overall both aggregate fiscal discipline and allocative efficiency are seen to be met, although further improvements in domestic revenue generation will be required to increase government expenditure as a percentage of GDP. Further attention will need to be paid to both the continued use of the 'other expenditure' category for additional budget expenditures and the extent to which priorities shift away from social sectors during the finalisation of the budget law.

These points notwithstanding, the major problems are to be found at the level of operational efficiency. As the figure below illustrates, the main bottlenecks are the result of poor linkages between levels two and three. It is the MTEF and programme budgets that ideally should serve as the link between these two, in order to ensure that prioritisation of resources is strongly based around strong, policy-oriented budget submissions of line ministries so that funds can flow towards those programmes which are deemed to be most effective.

Figure 5.1 Main findings on high-level budget outcomes

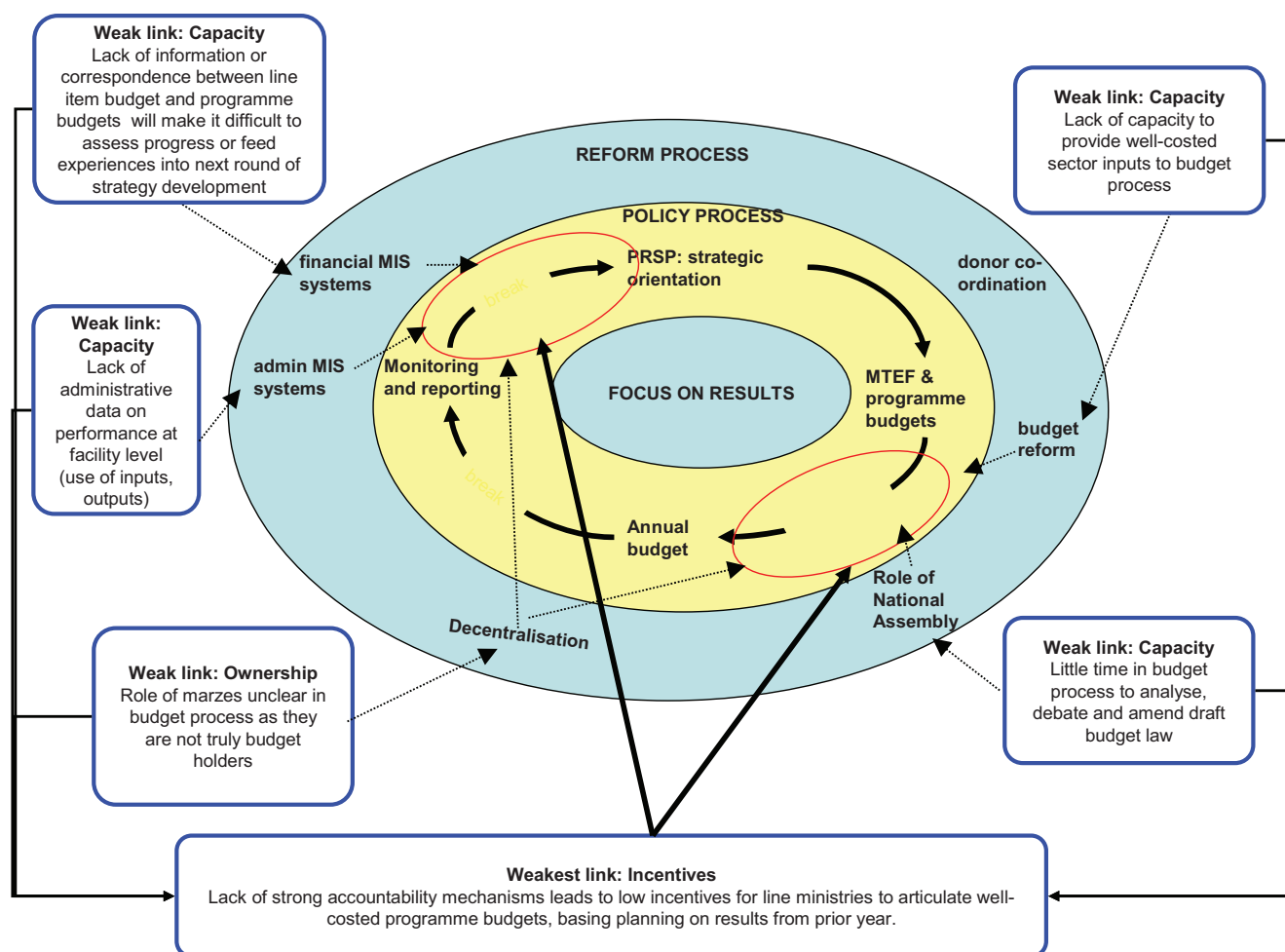


5.2 Understanding the process: current weak links in the focus on results

These weak strategic links between policy priorities and resource allocation are currently caused by the lack of incentives, ownership, and capacity for a focus on results. The figure below shows how weaknesses in capacity (in programme budgeting, the linkages between MTEF and state budget classification, the scope for thorough scrutiny of budget bids in the National Assembly, and the availability and analysis of administrative data) and ownership (in the case of marzes) all contribute to the larger issue of weak incentives for line ministries and other budget holders to invest in comprehensive and realistic planning and budgeting exercises.

These problems manifest themselves mainly in the initial formulation of budgets, where the traditional line item budgeting remains the 'real budget' (since the MTEF is not officially part of the budget law nor is it debated by the National Assembly and the programme budgets are only presented in the annex), and in the monitoring and reporting phase, which does not effectively produce reporting on outputs or hold ministries to account for their performance.

Figure 5.2 The focus on results: weak links in the chain of accountability



5.3 Entry points: recommendations

It is these weak links in the chain of accountability for results that help to identify the entry points going forward, in terms of both general issues with the wider PFM system and specific issues within the three key sectors.

5.3.1 General issues

In order to tackle the bigger issues around the current lack of accountability for results, some recommendations for the wider budget process include:

Most importantly, this will involve addressing the **incentives** of all budget holders:

- **Using the budget execution reporting process as a mechanism for holding all levels of government to account for results.** This would suggest a larger role for the National Assembly not just in terms of financial audits but in scrutinising the operational efficiency of results in implementation of line ministries. Similarly, line ministries and marzes should use the budget reporting process to carefully monitor performance of decentralised units, especially individual health and education facilities. It is this demand for information on performance which is likely to ensure that the supply of data improves, rather than vice versa. Although improvements to the administrative data systems are surely needed, there is also currently a wealth of detailed data that is not yet fully put to analytical use. It is also important to stress that simple measures of output are likely to be the most useful in the first instance, rather than focusing on complicated outcome indicators, as it is output indicators which will be responsive to changes in the short term and which are more likely to identify the key management issues which are most critical.

- Ensuring that there are more **solid links between the MTEF and annual budget** so that the programme budgets and annual budgets are not separate parallel activities. Efforts in this area are already envisaged as programme budgeting becomes embedded, so that for 2010 the classification in the MTEF and budget will be consistent. It will be important to support these already ongoing efforts;
- Doing this will require technical improvements in **capacity** including:
 - Ensuring that there are clear and easy linkages between the state budget classification and the programme budget classification in sector MTEFs;
 - Building capacity within the Ministry of Finance and line ministries for analysis of existing administrative data and for formulation and evaluation of budget submissions;
 - Improving the flows and storage of administrative data so that detail held at the marz level is effectively aggregated and analysed within central ministries;
 - Providing support for committees of the National Assembly to undertake rapid analysis of the draft budget law to facilitate evidence- and policy-based debate during the budget approval process.
 - Ensuring that programme budgets and MTEFs are adapted to reflect the final Finance Law passed by the National Assembly at the end of the arbitration phase, so that year one of the MTEF is an accurate reflection of the budget and that reporting against programme budgets can take place.
- In terms of **ownership**, it should also involve an evaluation of the role of marzes as deconcentrated units in order for them to play a greater oversight role in the performance of service delivery.

The results of the recently-concluded ARDEP programme provides some useful insights on this last area. As the local needs and priorities in the children protection area can often be better identified and prioritised at regional level than from the centre, there will be considerable scope to engage at this level. The practical means to achieve this will likely be the sector working groups (in particular, social ones, such as health, education and social protection), which enable participative and bottom-up identification and prioritisation of relevant needs at marz level. These are later discussed and approved at the level of Marz Councils (and regional development commissions) and submitted to the government as MDPs for marzes and their MTEF submissions. This would allow improved inventory of the needs and search for resources to address immediate and medium-term problems.

Where incentives, ownership, and capacity are addressed within central- and marz-levels, therefore, a focus on children's interests in policies, budgets, and results in implementation should be mutually re-inforcing.

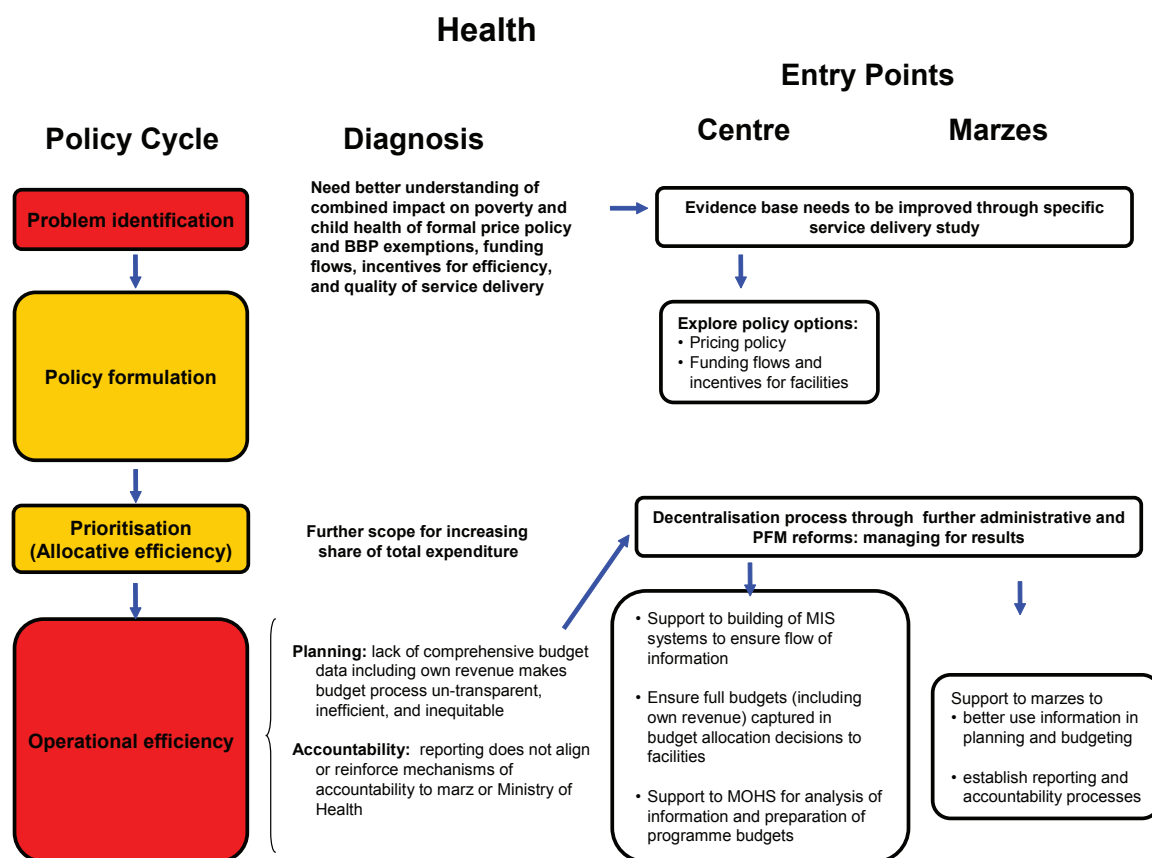
5.3.2 Health

Within the health sector, there are some more specific entry points that emerge throughout the policy and budget cycle. These are summarised in the figure below. As the 'traffic light' colours in the policy cycle reflect, the two main constraints are at the level of problem identification (which has a knock-on effect to policy formulation) and operational efficiency.

It is therefore recommended that some diagnostic work is undertaken to better understand the current situation and to provide the necessary evidence base for the current policy debate around health financing. The type of study most likely to be useful will be a service delivery survey which includes a sample of facilities and households, combining an analysis of resources, service delivery (including quality of care), the beneficiaries, the management hierarchy supporting service delivery and the effectiveness of the public expenditure that finances it. Expansion of the current National Health Accounts exercise to include a detailed look at sub-accounts in specific regions would also allow more disaggregated data to be collected that could then be compared with detailed data already collected by the SHA on service delivery.

Once these are addressed, it is more likely that the health sector will be able to produce solid evidence-based advocacy for higher resources during the budget arbitrage stage. In other words, a key message here is to address the most binding constraints first, rather than focusing solely on 'increasing fiscal space'; given the high levels of inefficiency and equity currently in the system, calls for higher expenditure without addressing these are unlikely to be very credible.

Figure 5.3 Entry points in the health sector



5.3.3 Education

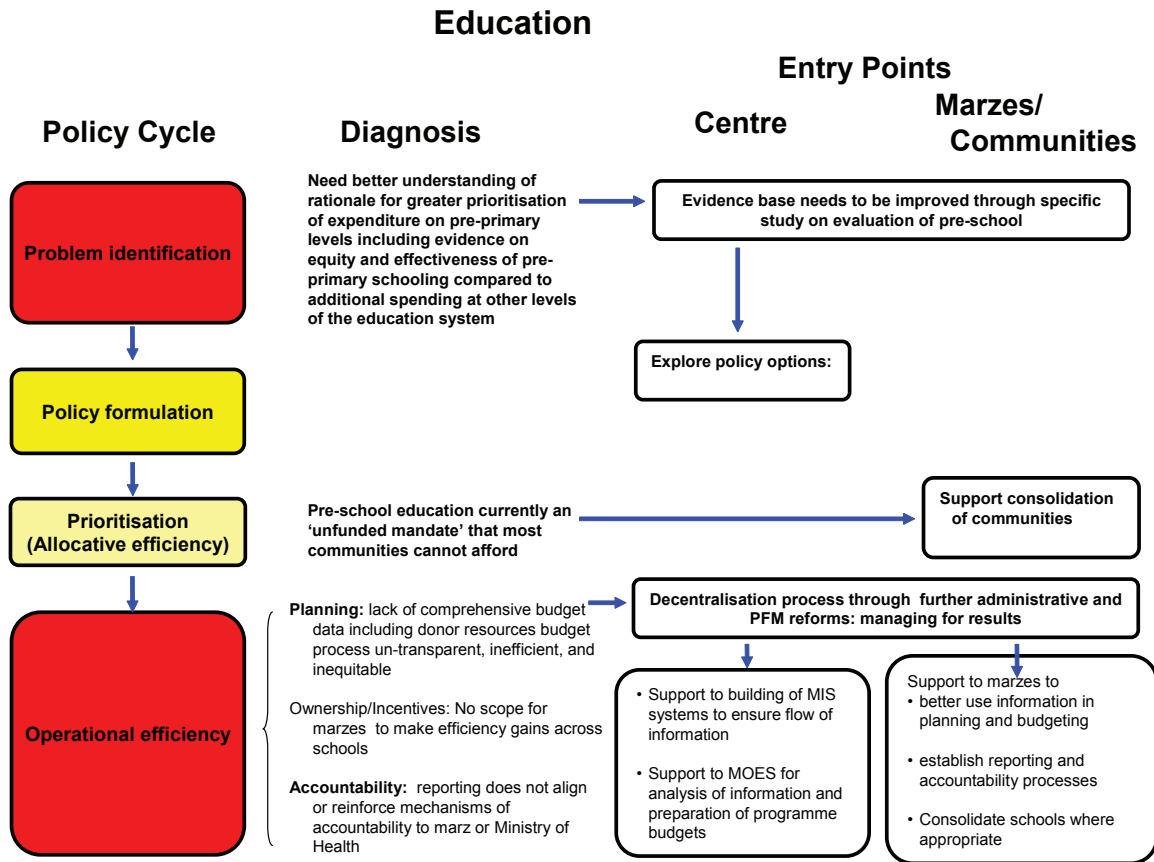
The story is much the same in the education sector. In terms of pre-primary education, the biggest bottleneck is at the stage of problem identification; there is no clear evidence base articulating why pre-primary should be a policy priority meriting higher spending, especially if this involves shifting resources from other levels of education. Building this evidence base could involve an evaluation of existing pre-primary education in terms of both educational outcomes with a strong focus on equity implications. This should then be followed by a cost-benefit analysis to understand the policy trade-offs involved between pre-primary spending and other potential options within the sector⁵⁴.

In terms of the prioritisation of pre-school education within community budgets, support could be given to the consolidation of communities. The high number of communities increases the administrative burden and limits the potential for spending on service delivery. By merging, communities would have larger budgets at their discretion and might also have a greater number of pre-primary-age children to further justify such expenditure.

With respect to basic education, the biggest constraints are in operational efficiency. This suggests that further support to decentralised service delivery is warranted, including technical support to the Ministry for administrative data collection and analysis in order to improve on programme budget formulation. At the local level, such support would also be important, combined with greater ability of marzes to make efficiency gains across schools through consolidation where appropriate.

54 A draft study commissioned by UNICEF and the World Bank is now available which will hopefully address these issues, however in its current form there are still some gaps which might not be possible to address without a follow-on study. In particular the data on precise coverage of facilities is not currently available (as this is often monitored only within Marzes, and even there it is often not possible to know whether facilities are staffed and functioning or not).

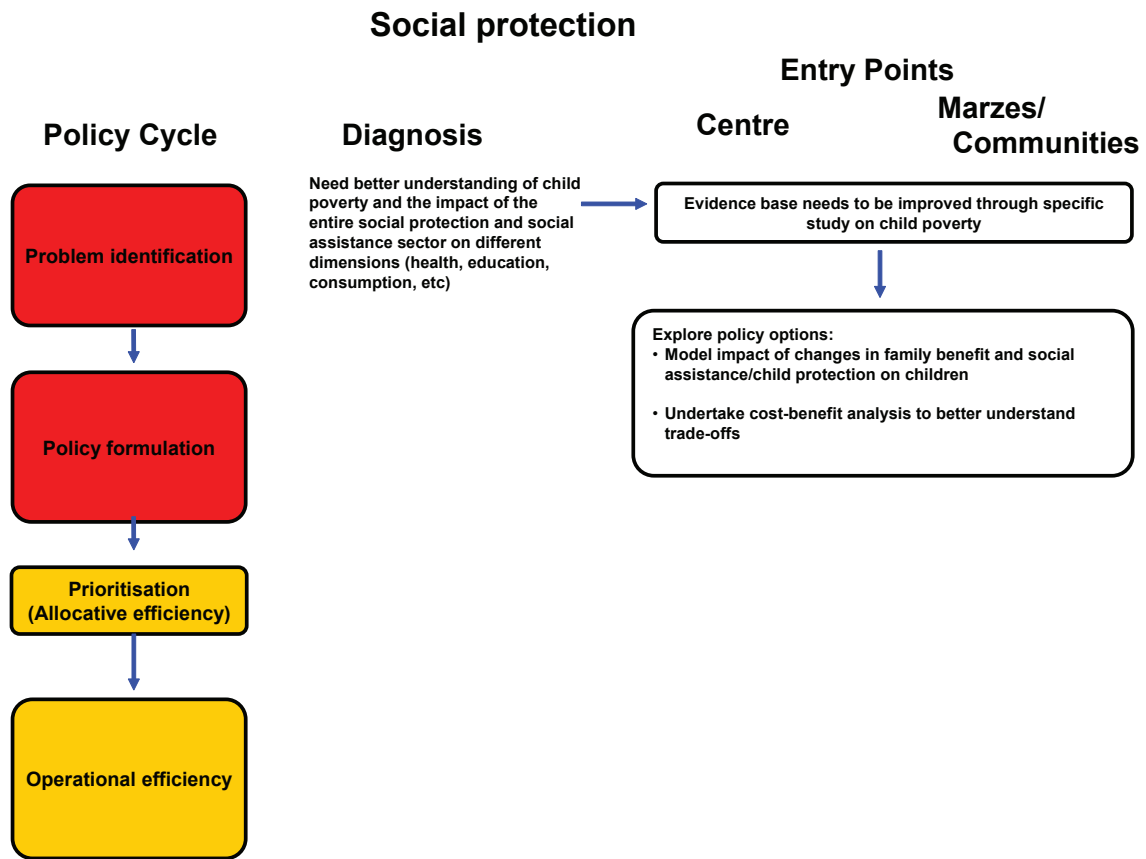
Figure 5.4 Entry points in the education sector



5.3.4 Social Protection

In terms of social protection, the bottlenecks seem to be mainly at the stage of problem identification and policy formulation. There is currently a lack of clear policy on the priorities for expansion of social services for children. Before a cost-benefit analysis of potential options is undertaken, it will be essential to first undertake a robust needs assessment and open a policy dialogue within the Ministry of Social Welfare and the Ministry of Finance on the rationale for such spending. This evidence base should include an analysis of the entire sector to better understand the poverty and welfare impact on children of the entire current system of financial support to families, pensions, unemployment payments and how these interact with non-financial benefits such as institutional care, foster care, and other services including access to health care through the BBP.

Figure 5.5 Entry points in social protection



References/Bibliography

- Angel-Urdinola, Diego F. and Jain, Shweta (2006) Do Subsidized Health Programs in Armenia Increase Utilization among the Poor?, World Bank Policy Research Working Paper 4017, Washington DC: World Bank.
- Angel-Urdinola, Diego F., Jain, Shweta and Prina, Silvia (2006) Armenia – Social Sectors and Poverty in Armenia: From Equity in Access to Equity in Quality. Background Paper for the 2006 Armenia Poverty Assessment.
- Chaudhury, Nazmul, Hammer, Jeffrey, and Murrugarra, Edmundo (2003) The Effects of a Fee-Waiver Program on Health Care Utilization among the Poor: Evidence from Armenia, World Bank Policy Research Working Paper 2952, Washington DC: World Bank.
- David Tumanyan (2005) The Ways of Local Self-Government System Development in The Republic of Armenia. Yerevan.
- Emerging Markets Group, Ltd. (2006) Household Health Survey: Baseline Evaluation, United States Agency for International Development (USAID).
- Government of the Republic of Armenia (1996) RA Law on Local Self-Government.
- Government of the Republic of Armenia (2008) Poverty Reduction Strategy Paper, Revised Version (PRSP-2).
- Hakobyan, Tatul, Nazaretyan, Mihran, Makarova, Tatyana, Aristakesyan, Movses, Margaryants, Hovhannes, and Nolte, Ellen (2006) Armenia: Health System Review. *Health Systems in Transition*, 8(6):1-180.
- Harutyunyan, K. Davtyan, N. and Rostomyan, H (2008) Education in Armenia, Yerevan: Center for Education Projects, Project Implementation Unit.
- Hua, Haiyan (2008) School Wastage Study in Armenia: Focusing on Student Absenteeism in Armenia, Yerevan: UNICEF.
- National Statistical Service (2007) Social Snapshot and Poverty in Armenia, 2007, Statistical Analytical Report based on the Results of the 2006 Integrated Living Conditions Survey of Households, Yerevan: National Statistical Service of the RA and The World Bank.
- Ministry of Finance of the Republic of Armenia (2008) Medium-Term Expenditure Framework (MTEF), various years.
- Ministry of Finance of the Republic of Armenia (2008) Public Financial Management Performance Measurement Report, Yerevan: Ministry of Finance of the Republic of Armenia.
- National Statistical Service (2007) Demographic Handbook of Armenia.
- National Statistical Service (2008). Marzes of the Republic of Armenia in Figures.
- National Statistical Service (2008b) Main Macroeconomic Indicators of the Republic of Armenia (mimeo)
- Shahbazyan, Vahram (2008) Relevance of Powers and Financial Resources of Local Self-government Bodies, in David Tumanyan (ed), *Local Self-Government Reforms in Armenia*, Yerevan: Communities Finance Officers Association.
- Torosyan, Arsen, Romaniuk, Piotr, and Krajewski-Siuda, Krzysztof (2008) The Armenian healthcare system: recent changes and challenges, *Journal of Public Health* (2008) 16:183–190.
- World Health Organisation (2007) National Health Accounts of the Republic of Armenia.
- World Bank (2003) Public Expenditure Review of Armenia, Washington D.C.: World Bank.
- World Bank (2007) Fiscal Policy and Economic Growth in East and Central Asia, Washington DC: World Bank.
- World Bank (2008) Armenia Public Expenditure Review: Education Sector, Human Development Department, Europe and Central East Asia, The World Bank.

Annex A Stakeholders consulted

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	Workstream Leader	Hovhannes Margaryants	
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	Project Manager	Irina Movsesyan	
	Chief of Division of Programming and Investments	Varduhi Mnatsakanyan	
	Head of Department for Coordination of Activities of Local Self-governments and Territorial Agencies	Ian Asatryan	
	Chief of Division for Social Protection	Surik Khachatryan	
	Chief of financial division	Kolozyan Seda	
	Chief of Division for Health Care	Gurgen Davtyan	
	Rank-2 specialist of Division for Industry and Procurements	Garnik Muradyan	
	Senior specialist, financial division	Armine Harutunyan	
	Deputy Head of Department for Education, Culture, Sports and Youth	Rubik Stepanyan	
	Deputy head of children protection department	Galoyan Mamikon	
	Deputy head of education department	Rubik Stepanyan	
	Home of Infants (Nork Orphanage) Lori Marzpetaran	Director	Liana Karapetyan Hovhannisyan
		Deputy Minister	Bagrat Yesayan
Ministry of Education and Science Ministry of Education and Science - Education PIU	Director	Karine Harutyunyan	
	Financial Manager	Haik Maghakyan	
Ministry of Finance		Jora Asatryan	
	Head of Department Financing Budget Expenditures	Hayk Ghalumyan	
Ministry of Health	Director, Health Economics and Accounting Department	Armen Karapetyan	
	Head of Maternal and Child Care Unit		
Ministry of Labor and Social Issues	Head of Administration	Jonik Margaryan Eduard Gevorgyan	

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	Chairman of the Standing Committee on Financial-Credit and Budgetary Affairs	Gagik Minasyan
State Health Agency	Director	Dr Ara Ter-Grigoryan
UNICEF	Representative	Laylee Moshiri
	Deputy Representative	Malathi Pillai
	Regional Program Officer	Evgeny Stanislavov
	M&E Officer	Sona Karapetyan
	Child Protection Officer	Hayk Khemchyan
	Child Protection Program Assistant	Artak Nersisyan
	Health and Nutrition Program Assistant	Mihran Hakobyan
	Education Officer	Alvard Poghosyan
WHO Country Office	Head	Elizabeth Danielyan
	Country Programme Coordinator for VPI	Tigran Avagyan
World Bank	Senior Health Specialist	Susanna Hayrapetyan

Annex B Basic benefit package

Health care services covered under the Basic Benefits Package (2004)⁵⁵

1 State governance of the health sector

2 Hospital care

- 2.1 Treatment of tuberculosis
- 2.2 Treatment of intestinal and other infectious diseases
- 2.3 Treatment of sexually transmitted infections
- 2.4 Psychiatric care
- 2.5 Emergency medical care
- 2.6 Treatment of narcological diseases
- 2.7 Provision of hemodialysis
- 2.8 Obstetrician and gynaecological services
- 2.9 Intensive health care
- 2.10 Health care services for vulnerable and special population groups
- 2.11 Health care services for children under the age of seven
- 2.12 Clinical and social rehabilitation and examination of ability to work
- 2.13 Medical care for reproduction
- 2.14 Capital reconstruction of health facilities
- 2.15 Examination and treatment of individuals of pre-prescription and prescription age

3 Primary health care (ambulatory-polyclinic)

- 3.1 Primary care of patients aged 18 years and over
- 3.2 Primary care of patients under the age of 18 years
- 3.3 Procurement of medicine on a centralized basis
- 3.4 Health care provided in dispensaries
- 3.5 Obstetrician and gynaecological services
- 3.6 Capital reconstruction of health facilities
- 3.7 Examination and treatment of individuals of pre-prescription and prescription age

4 Hygienic and epidemiological services

5 Other health services and programmes

- 5.1 Subsidy of other state non-commercial organizations
- 5.2 Transportation costs of patients referred for treatment abroad
- 5.3 Central procurement of modern medical equipment and supplies
- 5.4 Provision of difficult and expensive diagnoses
- 5.5 Other health services
- 5.6 Services provided within the "Preparation of health system optimization project" supported by the United States Agency for International Development
- 5.7 Services provided within the "Health system optimization project" (implemented by the World Bank)
- 5.8 Programme on "Recovery of small social and economic infrastructures in the health sphere" within the framework of second health project of the Armenia Social Investment Fund, implemented with support from the World Bank

Socially Vulnerable Groups covered under the Basic Benefit Package⁵⁶

- Beneficiaries of the poverty family benefits programme (38.00+ points).
- People with disabilities (according to three degrees of disability).
- Children under the age of seven.

⁵⁵ Hakobyan et al. (2006), p. 158-159.

⁵⁶ Hakobyan et al. (2006), p. 33-34.

- Children from families with four or more children under 18.
- Children without parental care.
- Children/adolescents under age 18:
 - o with disabilities
 - o with a disabled parent
 - o from a single parent household
 - o without family
 - o under regular medical care.
- Military servicemen; war veterans and their families; families of military servicemen who died in service.
- People involved in the clean-up activities following the Chernobyl accident.
- People undergoing additional medical examination by the Socio-Medical
- Expertise Commission (upon referral by SMEC authority).
- People of conscription/pre-conscription age (inpatient and outpatient health care, and for the people of call-up age, hospital tests as well).
- Convicts and individuals in detention.
- People being cared for in orphanages and homes for the elderly.

Annex C Supplementary tables and figures by chapter

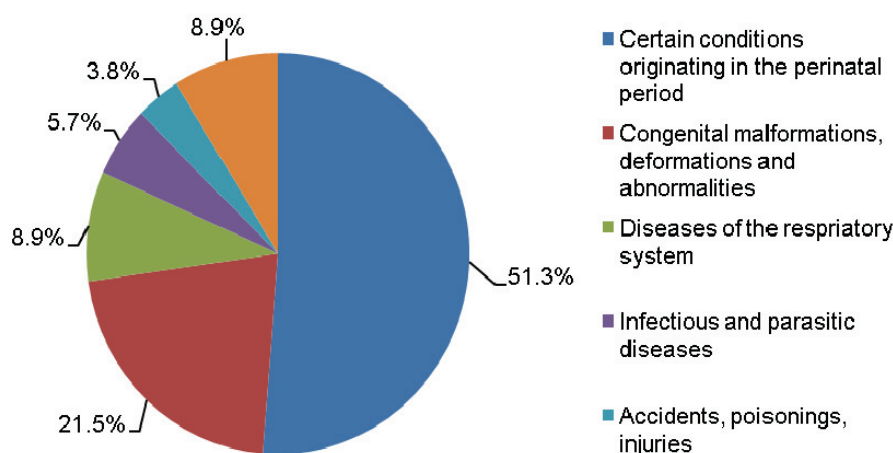
C.1 Situation analysis

Table C.1 Poverty measures by gender and age groups, 2004-2006 (in %)

	2004		2005		2006		% of poor	% of population
	Very poor	Poor	Very poor	Poor	Very poor	Poor		
Gender								
male	6.4	34.3	4.6	29.7	4.2	26.6	54.3	54.0
female	6.4	35.0	4.5	30.1	4.0	26.3	45.7	46.0
Age groups								
Children 0-5	8.0	41.9	5.1	34.9	5.6	35.3	9.6	7.2
Children 6-14	7.2	36.6	5.3	32.0	4.3	26.5	13.9	13.8
Children 15-19	6.1	35.0	4.9	30.2	4.8	27.8	9.9	9.4
Aged 20-24	6.4	35.4	5.6	29.8	3.8	27.3	9.0	8.7
Aged 25-29	6.7	39.2	4.3	29.7	4.4	27.5	7.5	7.2
Aged 30-34	8.4	37.5	4.9	30.8	3.6	26.3	6.2	6.3
Aged 35-39	6.6	35.6	4.5	31.6	4.3	26.6	5.9	5.9
Aged 40-44	5.5	32.7	4.1	29.6	4.0	27.0	7.4	7.2
Aged 45-49	5.8	29.3	4.4	27.4	3.1	21.9	6.5	7.8
Aged 50-54	5.4	30.2	4.8	27.9	3.3	24.7	6.0	6.5
Aged 55-59	4.6	30.5	3.1	26.6	2.7	22.1	3.8	4.6
Aged 60-64	6.3	30.3	3.0	25.0	1.8	21.9	2.1	2.6
Aged 65+	5.3	31.5	3.5	28.2	4.5	25.1	12.2	12.8
Total	6.4	34.6	4.6	29.8	4.1	26.5	100.0	100.0

Source: National Statistical Service (2007), p. 31.

Figure C.1 Main Causes of Death for Children 0-4 years, 2006



Source: NSS (2007), p. 69.

C.2 Fiscal space

C.2.1 Comparison with other countries in the region

economy	Gross domestic product per capita				Gross domestic product				Price level index	GDP per capita indices		GDP per capita indices		Shares			PPP	Exchange rate ^a	Population ^b	
	billions		billions		billions		billions		US=100	US=100		world=100		world=100			US\$=1	US\$=1	millions	
	PPP	rank	US\$	rank	PPP	rank	US\$	rank	rank	PPP	US\$	PPP	US\$	GDP @ PPP	GDP @ US\$	Population				
CIS																				
Armenia	3,903	89	1,523	91	12.6	113	4.9	120	39	110	9.4	3.7	43.5	21.1	0.02	0.01	0.05	178.58	457.69	3.22
Azerbaijan	4,648	81	1,604	89	38.4	79	13.3	88	35	127	11.2	3.8	51.8	22.2	0.07	0.03	0.13	1,632	4,727.0	8.27
Belarus	8,541	66	3,090	70	83.5	63	30.2	70	36	119	20.5	7.4	95.2	42.7	0.15	0.07	0.16	779	2,153.8	9.78
Georgia	3,505	96	1,427	92	15.3	106	6.2	112	41	104	8.4	3.4	39.1	19.7	0.03	0.01	0.07	0.74	1.81	4.36
Kazakhstan	8,699	63	3,771	64	131.8	56	57.1	58	43	96	20.9	9.0	97.0	52.2	0.24	0.13	0.25	57.61	132.88	15.15
Kyrgyz Republic	1,728	114	478	125	8.9	122	2.5	129	28	144	4.1	1.1	19.3	6.6	0.02	0.01	0.08	11.35	41.01	5.14
Moldova	2,362	104	831	108	8.5	125	3.0	124	35	123	5.7	2.0	26.3	11.5	0.02	0.01	0.06	4.43	12.60	3.59
Russian Federation ^a	11,861	51	5,341	54	1,697.5	8	764.4	14	45	91	28.5	12.8	132.2	73.9	3.09	1.73	2.34	12.74	26.26	143.11
Tajikistan	1,413	121	338	136	9.7	120	2.3	132	24	148	3.4	0.8	15.8	4.7	0.02	0.01	0.11	0.74	3.12	6.85
Ukraine	5,583	77	1,829	87	263.0	37	86.1	53	33	132	13.4	4.4	62.2	25.3	0.48	0.19	0.77	1.68	5.12	47.11
Total	9,202		3,934		2,269.2		970.0		43		22.1	9.4	102.6	54.4	4.13	2.19	4.02			247

Source: 2005 International Comparison Program, Tables of final results, February 2008

<http://siteresources.worldbank.org/ICPINT/Resources/ICP-final-results.pdf>

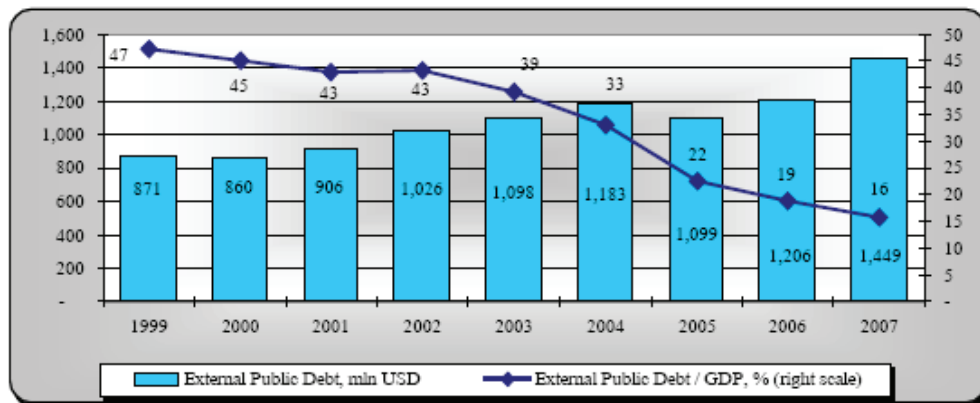
C.2.2 Annual report of the public debt of Armenia

	1999		2000		2001		2002		2003		2004		2005		2006		2007	
	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD	bin AMD	min USD
Public debt	487.3	930.3	504.4	913.5	545.2	970.4	840.8	1,095.3	864.4	1,173.9	821.1	1,278.5	548.2	1,213.3	508.9	1,400.1	516.2	1,896.9
of which																		
External debt	456.1	870.8	474.8	859.5	508.8	905.6	599.8	1,025.5	821.3	1,097.7	574.7	1,182.9	494.9	1,099.2	438.2	1,205.6	440.8	1,448.9
Domestic debt	31.2	59.5	29.8	54.0	36.4	64.8	40.9	69.8	43.1	76.2	46.4	95.5	51.3	114.1	70.7	194.5	75.4	247.9
of which																		
government bonds ¹	31.2	59.5	29.8	54.0	36.4	64.8	40.9	69.8	43.1	76.2	46.4	95.5	51.3	114.1	70.7	194.5	68.3	217.9
Public debt / GDP, %	49.35	60.41	48.91	47.79	48.38	45.81	47.02	48.09	40.90	41.82	32.55	35.74	24.35	24.78	19.15	21.92	18.44	18.49
of which																		
External debt / GDP, %	46.19	47.19	46.02	44.98	43.27	42.75	44.02	43.15	38.24	39.10	30.12	33.07	22.08	22.43	18.49	18.88	14.04	15.79
Domestic debt / GDP, %	3.18	3.23	2.89	2.82	3.10	3.06	3.00	2.94	2.65	2.71	2.43	2.87	2.29	2.33	2.68	3.05	2.40	2.70
of which																		
government bonds / GDP, %	3.18	3.23	2.89	2.82	3.10	3.06	3.00	2.94	2.65	2.71	2.43	2.87	2.29	2.33	2.68	3.05	2.11	2.37
Gross Domestic Product (GDP)	987.4	1,845.5	1,031.3	1,911.8	1,175.9	2,118.5	1,362.5	2,376.4	1,824.6	2,807.1	1,907.9	3,576.8	2,242.9	4,900.4	2,657.1	8,368.7	3,139.4	9,177.3
USD/AMD exchange rate as the end of year	523.77		552.18		561.81		584.89		588.00		485.84		450.19		363.50		304.22	
USD/AMD average annual exchange rate	535.08		539.52		555.08		573.35		578.77		533.45		457.89		418.04		342.08	

¹ Government securities at total amount of AMD 12.7 billion given for the recapitalization of CBA are included in 2006 public domestic debt.

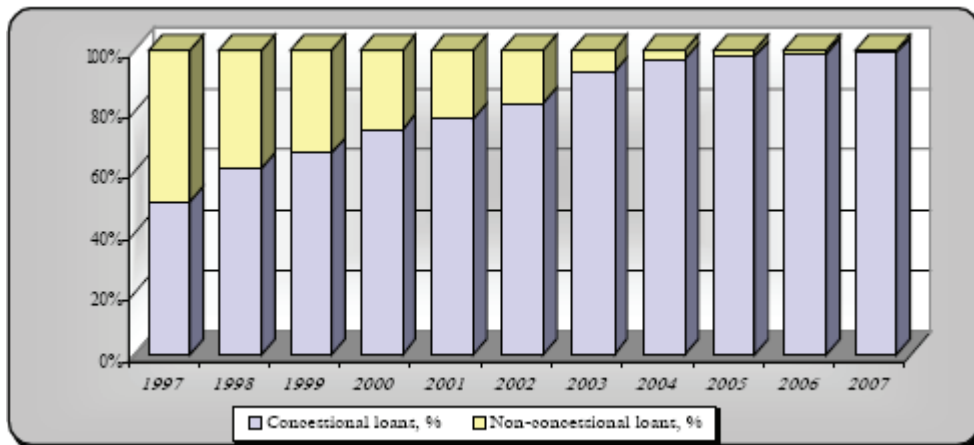
C.2.3 Composition of debt

Figure C.2 External Public Debt⁵⁷



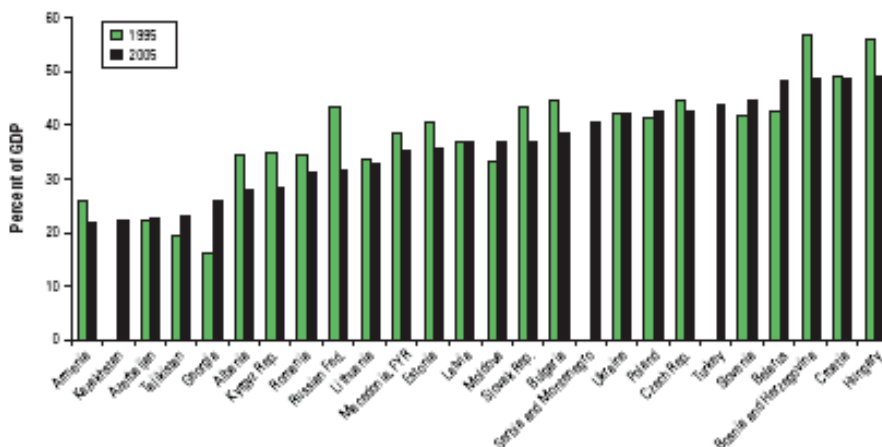
The dynamics of external public debt and external debt/GDP Index

Figure C.3 Changing composition of external financing⁵⁸



C.2.4 Comparison of spending on social sectors with other countries in the region

Figure C.4 Total Public Sector Spending, by Country in ECA, 1995 and 2005.



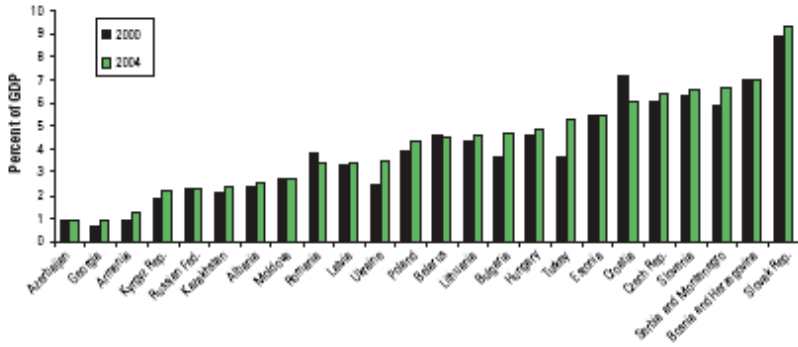
Note: Initial year data for Bosnia and Herzegovina are 1996 and for the Russian Federation are 1997. Data for 1995 not available for Kazakhstan, Serbia and Montenegro, and Turkey.

Source: World Bank (2007), p. 38.

57 The 2007 Annual Report of the Public Debt of the Republic of Armenia; www.mfe.am/mfeengweb/stattreasury/2007/2007.pdf

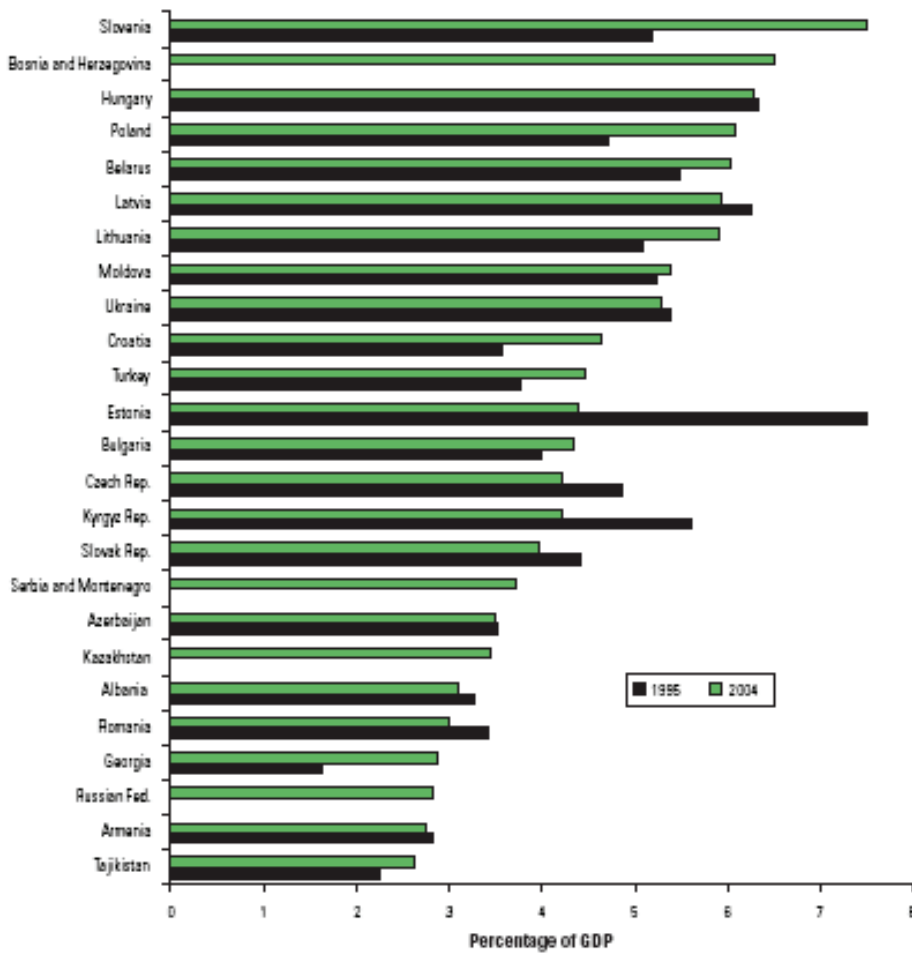
58 The 2007 Annual Report of the Public Debt of the Republic of Armenia; www.mfe.am/mfeengweb/stattreasury/2007/2007.pdf

Figure C.5 Public-Sector Health Expenditures in ECA Countries, 2000 and 2004



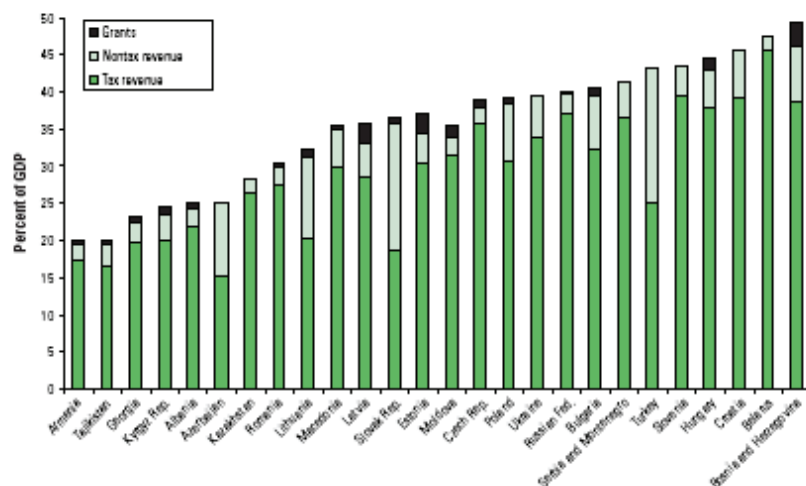
Note: a. Data for Russian Federation are for 2000 and 2003.
Source: World Bank (2007), p. 44.

Figure C.6 Education Spending in ECA Countries, 1995 and 2004



Note: Initial year data for Slovak Republic are 1996; final year data for the Russian Federation are 2003. No 1995 data available for Bosnia and Herzegovina, Serbia and Montenegro, Kazakhstan, and the Russian Federation.
Source: World Bank (2007), p. 44.

Figure C.7 Regional Variation in Revenues, 2005.



Source: World Bank (2007), p. 47.

C.2.5 Credibility of the MTEF

The tables below show the projections from successive rounds of MTEFs to give an idea of the credibility of outer-year forecasts. Actual figures are shown in the boxes, budgeted figures are shaded grey, and the MTEF projections are shown in white.

Table C.2 Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in the Social Sector over 2004-2008.

Functional Classification Group	2004	2005	2006	2007	2008	2009	2010
Social-Cultural Branches, Total							
MTEF 2005-2007	117013.8	142737.5	161705.5	188059.9			
MTEF 2006-2008	113849.5	149209.7	170242.9	194338	219102.7		
MTEF 2007-2009		144475.6	188651.3	200770.2	206824.5	223700.6	
MTEF 2008-2010			174832.3	213967.3	152938	307386.6	346080.2

Source: MTEF 2005-2007, MTEF 2006-2008, MTEF 2007-2009, MTEF 2008-2010.

Table C.3 Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in the Education over 2004-2008.

Functional Classification Group	2004	2005	2006	2007	2008	2009	2010
1. Education							
MTEF 2005-2007	45508.1	54645.6	59389.6	67714.6			
Share in GDP (%)	2.5	2.8	2.8	2.9			
Share in total expenditure (%)	13.8	15.4	15.2	15.6			
MTEF 2006-2008	43934.7	57460.8	65706.6	74990.5	90094.7		
Share in GDP (%)	2.3	2.7	2.9	3	3.3		
Share in total expenditure (%)	13.2	14.6	14.9	15.4	16.9		
MTEF 2007-2009		56453.16	77081.2	80648	85188	90316.6	
Share in GDP (%)		2.5	3.2	3	2.9	2.8	
Share in total expenditure (%)		13.5	16	15.4	14.5	14.9	
MTEF 2008-2010			66922.3	86045.3	101220.7	127395.7	142001.6
Share in GDP (%)			2.5	2.9	2.9	3.3	3.4
Share in total expenditure (%)			13.9	14.7	15.2	18.1	18.8

Source: MTEF 2005-2007, MTEF 2006-2008, MTEF 2007-2009, MTEF 2008-2010.

Table C.4 Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in Social Insurance and social security over 2004-2008.

Functional Classification Group	2004	2005	2006	2007	2008	2009	2010
2. Social Insurance and social security							
MTEF 2005-2007	35804.8	44834.2	52210.4	56580.5			
Share in GDP (%)	2	2.3	2.4	2.4			
Share in total expenditure (%)	10.9	12.6	13.4	13.1			
MTEF 2006-2008	34314.3	45882.3	52355.2	55467.6	56642.4		
Share in GDP (%)	1.8	2.2	2.3	2.2	2.1		
Share in total expenditure (%)	10.3	11.6	11.9	11.4	10.6		
MTEF 2007-2009		43313.4	54700.7	56655.4	57481.3	60667.4	
Share in GDP (%)		1.9	2.3	2.1	2	1.9	
Share in total expenditure (%)		10.4	11.3	10.8	9.8	10	
MTEF 2008-2010			51118.3	63071.4	69352.4	71050.4	73576
Share in GDP (%)			1.9	2.2	2	1.9	1.8
Share in total expenditure (%)			10.6	10.8	10.4	10.1	9.8

Source: MTEF 2005-2007, MTEF 2006-2008, MTEF 2007-2009, MTEF 2008-2010.

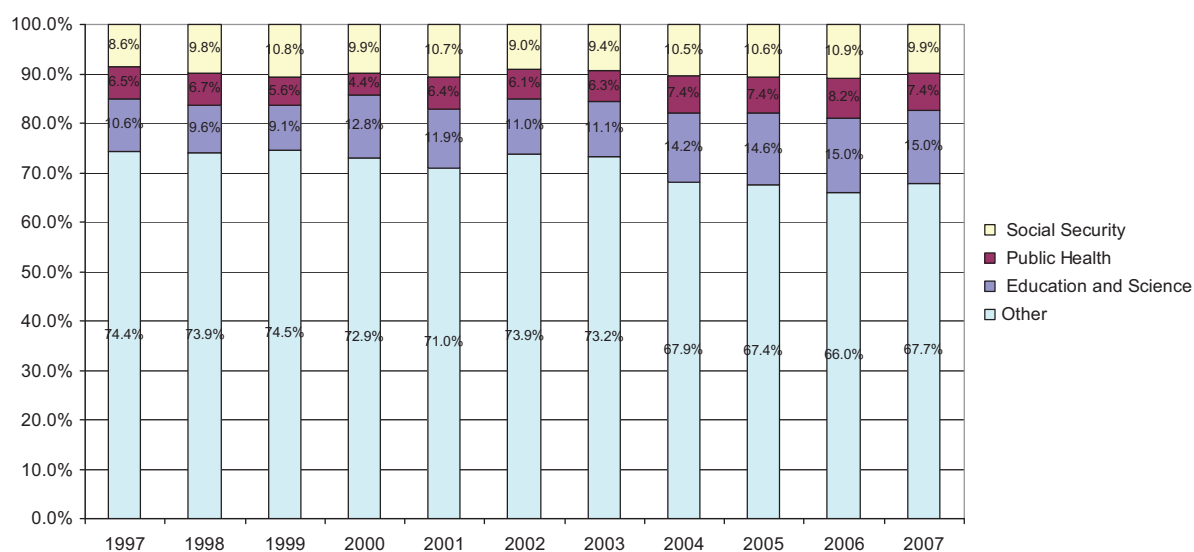
Table C.5 Credibility of the MTEF: Planned, Budgeted and Actual Expenditures in Health Care over 2004-2008.

Functional Classification Group	2004	2005	2006	2007	2008	2009	2010
3. Health Care							
MTEF 2005-2007	24508.6	31012.4	35788.5	49072.4			
Share in GDP (%)	1.4	1.6	1.7	2.1			
Share in total expenditure (%)	7.4	8.7	9.2	11.3			
MTEF 2006-2008	24185.5	31651.3	36627.5	47546.4	55433.1		
Share in GDP (%)	1.3	1.5	1.6	1.9	2		
Share in total expenditure (%)	7.2	8	8.3	9.7	10.4		
MTEF 2007-2009		30596	38625.3	44201.5	46456.7	52622.9	
Share in GDP (%)		1.4	1.6	1.6	1.6	1.6	
Share in total expenditure (%)		7.3	8	8.4	7.9	8.7	
MTEF 2008-2010			38638.1	44276.6	50853.3	57251.8	63987.2
Share in GDP (%)			1.4	1.5	1.5	1.5	1.5
Share in total expenditure (%)			8	7.6	7.6	8.1	8.5

Source: MTEF 2005-2007, MTEF 2006-2008, MTEF 2007-2009, MTEF 2008-2010.

C.2.6 Trends in spending shares

Table C.6 Shares in public expenditure 1997-2007, actual



Source: EDRC(2008), accessed at <http://www.edrc.am/project.html?cat-id=68> in October 2008.

C.2.7 Comparison of data sources on shares of expenditure

Table C.7 Comparison of shares of actual spending on health from different sources

	2004	2005	2006	2007
GGHE as % of General government expenditure, WHO estimate (a)	8.3	8.2	9.7	
Ministry of Finance (total expenditure)			7.5	7.5
PEFA (Primary expenditure)		8.2	8.3	8.3
MTEF (b)	7.2	7.3	8	

(a) WHO 2008, National Health Accounts; accessed September 2008 at <http://www.who.int/nha/country/arm.xls>

(b) actual expenditure as reported in MTEF 2006-2008 for 2004 actuals, MTEF 2007-2009 for 2005 actuals, MTEF 2008-20010 for 2006 actuals

Table C.8 Comparison of shares of actual spending on education from different sources

	2004	2005	2006	2007
Education PER (a)	13.2	13.6	14	
Ministry of Finance (total expenditure)			14.8	14.8
PEFA (Primary expenditure)		15.7	16.2	16.3
MTEF (b)	13.2	13.5	13.9	

(a) World Bank (forthcoming)

(b) actual expenditure as reported in MTEF 2006-2008 for 2004 actuals, MTEF 2007-2009 for 2005 actuals, MTEF 2008-20010 for 2006 actuals

C.3 Operational efficiency

Table C.9 Per capita Funding (PCF) Participating, Protected and PCF Non-Participation Schools

	2001	2002	2003	2004	2005	2006	2007
A. PCF participating schools							
No. of schools	200	301	506	791	1,024	963	1,362
No. of classes	4,411	6,890	10,159	15,368	18,320	17,246	20,494
No. of students	98,213	157,371	231,563	374,900	438,847	417,758	446,140
No. of staff positions	12,651	20,185	30,885	43,022	48,196	44,255	50,974
Teachers	8,104	12,776	20,349	26,033	29,618	27,483	31,765
Non-teaching staff	4,547	7,409	10,535	16,988	18,578	16,772	19,209
Recurrent budgets (AMD mils.)	2,667	4,635	8,000	17,315	29,943	33,393	47,599
Memo:							
Classes per school	22.1	22.9	20.1	19.4	17.9	17.9	15.0
Students per class	22.3	22.8	22.8	24.4	24.0	24.2	21.8
Student-teacher ratio	12.1	12.3	11.4	14.4	14.8	15.2	14.0
Per student budget (AMD)	27,200	29,500	34,500	46,200	68,200	79,900	106,700
B. Protected schools							
No. of schools			110	217	330	399	
No. of classes			1,059	2,009	3,045	3,631	
No. of students			13,268	25,735	38,164	46,305	
No. of staff positions			3,080	5,863	8,022	9,625	
Teachers			2,008	3,432	4,585	6,013	
Non-teaching staff			1,072	2,430	3,436	3,612	
Recurrent budgets (AMD mils.)			860	2,331	4,981	7,391	
Memo:							
Classes per school			9.6	9.3	9.2	9.1	
Students per class			12.5	12.8	12.5	12.8	
Student-teacher ratio			6.6	7.5	8.3	7.7	
Per student budget (AMD)			64,800	90,600	130,500	159,600	
C. PCF non-participating schools							
No. of schools	1,189	1,090	776	351			
No. of classes	22,648	18,971	13,114	4,639			
No. of students	462,424	376,027	268,790	92,799			
No. of staff positions	64,885	55,496	38,283	13,431			
Teachers	40,562	34,504	25,054	7,872			
Non-teaching staff	24,323	20,992	13,229	5,559			
Recurrent budgets (AMD mils.)	13,908	12,695	10,261	5,521			
Memo:							
Classes per school	19.0	17.4	16.9	13.2			
Students per class	20.4	19.8	20.5	20.0			
Student-teacher ratio	11.4	10.9	10.7	11.8			
Per student budget (AMD)	30,100	33,800	38,200	59,500			

Source: World Bank (2008: 43)