

Guidance for DFID country offices on measuring and maximising value for money in cash transfer programmes

Toolkit and explanatory text

Anthony Hodges, Philip White and Matthew Greenslade

October 2011

Table of contents

Table of contents	i
List of boxes, tables and figures	ii
Abbreviations	iii
Introduction	1
How to use this guidance	1
Why this guidance note?	1
Things to think about before you start	2
Please send your comments	4
Acknowledgements	4
Part 1: Toolkit	5
Analysing programme cost (all stages)	6
Analysing programme benefits (all stages)	7
Analysing value for money (all stages)	8
Critical cost-effectiveness drivers	13
Monitoring and evaluation (M&E)	14
Financial sustainability (design stage)	15
Part 2: Explanatory text	16
1. Background: ‘value for money’ and analytical challenges	16
2. Cash transfers, VfM and the results chain	18
3. Analysing programme cost	19
3.1 Breaking costs down into key components	19
3.2 Assessing other costs	21
4. Analysing value for money	24
4.1 Cost-efficiency	24
4.2 Cost-effectiveness	30
4.3 Cost-benefit analysis	35
4.4 VfM in labour intensive public works	40
5. Critical cost-effectiveness drivers	42
5.1 Targeting	43
5.2 Conditionality	48
5.3 Implementation systems	49
6. Monitoring and evaluation (M&E)	50
7. Financial sustainability	51
References	54

List of boxes, tables and figures

Figure 1:	Applying the 3E framework to analysing VfM in cash transfers	5
Table 1:	Measurement requirements and the VfM chain	8
Box 1:	Start-up cost structures in three cash transfer programmes	20
Box 2:	Private costs in Kenya's CT-OVC programme and Mongolia's CMP	22
Table 2:	Cost-transfer ratios in three African programmes with complex targeting	26
Box 3:	How cost-efficiency improves as programmes mature	27
Figure 2:	Evolving CTRs in cash transfer programmes in Kenya and Mexico	27
Box 4:	Relative cost-efficiency of cash, food and farm input transfers	28
Figure 3:	Cost-transfer ratios of cash, food and farm input transfers in Malawi and Zambia	28
Figure 4:	Share of administrative costs by types of intervention: median values (%)	29
Box 5:	Comparing the cost-effectiveness of cash transfers and subsidies	33
Figure 5:	Simulated change in poverty gap resulting from the global crisis and alternative social protection measures costing 1% of GDP, in three African countries, 2009-33	33
Figure 6:	Comparative cost of reducing the poverty gap	34
Box 6:	Two case studies of VfM analysis for cash transfers	37
Figure 7:	Cost of transferring US\$1 to a PWP beneficiary in Malawi and Zambia	41
Box 7:	Economic and financial analysis of the PSNP in Ethiopia	43
Box 8:	Relative costs and performance of alternative targeting methods	45
Figure 8:	Social Assistance, Social Insurance, and Social Sector Spending by Region, Selected Years	53

Abbreviations

BCR	Benefit-cost ratio
CBA	Cost-benefit analysis
CCT	Conditional cash transfer
CMP	Child Money Programme, in Mongolia
CTR	Cost-transfer ratio
CT-OVC	Cash transfers for orphans and vulnerable children, in Kenya
DFID	Department for International Development
EIRR	Economic internal rate of return
HSNP	Hunger Safety Nets Programme, cash transfer programme in Kenya
LEAP	Livelihood Empowerment against Poverty, cash transfer programme in Ghana
LSMS	Living standards measurement survey
MIS	Management information system
NAO	National Audit Office
NPV	Net present value
NREGA	National Rural Employment Guarantee Act, India
OAP	Old age pension
PMT	Proxy means test
Progresa	Programa Nacional de Educación, Salud y Alimentación (National Education, Health and Nutrition Programme), conditional cash transfer programme in Mexico now known as Oportunidades
PSA	Programa de Subsídios de Alimentos (Food Subsidy Programme), cash transfer programme in Mozambique
PSNP	Productive Safety Net Programme, Ethiopia
PV	Present value
PWP	Public works programme
VfM	Value for money
3Es	Economy, efficiency, effectiveness

Introduction

How to use this guidance

This guidance is in two linked parts:

1. **Part 1** provides a **toolkit** which sets out key concepts and metrics for analysing value for money (VfM) in cash transfer programmes. This gives an overview of the steps required, and may be **enough for those managing others carrying out VfM analysis**.
2. **Part 2** comprises **explanatory text**, providing more detailed guidance on the issues, concepts and approaches used for VfM analysis of cash transfers, as well as a range of examples. Part 2 **needs to be read and understood by those carrying out the analysis**.

Throughout the Part 1 toolkit reference is made to relevant sections in Part 2, and *vice versa*. Such cross-references are **hyperlinked** to facilitate on-screen navigation between the two Parts of the document and between different sections of Part 2. (With the cursor over the **hyperlink text** use Ctrl+Click to follow the link, and Alt+Left Arrow to return).

Why this guidance note?

This note responds to **demand from DFID country offices** for guidance on measuring and maximising value for money (VfM) in supporting cash transfer programmes, and reflects the post-election emphasis in DFID on ‘making every penny count’ and the need for consistency of approaches and metrics across DFID country offices. A particular gap to fill is **systematic assessment of the cost-effectiveness of design options** in DFID supported cash transfer programmes.

VfM is not only about minimising costs; it is about **maximising the impact of each pound spent** to improve poor people’s lives. This means making the analysis of both costs and benefits of cash transfer programmes as rigorous and comprehensive as possible, at the *ex ante* design and appraisal stage, during implementation, and in *ex post* evaluation.

DFID’s experience of VfM analysis for cash transfer programmes is rapidly accumulating, mainly in *ex ante* appraisals. Yet there is still much we need to do to **strengthen our consistency** in this area, not least in analysis of cost drivers and cost-efficiency, using benchmarks from other comparable programmes. The purpose of this note is to build on the good practice that is already out there, and to broaden and where possible standardise its application.

Some of the **challenges** in judging VfM for cash transfers are common across sectors (see *DFID Cash Transfers Literature Review*, DFID 2011b), in particular the need to:

- allow for different contexts, especially fragile and conflict affected states;
- measure ‘value’ in financial, economic, social, political and environmental terms, and for different actors;

- capture both direct and indirect costs and benefits, over short, medium and long timeframes
- address inevitable data deficiencies that limit the evidence base for VfM calculations, particularly when DFID may not have direct control over programme implementation but is supporting implementation through partner government systems or those of another donor.

But with cash transfer programmes we are also exploring **a new area with new challenges** stemming from their complex, cross-sectoral nature and impacts, and the need to make critical, evidence-based design choices on targeting, conditionality and choice of registration and payment systems despite major data deficiencies.

Things to think about before you start

Be proportionate in your approach

The toolkit sets out what VfM metrics are essential to measure in cash transfer programmes and what are desirable but not essential, but it is up to advisers to be vigilant in ensuring that the approach they take is **proportionate** to DFID's level of investment and to local context. Carrying out VfM analysis and managing consultants takes resources and adviser time – there is an opportunity cost!

It is not possible to be prescriptive on the level of time and resources that you invest but clearly it must be enough to ensure due diligence. It is important to show that appropriate effort has been taken to keep costs of programme components down for the chosen programme (chosen to maximise value for money, not just on the basis of cost). This means through the life of the programme, not just at the design stage.

Sometimes it will not be necessary for DFID offices to measure all of the metrics set out in the toolkit, because:

- Value for money analysis is being carried out by **other donors and government** – supporting governments to do this work may be better from an **aid effectiveness** perspective, even if the analytical work takes longer to produce. But even if others are doing the analysis DFID advisers must retain an overview of key metrics and be in a position to monitor **key trends and anomalies**.
- There is **little genuine choice** in terms of programme design. This may limit how much VfM analysis it is worth the DFID office doing in terms of assessing design options, although an assessment of costs and benefits will still be required if it has not already been done. An example of where choice was limited is DFID Pakistan's flood relief cash transfers business case (DFID, 2010b).
- In **conflict or post conflict environments** it *may* be that if speed is of the essence for stabilisation, and data is particularly poor, then VfM analysis has to be curtailed (arguably this is part of maximising VfM if speed of response is linked to impact). But reasons for limiting VfM analysis would have to be carefully explained and agreed with DFID line management in advance.

Plan your VfM analysis early

Unless otherwise specified, metrics listed in the toolkit should be included in both *ex ante* (appraisal) and *ex post* (evaluation) analyses of VfM, and where possible monitored during implementation too.

If the VfM analysis is being done within the DFID office it can be done in-house by economic advisers (as for DFID Pakistan's flood relief cash transfers) or more usually through a consultant (see DFID Jerusalem and DFID Ghana's recent business cases). Experience so far is that consultants need around four weeks to produce a good economic appraisal or evaluation using cost-benefit analysis. Good consultants are usually booked up well in advance, and so should be contracted as soon as possible. The **Poverty and Vulnerability Team** in Policy Division can help suggest names, provide standard ToR templates and comment on candidate CVs.

It is important that other advisers within the office and consultants, as well as development partners, are **engaged early in the design stage** so that VfM analysis is an integral part of choosing design options. This is assuming there are genuine design choices to be made. If there are not the reasons for this should be explained.

If partner governments or other donors are doing the VfM analysis, DFID advisers should ensure that are receiving enough regular information to retain an overview of key information on costs and benefits (outputs, outcomes and impacts) throughout design, monitoring and evaluation. At the least advisers need to be in a position to identify trends and anomalies and **benchmark costs against other programmes**.

Don't expect complete data

Rarely will reliable, up-to-date data be readily available to measure all of the metrics cited in this guide, even for pilot programmes. Steps should be taken to inventory and assess relevant data from a range of internal and external sources, with a focus on reliability and method of collection, and to **fill gaps** where possible, starting with the essential metrics and preferably through enhancing government or other in-country systems.

In line with DFID's new business case guidance, external evidence used for benchmarking should be **graded according to its reliability and robustness** e.g. evidence from articles in refereed journals will in general (though not always) be more robust than from elsewhere. Evidence can be used from a variety of sources, but we must be clear on its reliability, as far as we are able to make a judgement.

Think about your own context

Given all of the challenges of carrying out VfM analysis, this guidance **does not attempt to be the last word** in assessing VfM across all programmes involving cash transfers. It specifies **essential and desirable VfM metrics and measurement approaches** while **illustrating the issues** that are likely to arise in applying them, including contrasting and often partial evidence, the importance of context and the sensitivity of results to assumptions. A major conclusion is that the **metrics** for assessing VfM and the **reliability and robustness of evidence** used must be carefully assessed for programmes individually, and great care must be taken in attempting to benchmark VfM across different programmes and contexts. There may good reasons why costs for your programme are relatively high, for example geography, infrastructure, security and conflict factors, and the state of government and private sector capacity to deliver cash transfer payments.

VfM analysis therefore needs to compare across different programme types, as well as taking into account more specific design features, such as benefit levels, targeting methods and payment delivery systems. This note covers all social transfer programmes where a primary form of transfer is cash, including transfers to the poor or extreme poor, non-contributory social pensions to the elderly and disabled, child allowances and numerous hybrids and variants of these. Some are conditional on beneficiaries meeting certain obligations, such as sending their children to school or to health centres, while others are

unconditional. Also covered are public works programmes (PWPs) implemented as a social protection instrument involving cash transfers; these are a distinct programme type in terms of objectives and metrics, and are considered in a separate section in the explanatory text.

Please send your comments

This guidance will be revised periodically to take on board issues arising as DFID adds to its experience of analysing VfM in cash transfer programmes. The note has yet to undergo field-testing. We need feedback from users, especially in DFID country offices, on its strengths and its weaknesses, gaps and inaccuracies – the production of this note is an **iterative process**. We also hope that it will be converted, in partnership with World Bank, UNICEF, ILO and others, into a document for wider use by partner governments and other development partners. Please send your comments to the Poverty and Vulnerability Team, Policy and Research Division, DFID.

Acknowledgements

This guidance note was prepared by Anthony Hodges (Independent Consultant, hodges.anthony@ymail.com) and Philip White (International Development UEA, philip.white@uea.ac.uk), under the supervision of Matthew Greenslade (DFID Poverty and Vulnerability Team, m-greenslade@dfid.gov.uk). The drafting team are grateful to Tim Conway, Alexis Ferrand, Heather Kindness, Nick Lea, Anna McCord, Valsa Shah, Stephen Sharples and Keith Wood, who provided detailed comments on a preliminary draft. The authors are solely responsible for the inevitable errors and omissions that remain in this version.

Part 1: Toolkit

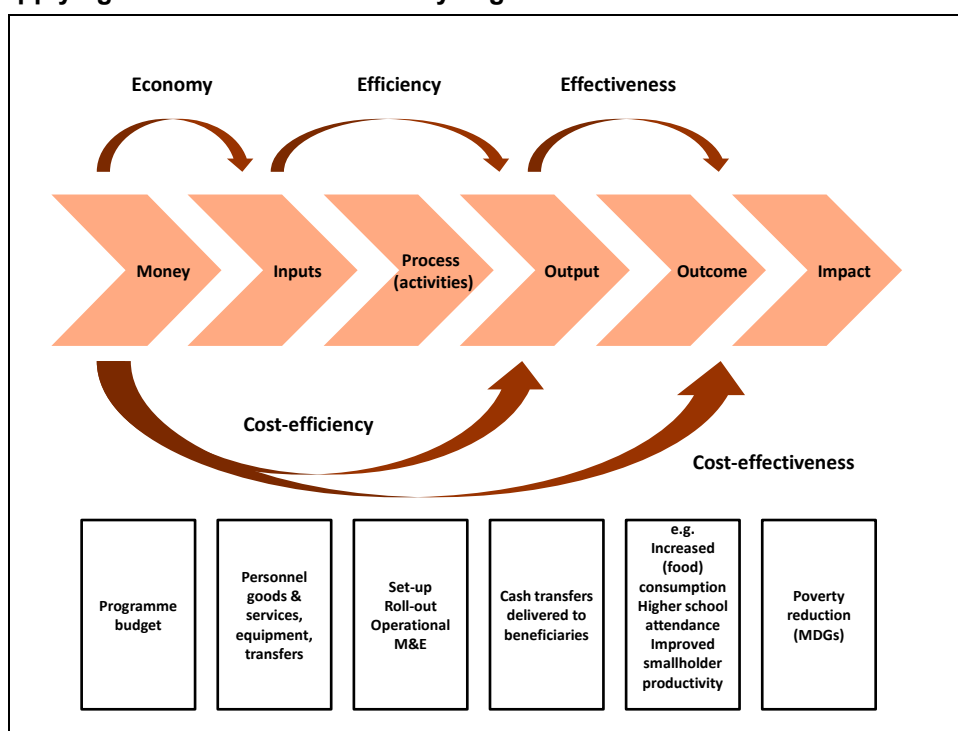
This toolkit sets out **16 steps** (labelled A to P) for analysing and maximising the value for money provided by cash transfer programmes over their life cycle, from initial design to implementation, monitoring and evaluation.

A. Understand the 3e's framework

- **Economy** relates to the price at which inputs are purchased (consultants in design phase, targeting costs, management information systems, payment mechanisms, independent evaluations).
- **Efficiency** relates to how well inputs are converted to the output of interest, which is cash transfers delivered to beneficiaries. **Cost-efficiency analysis** spans both economy and efficiency, focussing on the relationship between the costs of a cash transfer programme and the value of the cash transfers delivered to beneficiaries.
- **Effectiveness** relates to how well outputs are converted to outcomes and impacts (e.g. reduction in poverty gap and inequality, improved nutrition, reduction in school drop-out, increased use of health services, asset accumulation by the poor, increased smallholder productivity, social cohesion). **Cost-effectiveness analysis** measures the cost of achieving intended programme outcomes and impacts, and can compare the costs of alternative ways of producing the same or similar benefits. **Cost-benefit analysis (CBA)** is wider-ranging, quantifying in monetary terms as many of the economic costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value.

These relationships are illustrated in Figure 1 below. To learn more go to [Cash transfers, VfM and the results chain on page 18](#).

Figure 1: Applying the 3E framework to analysing VfM in cash transfers



Analysing programme cost (all stages)

B. Set out DFID and development partner costs

Use the following metrics to set out programme costs. For explanation go to page 19.

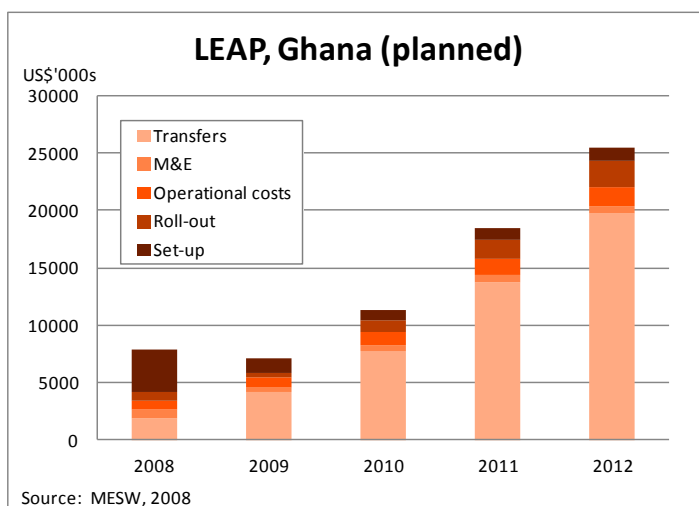
Metric	What to measure
Total programme coverage, by year	<ul style="list-style-type: none"> No. of direct recipients in each programme year (use programme coverage unit of measure, which may be households: but also provide estimate of individual beneficiaries, for calculation of global coverage of DFID bilateral cash transfer programmes: see Operational Planning indicator methodology guidance) Envisaged coverage post-programme/post-DFID support
Total programme administrative cost, by year and overall	<ul style="list-style-type: none"> Total costs for all partners (DFID, other donors, government, other implementing partners). <ul style="list-style-type: none"> to include set-up, training, targeting, enrolment, delivery, management, MIS and external M&E costs, with apportionment of staff time where possible.
Total programme transfer cost, by year and overall	<ul style="list-style-type: none"> Total transfer costs <ul style="list-style-type: none"> <i>ex ante</i>: coverage x average transfer per recipient <i>during and after implementation</i>: budget outturn on transfer spend
Total programme (administrative and transfer) cost by year and overall	<ul style="list-style-type: none"> Sum of total administrative and transfer costs % of total costs attributed to DFID

C. Break down programme administrative cost into key components

Use a table or chart to show the main components of administrative costs and how they are expected to move over time. It is helpful for comparative purposes to resolve costs into the following main categories (see further detail on page 19):

Metric	What to measure
Set-up costs	<ul style="list-style-type: none"> Costs of design, planning, training and major investments in systems
Roll-out costs	<ul style="list-style-type: none"> Costs of targeting/retargeting and enrolment of beneficiaries
Operational costs	<ul style="list-style-type: none"> Recurrent implementation costs, e.g. delivery of transfers
Monitoring & evaluation costs	<ul style="list-style-type: none"> Ongoing monitoring costs and the periodic costs of external evaluations

All costs should be covered to the extent possible, including staff costs attributed to the above activities. This example shows planned administrative and transfer costs for the LEAP pilot roll-out in Ghana. (For more examples of cost structures see Box 1 on page 20)



Examples of analysing cost drivers in DFID-supported programmes

- Kenya: breakdown of cost drivers for the Orphans and Vulnerable Children Programme (OPM 2010)
- Bangladesh: Chars Livelihoods Programme Phase 1 (HTSPE, 2011, p9)

D. Assess 'other' costs where possible

It is important to collect this 'other' cost information to judge VfM, to the extent possible. Examples are given in the table below. These 'other' costs should be assessed qualitatively where quantitative data are not available. See [Assessing other costs](#) on page 21, and Box 2.

Metric	What to measure
Total other costs per year (including non-quantifiable costs)	<ul style="list-style-type: none"> • Costs to beneficiaries (e.g. collection of transfers, stigmatisation, opportunity costs of compliance with conditions) • Political costs (e.g. of higher taxation, perceptions of 'welfare dependency', more popular alternatives foregone) • Other costs as appropriate (e.g. inflation, adverse labour market effects, social divisiveness, environmental costs) • Costs of envisaged future (post-project) scale-up

Analysing programme benefits (all stages)

E. Estimate quantifiable and assess unquantifiable programme benefits

Expected benefits should be set out along the results chain as in the logframe. In a well-prepared logframe these will have specific, measurable and time-bound targets, at least at output and outcome levels, providing a sound basis for VfM analysis. Some benefits, especially at the impact level, may be less amenable to measurement and only partially attributable to the programme, but are just as important to assess as those which are quantifiable. Other benefits, quantifiable or otherwise, which fall beyond the scope of the logframe should also be summarised. Use results from other programme evaluations as far as possible, setting out the robustness of evidence used, the extent to which they apply to the context, and any assumptions clearly. Types of benefit are illustrated in the table below. Further details and examples are set out in the [Cost-effectiveness](#) and [Cost-benefit analysis](#) sections in the explanatory text (pages 30 to 39), and in the *DFID Cash Transfers Literature Review* (DFID, 2011b)

Metric	What to measure
Outputs (as in logframe)	<ul style="list-style-type: none"> • No. of direct transfer recipients and wider beneficiaries in each year of the programme, as in 'Coverage' above. • Other outputs, e.g. targeting, registration and delivery systems established, staff trained, community assets created.
Outcome (as in logframe)	<ul style="list-style-type: none"> • Quantifiable: e.g. reduced poverty gap and inequality, improved health/nutrition indicators and school attendance or achievement • Less quantifiable: enhanced labour productivity, increased resilience of beneficiary households, cash transfer programme established on sustainable basis
Impact (as in logframe)	<ul style="list-style-type: none"> • E.g. reduced likelihood of conflict or needs for humanitarian assistance, improved access to social services, establishment of sustainable social protection mechanisms, constitutional or legal recognition of rights to social protection. <p><i>Note: the distribution of benefits between Outcome and Impact is likely to vary between programmes, according to type and scale</i></p>
Other benefits	<ul style="list-style-type: none"> • Growth and multiplier effects, social benefits (improved social status, reduced crime), political benefits (especially of more universal programmes), environmental benefits <p><i>Note: some of these may already be in programme outcome or impact.</i></p>

Analysing value for money (all stages)

F. Understand the circumstances in which cost efficiency, cost effectiveness and cost benefit analysis should be carried out

Cost-efficiency, cost-effectiveness and cost-benefit analysis, along with economy, should be carried out according to the following rules:

Table 1: Measurement requirements and the VfM chain

Point in VfM chain		When should it be measured?
Economy		At all stages (design, implementation and evaluation), to ensure we are minimising the different programme input costs in the different programme areas.
Efficiency		At all stages, to ensure we are not over- or underspending on overall administrative costs of delivering the programme output of cash transfers to households
Effectiveness	Cost-effectiveness analysis	At design and evaluation stages, if programme outcome or impact can be quantified but not necessarily in money terms
	Cost-benefit analysis	At design and evaluation stages, if programme outcome or impact can be put in money terms

G. Do cost-efficiency analysis in all cases to establish the most cost-efficient way to deliver transfers to beneficiaries

Measure cost-efficiency using the metrics below. For further explanation go to [Cost-efficiency](#) on page 24.

Metric	What to measure
Cost-efficiency	<ul style="list-style-type: none"> • Cost-transfer ratio (CTR) (i.e. ratio of administrative costs to transfer costs) <p>Notes</p> <p>(a) Alternative measures are 'alpha ratio' (ratio of transfer costs to total costs) or its reciprocal (total cost of delivering 1 unit of transfer); or ratio of administrative costs to total costs</p> <p>(b) Relate to national & international benchmarks, commenting on context, programme scale/maturity and other determinants</p> <p>(c) In food-deficit, isolated markets where food price hikes are likely, compare with cost-efficiency of food transfers, valuing food at local market prices at time of transfer.</p>

Examples of cost-efficiency analysis in DFID-supported programmes

Ethiopia:

- The World Bank's IEG report on the Productive Safety Nets Programme (PSNP) shows cost-efficiency of wage and infrastructure transfers of public works component, compared to a public works programme in Argentina (p.27). (World Bank, 2011b)
- Estimated cost-efficiency of the PSNP compared to international experience is on p.36 of the Wiseman evaluation report (Wiseman *et al.*, 2010) and on p.133 of World Bank Programme Appraisal Document. (World Bank, 2009)
- The cost-efficiency of food versus cash in the PSNP is on p.133 of the World Bank Programme Appraisal Document. (World Bank, 2009)

H. Check cost-efficiency against international benchmarks

Comparing cost-efficiency against international benchmarks is critical to judging value for money. But great care must be taken to interpret these benchmarks in the light of:

- problems of comparability between different methods of measuring cost: are we comparing like with like?
- different contexts with different challenges for delivery (e.g. conflict, geography, government capacity);
- different programme objectives and designs;
- the difference between pilots and national programmes;
- the difference between different points on the programme cycle – because costs are generally much higher in the early years;
- Are costs too low in relation to total amounts transferred, and likely to reduce performance and cost-effectiveness?

Some of the issues raised by benchmarking are illustrated in Part 2 using data provided by Grosh *et al.* (2008) comparing administrative costs as a proportion of total programme cost for a range of different programme types – see Figure 4 on page 29. The selected data suggest that public works are more cost-efficient than cash transfers, and conditional cash transfers are more cost-efficient than unconditional ones, which is contrary to what would

normally be expected based on other examples. To learn more go to [Using benchmarks from international evidence](#) on page 28. For other examples of benchmarks see Table 2 on page 26 and Box 3 on page 27.

Examples of cost-efficiency benchmarking in DFID-supported programmes

Uganda: economic appraisal for DFID Expanding Social Protection in Uganda programme gives international comparisons (DFID, nd. p15)

Bangladesh: Challenging the Frontiers of Poverty Reduction 1 compares administrative costs with other programmes reaching the ultra poor in Bangladesh (Sinha *et al.*, 2008, p19).

I. Be aware of the limits of cost-efficiency analysis

- The analysis is inevitably limited to administrative costs, ignoring private and social costs to beneficiaries, or adverse incentive, broader economic and political costs.
- Low cost-efficiency does not necessarily mean low cost-effectiveness, and *vice versa*. A higher administrative cost may be necessary to improve social outcomes. Choice of programme should not be based solely on cost-efficiency criteria.
- Cost-efficiency analysis faces significant data deficiencies, including a lack of information on government overhead costs.

Nevertheless, despite these limitations, cost-efficiency analysis should be done in all cases, and an effort made to address critical data gaps where possible. See [Limits of cost-efficiency analysis](#) on page 30.

J. Analyse cost-effectiveness for wider, measurable benefits

Cost-effectiveness analysis goes beyond cost-efficiency to measure costs against programme outcome and impacts (rather than just outputs). This gets to the heart of 'value for money', allowing rational choice between programme options based on relative cost of achieving desired social and economic results. Benefits need to be measurable, though not necessarily in money terms. See [Cost-effectiveness](#) on page 30 of Part 2 for more explanation.

Metric	What to measure
Cost-effectiveness (do where benefits can be measured)	<ul style="list-style-type: none"> • Cost per measure of outcome or impact e.g. unit cost of a percentage point reduction in poverty gap or incidence of severe child malnutrition <p><i>Notes: compare costs of alternative ways of achieving desired outcomes and impacts.</i></p>

Three examples of cost-effectiveness analysis for cash transfers are provided in Figure 6 on page 34. In **Guatemala**, the cost to reduce the poverty gap by 1 quetzal (Qz) was estimated for a range of different programmes by comparing programme and counterfactual scenarios using household survey data. In the **Republic of the Congo**, national household survey data was used to simulate *ex ante* the cost-effectiveness of universal and poverty-targeted child allowances and universal social pensions for the elderly, in terms of the CFA franc cost of a 1 CFA franc reduction in the poverty gap. In **Benin**, similar methods were used for a feasibility study on cash transfers, simulating the cost-effectiveness of a range of cash transfer options, including child allowances, old age pensions, maternity allowances and non-categorical transfers targeted to the poor and the ultra-poor. For more detail see [Cost-effectiveness – Evidence](#) in Part 2, page 34.

K. Be aware of the limits of cost-effectiveness analysis

- Data requirements and analytical methods are more demanding than for cost-efficiency analysis, making it necessary to be realistic about what can confidently be measured.
- Effects need to be measurable in the same units, but the multiple nature of the benefits that cash transfers are expected to generate and serious deficiencies in data availability can make this very challenging.
- Cost-effectiveness analysis ignores impacts that cannot be measured, such as improvements in social cohesion or self-esteem, unless a credible and measurable proxy indicator can be identified..

Examples of cost-effectiveness analysis in DFID-supported programmes

Zambia: analysis of poverty reduction from targeting different population groups (Watkins, 2008 p.53)

Ethiopia: cost-effectiveness of different components of household asset building part of the Productive Safety Nets Programme (World Bank, 2009b p.135)

Rwanda: unconditional transfers more cost-efficient than conditional, though not necessarily more cost-effective (although no comparisons with other programmes – page 38 of Vision Umurenge Programme Annual Report 2009/10.)

L. Consider cost-benefit analysis where main costs and benefits can be credibly monetized

Cost-benefit analysis (CBA) is a more complete exercise which quantifies in monetary terms as many of the economic costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value. This allows the balance of incremental costs and benefits attributable to an intervention to be assessed quantitatively, and compared between alternative options. CBA is most often undertaken in the economic appraisal of new interventions, as part of the Business Case. Whether cost-effectiveness analysis or full CBA is used for this purpose depends on the size of the proposed investment and the extent to which benefits can be credibly monetised.

In DFID cost-benefit analyses of cash transfer programmes carried out to date, a key issue is in the choice of **how to estimate benefits**. Two distinct approaches have emerged – estimating the benefit of redistributing to the poor (used for Ghana and Zimbabwe, see Table 3), and secondly estimating the individual benefits from, for example, higher consumption, greater school attendance or performance and increased household investment (used for Pakistan and OPTs – Uganda used a combination of the two approaches). It is better to estimate these individual benefits if it is felt that the evidence is strong enough to support such an approach. For more on estimating redistributive benefits see page 35 and Box 6 in Part 2).

Where programmes are joint with other donors and government a single shared CBA will save considerable time (CBA is usually time consuming – DFID experience so far is that it takes a full four weeks of consultant time). But CBA is currently uncommon, even in the World Bank, because of gaps in the data. The view within DFID is that we should be prepared to put more effort and resources into taking analytical work as far as we can, using assumptions where they are appropriate.

A number of **assumptions** will need to be made in simulating projected cost and benefit streams, and these will need to be made for the preferred programme option, the counterfactual

(‘do nothing’) option, and other main programme options for achieving desired outcome and impacts. These need to be explicitly backed up by **within-country evidence** (e.g. programme evaluations, national surveys, published research) and **international comparisons**. The **quality, relevance and reliability** of this evidence must be assessed. In *ex ante* analysis, main **risks** to achievement of objectives should be identified, along with their estimated probability of occurrence, their impact on the balance of costs and benefits, and proposed mitigation measures. To account for the inevitable uncertainty surrounding the assumptions made, undertake a **sensitivity analysis** to test the effect of varying main assumptions, including the discount rate used. If units of benefit can be monetised but not quantified, consider a **break-even analysis** (how many units of benefit would the intervention have to generate before the value of the benefits outweighs the costs?) and assess how likely it is that break-even will be reached. Finally, **the discount rate** used should be the one used for other programmes in your country (as per recent guidance from the DFID chief economist), and it is worthwhile having cost-benefit analysis peer reviewed before formal approval and QA.

Metric	What to measure
Cost-benefit analysis (do where main costs and benefits can be credibly monetised)	<ul style="list-style-type: none"> • Incremental economic cost and benefit streams over a full time horizon (e.g. 20 or 30 years) for the preferred (<i>ex ante</i>) or actual (<i>ex post</i>) programme design option compared with the counterfactual case, and other main options (<i>ex ante</i>) • Main risks: probability, impact on costs & benefits, mitigating measures • Net present value and benefit-cost ratio using established country discount rate, and (optionally) economic internal rate of return • Sensitivity to changes in key assumptions (including discount rate) to reflect uncertainty. • Break-even point: benefits required to outweigh costs and likelihood of achievement • Proportion of costs attributable to DFID.

For further discussion on CBA for cash transfers, see **Cost-benefit analysis** on page 35 of Part 2. For detailed guidance on CBA, refer to the *HM Treasury Green Book* and DFID’s *‘How To’ Note on Economic Appraisal*.

Table 3 on page 39 of Part 2 shows results of CBA analysis from a range of international studies and DFID economic appraisals and evaluations.

M. Be aware of the limits of cost-benefit analysis

- The simulations and projections underpinning CBA can be time-consuming and resource intensive.
- With its heavy reliance on assumptions, questions inevitably arise as to how credible these are, especially when they are drawn from evidence in other countries with possibly quite different contexts and conditions.
- In the absence of credible evidence, there is a risk of falling into the trap of arbitrarily varying assumptions until the analysis produces a NPV or BCR result that seems to justify the investment.

For these reasons, a well-conducted cost-effectiveness analysis is always more useful than a poorly supported CBA. Nevertheless, the value of CBA goes beyond its NPV or BCR result, as the exercise demands a level of scrutiny that can expose weaknesses in programme design or sustainability that might otherwise be overlooked.

Critical cost-effectiveness drivers

N. Show that you have considered the critical cost-effectiveness drivers for the programme

- Whether and how to target
- Transfer levels
- Whether to use conditionality
- Which systems for programme implementation

Use the metrics in the table below. ***‘Must do’ metrics are in bold italics.***

Metric	What to measure
<p><i>Targeting efficiency</i> Target method and cost, inclusion & exclusion error, benefit incidence. (See Targeting on page 43)</p>	<ul style="list-style-type: none"> • <i>Targeting approach and its cost as % of total cost.</i> • <i>% of recipients not in target group</i> • <i>% of target group not receiving transfers</i> • <i>% of total transfers reaching target group(s)</i> • <i>Frequency of retargeting and rate of graduation</i>
<p><i>Transfer levels</i> (See Cost-efficiency – evidence on page 25; Table 2 and Box 3 on page 26; and transfer level in relation to targeting on page 46)</p>	<ul style="list-style-type: none"> • <i>Nominal level(s) of transfer per direct recipient per month at scheme inception</i> <ul style="list-style-type: none"> – in current cash terms – as % of current poverty line and minimum wage • <i>Arrangements for periodic review of levels (ex ante)</i> • <i>Changes in nominal levels over time (ex post)</i> • <i>Changes in real levels over time with respect to CPI and food prices (ex post)</i>
<p>Conditionality and its own cost-effectiveness (see Conditionality on page 48; and Fiszbein & Schady, 2008)</p>	<ul style="list-style-type: none"> • Public costs of monitoring conditions and private costs of compliance • Recipients’ additional use of services specified in conditions, and cost of supplying additional services
<p><i>Implementation systems:</i> registration, enrolment, identification, payments, grievance/appeals system, financial management and fiduciary risk. (See Implementation systems on page 49, and DFID’s ‘How To’ note on Managing fiduciary risk.)</p>	<ul style="list-style-type: none"> • <i>Costs of registration, enrolment, recipient identification and payments.</i> • <i>Regularity of payments to recipients:</i> <ul style="list-style-type: none"> – <i>frequency:</i> no. of payments per year – <i>timeliness:</i> average actual deviation from scheduled payment date (ex post) • <i>Grievance/appeals procedures,</i> actual frequency of use and outcomes • <i>Integrity of financial management systems and control over fiduciary risk</i>

These metrics will inform judgements about key aspects of design which affect VfM, e.g.:

- Is there a more cost-effective approach to targeting to achieve scheme objectives, or do those objectives need revisiting? In a context of widespread severe poverty, does it make sense to invest in methods for targeting the poorest 10%? Has an appropriate balance been struck between targeting costs and targeting precision?
- Are transfer levels adequate to achieve objectives? Has an appropriate balance been struck between breadth of coverage and transfer levels?

- If conditionality is applied, how far are changes in service uptake due to the conditions as opposed to the transfers or other scheme benefits? Does conditionality justify the additional costs of monitoring and compliance?
- What scope is there to improve the efficiency and reliability of implementation systems through use of ICT applications in an integrated MIS?
- Are fiduciary risks adequately catered for?

Monitoring and evaluation (M&E)

O. Build a framework for M&E into programme design, based on the logframe

All the VfM metrics above should be measured throughout the programme life cycle in order to ensure that VfM standards are upheld as implementation proceeds. Programme design should include an M&E framework which can efficiently collect information on indicators at each level of the logframe and test the validity of the assumptions underpinning the results chain, provide timely information for adjusting programme design and process as required during implementation, and inform lesson-learning both during and after the programme. A good M&E system will be **flexible** to incorporate changes in programme design or implementation context, **operational** in its links with MIS tools and with strategic and management decision-making, **client-focussed** to accommodate client feedback and complaints, **cost-efficient** in selection of indicators and data collection, **intelligible** to its target audiences and **accountable** for its results and findings.

Appropriate M&E indicators for cash transfers depend very much on specific programme objectives, but tend to fall into the following categories:

- **cost indicators** relate most directly to the ‘money’ side of VfM and include costs of different programme inputs and operations; cost per recipient; cost per unit of transfer (cost-efficiency); and cost per measure of wider benefits (cost-effectiveness);
- **targeting indicators** which shed light on the efficiency and effectiveness of the targeting system and its appropriateness in supporting programme objectives;
- **implementation indicators** assessing how well a programme is being operated, covering recipient registration, enrolment and identification; payments; grievance procedures; recognition of rights and entitlements;
- **impact indicators** at the level of **individuals, households** and **wider economy and polity**.

Valuable insights into VfM in scheme operation and impacts can often be gained by comparing these indicators across different administrative areas or communities covered by a cash transfer programme, or, in assessing impacts, between areas/communities with and without the programme, or in different phases of incorporation into it.

Indicators should be chosen with an eye to VfM within the M&E process itself, focussing on the minimum dataset required to meet operational, strategic and advocacy information needs, and no more. Too many indicators and too much data will obscure key messages, delay the release of findings and slow down the learning process.

For more detail on M&E go to [Monitoring and evaluation \(M&E\)](#) on page 50 of Part 2.

Issues to consider:

- Is the monitoring of costs, benefits and the flow of money built into programme management, including the tracking of costs of different components?
- Have you drawn a timetable and allocated responsibilities?
- Is an independent evaluation planned? Is the collection of baseline data before the start of the programme planned?
- Is there a plan to fill information gaps in the programme monitoring and evaluation?
- Are there efficient ways of monitoring and evaluating through other donors or the partner government that (a) save DFID resources (b) support aid effectiveness objectives?

Financial sustainability (design stage)

P. Is the programme likely to be sustained after DFID support?

A critical question for most DFID-supported cash transfer programmes, to be considered mainly at the design stage, is the likelihood of being extended or scaled up beyond the period of that support under government financing and management. This may be determined by the government's fiscal room for manoeuvre, but is also a reflection of its political and planning priorities. These issues are explored in more detail in [Financial sustainability](#) on page 51 of Part 2.

Metric	What to measure
<p>Sustainability analysis (do where impact depends on government adoption/scale-up of programme)</p>	<ul style="list-style-type: none"> • Government costs during and after programme in cash terms and as % of recurrent government expenditure and of GDP • Other indicators of fiscal space, e.g. GDP and tax revenue growth, fiscal balance, aid dependence • What evidence is there of government commitment to funding programme extension/scale up post-DFID support?

Part 2: Explanatory text

1. Background: ‘value for money’ and analytical challenges

1. The post-election emphasis on ‘value for money’ (VfM) in UK aid comes at a time when cash transfer programmes are becoming increasingly prominent as a tool for social protection and poverty reduction in developing countries, so DFID’s interest in being able to measure and maximise VfM in its support for cash transfers is unsurprising. The fact that DFID is one of the main external funders of cash transfer programmes – indeed the single largest funder in the case of sub-Saharan Africa (World Bank, 2011a) – means that the Department has a strong stake in demonstrating that its assistance for these programmes is money well spent.

2. The National Audit Office (NAO) defines VfM as being ‘the optimal use of resources to achieve intended outcomes’. And, given the UK aid programme’s overarching goal of poverty reduction, DFID therefore interprets VfM in its own programme as meaning that ‘we maximise the impact of each pound spent to improve poor people’s lives’ (see *DFID’s Approach to Value for Money*). So it is vitally important to ensure that the outcomes achieved through cash transfers, notably in terms of poverty reduction, justify the money spent on them. Could better outcomes be achieved for a given financial outlay? Or could these outcomes be achieved more cheaply by improving programme design or implementation, so freeing up funds for other development spending?

3. Although DFID has already accumulated significant experience in VfM analysis for cash transfer programmes, there is still much we need to do to increase rigour and consistency in this area. Shortcomings tend to come from two major types of challenge, which this guidance aims to help address:

- **Conceptual complexity:** VfM is not absolute. It must be related to a specified timescale and point in the ‘results chain’ (output-outcome-impact); it varies between different contexts and between actors who might have different objectives (stated or unstated); it includes ‘value’ in different terms (financial, economic, social, political, environmental) not all of which are quantifiable; and it is not independent of the social and political processes with which aid is engaging. Short-term VfM may be realized in efficient delivery of cash to target groups, but this is no guarantee of VfM in achieving intended outcome or longer term impact. Programmes that transfer cash in difficult circumstances (e.g. to remote beneficiaries or in an area where there is conflict) may provide good VfM despite falling behind international VfM benchmarks. What appears to a DFID economist to constitute good VfM, for example in reaching the extreme rural poor in a pilot district-level programme, may not do so for a government concerned with nationwide coverage and/or seeking approval from influential non-poor or vociferous urban constituencies. VfM assessments should always be contextualised.
- **Data deficiencies** limit the evidence base on VfM for most cash transfer programmes, particularly in the poorest countries. For example most government departments or NGOs operating cash transfer programmes can provide data on annual programme expenditure, but it is often unclear exactly which costs are included and which are not, or how fixed and recurrent costs can be distinguished. This complicates any judgement as to how cost structure may change as the programme scales up or matures, adding to the inherent difficulties of quantifying the multiple and often long-term benefits of cash transfers. As noted in a global review on the effectiveness of DFID-supported pilot

social transfer schemes, 'the cost-effectiveness of social transfer programmes is extremely challenging to determine, partly because full costs are difficult to obtain and partly because impacts (effectiveness) are difficult to attribute and to quantify' (Devereux & Coll-Black, 2007). Such weaknesses have been noted in the DFID literature review on cash transfers (DFID, 2011b).

4. In view of these challenges, the **objective** of this DFID guidance note is to provide guidance to DFID country offices on measuring and maximising value for money in cash transfer programmes through the rigorous analysis of costs and benefits, as far as possible, at the design stage and through programme implementation and evaluation. It responds to strong country office demand for specific advice and guidance on how to ensure that cash transfer programmes are delivering value for money. VfM analysis is needed at different stages of the programme cycle, including design/planning, implementation/monitoring and evaluation. This note is therefore intended to help orient both the *ex ante* economic appraisal of VfM needed for DFID business cases and the *ex post* evaluation of VfM, while helping also to inform the data requirements of management, monitoring and evaluation systems during implementation.

5. In terms of **scope**, this note is intended primarily to guide analysis of VfM in cash transfers, rather than social transfers more generally. Cash transfers are of various types, including transfers to the poor or extreme poor, non-contributory social pensions to the elderly and disabled, child allowances and numerous hybrids and variants of these basic types. Some are conditional on beneficiaries meeting certain obligations, such as sending their children to school or to health centres, while others are unconditional. VfM analysis therefore needs to compare across different programme types, as well as taking into account more specific design features and implementation arrangements, such as benefit levels, targeting methods and payment delivery systems.

6. One particular form of conditionality relates to the supply of labour on **public works projects** (PWPs). PWPs are not included in the World Bank's definition of 'conditional cash transfers' (e.g. in Fiszbein and Schady, 2009), and some would exclude them from cash transfers altogether on the grounds that they have more to do with employment creation than social transfers. However, they are receiving increasing attention – especially by the World Bank – under the push for 'productive safety nets' such as Ethiopia's Productive Safety Net Programme. Payment of wages on PWPs is most often though not always in cash terms, with objectives that are most often oriented towards mitigation of acute or chronic vulnerability. Accordingly, they have been included in DFID's *Cash Transfers Literature Review* (DFID, 2011b), and are considered in a separate section (Section 4.4) in this guide.

7. It is also important for DFID country offices (and partner governments and other donors) to be able to compare the costs and benefits of cash transfers with those of alternative policies or programmes that might be implemented to achieve the same results. Comparisons with other types of social transfers are particularly relevant, as cash transfers are increasingly being promoted as preferable alternatives to humanitarian food distribution, particularly in situations of chronic food insecurity, and to consumer subsidies, which have in the past been the main (indirect) transfer instrument used by governments in many parts of the world to protect living standards. Whether these claims for cash transfers hold true depends in part on the context, as we shall see below, and underscores the need for country-specific, evidence-based analysis of the comparative VfM of different types of programmes. This note takes such a broad approach.

8. The note's geographical focus is mainly on low income and lower-middle income countries in sub-Saharan Africa and South Asia, since this is where the UK aid programme is concentrated. It is also an increasing area of focus for other donors.

9. This guidance note is intended to assist DFID programme staff by explaining basic concepts and methods for VfM analysis, contextualised to the specific requirements of analysing VfM in cash transfers. The note provides examples from cash transfer programmes in a wide range of developing countries to illustrate the main points. Reference is made at various points to existing DFID guidance and other external resources for more detailed information on specific topics, and a list of bibliographical references is provided at the end.

10. This guidance note should therefore be used in conjunction with other DFID business case and VfM guidance along with sources of more detailed advice and evidence on the design and implementation of cash transfer programmes, including in specialised areas such as targeting, payment delivery systems, and monitoring and evaluation.

2. Cash transfers, VfM and the results chain

11. **VfM should be measured at all points in the results chain.** VfM can best be understood in terms of the results chain, which shows how money is converted into inputs, which in turn generate activities (or 'processes'), produce outputs (the specific, direct deliverables of a programme) and finally result in outcomes (changes in social or economic well-being) and impacts (related to the longer-term, higher level goals of programmes). VfM therefore depends critically on the validity of the causality embedded in the 'logic' of the results chain (or **theory of change**), which in turn depends on the strength of the evidence and the reasonableness of the assumptions upon which it is built, along with the degree to which the results chain is subject to exogenous risks.

12. VfM is thus ultimately about the relationship between the money that enters the chain (the costs) and the resulting outcomes and impact. However, VfM can be assessed at different points in the chain. There are basically three levels of VfM analysis, corresponding to the '3Es' of economy, efficiency and effectiveness, as illustrated in Figure 1 in the toolkit.

13. **Economy** is about the price at which inputs of appropriate quality (staff, consultants, goods and services, capital equipment) are purchased. Economy in procurement is more important for in-kind transfer programmes such as food distribution and school feeding, and for public works programmes, but is still significant in 'pure' cash transfer programmes, for example in purchasing a management information system (MIS) or an impact evaluation. Procurement issues are not discussed further in this note, as they are not specific to cash transfers as such and are the subject of existing guidance available on DFID's internal intranet site, in the 'Procurement' section on 'Moneysight'.

14. **Efficiency** concerns the conversion of inputs into outputs (or deliverables) through programme activities. In the case of cash transfer programmes, the outputs of interest are the cash transfers delivered to beneficiaries. Analysis of **cost-efficiency** goes beyond this to focus on the relationship between the costs (of a programme's inputs) and a programme's outputs, in this case the relationship between the costs of a cash transfer programme and the value of the cash transfers delivered to beneficiaries¹. Analysis of cash transfer programmes has highlighted important cost-efficiency issues, which are discussed in detail in Section 4.1 – one of these is that high cost-efficiency does not by itself mean that a programme has high VfM: it may be that high cost-efficiency has been achieved by under-

¹ Cash transfer programmes may have other outputs, such as the assets created on public works programmes, or outputs associated with recipient uptake of services or enhanced institutional capacities. As discussed in Section 4.1, these are not normally included in cost-efficiency analysis, but should be considered in interpreting findings.

spending on essential inputs and activities, thereby compromising the quality of the outputs and their social outcomes and impact.

15. **Effectiveness** concerns the extent to which programme outputs (in this case transfers paid to beneficiaries) are converted into programme outcomes and impacts (for example, reduction in the poverty gap, improved nutrition, reduction in school drop-out, increased use of health services, assets accumulation by the poor, increased agricultural productivity of small-holders, reduction in inequality, social cohesion, to cite many possible results at the outcome or impact level). **Cost-effectiveness** measures the cost of achieving intended programme outcomes and impacts (for example the cost of a 1 percentage point reduction in the poverty gap might be one possible measure, as will be discussed in greater detail below in Section 4.2). **Cost-benefit** analysis is a wider-ranging form of cost-effectiveness analysis that facilitates cross-programme comparisons by using common money-denominated metrics to quantify the very different types of costs and benefits associated with cash transfers, including items for which the market does not provide a satisfactory measure of economic value, and which would otherwise be difficult to compare (see Section 4.3).

3. Analysing programme cost

16. VfM is not just about minimising costs. It is about achieving long-term sustainable results (the 'value' part of VfM) just as much as it is about costs or the 'money'. Having said that, we need to understand the main drivers of costs, set out programme costs in a clear manner, break costs down into key components appropriate to cash transfers, assess costs other than those relating to administration and the transfers themselves, and make sure we get the desired quantity and quality of outcomes at the cheapest possible price. [Go to toolkit page 6](#) to see how to present programme costs.

3.1 Breaking costs down into key components

17. **Costs should be broken down into programme components and analysed over time, as shown in the toolkit page 6.** To understand better the cost structure of cash transfer programmes, it is helpful to disaggregate administrative costs by four broad types: set-up costs, roll-out costs, operational costs, and monitoring and evaluation (M&E). In practice, cost structures vary considerably between programmes, as illustrated by the three contrasting examples in Box 1. Some main determining factors are the following:

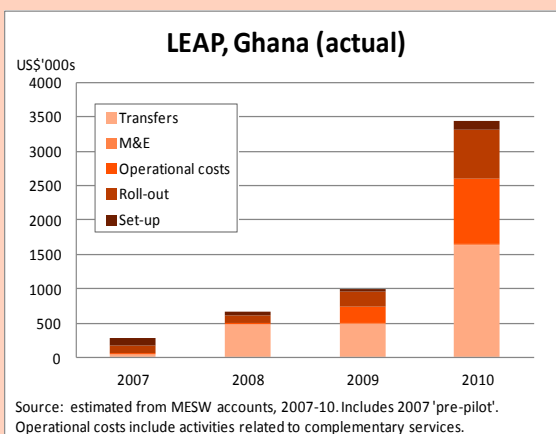
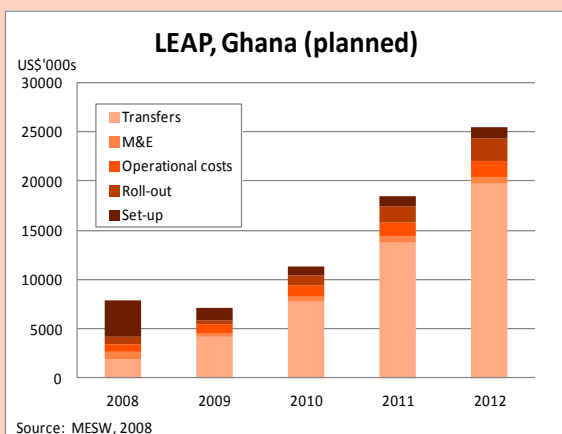
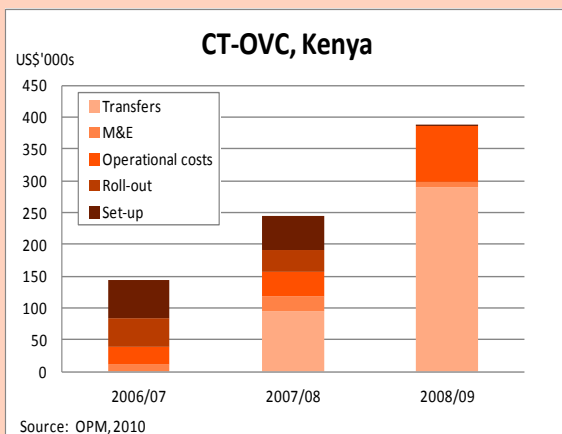
- In principle, **set-up costs**, which include design, planning and major investments (such as the establishment of an MIS – see Section 5.3), are fixed costs that should be concentrated mainly at the start of a programme. Set-up costs will be higher where the programme design is complex (e.g. due to multiple objectives or a multilevel targeting system) requiring greater administrative capacity and thus significant external technical assistance and training input; or where the existing ICT infrastructure on which to base an MIS is inadequate.
- **Roll-out costs**, which include the identification (targeting) and enrolment of beneficiaries, are also concentrated during the periods of programme launch and expansion, but are not strictly one-off where an established programme is enrolling new beneficiaries or if periodic retargeting is required. Roll-out costs can be expected to be higher where there is a complex set of targeting criteria, requiring intensively supervised selection procedures involving community committees and/or proxy means tests, and periodic retargeting (Section 5.1); or where there is no effective identification system for registration of beneficiaries (Section 5.3).

Box 1: Start-up cost structures in three cash transfer programmes

The CT-OVC Kenya example below follows the expected pattern of costs for a new programme. The OPM evaluation, from which the CT-OVC figures are drawn, covered only the 7 pilot districts assisted by donors. The main costs in 2006/07 were those associated with setting up the programme and identifying and enrolling the first cohort of beneficiaries – indeed no actual transfers were made in that year. As the programme matured, set-up costs declined almost to zero by 2008/09, while roll-out for this pilot phase of the programme was already complete by 2007/08. Expansion to the rest of Kenya’s districts would require further roll-out costs. Operational costs, including UNICEF’s management fee on DFID funds (about 10 percent of all non-transfer costs), expanded roughly in proportion with the volume of transfers, which grew to their 2008/09 level based on roll-out activities in the previous year.

Administrative costs during the start-up of Progresa/Oportunidades in Mexico in 1997-2000 showed a similar evolution, in that set-up and roll-out costs gradually gave way to operational costs as the programme grew, falling from 71% to 15% of administrative costs between Years 1 and 4. Surprisingly, set-up costs appear insignificant at only 6% of administrative costs in Year 1, suggesting incomplete attribution of all such costs to the programme. More strikingly, overall administrative costs comprise a much smaller proportion of total costs in all years compared with the Kenya example, reflecting economies of scale resulting from Progresa’s more rapid scale-up and much larger size (see Box 3).

The example of Ghana’s Livelihoods Empowerment Against Poverty (LEAP) programme illustrates the extent to which actual cost structure (bottom right) can deviate from that which was planned. Planned costs for the five year pilot phase (2008-12) conform to the expected pattern for a pilot roll-out, with relatively high set-up costs and a small volume of transfers in the first year, but diminishing set-up costs thereafter while roll-out and operational out costs increase in approximate proportion to transfer costs as the programme expands. Actual implementation, however, was beset by staff capacity constraints and financing and delivery delays, so that by the end of 2010 only a fraction of the budgeted amounts had been spent, and the proportion of administrative costs in total expenditure was approaching half.



- Recurrent **operational costs** notably include the costs of delivering transfers to beneficiaries (and in CCTs the costs of monitoring conditionality). These are the long-term running costs of the programme and should become the dominant component of administrative costs as a programme scales up and reaches maturity. Operational costs are likely to be inflated by complex requirements for monitoring compliance with conditions (Section 5.2), and where there is a lack of a financial infrastructure (e.g. post offices or banks) that can handle payments securely and at reasonable cost and to which the target population has effective access; they benefit from economies of scale with respect to both numbers of beneficiaries and level of transfers (Section 5.3).
- Finally, **M&E costs** include both an element of ongoing monitoring costs and the periodic costs of external evaluations, which in the case of major process and impact evaluations can be quite large. M&E costs will be higher where existing government reporting systems on activities and expenditure are inadequate and/or there are significant fiduciary risks, and where there is a lack of recent data on national poverty from household income and expenditure surveys, and on the living conditions of intended target groups, to provide an effective baseline for impact evaluation purposes (Section 6).

18. The overall level of administrative costs relative to the volume of transfers achieved is likely to be higher during the start-up phase of a programme, for small pilots that require intensive supervision and M&E (often involving significant technical assistance inputs) and are not yet benefiting from economies of scale, and for transfers linked to complementary activities such as health and education services or public works.

3.2 Assessing other costs

19. **Programme costs include various private, social and other costs that go beyond programme inputs – these should be measured if they can be, though not if the effort required would crowd out other essential programme activity.** Much of the analysis of the cost-efficiency and cost-effectiveness of social transfers, including cost-benefit analysis, focuses narrowly on **programme administrative costs**. Programme managers and funders are naturally concerned about controlling their own programme costs. However, there are many other potential types of costs that need to be taken into account when designing, implementing or evaluating cash transfer programmes. (See toolkit page 7)

20. Van de Walle (1998) identifies three broad types of costs associated with social transfers: programme administrative costs; costs that arise from incentive effects or behavioural responses; and ‘costs that result from the ramifications of political economy’. The latter include both political costs and economic costs such as adverse market effects. Coady *et al* (2003) add private costs (the transaction costs and opportunity costs of programme beneficiaries or prospective beneficiaries) and social costs such as the stigmatization of beneficiaries.

21. **Private costs.** It is especially important to minimise the costs borne by programme beneficiaries, which may be substantial if enrolment procedures, payment mechanisms or conditionality requirements are burdensome, distant or time-consuming. Some of these costs, such as transport costs or the cost of obtaining documents needed to enrol in a programme, are direct costs, while others (time spent and income foregone) are opportunity costs. Box 2 provides examples of the high costs borne by some beneficiaries of Kenya’s cash transfer programme for orphans and vulnerable children (CT-OVC programme) and Mongolia’s Child Money Programme (CMP). Use of electronic payment systems can significantly reduce private costs of collecting payments. In South Africa and Namibia, for example, recipients of social grants can choose between alternative delivery routes involving mobile ATMs, post-offices and banks, and have control over when and where to collect

payments. This replaces distribution via government offices at predetermined times and places, involving high travel costs and long queues.

Box 2: Private costs in Kenya's CT-OVC programme and Mongolia's CMP

The impact evaluation of Kenya's DFID-funded pilot cash transfer programme for orphans and vulnerable children (CT-OVC programme) assessed the time spent on collecting transfers, paid every two months through the Post Office, and the cost of transport (see Ward et al, 2010, Section 3.1). It found that the costs were particularly high for beneficiaries in the district of Garissa, which has a more dispersed population and weaker infrastructure than the other six districts covered by the pilot programme. While 57 per cent of current beneficiaries outside Garissa walked to the payment site, spending on average 2.3 hours on a return trip, in Garissa only 2 per cent of the beneficiaries lived within walking distance of the post office. A much larger proportion of beneficiaries in Garissa had to rely on motorised transport, spending on average 19.2 hours on a return trip and incurring much higher transportation costs than other beneficiaries. Some 83 per cent of recipients in Garissa had to spend at least one night away from their home in order to obtain the payment. The programme provided 1,000 Kenya shillings (Ksh) compensation for travel costs in Garissa. However, the impact evaluation found that this was not enough to cover the full costs of almost Ksh 1,500 spent on average by beneficiaries in Garissa on transportation, accommodation and food for each 2-monthly payment cycle, to collect a transfer of Ksh 3,000.

An analysis of the Child Money Programme (CMP) in Mongolia (Hodges et al, 2007) found that the transaction costs involved in applying for child allowances could be substantial or even prohibitive for those without the necessary documents, especially if they lived in rural areas and needed to obtain new identity documents or change their residence registration. Participants in a focus group meeting in a rural area in Dundgovi *aimag* (province) estimated that it would cost approximately 40-55% of the value of one year's child allowances, including the costs of transport, to replace a lost identity card, which required travel to the *aimag* centre and the payment of a penalty. According to household survey data, the transaction costs for receipt of child allowances were also substantial, especially for those living in the countryside, far away from *soum* (local government) centres, where payments were received. Although 90% of households collected their child allowances monthly, the amount of time required for the round-trip journey to receive the benefits averaged 4.3 hours in summer and 4.9 hours in winter for those living in the countryside, outside the *soum* centres, compared with 1 hour for those living in the capital, Ulaanbaatar. The total cost per journey was more than one third of the value of the monthly benefit per child for households living in these rural areas and more than six times higher than for those living in Ulaanbaatar.

22. Public works programmes (PWPs) are a special case, as they require a labour contribution from participants, which has an opportunity cost in terms of the time spent and income lost from other activities which may be displaced by participation in the programme. As we shall see below (Section 4.4), analysis of the cost-efficiency and cost-effectiveness of PWPs needs to distinguish between the gross wages paid to programme participants and their net wages after taking into account income foregone.

23. **Social costs** could include heightened social tension or the stigmatisation of beneficiaries. There has been particular concern that in low-income environments where almost all households are poor and there are only minor differences in income and consumption expenditure across deciles, even small transfers could be socially divisive if they are targeted only to the bottom one or two deciles. Ellis (2009) has drawn attention to the risk that transfers could lead to beneficiary households jumping up two or three deciles, 'leapfrogging' non-beneficiaries and undermining social cohesion in rural communities. Although the evidence is quite limited, the impact evaluation of the Mchinji social cash transfer scheme in Malawi (Miller et al, 2008) reported that the transfer amount (an average US\$4 per capita compared with an inter-decile difference of about US\$1.50 per capita) was enough to shift beneficiary households from the first, poorest quintile to above average consumption expenditure in the targeted communities. As a result, 38% of beneficiary households said that the transfers increased jealousy and 22% that they increased conflict.

24. Stigmatization of beneficiaries may occur if local cultures attach shame to the receipt of transfers or to particular eligibility criteria, such as AIDS. An example of this is provided by the low take-up of the 'solidarity cards' that provide free access for the 'indigent' to primary health care in Madagascar. Fear of the stigma associated with the status of indigent, which is strong in Malagasy culture, has made even the poorest of the poor reticent about accepting and using the solidarity cards, particularly in rural areas where communities are close-knit. As a result, the exclusion error is very high and even the modest target of 1% coverage of the population has not been met (Poncin and Le Mentec, 2009). On the other hand, entitlement to a regular cash transfer which is not exclusively reserved for the indigent can have the opposite effect of enhancing recipients' social status, as has been observed for social pensions in South Africa, Namibia and Lesotho. Arguably, social relations deserve more attention in design and evaluation of cash transfer programmes than they have so far received. (Devereux, 2001; Croome, Nyanguru and Molisana, 2007; MacAuslan and Riemenschneider, 2011).

25. **Adverse incentive costs** occur when programme design features encourage dependency or diminish participation in productive economic activity. Such effects are most likely to be created by programmes that have a fixed income ceiling for eligibility, verified by a means test, which may provide an incentive to reduce earned income in order to qualify. However, the evidence for such effects is extremely limited, especially in developing countries where transfers are much less generous than in developed countries and where verified means tests are usually impossible to implement (see Grosh *et al.*, 2009:34-37, for more detailed discussion). On the contrary, positive impacts on labour market participation have been documented for Progresa, in South Africa's Old Age Pension Child Support Grant, and Namibia's Basic Income Grant Pilot (Skoufias & di Maro, 2006; Samson *et al.*, 2004; Namibia BIG Coalition, 2008).

26. **Economic costs** could arise when cash transfers have inflationary effects, although there is little international evidence for this, except where local markets are functioning poorly or are entirely cut off from wider markets due to lack of transport infrastructure or conflict. In those conditions, the infusion of cash can raise prices in local markets, eroding the value of the transfers among other negative effects. This is why the use of cash transfers in the response to humanitarian crises in particular is normally subject to prior analysis of local market conditions (see Harvey, 2007). It is more usual, however, for cash transfers to bring economic benefits rather than costs. These may include enabling households to invest in productive assets and increase their productivity (and in the long term by investing in human capital development); or stimulating local markets through multiplier effects. Cash transfers also usually avoid the negative market effects of food transfers, which can depress farmgate prices and reduce incentives to domestic farmers to increase food production.

27. Finally, **political costs** may arise if programmes, or certain features such as their eligibility criteria, are not widely accepted. There is very little evidence, however, of political costs resulting from the implementation of cash transfer programmes, even if there may be political opposition (mainly from policymakers and élites) to launch and fund them. Once the programmes are in place, there are more likely to be political costs in ending or curtailing them. In Mauritius, the imposition of a means test on the universal non-contributory old-age pension in 2004 led to electoral defeat and the rapid reinstatement of its universality by the new government. However, these costs may be limited if programme beneficiaries are poor populations with little or no political voice, as is the case in many low income developing countries. In Ghana, the government has been advised by development partners to end universal subsidies on fuel and utilities to create fiscal space to expand more poverty-oriented programmes such as LEAP cash transfers, especially in the poorer rural north of the country, but remains wary of the political cost of angering their more vocal and influential urban constituents who benefit most from the subsidies.

28. Many of these wider costs – and the corresponding benefits of minimising them – are difficult or impossible to quantify in the same way as administrative and transfer costs. Nevertheless no VfM analysis is complete without a careful assessment of how they qualify the interpretation of the quantitative VfM metrics described in this Section.

4. Analysing value for money

29. **VfM should be measured at ALL points in the VfM chain to minimise costs and maximise benefits.** We should focus on all of the different points of the VfM chain, in programme design and implementation, as set out in Table 1 on page 8 of the toolkit, and discussed in more detail in subsequent sections, though there will be a choice to make on how to analyse programme effectiveness.

4.1 Cost-efficiency

30. As we have seen above, **cost-efficiency analysis focuses on the relationship between programme administrative costs and programme outputs**, in the case of cash transfer programmes taken to be the amount of cash transfers delivered to beneficiaries. At this level of analysis, it is not necessary to try to measure private or other non-administrative programme costs or any other outputs, and by definition, the social outcomes or impact of programmes are not taken into account. Nevertheless, these broader costs and benefits should be considered in interpreting findings, since high administrative cost-efficiency may in practice mask shortcomings in the transfer programme that negatively affect performance. This is particularly important in the short to medium term if a programme is measuring cost-efficiency and not yet actual cost-effectiveness (if too early to see or measure impact). As Grosh *et al.* (2008:390) remark:

To maximize the level of transfers reaching beneficiaries, the obvious desire is to minimize administrative costs. At the same time, delivering cash or in-kind transfers is like any production process: to reach the intended beneficiaries with the desired transfer of service, programs have to finance a set of critical functions, such as receiving and processing applications, dealing with appeals, processing payments, undertaking monitoring and evaluation, and exercising oversight over how program resources are used. Programs that allocate insufficient resources to perform these functions tend to perform poorly.

31. Despite the limited scope of the analysis, it is useful to examine the cost-efficiency of cash transfer programmes, as low cost-efficiency may reflect low economy (poor procurement) or basic design flaws that inflate costs. Likewise high cost-efficiency can reflect costs which are too low and having a negative effect on outcomes/impact. Inevitably the bottom line question asked by programme managers and funders is ‘what is a reasonable level of administrative costs?’ Behind the numbers, however, lie issues to do with the nature, scale and maturity of programmes, and the relative generosity of transfers, as well as design and implementation issues.

Methods and measures

32. It is useful first to review the different measures used to express cost-efficiency in social transfers. These are all expressed as ratios and are permutations of the same basic concept. Transfer programme costs have two components: the value of the transfers and administrative costs. Cost-efficiency is therefore sometimes expressed as a ratio between transfers and total costs, or vice-versa.

- The **alpha ratio** is the ratio of the total value of transfers to total (administrative and transfer) costs. If, for example, it costs £8 million in administrative costs to transfer £32 million in transfers to beneficiaries, the alpha ratio is 0.8. A higher alpha ratio is more cost-efficient.
- Sometimes the reciprocal of the alpha ratio is used, i.e. the **ratio of total costs to transfers**, which is the total cost of delivering one unit of transfer (e.g. £1) to a beneficiary (1.25 in this example).
- Alternatively, cost-efficiency is measured as a ratio between administrative costs and either total costs or transfer costs. In the first case, the **ratio of administrative costs to total costs** is $1 - \alpha$, i.e. 0.2 for the example above. In the second case, the **cost-transfer ratio (CTR)** is the ratio of administrative costs to transfers, i.e. the administrative cost of making a one-unit transfer to a beneficiary. In our example, the CTR is 0.25.

33. It is worth noting that most calculations of these ratios interpret transfers to mean the total value of transfers paid, irrespective of whether they have been paid to the 'right' people. In other words, there is no consideration of inclusion error. A case could be made that transfers made to those who in theory are ineligible is 'leakage' (the inclusion error is sometimes called the leakage rate) and that therefore these transfers are not part of the output that should be included in these ratios. However, since such leakage will not affect the efficiency of delivery as defined above, this is not a refinement that should be made in the calculation of cost-efficiency, although VfM in relation to targeting should be assessed alongside analysis of targeting accuracy/errors.

34. The need to include ALL administrative costs in cost-efficiency analysis, year by year, must be emphasised. Direct costs (i.e. those attributable entirely to the programme) are relatively straightforward to measure. For indirect costs, such as inputs of work time on transfer programme administration by regular government or partner agency staff, it will be necessary to estimate both their total annual costs and the proportion of these expended on administering the programme. In either case, these should be apportioned between the four headings suggested above (set-up, roll-out, operational and M&E), although it is recognised that this may be to some degree arbitrary, for example when accounting costs distinguish only between headings such as human resource costs, and logistics, fuel etc.

Evidence

35. Where available, the data on these measures show wide variations between programmes and countries, and between different years for the same programmes. As noted above, these differences reflect not only differences in programme nature, design and implementation, but also declining unit costs and a shifting structure of costs as programmes develop beyond pilots to scale up and reach 'maturity'. Differences in these cost-efficiency measures also reflect differences in transfer levels, which automatically affect all the ratios mentioned above. If two programmes are identical except that the transfer level is twice as high in one as the other, then the CTR of the first will be half that of the second.

36. Looking at the evidence, the Lesotho old age pension (OAP) appears to be one of the most cost-efficient programmes in low-income Africa, with a CTR (ratio of administrative costs to transfers) of only 0.02 in 2005/06, although this is thought to underestimate central administrative costs (Ellis et al, 2009). This reflects the fact that the OAP uses simple categorical targeting, with on-demand enrolment, and delivers payments for a low charge through the Post Office. Social pensions in general appear to be among the most cost-efficient programmes.

37. Cash transfer programmes with more complex targeting (based on proxy means tests and/or community targeting) tend to be more administratively expensive, as do conditional cash transfers (CCTs) which require mechanisms for monitoring compliance of beneficiary households with the conditions imposed by the programme. Nevertheless, these programmes can be cost-efficient when they are taken to scale and initial fixed costs diminish in importance. The most cited example (see Caldés et al, 2004) is Mexico's PROGRESA programme (now known as Oportunidades), which had a CTR of 0.05 in 2000, four years after it was launched.

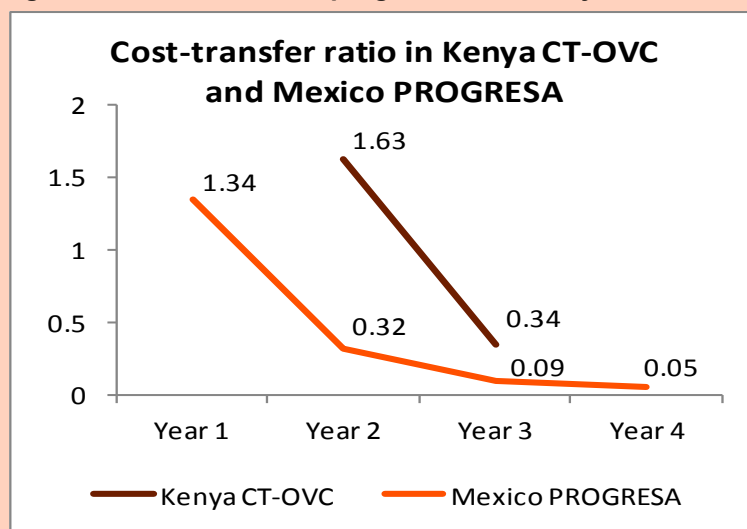
38. Programmes of this type in low-income Africa have much higher CTRs, but this is largely explained by the fact that they tend to be quite recent, still have large fixed start-up costs and have not yet achieved economies of scale. Another factor is that the African programmes often provide lower transfer levels than in the middle-income Latin American countries. Table 2 provides examples of three such African programmes.

Table 2: Cost-transfer ratios in three African programmes with complex targeting

Programme	Cost-transfer ratio	Determining factors
Ghana – Livelihood Empowerment Against Poverty (LEAP)	1.0 approx. (2008-2010 cumulative)	New government-run pilot for extremely poor households. Nationwide coverage, but thinly spread with complex community + PMT targeting system. CTR affected by payment delays. (White, 2011)
Kenya CT-OVC programme	1.03 (2006/07-2008/09 cumulative). Down to 0.34 by 2008/09.	New pilot for poor OVCs in 7 districts. Intensively managed. Complex community + PMT targeting. See Box 3. (OPM, 2010)
Mozambique Food Subsidy Programme (PSA)	0.55 (2007)	Government-run cash transfer for very poor elderly, disabled and chronically ill, begun 1990 in urban areas but expanded to rural areas from 2006. Thinly spread, with high travel costs and lengthy targeting procedures but low transfer level (only 5% of minimum wage by 2010). (Walker et al, 2008; Ellis et al, 2009; Hodges & Pellerano, 2010)

Box 3: How cost-efficiency improves as programmes mature

The figure below uses the first two examples from Box 1 to show how the CTR diminishes as programmes evolve from small pilots to expand programme coverage. The CTR in Mexico fell sharply from 1.34 in year 1 to 0.05 in year 4, mainly due to the rapid increase in transfer volumes. In the Kenyan case, the CTR cannot be calculated for Year 1, as there were no transfers. The CTR then declined from 1.63 in year 2 to 0.34 in Year 3, when costs were almost entirely recurrent operational costs. The CTR of 0.34 in Year 3 may provide some indication of the long-term average CTR of the programme, although this is likely to decline further as the programme expands and achieves larger economies of scale. It is noteworthy that this figure is still almost 7 times higher than that for PROGRESA in its fourth year, but PROGRESA was by then a huge programme, reaching 2.6 million rural households, or almost one-ninth of all households in Mexico, with a relatively generous transfer (up to US\$60/month per household by 1999). The scale-up of African cash transfer programmes has been much slower and transfer levels much lower.

Figure 2: Evolving CTRs in cash transfer programmes in Kenya and Mexico

Sources: OPM, 2010; Caldés et al, 2010

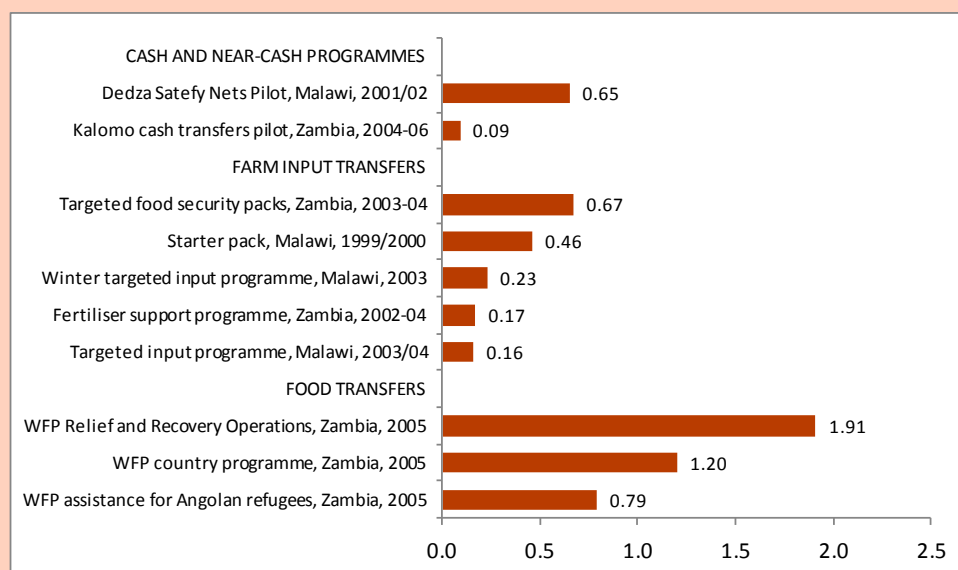
39. The available data on the relative cost-efficiency of cash transfers versus food distribution supports the view that in most cases it is cheaper (as well as more flexible for beneficiaries) to distribute cash rather than an equivalent amount (in market value) of food. However, this may not be the case in situations of high food scarcity and poorly performing markets. Evidence on cash and food-based programmes in Malawi and Zambia is presented in Box 4.

Box 4: Relative cost-efficiency of cash, food and farm input transfers

Should donors shift the emphasis of transfers away from food, which has traditionally been dominant in social assistance and humanitarian programmes, to cash or near-cash (vouchers)? The improved cost-efficiency of cash transfers over food transfers has been one of the main arguments for doing so, along with a desire to give beneficiaries more flexibility in meeting their needs and to avoid the risk that food distribution will undermine local agricultural markets and reduce incentives to improve food production, especially if food is imported from outside. However, it would be misleading to claim that cash is always more cost-efficient to deliver than food. This depends to a large extent on how well food markets are working.

White and McCord (2006) argue that, to make valid comparisons it is necessary to convert cash transfers into the food they will buy, using local market prices, or conversely to convert food transfers into their cash value on local markets. The cost-efficiency of transfers of farm inputs, such as seeds and fertiliser, can also be compared in this way if they are converted into their food or cash equivalent at local market prices. Using this approach, White and McCord compared a range of cash, food and farm input transfers in Malawi and Zambia, which confirmed that in general cash transfers are more cost-efficient than food transfers. Their results are shown in Figure 3, converted into the CTR measure (administrative costs per US dollar of transfer), with food and farm input transfer values converted into dollars at local market prices rather than using procurement prices. In cost-efficiency terms there appears to be no substantial difference between cash and farm input transfers. These results need to be interpreted with caution, however, as they are based on a small sample of programmes. Cost-efficiency for individual programmes in single years may be affected by idiosyncratic factors such as programme scale and maturity.

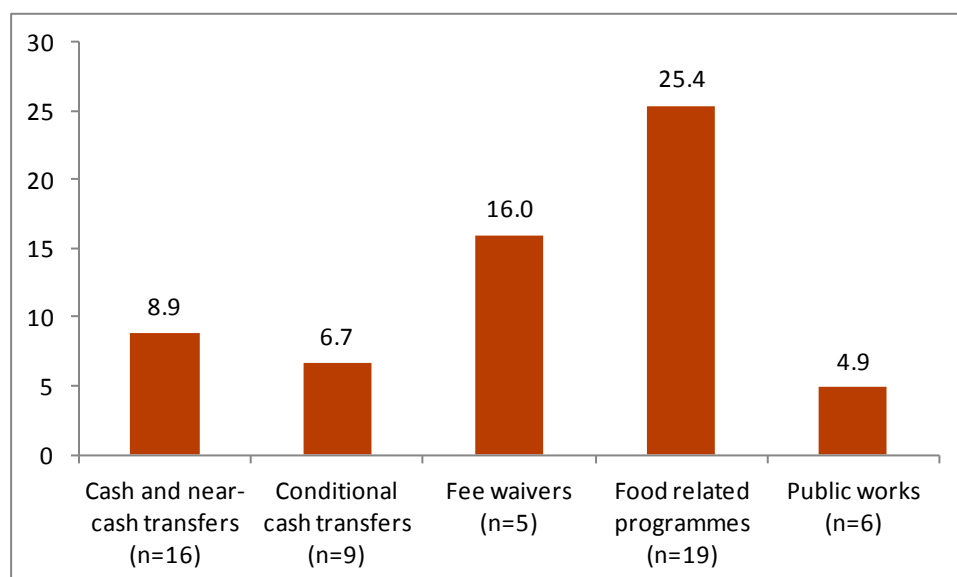
Figure 3: Cost-transfer ratios of cash, food and farm input transfers in Malawi and Zambia



Source: derived from White and McCord, 2006.

Using benchmarks from international evidence

40. **Total administrative costs as a share of programme costs should be compared with international evidence from other programmes.** Notwithstanding the inherent difficulties in comparing across countries and programmes, the World Bank has provided approximate benchmarks for what it considers to be a reasonable share of administrative costs in total programme costs (administration + transfers) in different types of social transfer programmes. Overall, the share of administrative costs in total costs clusters in the range of 5 to 15% in well-executed cash and in-kind transfer programmes (see Figure 4). The Bank suggests that 'anything beyond about 12 to 15 percent of total costs bears close examination to see why administrative costs are relatively high' (Grosh *et al.*, 2008, p. 391).

Figure 4: Share of administrative costs by types of intervention: median values (%)

Source: Grosh *et al.*, 2008.

41. However, as Grosh *et al.* themselves acknowledge, care is needed in using the data presented in Figure 4 for benchmarking purposes, due to problems of comparability between the very diverse range of programmes in each group. While the higher costs of food-related programmes is to be expected due to their greater logistical demands, the ordering of cost-efficiency between public works, CCTs and cash transfers in this sample seems precisely opposite to what one would expect. The share of administrative costs for the six public works programmes, for example, ranged from 1.6% to 24.0%, and it appears that staff costs were not included in all cases. Much depends on the choice of programmes for benchmarking.²

42. There may be perfectly good reasons why the share of administrative costs is higher than this in specific instances. But this could also be a sign that the programme can be improved. To apply such benchmarks meaningfully it is necessary to go beyond the headline numbers and ask the following types of questions (summarised on page 9 of the toolkit):

- Does the programme also provide specialised social welfare or other complementary services in addition to transfers, and is conditionality involved?
- On public works programmes, are administrative costs significantly inflated by the costs of implementing works projects?
- Does the programme serve small groups with special needs, such as groups living with particular disabilities, making it impossible to achieve significant economies of scale?
- Is the programme just starting up, with high initial fixed costs, and not yet exploiting economies of scale?

² It is worth noting that this comparison is made in a publication for the World Bank, which has an interest in promoting public works and CCTs as programmes that can be presented as investment (in community assets and human capital respectively) and thus suitable for World Bank loan financing, as opposed to unconditional cash transfers which are seen as predominantly for consumption purposes. There is a lively debate in social protection circles about the suitability of public works and CCTs for addressing chronic poverty and vulnerability. For the rather limited evidence for or against the added value of conditions relative to a simple unconditional transfer, see for example Fiszbein and Schady (2009:155-160) or Baird *et al* (2011).

- Is the administrative cost share high because the transfer level is too low (to achieve intended social protection outcomes and impacts)? To adjust the cost-efficiency measure for the relative generosity of transfer levels, the World Bank (Grosh et al, 2008, p. 392) has proposed an index of administrative costs calculated as: (administrative costs/total programme costs)*(transfer level/beneficiary household consumption)
- Is there an inherent design problem? For example, are the targeting and conditionality mechanisms too complex and costly for the benefits they bring, or alternatively should they be strengthened because the benefits in programme performance will outweigh the higher costs? Could new technology in registration and payments systems bring down unit costs? These issues are discussed further in Section 5.
- Are there implementation problems, for example in procurement or the need to reach beneficiaries in difficult environments, whether a result of geography, poor infrastructure or conflict?

Limits of cost-efficiency analysis

43. It is important once again to stress the limits of cost-efficiency analysis in assessing VfM for cash transfers. First, the analysis is invariably limited to administrative costs and takes no account of private and social costs to beneficiaries, or adverse incentive, broader economic and political costs, all of which are nevertheless very important in broader analysis of programmes. Second, low cost-efficiency does not necessarily mean low cost-effectiveness (which is the cost of achieving outcomes or impact rather than output), and *vice versa*. A higher administrative cost may be necessary to improve the social and economic outcomes of a programme. For this reason it would be wrong to base choice of programme solely on cost-efficiency criteria. Finally, analysis of cost-efficiency is limited in practice by major deficiencies in data, including for many programmes a lack of information on government overhead costs. Nevertheless, despite these limitations, cost-efficiency analysis should be done in all cases, and an effort made to identify clearly and where possible address critical data gaps.

4.2 Cost-effectiveness

44. **Cost-effectiveness should be calculated where benefits can be quantified but not necessarily expressed in money terms.** Analysis of cost-effectiveness goes far beyond the limited realm of cost-efficiency by attempting to measure costs against the outcomes and impact of programmes, in other words the results they are ultimately intended to deliver. This gets to the heart of 'value for money', making it possible to choose rationally between programmes or variants in programme design on the basis of the relative cost of achieving desired social and economic results.

45. However, the data requirements and analytical methods are more demanding, making it necessary to be realistic about what can be measured with confidence. As the DFID 'How To Note' on economic appraisals rightly points out, 'the sophistication of the techniques that can be used in analysing value for money, and the depth of insight that can be given, depend on whether outcomes and impacts can be credibly quantified'. In the specific case of cash transfers these challenges are formidable, although not entirely insuperable, due to the multiple nature of the benefits that cash transfers are expected to generate, their long time-horizon and serious deficiencies in data.

46. In their book on *Social Protection in Africa*, Ellis et al (2009, p. 86) draw a clear distinction between 'cost-effectiveness analysis' and 'cost-benefit analysis', which it is

important to bear in mind as we discuss these two different but related approaches over the next two sub-sections:

Cost-effectiveness analysis differs from cost-benefit analysis in that whereas cost-benefit analysis attempts to assess financial or economic returns to an investment by attaching monetary values to all associated costs and benefits and comparing the two, cost-effectiveness analysis more straightforwardly specifies a project objective (or set of desired outcomes) and then analyses the cost of achieving it. Cost-effectiveness analysis is appropriate when effects cannot easily be reduced to monetary terms, even if they can be quantified. It is well suited to social transfer schemes, where the focus is most often on assessing value for money in attaining transfer objectives rather than on quantifying overall economic or financial returns to an investment. Like cost-benefit analysis, cost-effectiveness analysis can be used to compare alternative interventions with different costs and different effects, provided the effects can be expressed in the same units.

Methods

47. The kinds of effects that cash transfers are typically expected to generate vary according to the type of transfers concerned (ranging from old age pensions to public works to human development-oriented CCTs), but they often include (as immediate or short term effects) the reduction of monetary poverty, increased spending on food and improved dietary diversity, improved school attendance or reduced drop-out, reduced use of child labour, lower incidence of sickness and increased take-up of health services, the accumulation of household assets and increased productivity. (See [Analysing programme benefits](#) in the toolkit, page 7.) These are the same kinds of domains in which impact evaluations of cash transfers seek to measure the short-term effects on programme beneficiaries (relative to control groups of non-beneficiaries with similar socio-economic characteristics). Impact evaluations, combined with programme cost information, are therefore potentially a valuable source of data for analysing cost-effectiveness. Although impact evaluations of cash transfers are becoming more common in low-income countries, following in the tradition set by CCTs in Latin America, they have not yet been fully exploited for this purpose.

48. Likewise, more scope exists for using data in national household surveys either for *ex post* analysis of the cost-effectiveness of existing programmes or for *ex ante* simulations of the expected cost-effectiveness of cash transfers in programme design and planning. Since living standards measurement surveys (LSMS) or other household surveys of a similar type are now being implemented periodically in most low-income countries, they should be used for this purpose where they are reasonably up-to-date. To realise the potential of national surveys for cost-effectiveness analysis may however involve working with the national statistical office (and donors supporting it):

- For *ex post* analysis of impact, it is essential that the survey includes questions on household receipt of the cash transfer in question, making it possible to identify recipients and then examine their situation. This is also invaluable in enabling robust assessment of targeting performance: beneficiary incidence analysis can reveal what proportion of transfer recipients are falling into the poorest and richest quintiles, or below and above the national poverty line.
- When a transfer programme is small, a LSMS sample may not include sufficient recipients to enable statistically robust estimation of impact. Where the programme is geographically targeted, it may be possible to overcome this by over-sampling in the programme area.

49. Simulations may be limited to estimating the short-term income effects of transfers, usually making the simplifying assumption that transfers are added fully to consumption expenditure and ignoring substitution effects and behavioural changes, although more complex models can accommodate these. In most cases, the models employed do not take

into account second-round effects and thus are not appropriate for predicting the long-term impacts of programmes, such as for example the returns to education resulting from cash transfers over many years.

50. Nonetheless, it is extremely useful to calculate the short-term effects of alternative cash transfer options and then combine these results with cost data or cost projections, based on programme planning assumptions, to simulate cost-effectiveness for selected variables. The counterfactual is the absence of the cash transfer, or an alternative policy option, such as consumer subsidies (see Box 5), depending on the question being answered. With the data available in LSMS and similar surveys, along with cost projections, it is possible to estimate the cost-effectiveness of different transfer options with respect to the standard monetary poverty indicators (poverty headcount, gap and severity) and their equivalents for extreme or food poverty, food consumption indicators (expenditure, calorie intake, dietary diversity, etc.), number of livestock or value of total assets, school attendance, use of health services, and incidence of child labour, among others.

51. With respect to the monetary poverty dimension of cost-effectiveness, it is usually more relevant to focus on the poverty gap (P_1 or the average distance from the poverty line) or poverty severity (P_2 or the squared poverty gap, which gives greater weight to the poorest), rather than the poverty headcount (P_0). In large-scale national programmes sustained over a number of years (as in some Latin American countries), it may be possible to estimate effects on the poverty headcount; but more normally, and especially in the case of cash transfer programmes that target the poorest, programmes may reduce the depth of poverty of these beneficiaries without providing transfers large enough to bring significant numbers of beneficiaries above the poverty line. In this case, a cost-effectiveness analysis should analyse, either *ex ante* or *ex post*, the cost of a unit reduction in the poverty gap and/or poverty severity, measured in percentage points.³ Similarly, alternative education-focused social transfers – for example, a CCT, a school feeding scheme and the free distribution of school uniforms – might be compared in terms of the cost of a 1 percentage point increase in the next primary school attendance ratio. Similar types of measures could be devised for other types of effects.

52. At a minimum, cost-effectiveness analysis should measure both transfers and administrative costs over time. Other incremental costs (e.g. private, social, economic, political as detailed above) should be included where quantifiable, or assessed explicitly to qualify the analysis where not.

53. Cost-effectiveness analysis should take into account targeting performance. For example, where a programme is targeted at the extreme poor, the benefit incidence (in this case the proportion of transfers reaching the extreme poor) should be estimated and used for the analysis. Moreover where successive LSMS surveys data indicate a significant trend in extreme poverty headcount or gap, benefit incidence will need to be projected forward in *ex ante* analysis to the period over which impact on poverty is expected to occur.

³ In the Bilateral Aid Review (BAR) offers, Bangladesh, Nigeria, OPTs, Tanzania and Zimbabwe estimated the impact on the poverty headcount, and Kenya, Uganda and Zambia the impact on the poverty gap index. Nepal estimated both. Bangladesh and Tanzania gave estimates of the cost per person leaving poverty. The 2011 appraisal of proposed DFID support to Ghana's LEAP programme estimated impact on poverty headcount and poverty gap.

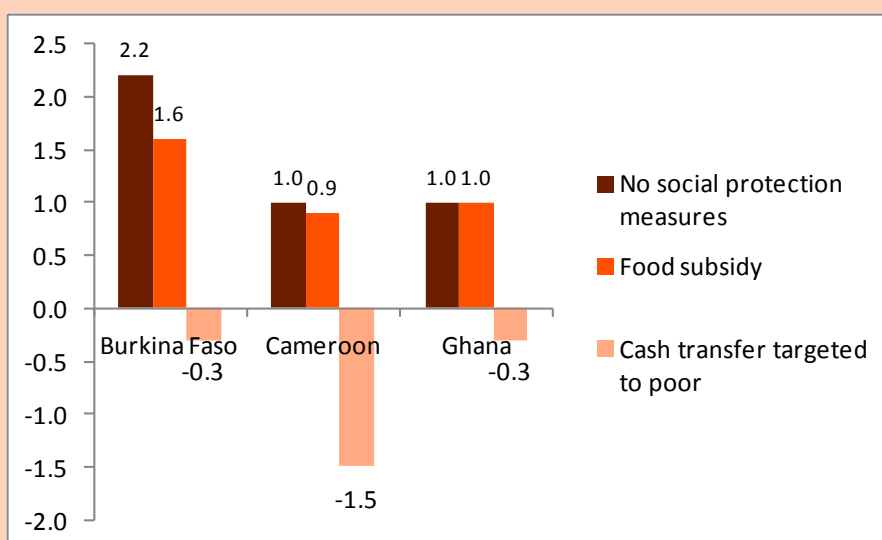
Box 5: Comparing the cost-effectiveness of cash transfers and subsidies

Benefit incidence analysis, which analyses the distribution of benefits across the population (e.g. by per capita consumption quintiles), has shown that in many countries subsidies are poorly targeted, benefiting the poorest least. In low-income countries, one of the main reasons for this is that subsidies tend to be applied to goods that are imported and/or traded in formal markets. It is administratively difficult to subsidise the food products that are bought by poor households, which are mainly traded in informal markets. As a result, consumer subsidies are often also less cost-effective than well-targeted cash transfers, and major savings (or a bigger bang for buck) could be obtained by shifting resources from subsidies to cash transfers. In Senegal, for example, cash transfers are being developed as a more cost-effective alternative to subsidies, which were not pro-poor and were very expensive, costing between 3 and 4% of GDP, leading to their abolition in 2008 (World Bank, 2011a). In Mozambique, based on data for 2008, it would have been possible almost to quadruple government expenditure on social transfers if all the resources spent on fuel subsidies had been redirected to this end (Hodges et al, 2010).

A study on policy responses to the impact of the global crisis on children in three West African countries (Burkina Faso, Cameroon and Ghana) compared the cost-effectiveness of food consumption subsidies (in the form of VAT or import tariff exemptions) and cash transfers targeted to households below the national poverty line using a proxy means test (PMT), taking into account the inclusion and exclusion errors predicted by the PMT formula. Cost-effectiveness was shown by measuring the benefits (against a counterfactual scenario of no action) that could be bought with each intervention for a budget outlay equivalent to 1% of GDP, considered to be a reasonable level of social assistance expenditure by the standards of low or lower-middle income countries. The study used a complex methodology, linking a CGE model to simulate the effects of the global crisis on the economy of each country to a micro-level household model, using national household survey data, to simulate both the impacts of the crisis and the impacts of alternative policy measures on child welfare variables. Impacts and cost-effectiveness were simulated with respect to monetary poverty, caloric poverty ('hunger'), school participation, child labour and access to health services.

The cost-effectiveness of the two policies varied across the countries, but in all cases the targeted cash transfer was more cost-effective than the food subsidy. Figure 5 shows the results for the change in the poverty gap resulting from the combined effects of the global crisis and the three policy scenarios: no action, a food subsidy and a targeted cash transfer programme. As can be seen, the food subsidy only partially offset the impact of the global crisis in Burkina Faso and Cameroon, and had no effect in Ghana, while in all cases the cash transfer more than offset the effects of the crisis, especially in Cameroon.

Figure 5: Simulated change in poverty gap resulting from the global crisis and alternative social protection measures costing 1% of GDP, in three African countries, 2009

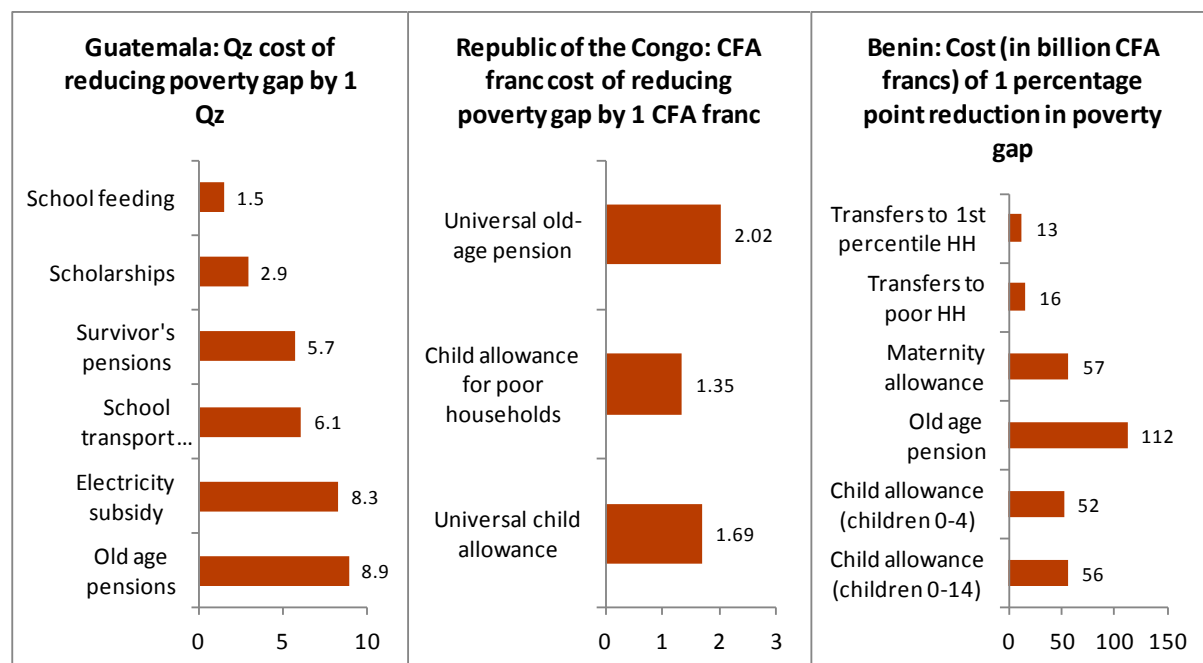


Source: Cockburn et al, 2010.

Evidence

54. In Figure 6 below, we provide below a few examples of cost-effectiveness analysis applied to social transfers using these types of measures. A list of examples for DFID-funded programmes appears on page 11 of the toolkit.

Figure 6: Comparative cost of reducing the poverty gap



Sources: World Bank (2009), Notten et al (2008), Hodges et al (2010)

55. In Guatemala, the World Bank estimated the cost required to reduce the poverty gap by 1 quetzal (Qz) for a range of different social protection programmes (see World Bank, 2009, citing World Bank, 2002). To establish the counterfactual, it was assumed that the level of consumption in the absence of each welfare programme equals current consumption minus the welfare payment. For each programme the current and counterfactual poverty gaps are estimated, using data from a household survey. The difference is the contribution of the programme to poverty gap reduction. Finally, cost-effectiveness is calculated by dividing the reduction in the poverty gap by the cost of the programme. In this case, due to the inadequacy of data on administrative costs, costs were limited to the costs of the transfers. The results showed school feeding was one of the most cost-effective options, costing Qz1.5 to achieve a Qz1.0 reduction in the poverty gap, compared with (at the opposite extreme) Qz8.9 for old age pensions and Qz8.3 for electricity subsidies. In the **Republic of the Congo**, Notten et al (2008) used national household survey data to simulate *ex ante* the cost-effectiveness of universal and poverty-targeted child allowances (for children aged 0-14), along with universal social pensions for the elderly (aged 55 and above), given assumptions about transfer level (relative to the national food poverty line) and the ratio of administrative costs to transfers, based on international experience. Cost-effectiveness was measured in terms of the CFA franc cost of a 1 CFA franc reduction in the poverty gap, with the results showing the highest cost-effectiveness for targeted child allowances (a unit cost of 1.35 CFA francs per 1 CFA reduction in P1), followed by universal child allowances (1.69) and then universal old-age pensions (2.02). The targeted child allowance had the best performance despite significant inclusion and exclusion errors resulting from a proxy-means test, simulated as part of the model.

56. In Benin, similar methods were used, although assuming perfect targeting, to simulate the cost-effectiveness of a range of cash transfer options, including child allowances, old age pensions, maternity allowances and non-categorical transfers targeted to the poor and the ultra-poor (first percentile), for a feasibility study on cash transfers (Hodges et al, 2010).

Limits of cost-effectiveness analysis

57. Cost-effectiveness analysis of the type described above is useful for measuring the cost of unit changes in the intended social or economic outcomes of cash transfer programmes, so long as the effects can be measured in the same units. As indicated above, the absence of a common metric such as money to quantify effects across the range of different dimensions in which transfers can be expected to produce benefits is the main limitation of this approach, although it may be more credible, given the demanding data requirements of a full cost-benefit analysis, and is valuable for making policy choices or refining programme design.

58. A second limitation in practice is the short-term nature of the effects that can be measured with the tools and data available for most cost-effectiveness analysis, whether using model-based *ex ante* simulations or analysis based on the data from impact evaluations. In the latter case, attribution to the programme of changes in poverty headcount and gap would require two good, well-timed rounds of household survey data with distinct beneficiary and control groups. But such data constraints also apply to most cost-benefit analysis of cash transfers, which often has to rely heavily on assumptions. The difficulty of quantifying certain impacts, such as improvements in social cohesion, limits the scope of both approaches equally.

4.3 Cost-benefit analysis

59. Whereas cost-effectiveness analysis compares the costs of alternative ways of producing the same or similar benefits, cost-benefit analysis (CBA) quantifies in monetary terms as many of the economic costs and benefits of a proposal as feasible, including items for which the market does not provide a satisfactory measure of economic value. This allows the balance of incremental costs and benefits attributable to an intervention to be assessed quantitatively, and compared between alternative options. CBA is most often undertaken in the economic appraisal of new interventions, and forms part of the Business Case. Whether cost-effectiveness analysis or full CBA is used for this purpose depends on the size of the proposed investment and the extent to which benefits can be monetised. The same applies to use of these techniques in *ex post* evaluation. See [Consider cost-benefit analysis where main costs and benefits can be credibly monetized](#) on page 11 the toolkit for a summary of metrics and methods.

Methods

60. CBA normally covers the **full time horizon** over which costs and benefits can be expected to occur – up to 20 or 30 years is often used depending on the nature of benefits – not just the period during which investment takes place. To compare costs and benefits occurring in different time periods, projected incremental cost and benefit streams are discounted to their present value (PV). There are two main methodologies for arriving at a suitable **discount rate** for this purpose:

- the social rate of time preference (SRTF), which assesses the value society attaches to present as opposed to future consumption, and recommended and explained in the HM Treasury *Green Book*;

- the social opportunity cost of capital (SOC) which seeks to proxy the marginal social return were funds to be invested privately, and may be more appropriate in certain developing country contexts with severe resource scarcities.

61. Present DFID guidance is that a uniform discount rate should be established for all DFID's appraisal work in the country in question, using one of these two methods.⁴

62. CBA results are usually expressed as **net present value (NPV)** (PV of incremental benefits minus PV of incremental costs) or **benefit-cost ratio (BCR)** (PV of incremental benefits divided by PV of incremental costs). Optionally, economic **internal rate of return (EIRR)** (the discount rate at which NPV equals zero) can also be provided.

63. A number of **assumptions** will need to be made in simulating projected cost and benefit streams. These need to be explicitly backed up by **within-country evidence** (e.g. programme evaluations, national surveys, published research) and **international comparisons**. The **quality, relevance and reliability** of this evidence must be assessed. To account for the inevitable uncertainty surrounding the assumptions made, a **sensitivity analysis** should be undertaken to test the effect of varying main assumptions, including the discount rate used. If units of benefit can be monetised but not quantified, **break-even analysis** is useful. This asks the question 'how many units of benefit would the intervention have to generate before the value of the benefits outweighs the costs?', and assesses how likely it is that the break-even point will be reached.

64. For *ex ante* appraisal, the analysis should be undertaken for each major project option for achieving desired outcome and impacts. At a minimum, two options are analysed: the preferred option and the counterfactual (do nothing) option. Similarly, in applying CBA to *ex post* evaluation, the estimated actual economic cost and benefit streams are compared with the counterfactual (those that would have occurred without the programme). Full guidance on appraisal methods is provided in the HM Treasury *Green Book* and DFID's *How To Note on Economic Appraisal*.

65. In applying CBA to cash transfers, it is necessary to think carefully about the economic benefits that the transfers are expected to yield, identifying the units of benefit that best describe outcome and impact in the results chain. (Metrics are summarised in **Analysing programme benefits** in the toolkit, page 7.) Two contrasting approaches are presented in Box 6. The Gaza case attempts to quantify not only immediate impacts on consumption (valued at the level of the transfer itself) but also longer-term impacts deriving from improved health, educational achievement and labour productivity, as well as from an economic multiplier effect. This is commendable for focussing explicitly on the most important end-results that transfers hope to bring about, and is the preferred approach to valuing transfer benefits provided the assumptions used are (as in this case) credible and supported by evidence.

⁴ For details see internal DFID minute 'Interim guidance on discount rates', DFID Chief Economist, 26-Aug-11

Box 6: Two case studies of VfM analysis for cash transfers**Gaza Social Protection and Food Security Programme**

One of two options appraised by a 2011 VfM analysis for this proposed programme (Shah, 2011) was a US\$20m urban voucher programme (UVP). Implemented in partnership with WFP, the UVP would target poor and food insecure households in urban Gaza through provision of monthly vouchers worth US\$70, exchangeable for selected food items at registered retail outlets. With administration costs at 17% of total costs (i.e. an alpha ratio of 0.83 or CTR of 0.20), the UVP was judged cost-efficient. Using findings from a mid-term review (MTR) of an earlier pilot voucher programme, the US\$270 cost per beneficiary-year was compared with that of in-kind food distribution. Although the latter could meet daily calorie and protein requirements more cheaply, the vouchers were judged more cost-effective due to wider benefits arising from beneficiary access to a more nutritionally varied and higher value food basket, which they could supplement with cereals purchased using money saved due to the vouchers.

The CBA was based on the following units of benefit:

- **immediate consumption and income effects**, valued at the exchange value of the vouchers;
- **longer-term welfare benefits** from improved nutrition, in terms of Disability Adjusted Life Years (DALYs) averted, valued using a GDP per capita estimate for the target population; DALY estimates were based on those for Jordan (available from WHO), doubled to account for the higher incidence of malnutrition in Gaza;
- **labour productivity gains** for present and future employed beneficiaries resulting from better nutrition and educational achievement, accounting for future entry and exit from the labour force, disability, stunting and unemployment; for over-16s this was based on evidence from Pakistan on nutrition-wage relationships, while for under-16s gains are modelled using findings for the South Africa Child Support Grant (Aguero *et al.*, 2006);
- **an economic multiplier effect** in the Gaza economy and the increase in revenue thereby realized by local retailers; this was based on the pilot MTR finding that the vouchers increased the turnover of participating retailers by 62%, of which 20% would represent increased profit.

The main non-quantifiable benefit considered in the CBA was an expected improvement in **social cohesion and stability** in Gaza's fragile social and political context, based on the notion that poverty reducing interventions can contribute to breaking vicious cycles of poverty and instability.

LEAP Social Cash Transfer Programme, Ghana

LEAP began in 2008 and is expanding towards a pilot roll-out target of 164,000 households by end-2012, this being about 20% of the estimated number of extremely poor households in Ghana based on the most recent Ghana Living Standards Survey. Main aims are to alleviate poverty and hunger within these households, prioritising those with members who are elderly, incapacitated, pregnant or OVCs, and stimulating their access to social services and livelihood opportunities. In principle, LEAP provides monthly transfers of GHS 8-15 (GBP 3.20 to 6.10) depending on household size. But roll-out has been adversely affected by capacity constraints in targeting, registration and payments systems and in scheme management, and payments are unpredictable and seriously behind schedule. Cost-efficiency is low, with a cumulative CTR close to 1.0.

A 2011 economic appraisal (White, 2011) examined a number of options for DFID support to establish LEAP on a more sustainable basis, the most preferred being support for upgrading systems, building LEAP's management capacity and political profile, and increasing coverage by 100,000 households by 2016. In the counterfactual case, LEAP was expected to reach its pilot roll-out target by 2015/16, and, consistent with government policy statements, to continue to expand thereafter towards coverage of all extremely poor households. VfM analysis focussed on the following quantifiable benefits as well as several non-quantifiable ones:

- cost-efficiency gains from **improved targeting, electronic registration and payments, and enhanced management capacity**: these would permit a steeper post-2016 roll-out from a higher base, at minimal extra cost;
- cost-effectiveness gains from **impacts on poverty headcount and gap**, accounting for targeting error and projecting declining poverty trends from the last three GLSS surveys;
- pending availability of baseline and impact data on LEAP households, CBA centred on estimating **distributional impacts** of transfers, based on HM Treasury Green Book guidance.

66. In the other case study in **Box 6** (Ghana's LEAP), it was recognised that the necessary evidence for a similar approach to quantifying benefit was lacking for the time being, although it was expected to emerge soon from baseline and impact studies that were underway. In the interim, the CBA focussed more straightforwardly on estimating the overall distributional benefit that would result from the programme over time, based on the principle that a marginal unit of consumption brings more benefit to a poorer person than a better off one, in proportion to the difference in their incomes. This methodology, which is explained in Annex 5 of the HM Treasury Green Book, is appropriate where the objective is solely redistributive or poverty-alleviating for its own sake, or where data to quantify other more promotive programme aims are lacking, and has been followed in a number of other DFID-supported cash transfer appraisal exercises (Zimbabwe and Uganda)⁵. This second case study also involved greater attention to the counterfactual case, in which poverty rates are already falling due to economic growth, and government is already implementing a cash transfer programme which would be improved in various ways by the proposed investment. It included an analysis of impacts on poverty headcount and gap as a means of gauging cost-effectiveness.

67. A range of other benefits and associated costs may be considered for inclusion in a CBA, at household, local community and macro level, depending on programme objectives. Most public works programmes include an aim to build community level assets (afforestation, soil conservation, dam building and road maintenance are common activities) and these can be subjected to standard CBA procedures (see Section 4.4). Most conditional cash transfer programmes focus more explicitly on human capital enhancement through conditions relating to use (and where necessary supply) of health and education services, the measurement of which is discussed in detail in Fiszbein and Schady (2009 – Ch. 5).

68. Macro-level impacts may include local or national multiplier effects as noted above for the Gaza example, and adduced for India's NREGA programme (Hirway et al., 2009) and, at district level, for Malawi's Dowa Emergency Cash Transfer (Davies and Davey, 2008). Other studies estimate impacts of cash transfers on local or national GDP growth (e.g. Landim, 2009 for Brazil's Bolsa Familia, or McCord and Van Sventer, 2004 for labour intensive public works in South Africa). It must be acknowledged, however, that data on multiplier, growth or price impacts are rarely available and seldom captured in impact evaluations. The main concern relating to price levels, especially food prices, is that rising prices will erode the real value of transfers unless they are adequately indexed.

Evidence

69. Cost-benefit analysis estimates, in appraisals (*ex ante*) or evaluations (*ex post*) should be compared with *ex ante* or *ex post* estimates from other programmes to assess relative rates of return or benefit to cost ratios. Table 3 shows results from international studies and DFID economic appraisals and evaluations. Reliability of the estimates depends on the quality of evidence and the analytical approaches used: in general evaluation evidence is more robust, as it is based on actual programme monitoring data, as is evidence from refereed journals with more robust QA processes. The 1.59 benefit to cost ratio estimated for the conditional cash transfer programme Familias en Accion in Colombia, is regarded by

⁵ The redistribution in question is from non-poor to poor in the partner country, not from UK tax payers to the poor: the decision to spend aid in the partner country can be taken as read and is not the investment decision being analysed. A challenge is getting the counterfactual right. Where would the money be spent if not on the programme in question? If it would be spent on equally poor beneficiaries, there will be no benefit from redistribution.

World Bank analysts as 'high by traditional cost-benefit ratio standards',⁶ though DFID estimates are distributed both above and below this figure.

Table 3: CBA results from evaluations and appraisals of cash transfer programmes

Programme	Estimate	Source
Benefit to cost ratios		
International evaluations (ex-post)		
Colombia: Familias en Accion	1.59	IFS, 2006
Mexico: PROCAMPO	2.5	Sadoulet, De Janvry & Davis (2001)
Evaluations (ex-post) for DFID-supported programmes		
Bangladesh: Challenging the Frontiers of Poverty Reduction	3.1-6.2	Sinha et al. (2008)
Ethiopia: Productive Safety Net Programme	1.8-3.7	Wiseman <i>et al.</i> (2010)
DFID economic appraisals (ex-ante)		
Bangladesh: Chars Livelihoods Programme 2	4.02	Tauhid (2009)
Ghana: LEAP support and expansion	1.34	White (2011)
OPTs: Urban vouchers	1.03	Shah (2011)
Uganda: Social Assistance Grants for Empowerment	1.49	DFID (nd)
Economic rate of return		
International evaluations (ex-post)		
China: South West China Poverty Reduction	8.6-9.8%	Ravallion and Chen (2005)
Bangladesh: Food for Education	15-26%	Ryan, J.G. and Meng, X. (2004)
Mexico: Oportunidades	8-17%	Coady & Parker (2004); Gertler, Martinez & Rubio-Codina (2006)
DFID economic appraisals (ex ante)		
Pakistan: Flood compensation cash transfers	18%	Ferrand (2011)
Zimbabwe: OVC programme – cash transfers element	13%	Toigo
International studies - other sectors		
Median for all WB programmes across all sectors for which ERR estimated, 2005-07	24%	Warner (2010)

Source for international evidence: World Bank presentation to South-South Learning Forum 2011: *Emerging Directions in Safety Nets in LICs and Fragile States*, 30 May – 3 June 2011

Limits of cost-benefit analysis

70. CBA is a more complete exercise than cost-effectiveness analysis, taking in a wider range of costs and benefits over a full time horizon. Its value goes beyond its NPV or BCR result, as the exercise demands a level of scrutiny that can expose weaknesses in programme design or sustainability that might otherwise be overlooked. However, the approach has some significant limitations:

- The simulations and projections underpinning CBA can be very time-consuming and resource intensive. Consideration should be given to whether the size of the investment, the amenability of main costs and benefits to quantitative analysis and the data and time available for the analysis make CBA worth undertaking.

⁶ Fiszbein and Schady (2009)

- Due to inevitable data limitations, CBA relies heavily on a significant number of assumptions. This is acceptable as long as the basis for such assumptions is fully explained and rigorously substantiated using evidence from national and international experience. Even so, questions arise as to how credible such assumptions are, especially when they are drawn from evidence in other countries with possibly quite different contexts and conditions.
- In the absence of credible evidence, there is a risk of falling into the common trap of arbitrarily varying assumptions until the analysis produces a net present value or benefit-cost ratio that seems to justify the investment.

71. For these reasons, a well-conducted cost-effectiveness analysis is always to be preferred to a poorly substantiated CBA. Where CBA is undertaken, it is important to test the sensitivity of findings to varying key assumptions, and comment realistically on the likelihood of such variations being borne out in practice.

4.4 VfM in labour intensive public works

72. **Public works programmes can be analysed using an approach developed by the World Bank.** Labour-intensive public works programmes (PWP) combine short-term social protection objectives (increasing employment opportunities and incomes of the poor, either in cash or in food) with longer term developmental objectives, such as the creation, repair or maintenance of infrastructure and environmental protection, and in some cases the provision of training to increase employability. In a few cases, such as the rural employment guarantee scheme established in India, PWPs act as ‘employers of last resort’, providing income insurance through guaranteed employment for all who seek it. Some schemes, such as the Productive Safety Nets Programme (PSNP) in Ethiopia, which is by far the largest PWP in Sub-Saharan Africa, are designed specifically to provide regular employment to food insecure households during the ‘lean season’ before harvests and have been promoted as a more developmental alternative to traditional humanitarian food distribution. For a typology of PWPs, see McCord and Slater (2009).

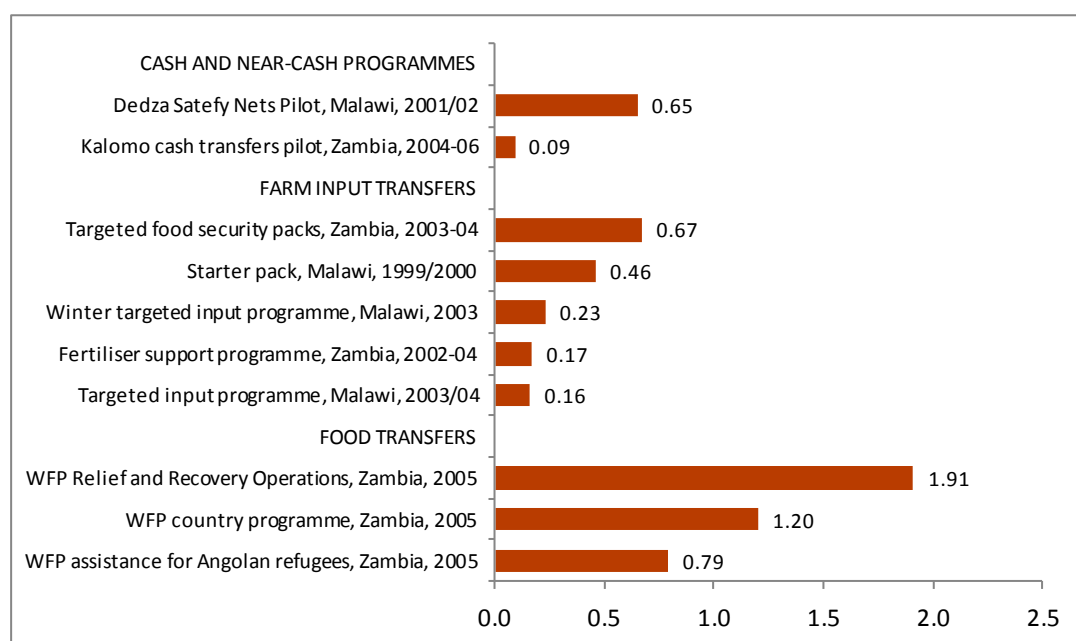
73. Analysis of value for money in PWPs is more complicated than for ‘direct’ cash transfers in so far as the outputs include the social assets created (rural feeder roads, small irrigation systems, terraces, dykes and tree-cover, among others) and services provided (e.g. rubbish collection in urban areas) by public works, in addition to the transfer provided to participants as a wage. A third output comprises human capital or labour supply development, through training and work experience. These outputs in turn are expected to generate long term benefits in terms of economic and social outcomes, such as improved access to markets and social services, reduced exposure to environmental risks, and improvements in agricultural productivity, food security, nutrition and health. On the other side of the ledger, programme costs will be higher because of the need to design and manage large numbers of public works projects (34,000 annually in the case of Ethiopia’s PSNP) and to purchase the equipment and materials needed to implement these projects. Private costs may also be higher because of the opportunity costs incurred by participants (time and income foregone from other productive activities). All these factors need to be taken into account in comparing the VfM of PWPs with other types of social transfers.

74. The measures most often employed to measure aspects of cost-effectiveness in PWPs, such as **labour intensity** or the cost of transferring US\$1 to a beneficiary, are inadequate when taken alone. On the output side, they focus only on the transfer, excluding the value of the assets created, and they naturally vary according to the types of works involved, which require different degrees of labour intensity. However, high labour intensity is an important factor in determining the extent to which PWPs have income transfer effects.

75. It may be noted that, analysing data for 26 PWPs in Sub-Saharan Africa for which the wage share of budgets is available, McCord and Slater (2009) found that on average 46% of expenditure is on wages. Del Ninno et al (2009) found, however, that the majority of PWPs worldwide (62%) have a wage share of more than 60%. Ethiopia's PSNP has a much higher level of wage intensity: about 87% according to the World Bank (2009), with administrative costs low at 7.8%. Some programmes place caps on wage/capital ratios, but this may be arbitrary and inefficient if higher levels of capital investment would optimally be required to produce the intended assets at lowest cost.

76. Analysing several schemes in Malawi and Zambia, White and McCord (2006) found that the apparent (total) cost per dollar of transfer ranged from US\$1.42 (in the Project Urban Self-Help scheme in Zambia in 2005) to \$US8.21 (in the I-LIFE programme in Malawi) – see Figure 7. These figures reflect a lack of comparability over what was included as costs, but are in most cases much higher than in 'pure' cash transfer programmes. The measure once again focuses only on the transfer, ignoring the assets created, and the capital requirements of the kind of works concerned. However, as McCord and Slater point out, 'from a fiscal perspective, such a premium is acceptable only if the value of assets created and any other benefits specific to PWP provision of social protection, are commensurate with this premium, a question which remains largely unexplored in the literature and evaluations to date.'

Figure 7: Cost of transferring US\$1 to a PWP beneficiary in Malawi and Zambia



Source: White and McCord (2006).

77. For broader cost-effectiveness, we need to take into account the net wage gain (after deducting the private opportunity costs of participation) and the length of employment provided, in addition to labour intensity, targeting performance, the value of the assets created and the longer-term social and economic benefits of the assets.

78. The **duration of employment** is another important factor, as many PWPs provide only short periods of ad hoc employment rather than a regular predictable source of additional income as in the case of direct cash transfers (see Devereux et al, 2007). An exception is the PSNP, which provides an average of 150 days work per household per year (World Bank, 2009) on a regular annual basis (in principle limited to five years before graduation). Overall in Sub-Saharan Africa, McCord and Slater found that, for 42 PWPs with data on this indicator, the mean duration of employment was 4.8 months. But many programmes provide

much less than this: in Madagascar, where PWP benefit approximately 10.5% of poor households, this relatively high coverage needs to be balanced against the fact that, in 2010, the average length of employment provided was only 24.5 days (Hodges, 2011). A sustained improvement in livelihoods is not likely to result from a low transfer over a short period of time. From this perspective, it is valuable to examine the contribution of the net wage to annual household income.

79. **Targeting performance** affects the proportion of the gross and net wages benefiting the target group, i.e. taking into account inclusion errors. PWPs often attempt to use the wage rate as a mechanism for self-selection. However, in contexts where unemployment or underemployment is extremely high, PWPs are seldom large enough to make it possible even with very low wages to clear markets, making it necessary to use complementary targeting methods (often community-based targeting) or, as is common in many schemes, to resort to rationing (or lottery allocation) of the limited jobs on offer, rather than rely on self-selection alone.

80. While most PWP evaluations place their emphasis mainly or entirely on the short-term income effects of PWPs, a proper assessment of cost-effectiveness should also incorporate the benefits of the **assets** created or maintained, both for society as a whole and for the poor specifically. This requires data on the nature, quantity, quality, sustainability and usage of the assets concerned. Standard financial cost-benefit ratios for these investments can be calculated, assuming the required data are available. This analysis can be extended to focus specifically on the proportion of benefits accruing to the poor – likely to be very high in the case of the PSNP, but not always the case in PWPs intended merely as a mechanism for job creation and/or infrastructure creation.

81. Ravallion (1998) has proposed a **cost-effectiveness ratio** that takes some of these factors into account: labour intensity, the poverty incidence of participants, the net wage gain, indirect benefits accruing to the poor from the assets created, and the potential rate of cost recovery accruing to the state from these assets. This amounts to a formula for deriving a cost-benefit ratio. However, the lack of data available for many of the components of this model means that it is impossible to apply it in practice to most PWPs without resorting heavily to assumed values. It is also noteworthy that the formula itself does not take into account all the long-term impacts of the income transfer in PWPs, notably the indirect benefits that may arise from higher levels of human capital development due to the income effects on nutrition and school attendance. Ethiopia's PSNP has had substantial impacts on beneficiaries' food security and nutrition and on the use of health and education services, as well as investments in farming inputs and livestock (World Bank, 2009; see Box 7). This method was applied in Shah's economic appraisal of the job creation programme in Gaza (Shah, 2011).

5. Critical cost-effectiveness drivers

82. In this section we look more closely at specific features of cash transfer programmes that affect the cost and performance of cash transfer programmes and thus their VfM. One of these is the targeting of beneficiaries, in which there is a trade-off between cost and targeting accuracy, raising the question of what is the optimal targeting solution. A second major issue concerns conditionality. Here an important question is: Do the benefits of conditionality, if any, justify the cost of implementing it? A third series of issues focuses on the implementation systems of cash transfer programmes, including management information systems (MIS), and their VfM implications. What VfM gains can be achieved by adopting modern technologies for registration, enrolment and payment of beneficiaries? And finally there is the need for monitoring and evaluation, which also come at a cost but may be crucial

Box 7: Economic and financial analysis of the PSNP in Ethiopia

Ethiopia's Productive Safety Nets Programme is by far the largest PWP in Sub-Saharan Africa and one of the largest in the world. In 2009, it had almost 7.6 million beneficiaries. The economic benefits of this programme include: (1) protective benefits in household wellbeing as a result of consumption smoothing, asset protection and the avoidance of adverse coping behaviours; (2) productive benefits in the form of increased household assets such as livestock, increased farm productivity (when combined with access to credit and extension services), and increased human capital, notably from higher utilisation of health services; and (3) community level benefits from the PWP projects (about 34,000 a year), which include investments in soil and water conservation, rural feeder roads, natural resource management and social infrastructure.

The World Bank has argued that 'calculating a single economic rate of return for the Program is not appropriate for this type of safety net operation', due to methodological limitations in imputing economic value for all of the PSNP transfer benefits, as well as difficulties in calculating the economic benefits of some types of public works projects. The short timeframe of available data made it impossible to capture the reduction in the long-term transmission of poverty or long-term increases in human capital. Nevertheless, it was possible to assemble evidence on a range of VfM indicators:

- **Cost-efficiency**, measured in terms of the cost to deliver transfers, is high due to: (1) substantial savings from promoting cash over food transfers (US\$11 million in actual savings in 2008 and US\$22 million in potential total savings if all transfers were paid in cash; and (2) a low share of administrative costs (7.8% of total programme costs, although this is an underestimate as it did not include the salary costs of civil servants).
- **High targeting performance**: 87% of beneficiaries had a food gap of three months or more.
- **Labour intensity**: 77.7% of total programme expenditure (excluding costs of civil servant salaries) was spent on cash and food transfers.
- **Financial benefit-to-cost ratios**, which could be calculated for some categories of public works, were reasonable, ranging from 3.7 for water supply projects to 1.8 for soil and water conservation and rural road projects (World Bank, 2009).

Source: World Bank (2009).

for ensuring the high performance of cash transfer schemes. **Essential and desirable metrics for critical cost drivers** are summarised on page 13 of the toolkit.

5.1 Targeting

83. **Cost-effectiveness of targeting options should be analysed, to the extent that there are genuine choices to be made – some options may be excluded for political or technical reasons.** When assessing the cost-effectiveness of transfer programmes, it is crucial to know the extent to which programmes are reaching their intended beneficiaries. The higher the inclusion error (the proportion of actual beneficiaries who are not intended beneficiaries), the more 'leakage' of resources reduces cost-effectiveness. Exclusion errors (the non-participation in the programme of some intended beneficiaries) reduce effectiveness and should be of particular concern to programme managers, even though in this case costs may be reduced proportionately.

84. The size of these errors depends on the performance of targeting methods. There are a range of alternative possible measures by which to assess the accuracy of targeting mechanisms: the most suitable measure will depend on programme goals, eligibility criteria, and available data. Coady, Grosh and Hoddinott (CGH) proposed a simple index for measuring the overall targeting performance of programmes: the actual share of the targeted centiles of the population in total benefits divided by their share of the population (Coady et al, 2004). Any value above 1 (the neutral outcome) indicates progressive targeting and any value below 1 is regressive. Thus, if the bottom 40 percent of the income distribution receive

60% of the benefits, then the CGH index of targeting performance is calculated as $(60/40) = 1.5$. For any given programme, the index value will depend on where the intended coverage figure is set: the index will be different depending on whether recipient and population shares are compared at 20 percent, 40 percent, or 60 percent levels.

85. It is not proposed here to review in detail the menu of targeting options, which goes beyond the scope of this note. In-depth guidance on targeting can be found in the manual on 'Designing and implementing social transfers' (Samson et al, 2006). Another excellent source is 'The targeting of transfers in developing countries' (Coady et al, 2004), which describes the different targeting methods and analyses the targeting performance of 122 anti-poverty programmes in 48 countries, using the formula described above. However, Box 8 highlights key points about the relative advantages and disadvantages of the different targeting methods used in low income and lower-middle income countries, in terms of their targeting performance and costs.

86. **An initial requirement is to be clear about who the intended beneficiaries are.** There is a general presumption that DFID is ultimately interested in directing transfers to the poor. On this basis, when universal categorical targeting is used (e.g. age-based transfers for children under two years, or the elderly over 65 years), this is in large part because these groups are assumed or known to have higher-than-average poverty incidence – and because attempts to target poverty directly (e.g. through geographical, community-based or proxy means test targeting) are assumed or known to entail higher administrative costs and/or inclusion and exclusion errors. In the case of categorical targeting, targeting performance may need to work on two tracks. A first set of targeting performance measures will measure exclusion and inclusion errors against the eligibility criteria (i.e. are there three year-olds who are receiving a grant intended for those up to age two – an inclusion error; or people over 65 years who are *not* receiving the pension to which they are entitled – an exclusion error?). The second angle on targeting performance will be to track how many of the eligible recipients (pensioners, children under two, etc.) are not in fact poor; and (more importantly) what proportion of the total number of poor do not benefit from the categorical transfers.

87. In some cases, however, poverty is not the criterion, or may be one criterion amongst many. If for example child nutrition or girl enrolment indicators are bad amongst richer quintiles as well as poorer quintiles, then a conditional cash transfer may be intended *primarily* to address nutrition or gender equality, and the target population is all children or all girls of school age, not only those who are poor. Cash transfers are increasingly considered an appropriate response during or after humanitarian emergencies. In some circumstances, more universal benefits may be advocated on the grounds that these are thought to be more effective than narrowly targeted transfers in building a sense of citizenship and strengthening state legitimacy and state-society relations (particularly important in fragile or post-conflict settings). This is hard to prove or measure and thus hard to capture in VfM calculations, but can be noted in the narrative to a comprehensive VfM analysis. The targeting of transfers also needs to fit with national social and political conventions on who should benefit: for example, in some societies it is easier to achieve consensus that the elderly deserve support, but may be harder to ensure an adequate coalition of support for transfers to poor adults of working age.

Box 8: Relative costs and performance of alternative targeting methods

The different targeting methods employed in developing countries each have their advantages and disadvantages in terms of targeting performance, which affects programme efficiency and effectiveness, and their costs. Several of these methods may be combined, potentially increasing targeting accuracy, but increasing the weight of targeting in overall administrative costs.

Geographical targeting directs transfer programmes to areas (provinces, districts, communes) of greatest need. Where targeting for poverty, poor areas may be identified in various ways. The ideal is probably small area estimation (SAE), combining census and survey data to produce a map of poverty headcounts. In other cases, target areas may be selected on a more loosely-derived consensus on living standards, poor human development outcomes, or social problems. Geographical targeting is relatively cheap, but may require new household surveys to complement national survey data, which usually do not provide statistical significance below regional or provincial levels. When used alone, which is rare, geographical targeting will lead to inclusion errors (as all households in that area, including the non-needy, will be eligible) and exclusion errors (omitting the needy who live outside the target areas). Where needs are spatially concentrated, for example following disasters, these errors can be minor. In the case of poverty, however, needs may be very high in peripheral, sparsely populated areas: but the majority of the poor live in densely populated areas with low headcounts. In this case, geographical targeting will work less well. Targeting accuracy will improve with (reliable) fine-grain estimates that allow the identification of a poor district within a wealthy province: however, (i) the statistical reliability of SAE poverty estimates declines at very small scales and (ii) such granularity is only ever possible when both survey and census data are both recent and high quality.

Categorical targeting based on simple identifiable criteria is relatively low-cost, especially for age-based categories when it can be implemented on an on-demand basis through the presentation of widely-held documents that prove age (e.g. identity cards, birth certificates or electoral cards). This is one reason why social pensions in southern Africa are relatively cost-efficient. Initial costs (both private and administrative) can be higher, however, if documents are not widely held and have to be obtained and paid for, or if additional requirements are imposed (for example medical certificates to prove disability or chronic illness, as in Mozambique's PSA), or if census-type methods are needed, e.g. to identify households with high dependency ratios (see Cosgrove *et al.*, 2011, on the Kenyan HSNP). On the effectiveness side, the main issue is the degree of correlation of the eligibility categories with need. Reaching the poorest using categorical targeting alone can involve high inclusion and exclusion error. On the other hand, categorically targeted programmes often have objectives beyond narrow poverty targeting, tend to spread benefits beyond direct recipients, and score highly in terms of social/political acceptability, social inclusion, predictability and the entrenchment of rights.

Community-based targeting (CBT) allows community structures to help decide on eligibility criteria and select those they believe to meet them. CBT forms part of the targeting methodology in many programmes in Africa, such as the HSNP and CT-OVC in Kenya, LEAP in Ghana, and the social cash transfers in Malawi and Zambia. It can be more difficult to apply in urban areas, particularly in contexts of rapid urbanisation and growth of urban poverty. While small well-knit communities can often identify the destitute, broader targeting of the poor through CBT is more difficult because of the shallow difference in wellbeing among the majority of households in communities in most low-income countries and the widespread perception that 'we are all poor here' (Ellis, 2008). There are also concerns about the risks of elite capture or manipulation, high costs of supervision and costs to community members who participate in community assemblies, committee meetings and visits to households (see Cosgrove *et al.*, 2011, on Kenya's HSNP and Watkins, 2008, on the social cash transfer pilots in Zambia).

Proxy means tests (PMTs) are used in poverty targeting as an alternative to income means tests, which are impractical in developing countries where evidence to prove income is most often lacking. Based on a weighted formula of easily verifiable proxy indicators for poverty derived from regression analysis of household survey data, PMTs 'predict' poverty and thus eligibility. However, these are inevitably somewhat blunt instruments, particularly in poor countries where differences in income, assets and other household characteristics are very small, making it difficult to identify which households are above or below an eligibility cut-off point. As a result, inclusion and exclusion errors can be quite high (see Kidd and Wylde 2011 for a critical perspective). On the cost side, PMTs are quite 'heavy' on data collection and processing requirements to determine eligibility.

Self-selection uses specific programme characteristics (e.g. a requirement to provide manual labour at low wage rates) to attract only the most needy. It is used as a cost-free method of targeting public works programmes, but is rarely successful by itself in preventing inclusion errors and so usually has to be accompanied by other targeting methods (see Section 4.4).

88. **All targeting mechanisms are imperfect.** Relatively simple age-based categorical benefits will tend to perform well against their own eligibility criteria (although even these rarely achieve full coverage, either because the rich choose not to take up their small entitlement, and / or because the poor do not know about their entitlement, or face logistical barriers to claiming it). Achieving good targeting performance against the more complex conceptual category of poverty is considerably harder. For a programme designed to reach the poor, the optimal balance between exclusion and inclusion errors is likely to depend heavily on contextual factors. These include the depth and breadth of poverty; resources available for the transfer programme; national administrative capacities; and social and political values and forces. All methods involve trade-offs between inclusion and exclusion errors. In broad terms:

- Narrow targeting can ensure that all recipients are poor and that limited resources are not ‘wasted’ on the non-poor (‘leakage’ or inclusion errors are minimised) – but at the price that a proportion of the poor do not receive the transfer (high exclusion errors). In this case, cost-effectiveness should be quite high (most or all of the transfer spend will be going to poor people, and helping to reduce poverty): but this needs to be balanced against the corresponding level of undercoverage and unmet need (exclusion).
- Conversely, it is possible to ensure that all of the poor (the desired recipients) receive transfers through universal (non-targeted) transfers or broad, inclusive targeting (setting coverage well above the poverty headcount): but at the price that (i) a significant share of limited public finance will go to non-poor households and (ii) for a fixed budget, the transfer level will be correspondingly smaller. Cost-effectiveness measures may be lower (because the programme has to deliver many small payments, with more limited impact on the beneficiaries, rather than a small number of larger payments with greater impact); or higher (if the administrative costs associated with non-targeted or broadly targeted delivery are significantly lower than those involved in administering a complex system of narrow targeting).

89. Poverty targeting using a proxy means test or community-based targeting is easiest to do well when the distribution of the welfare measure (e.g. per capita consumption or per capita income) in the population shows a distinct inflection point (that is, a point in the distribution at which there is a marked jump in income or consumption); when this point coincides well with the poverty line (so the identification of the poor is relatively simple and uncontroversial); and when available resources are enough to provide transfers to all those who are poor. Targeting is likely to be less accurate, and less socially acceptable, where the level of transfer coverage that is possible is significantly less than the proportion considered poor; and/or when wealth differences towards the bottom of the distribution (below and above the percentage of the population that can be covered by transfers) are minor and hard to pick up through the targeting mechanism. **Box 9** provides illustrative examples of how targeting performance can depend on the fit between targeting method and context.

90. In summary, good targeting is a way of increasing programme performance, by ensuring that scarce resources are directed to those most in need, and thus improving cost-effectiveness, unless of course the additional targeting costs outweigh these benefits. Samson et al (2006) note that the costs of improving targeting increase sharply as efforts are made to achieve ever greater targeting accuracy and provide a hypothetical example (*ibid*, Box 2.13) of a case where the combined administrative, private, incentive and political costs of a targeting mechanism are higher than the savings from reduced leakage. Taking the administrative costs alone, targeting accounts for quite a high proportion of total administrative costs, ranging from 26% to 88%, in a sample of programmes for which data are provided by the World Bank (see Grosh et al, 2008). As a percentage of total programme costs, including the total value of transfers, targeting cost between 0.6% and 6.3% in this sample of programmes.

Box 9: Poverty targeting methods and poverty context

Poverty targeting through proxy means testing or community-based targeting might work relatively well if (i) the bottom 20 percent of the population has living standards (as measured by levels of per capita consumption or income) which are markedly below those of the remaining 80 percent, with a sharp step between these two parts of the population and (ii) available finances are sufficient to provide the bottom 20-25 percent of the population with transfers that are big enough to make a difference to the recipients.

By contrast, if differences in living standards amongst the bottom 80% of the population are very small (everyone in this range is almost equally poor) but available resources are limited, programme designers – or communities - face a difficult choice.

- They can ration transfers to just 10 or 20 percent of the population, to ensure that transfer size remains big enough to have an effect on the recipients. However, given the small differences within the bottom 80 percent, it is likely that the minor differences in estimated living standards generated by PMT reflect measurement or model errors as much as actual differences; and communities will be forced to choose 10 or 20 households from 80 that are all similarly needy. The selection of recipients thus becomes largely random; and for those who are lucky enough to be chosen, the transfer will be sufficient to 'leapfrog' them up into the third or fourth quintile, raising serious questions about fairness (Ellis 2008).
- The alternative is to spread the available budget across the entire 80 percent of the population that is considered poor (or, simply, to make it universal). This is equitable, but the size of the cash transfer is then far too small to make a difference to recipients. Distributing very small sums to many people is likely to represent greater equity, but lower cost-effectiveness.

91. However, these costs are often bunched in periods of programme roll-out (see Box 3) and re-targeting. This is the case when targeting takes place on a once-off basis and through subsequent re-targeting exercises, using CBT and survey-type data collection exercises (e.g. for a PMT). In Mexico, targeting accounted for 34% of administrative costs over the first four years of the programme (1997-2000), but declined from 61% in the first year to 3% in the fourth year (Caldés et al, 2004). In the Kenyan CT-OVC programme, the share of targeting in administrative costs fell from 22% in the first year (2006/07) to 10% in the second year and 0% in the third year when there was no further roll-out (OPM, 2010). In the case of on-demand social assistance programmes, such as universal social pensions and child allowances, targeting is a continuous process and in any case much lighter and cheaper.

92. For CBT, PMTs and other methods requiring periodic targeting processes, a key issue is the frequency of re-targeting, which requires similar resources to be re-invested as in the initial targeting. This might be every three or five years or even more frequently (once a year in the case of the Vision 2020 Umurenge Programme in Rwanda). This stage has not yet been reached, however, in most of the new cash transfer programmes in Sub-Saharan Africa, so the implications have not yet become clear.

93. Finally, targeting costs can be reduced by establishing a single registry or common targeting mechanism, making it possible to share targeting costs across a range of social programmes. This has been done in several middle income countries, especially in Latin America, but not yet in low-income countries. Ghana is one sub-Saharan African country that is currently proposing to establish a common targeting mechanism that could be used for the LEAP cash transfer programme, the free enrolment of 'indigents' in the National Health Insurance Scheme, the distribution of free school uniforms and exercise books, and other programmes (MESW, 2011). The danger with this approach, however, is that the mechanism's specific targeting method and its inevitable error will be replicated across the whole range of programmes to which it is applied. An alternative approach, embodied in the UN's concept of a "social protection floor", is to focus on the *collective* performance of a **social protection system** in minimising exclusion of the most needy sections of the

population, by combining, for example, a child grant, a social pension, and some form of targeted transfer to the working age poor

5.2 Conditionality

94. **The costs and benefits (if any are evident) of using conditionality should be analysed, to the extent that there is a genuine choice on whether or not to incorporate conditions – they may be ruled out because of capacity constraints or for other reasons (or, conversely, required by a government or taxpayers who feel that public transfers should be made conditional on actions by the recipients).** The implementation of conditionality mechanisms is another important cost component of some cash transfer programmes, this time at the operational stage, i.e. as an ongoing recurrent cost. Samson et al (2006) have noted the high costs of conditionality, both for programme administration and for beneficiaries. Administrative costs are incurred in monitoring the compliance of CCT beneficiaries with conditions, such as school attendance by children, making the requisite number of visits to health centres for growth monitoring of children, and attending compulsory educational sessions on nutrition and health practices.

95. For example, conditionality accounted for 18% of the administrative costs of Mexico's PROGRESA in its first four years, rising to 24% by the fourth year when initial fixed costs had greatly diminished (Caldés et al, 2004). This suggests that conditionality adds about one quarter to the long-term recurrent administrative costs of a 'mature' CCT.

96. It should be noted that administrative costs are not only incurred in terms of programme staff time. They also usually require substantial time inputs of teachers and health workers, potentially taking them away from other (possibly more useful) core activities – teaching and consulting patients. These costs incurred by schools and the health system are often not captured in the data on administrative programme costs.

97. Even less likely to be computed is the opportunity cost borne by households for complying with the conditions, which could for example include attending meetings that they would not otherwise see any benefit in attending.

98. If these direct administrative and private opportunity costs are to be justified, they have to be outweighed by the additional benefits in terms of programme outcomes and impact. Specifically, these benefits (with respect to these programmes' human development objectives) would need to be additional to the benefits arising from the income effect alone. However, there is extremely little evidence worldwide on the contribution of conditionality, relative to the income effect, on the human development results of CCTs. In one analysis of Progresa, Handa et al (2008) found no evidence of a substitution effect on household expenditure arising from the conditionality, suggesting that improved human development outcomes were due only to the income effect, and concluded that more evidence on the benefit of conditionality was needed 'before confidently recommending their inclusion in CT programs where budgets are tight, capacity to enforce conditionality is low and the time cost of compliance is significant'. Another study of Progresa found that conditionality did appear to have some effect on enrolment - but only for one particular year of the school system (de Brauw and Hoddinot, 2008). A recent research impact evaluation in Malawi (Baird *et al.*, 2011) found that conditionality enhanced some outcomes (girls' enrolment), but reduced others (teenage pregnancy and marriage rates, with implications for sexual and reproductive health and girls' opportunities).

99. The CT-OVC programme in Kenya was intended to test empirically whether conditionality 'works', by comparing performance between some districts where conditionality was monitored and enforced and others where conditions were 'soft'. The results of the

impact evaluation (OPM, 2010) did not provide any evidence for an impact on education or health indicators from imposing conditions with penalties but noted that these findings could only be considered indicative at best, as conditionality was not being implemented effectively, especially in the health sector, in the enforcement districts. As a result, the costs of implementing conditionality were also almost insignificant (0.1% in year 3), although this appears also to reflect the fact that monitoring of conditionality was often not accounted for separately by programme staff.

100. A list of metrics for conditionality is provided under **Critical cost-effectiveness drivers** on page 13 of the toolkit. See also Fiszbein and Schady's (2008) volume on *Conditional Cash Transfers*.

5.3 Implementation systems

101. **With many cash transfer programmes still depending wholly or partly on manual systems for registering beneficiaries and delivering payment, there is significant scope for introduction of improved ICT-based systems that can drive down costs while enhancing speed, accuracy and security in these operations, thus helping to raise VfM standards.** Key elements of such an approach are the following (Turner *et al.*, 2010):

- **Registration** involves the identification of potential members of the programme's target group(s). This may entail use of large scale national household surveys backed up by *ad hoc* poverty and vulnerability surveys (outreach approach), and/or publicity campaigns inviting eligible individuals or households to apply to a programme office (demand driven approach). The approach used and contextual factors (e.g. location, access to documentation) will influence the balance between administrative and private costs.
- A '**single registry**', containing information on potential participants across both administrative areas and different social protection programmes, enables efficient sharing of registration and delivery information nationwide, and the ability quickly to assess the degree of overlap between programmes and to monitor their complementarity.
- **Eligibility** determination and **enrolment** is made more efficient by the use of simple, transparent eligibility criteria and electronic enrolment systems.
- A reliable recipient **identification system**, essential for ensuring that transfers reach the right people, can use smart card technology to improve the cost-efficiency of payment delivery, but could become still more cost-effective if linked to other smart card applications such as national identification, voter registration or health records.
- **Payments** systems for cash transfers using ICT applications can dramatically reduce both administrative and recipient costs as well as improve reliability. These may include smartcards holding both identification and financial transfer information, mobile phones for rapid, low cost money transfers, automatic teller machines (ATMs) and intelligent Point-of-Sale (PoS) equipment. Delivery systems also open up other opportunities when linked to social or financial service provision. Where recipients assemble to collect transfers, training, public awareness campaigns and health services can be provided at the same time. Where transfers are delivered to recipients electronically these benefits of assembly may be precluded, but private collection costs are lower and additional financial services (such as micro-credit or small savings schemes) can be included. Bringing such financial services to the previously 'unbanked' benefits the community as a whole, since as they expand, people can use them for a range of financial transactions, thus further stimulating the local and national economy.

- Sound **financial management and accountability** systems are essential for ensuring that benefits reach intended target groups in a timely, predictable and regular fashion. Detailed guidance is provided in DFID's 'How To' note on *Managing fiduciary risk when providing financial aid*. Key issues for cash transfers, especially where donor funds flow through host government systems, are:
 - the timeliness and credibility of budget preparation based on due policy debate and with due regard to the recurrent expenditure implications of donor-funded spending on cash transfer programmes;
 - smooth budget execution and funds release mechanisms which give spending units adequate time to follow proper procedure in procuring and paying for services and delivering payments;
 - adequate controls over establishment and payroll to prevent the accumulation of budget arrears which threaten programme sustainability;
 - control of corruption risk, including good civil society access to fiscal and public accounts information, and targeting and delivery systems which restrict the scope for manipulation and élite capture.
 - properly functioning independent grievance procedures (e.g. through an ombudsperson's office) to handle complaints and investigate abuses.

102. Most of these functions can be facilitated by combining them into a semi-automated **management information system (MIS)** which, for example, directly links registry, enrolment and payments databases, and can rapidly generate both standard regular and tailor-made *ad hoc* reports to support programme management. An MIS of this kind can help to contain fiduciary risk and serve many of the needs of process and impact monitoring as well as providing a solid basis for evaluation, all of which can bring significant VfM dividends. Programmes often rely on manual/rudimentary arrangements at initial stages and then move to a more comprehensive MIS as scale-up proceeds. But in terms of being able to monitor VfM, the earlier a comprehensive MIS is functioning the better in terms of complete, timely and good quality data availability.

6. Monitoring and evaluation (M&E)

103. **All the VfM metrics above should be measured throughout the programme life cycle** in order to ensure that VfM standards are upheld as implementation proceeds. As in any programme, this will require systems to be developed for regular monitoring of inputs, outputs and outcome during implementation (based on the aforementioned MIS) and arrangements for periodic independent evaluation of process, outcome and impacts against a baseline established at programme inception. Taking the logframe as a starting point, programme design should include an M&E framework which can efficiently collect information on indicators at each level and test the validity of the assumptions underpinning the results chain, provide timely information for adjusting programme design and process as required during implementation, and inform lesson-learning both during and after the programme. A good M&E system will be **flexible** to incorporate changes in programme design or implementation context, **operational** in its links with MIS tools and with strategic and management decision-making, **client-focussed** to accommodate client feedback and complaints, **cost-efficient** in selection of indicators and data collection, **intelligible** to its target audiences and **accountable** for its results and findings.

104. Appropriate M&E indicators for cash transfers depend very much on specific programme objectives, but tend to fall into the following categories:

- **cost indicators** relate most directly to the 'money' side of VfM and include costs of different programme inputs (cash, staff, equipment, logistics, contracted services etc.)

and operations (set-up, roll-out, operations, M&E); cost per recipient (programme and private costs); cost per unit of transfer (cost-efficiency); cost per measure of wider benefits (cost-effectiveness);

- **targeting indicators** which shed light on, for example, appropriateness of targeting criteria, targeting and retargeting process, inclusion and exclusion errors, unintended consequences of targeting, benefits and drawbacks of different targeting approaches, barriers to access for the most vulnerable, local and national politics of targeting;
- **implementation indicators** assessing how well a programme is being operated, covering such issues as delivery (timeliness, regularity, predictability, costs to recipients); registration and enrolment (efficiency, participant understanding and experience of process); grievance procedures; recognition of rights and entitlements;
- **impact indicators** at the level of **individuals** (consumption, child health and nutrition, vaccination, morbidity, school enrolment, attendance and performance, adult and child labour, use of services), **households** (expenditure patterns, income generation, asset accumulation, food security, migration, production), **community** (impact on markets, prices, traders, non-recipients, multiplier effects, social cohesion and reciprocity, financial inclusion) and **wider economy and polity** (poverty gap and inequality, fiscal priority, exchange rates, social attitudes towards poverty, voting behaviour, political priorities).

105. During implementation and *ex post* evaluation it is often useful to compare cost, targeting and implementation indicators between different administrative areas or communities in which the programme is or has been in operation. This can shed light on reasons behind observed patterns and help lesson learning. For assessing impacts, comparisons between areas/communities with and without the programme, or in different phases of entry into the programme, are particularly useful. A range of statistical techniques is available for deriving unbiased estimators of programme impacts based on such comparisons, including *ex ante* quasi-experimental sampling designs in which communities are randomly selected for phasing into the programme in one time period and compared with those which are due for incorporation at a later stage. An early application of this latter approach to cash transfers in Africa was in assessing the impacts of rolling out social cash transfers across Monze District in Zambia (Schuring *et al.*, 2007).

106. Indicators should be chosen with an eye to VfM within the M&E process itself, focussing on the minimum dataset required to meet operational, strategic and advocacy information needs, and no more. Too many indicators and too much data will obscure key messages, delay the release of findings and slow down the learning process.

107. A **summary and checklist of M&E issues** is provided on page 13 of the toolkit. Indicators should also be identified and assessed in the light of the **Critical cost-effectiveness drivers** listed on page 13.

7. Financial sustainability

108. **Financial sustainability must be analysed for all programmes where programmes are being, or are expected to be, funded through government systems.** While going beyond VfM as such, the question of a programme's affordability on a long-term sustainable basis is an additional critical issue for economic appraisal (see DFID, 2009). Even if donors play a role in the financing of social protection programmes, this is likely (in most cases) to be only a partial contribution to the full cost and often only for an initial pilot or start-up phase. Donors seldom finance fully social protection programmes taken to scale, although there are rare exceptions, such as the Ethiopian PSNP, where this has been seen as an alternative to

large-scale, less cost-effective humanitarian assistance. In any case, heavy reliance on donors for funding social protection programmes is generally considered unwise (see Handley, 2009), as donor assistance is by its nature short-term (or medium-term at best) and so tends to be unpredictable, putting the sustainability of programmes at risk. When social transfers are seen as entitlements, or enshrined in law as such, their withdrawal due to funding shortfalls also carries political risks as well as raising ethical/rights issues for beneficiaries.

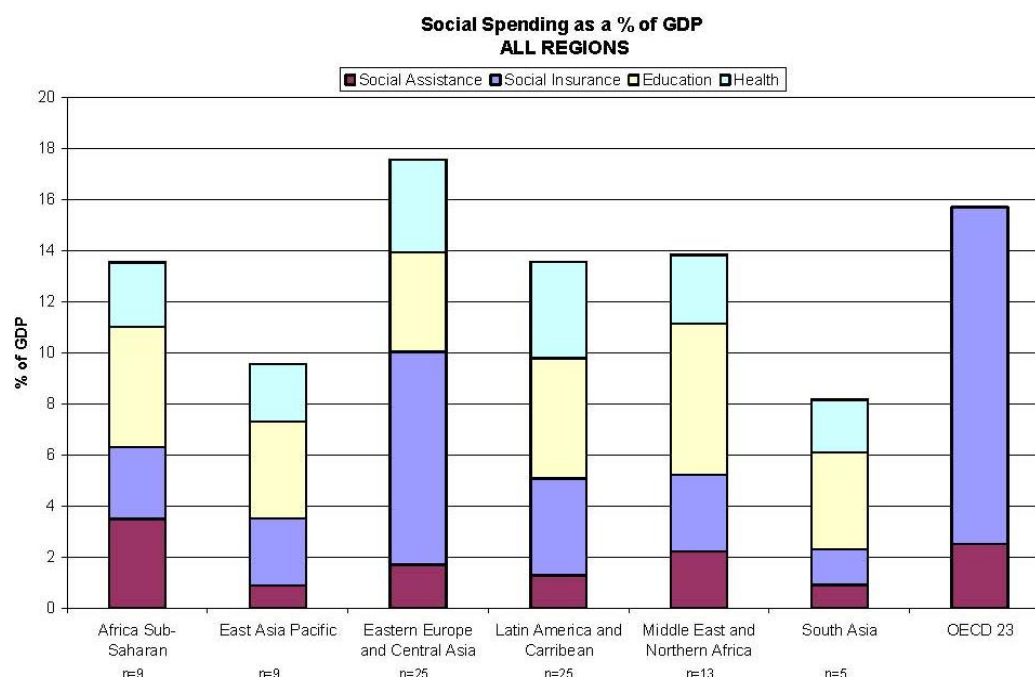
109. The donor role should therefore in most cases not substitute for a domestic government's primary responsibility to finance social transfers. One approach, noted by the World Bank (2011a), is for development partners to let governments fund all or most of the actual transfers, while using aid – or in the World Bank's case loan – funds mainly for technical assistance and capacity building, particularly in the set-up and roll-out stages of programme development. This can include support for programme design, setting up an MIS, carrying out process and impact evaluations, and strengthening of targeting. This approach has been applied in programmes such as Ghana's LEAP and Mozambique's PSA, which have so far been largely financed from government budgets. A note of caution is nevertheless sounded by Devereux and White (2010) and Hanlon *et al.* (2010:157) who warn that involving donors at the set-up stage can give them undue influence over programme design, crowding out local agendas and making it less likely that governments will prioritise programme extension.

110. Where donors do support pilot programmes, they should be especially careful to ensure that these respond to domestic conceptualisations of need and prioritisations of objectives, and that there is tangible evidence of government commitment, including usually through at least some financial contribution. Without this, there is a strong risk that pilots will not be scaled up, whether or not they have proven their cost-effectiveness. Several pilots such as the Hunger Safety Nets Programme in Kenya and the social cash transfers in Malawi and Zambia face these risks, despite strong donor advocacy in some cases for governments to co-finance scale-up.

111. The question that arises is what level of expenditure on social assistance can governments in developing countries be reasonably expected to commit to social assistance programmes? This can be measured as a percentage of GDP or as a percentage of total government expenditure. While in practice the answer ultimately depends as much on political priorities (and related interests) as on 'rational' economic choices (reference to the Zambia DFID drivers for change study on social protection?), a rough ballpark figure of the potential spending share is probably in the range of 1-2% of GDP in most low income countries, but slightly more than that in lower middle income countries. To cite some existing examples, Namibia's social pension was estimated to cost 1.4% of GDP in 2009/10, and Lesotho's 1.4%, while Mauritius spends 2% of GDP on its basic and enhanced retirement pensions (World Bank, 2011a). The PSNP in Ethiopia costs 1.2% of GDP (World Bank, 2009). And it has been estimated that Ghana's LEAP could be scaled up to reach all extreme poor households (18.5% of the population) for less than 1% of GDP (Jones *et al.*, 2009). Some useful regional and cross-sectoral comparisons are made in Figure 8 below.

112. To contextualise this issue, it bears noting that, for low-income countries in sub-Saharan Africa, government revenue (excluding grants) averaged 15.5% of GDP and government expenditure 22.2% of GDP in 2004-08 (IMF, 2011). On average, governments of developing Sub-Saharan African countries spend about 4% of GDP on education and 3% of GDP on health.⁷ As Hagen-Zanker and McCord (2010) point out, the setting of international targets for the proportion of GDP that low income countries should devote to spending on

⁷ World Bank, World Development Indicators.

Figure 8: Social Assistance, Social Insurance, and Social Sector Spending by Region, Selected Years

Source: Weigand and Grosh, 2008, p.8

social protection ignores the competing demands of other sectors for which international spending targets have also been set. Meeting any of these sectoral targets individually might be feasible, but only with trade-offs against other sectors. Meeting them all simultaneously would, in their study of six sectors in five sub-Saharan countries, require more than 100% of total government expenditure in four countries and 98% in the fifth.

113. The potential for expanding expenditure on social transfers in any particular country can best be assessed by examining the overall situation of government finances (primary and overall balances, level of debt, etc.) and then analysing potential sources of fiscal space, while taking into account competing demands on government resources and political priorities. Bearing in mind the caveat above about over-dependence on aid, the main domestic sources of fiscal space (apart from increasing debt) are increases in government revenue (as a function of GDP growth and/or a higher tax yield, i.e. an increase in the revenue/GDP ratio) or the reallocation of government expenditure.

114. Government revenue as a percentage of GDP has been gradually increasing in most of Africa, due to tax reforms. In addition, governments could consider earmarking specific sources of domestic revenue to finance expanded social protection. One of the most striking examples of such an approach is the 2.5% national health insurance levy, added to VAT to finance the bulk of the National Health Insurance Scheme in Ghana.

115. The reallocation of expenditure is an alternative, but often difficult in practice due to the non-discretionary nature of a large part of government spending and political interests. However, even within social protection, there are potentially important cost-effectiveness gains to be made from reallocating expenditures, as we have seen above with respect to the phasing out of consumer subsidies to finance better targeted cash transfers.

References

- Agüero, J., Carter, M. and Woolard, I. (2007) *The impact of unconditional cash transfers on nutrition: the South African Child Support Grant*. International Poverty Centre Working Paper 39, September. Available at <http://www.ipc-undp.org/pub/IPCWorkingPaper39.pdf>
- Baird, S. C. McIntosh and B. Özler (2011) 'Cash or condition? Evidence from a cash transfer experiment.' Forthcoming in *The Quarterly Journal of Economics* 126:4. Draft (February 23 2011) available at <http://ipl.econ.duke.edu/bread/papers/0511conf/Baird.pdf>
- Caldés, N., D. Coady and J. Maluccio (2004) *The cost of poverty alleviation transfer programs: a comparative analysis of three programs in Latin America*, FCND discussion paper no. 174, February, International Food Policy Research Institute, Washington, D.C.
- Coady, D., M. Grosh and J. Hoddinott (2004), *Targeting of transfers in developing countries: review of lessons and experience*, The World Bank and International Food Policy Research Institute, Washington, D.C. Available at <http://ideas.repec.org/a/eee/wdevel/v34y2006i5p818-837.html>
- Coady, D. and Parker, S. (2004) 'Cost-effectiveness Analysis of Demand- and Supply-side Education Interventions: the Case of PROGRESA in Mexico', *Review of Development Economics* 8(3), pp. 440–451, August
- Cockburn, J., I. Fofana and L. Tiberti (2010) *Simulating the impact of the global economic crisis and policy responses on children in West and Central Africa*, Innocenti working paper IWP-2010-01, UNICEF Innocenti Research Centre, Florence. Available at <http://www.unicef-irc.org/publications/596>
- Cosgrove, C., L. Hannigan, S. Kidd and A. McPherson (2011) *A qualitative review of targeting methodologies in the Kenya Hunger Safety Net Programme (HSNP)*, Development Pathways, June.
- Croome, D., A. Nyanguru and M. Molisana (2007) *The impact of the Old Age Pension on hunger vulnerability – a case-study from the mountain zone of Lesotho*, prepared for the Regional Hunger Vulnerability Programme, National University of Lesotho, October
- Davies, S. and Davey, J. (2008) A Regional Multiplier Approach to Estimating the Impact of Cash Transfers on the Market: The Case of Cash Transfers in Rural Malawi, *Development Policy Review* 26 (1): 91-111
- de Brauw, A. & Hoddinott, J., (2008). "Must conditional cash transfer programs be conditioned to be effective?: The impact of conditioning transfers on school enrollment in Mexico," *IFPRI discussion papers* 757, International Food Policy Research Institute (IFPRI). Available at <http://www.ifpri.org/publication/must-conditional-cash-transfer-programs-be-conditioned-be-effective>
- Devereux, S. (2001). *Social pensions in Namibia and South Africa*. IDS Discussion Paper 379, Brighton: Institute of Development Studies, February. Available at www.ids.ac.uk/download.cfm?file=dp379.pdf
- Devereux, S., and S. Coll-Black (2007) *Review of evidence and evidence gaps on the effectiveness and impacts of DFID-supported pilot social transfer schemes*, evaluation working paper, Department for International Development.

- Devereux, S. and White, P. (2010) "Social Protection in Africa: Evidence, Politics, and Rights", *Poverty & Public Policy*, Vol. 2: Iss. 3, Article 5. Available at www.psocommons.org/ppp/vol2/iss3/art5
- DFID (nd) *Expanding Social Protection in Uganda*, Annex D Economic Appraisal, DFID Uganda
- DFID (2009) *A Strengthened Approach to Economic Appraisals*, How To Note, Value for Money Department, FCPD, Department for International Development.
- DFID (2010a) *Writing a Business Case*, How To Note, Value for Money Department, FCPD, Department for International Development.
- DFID (2010b) *Citizens' Damage Compensation Programme Phase II: "Flood compensation cash transfers" – Business Case*, DFID Pakistan, May
- DFID (2011a) *DFID's approach to value for money (VfM)*, Department for International Development.
- DFID (2011b) *DFID Cash Transfers Literature Review*, Department for International Development, April
- Ellis, F., S. Devereux and P. White (2009) *Social Protection in Africa*, Edward Elgar, Cheltenham, UK, and Northampton, Massachusetts, USA.
- Ellis, F. (2008) 'We are all poor here': *economic difference, social divisiveness and targeting cash transfers in SSA*, presentation to the Conference on Social Protection for the Poorest in Africa, 8-10 September, Entebbe, Uganda. Available at www.uea.ac.uk/polopoly_fs/1.87456!/fe-paper-sp-sept2008.pdf
- Ferrand, A. (2011) DFID economic appraisal for Citizens' Damage Compensation Programme Phase II "Flood compensation cash transfers", Department for International Development, May [Alexis Ferrand, a-ferrand@dfid.gov.uk]
- Fiszbein, A. and Schady, N. (2009) *Conditional Cash Transfers – reducing present and future poverty*, World Bank Policy Research Report, Washington, DC: The World Bank. Available at <http://go.worldbank.org/UQEJK2J5E0>
- Gertler, P., Martinez, S. and Rubio-Codina, M. (2006) *Investing cash transfers to raise long term living standards*, Policy Research Working Paper Series 3994, World Bank, August
- Grosh, M., C. Del Ninno, E. Tesliuc and A. Ouerghi (2008) *For protection and promotion: the design and implementation of effective safety nets*, The World Bank, Washington, D.C. Available at <http://go.worldbank.org/K0Z8SB4VJ0>
- Schuring, E. et al. (2007), *Impact Evaluation Design, Cash Transfer Pilot in Zambia: Concept Note*. A collaborative project implemented by GTZ, MASDAR and CARE with support from GTZ, The World Bank and DFID Zambia. 22 March. Available at http://german-practice-collection.org/en/download-centre/doc_download/514-Cash-Transfer-Pilot
- Hagen-Zanker, J. and McCord, A (2010) *Financing Social Protection in the Light of International Spending Targets: A Public Sector Spending Review*, Final report, Overseas Development Institute, London, October
- Handley, G. (2009) *Fiscal Space for Strengthened Social Protection, West and Central Africa*, Overseas Development Institute, London, and UNICEF, West and Central Africa

- Regional Office, Dakar. Available at www.odi.org.uk/resources/download/3474-briefing-paper-english.pdf
- Hirway, I., M.R. Saluja and B. Yadav (2009), *Analysing Multiplier Impact of NREGA Works Through Village SAM Modeling*, The Levy Economics Institute of Bard College
- Hodges, A. (2011) *Strategic Directions for Social Protection in Madagascara*, report for the World Bank, July.
- Hodges, A., K. Dashdorj, Y.J. Kang, A.-C. Dufay, U. Budragchaa and T. Mungun (2007) *Child benefits and poverty reduction: evidence from Mongolia's Child Money Programme*, Division of Policy and Planning working papers, UNICEF, New York.
- Hodges, A., L. Pellerano and A. Mabota (2010) *Development of social protection, strategic review for UNICEF Mozambique*, Oxford Policy Management.
- Hodges, A., C. O'Brien, D. Mèdédji and A. Koto-Yerima (2010) *Etude de faisabilité d'un programme de transferts sociaux en espèces*, report for UNICEF Benin, Oxford Policy Management.
- HTSPE (2011), *Impact assessment of the Chars Livelihood Programme (CLP) Phase 1 – an assessment of IMO efficiency and programme costs*, Final Report. HTSPE International Programme Management Ltd. in association with Verulam Associates Bangladesh Ltd., DFID Bangladesh, February
- IEG (2011). *Social Safety Nets: An Evaluation of World Bank Support, 2000–2010*. Washington, DC: Independent Evaluation Group, the World Bank Group. Available at <http://ieg.worldbankgroup.org/content/ieg/en/home/reports/ssn.html>
- IFS (2006) *Evaluación del Impacto del Programa Familias en Acción–Subsidios Condicionados de la Red de Apoyo Social*, Institute for Fiscal Studies, Econometría, and Sistemas Especializados de Información. National Planning Department, Bogotá, Colombia.
- Jones, N., W. Ahadzie and D. Doh (2009) *Social protection and children: opportunities and challenges in Ghana*, Overseas Development Institute, London, and UNICEF, Accra.
- Kidd, S. and E. Wylde (2011) *Targeting the poorest: an assessment of the proxy means test methodology*. AusAID. Available at http://www.ausaid.gov.au/publications/pubout.cfm?ID=7044_2239_6308_4104_9028
- MacAuslan, I. and Riemenschneider, N. (2011) 'Richer but resented: What do cash transfers do to social relations and does it matter?', paper for International Conference: "Social Protection for Social Justice", Institute of Development Studies, UK, 13–15 April 2011. Oxford Policy Management
- McCord, A., and R. Slater (2009) *Overview of public works programmes in Sub-Saharan Africa*, Overseas Development Institute, London.
- MESW (2011) *Common targeting mechanism: report on pretesting of data collection instrument*, Ministry of Employment and Social Welfare, Accra.
- Namibia Basic Income Grant Coalition, 2009. *Making the difference! The BIG in Namibia – Basic Income Grant Pilot Project Assessment Report*. Available at http://www.bignam.org/Publications/BIG_Assessment_report_08b.pdf

- Notten, G., B. Buligescu and Mpoué, A. (2008) *Policy options to reduce child poverty and improve access to education and health care in the Republic of Congo: cost and impact simulations*, UNICEF, Brazzaville.
- OPM (2010) *Cash Transfer Programme for Orphans and Vulnerable Children (CT-OVC), Kenya: Operational and impact evaluation, 2007-2009*, final report, May, Oxford Policy Management, Oxford.
- Ravallion, M. (2003) *Appraising workfare programs*, policy research working paper, WPS 1955, The World Bank.
- Ravallion, M. and Chen, S. (2005) 'China's (uneven) progress against poverty', *Journal of Development Economics* 82 (2007) 1– 42, Development Research Group, World Bank
- Sadoulet, E., A. de Janvry, and B. Davis (2001) 'Cash transfer programs with income multipliers: PROCAMPO in Mexico' *World Development* 29(6):1043-1056
- Samson, M., Lee, U., Ndlebe, A., MacQuene, K., van Niekerk, I., Gandhi, V. and Harigaya, T. (2004) *The Social and Economic Impact of South Africa's Social Security System*, Report commissioned by the Ministry of Social Development, Republic of South Africa. Cape Town: Economic and Policy Research Institute (EPRI).
- Samson, M., I. Van Niekerk and K. Mac Quene (2006) *Designing and implementing social transfer programmes*, Economic Policy Research Institute Press, Cape Town.
- Sinha, S., Gidwani, J., Das, N.C. (2008) *Cost-benefit Analysis of CFPR*, BRAC Research and Evaluation Division and EDA Rural Systems Private Limited, March.
- Skoufias, E. and V. di Maro (2006) *Conditional Cash Transfers, Adult Work Incentives, and Poverty*, Policy Research Working Paper, 3973. Washington DC: World Bank
- Shah, V. (2011) *Gaza social protection and food security programme*, Economic Appraisal, Section C of appraisal case for the business case documents, 18 May, Department for International Development. [Valsa Shah, valsashah@gmail.com]
- Ryan, J.G. and Meng, X. (2004) *The contribution of IFPRI research and the impact of the Food for Education program in Bangladesh on school outcomes and earnings*. Impact Assessment Discussion Paper No. 22. International Food Policy Research Institute: Washington, DC. Available at <http://impact.cgiar.org/>
- Tauhid, S. (2009) Chars Livelihoods Programme 2 Programme Memorandum, DFID Bangladesh, November. [Syeeda Tauhid currently on secondment to World Bank – alternative DFID contact Arifur Rahman]
- Toigo, P. (2010) Economic Appraisal of OVC programme – cash transfers element, DFID Zimbabwe [Pietro Toigo: p-toigo@dfid.gov.uk]
- Turner, S., Devereux, S., Ellis, F., Freeland, N., Ntseane, D., Seeley, J., Seleka, T. and White, P., (2010). 'A Social Development Policy Framework for Botswana. Phase II: Framework and Strategy'. 26 May 2010. Ministry of Local Government, UNICEF and RHVP, Gaborone: Botswana
- Van de Walle, D. (1998) 'Targeting Revisited', *The World Bank Research Observer*, vol. 13, no. 2, August, pp. 231-248.

- Walker, D., A. Mabota, J. Carrilho and B. Kallen (2008) *Estudo sobre o mecanismo de distribuição para o Programa de Subsídio de Alimentos em Moçambique*, Instituto Nacional de Acção Social, Maputo, and Regional Hunger and Vulnerability Programme.
- Warner, A. (2010) *Cost-Benefit Analysis in World Bank Projects*, Independent Evaluation Group, World Bank, June. Available at <http://www.worldbank.org/ieg/>.
- Watkins, B. (2008) *Alternative methods for targeting social assistance to highly vulnerable groups*, independent monitoring and evaluation study, Kimetrica, 4 February.
- White, P. (2011) *Economic appraisal of LEAP Support and Expansion Programme, Ghana*, prepared for Business Case drafted by A. McCord, T. Awori and P. White, Overseas Development Institute, London and DFID Ghana, May
- White, P. and McCord, A. (2006) *Cost comparison of cash, food and agricultural input transfer schemes in Malawi and Zambia, summary of conclusions*, unpublished paper, 30 January.
- Wiseman, W., Van Domelen, J. and Coll-Black, S. (2010) *Designing and Implementing a Rural Safety Net in a Low Income Setting: Lessons Learned from Ethiopia's Productive Safety Net Program 2005–2009*, Productive Safety Net Programme, Government of Ethiopia
- World Bank (2002) *Guatemala Poverty Assessment Program: social protection, private transfers and poverty*, Washington, D.C.
- World Bank (2009a) *Specific Guidance for Social Protection: Preparing PERs for Human Development*, May, Washington, D.C.
- World Bank (2009b) *Project appraisal document on a proposed grant [...] in support of the third phase of the Productive Safety Net Program*, report no. 48633-ET, 25 September, Washington, D.C.
- World Bank (2010) *Republic of Ghana, Improving the targeting of social programs*, report no. 55578-GH, Washington, D.C.
- World Bank (2011a) *Cash transfer programs: the emerging safety net in Sub-Saharan Africa*, draft, 28 January, Washington, D.C.
- World Bank (2011b) *Project Performance Assessment Report, Ethiopia Productive Safety Net Project* (CR. 4004, IDA Grant H136, TF056013), Report No. 62549, Independent Evaluation Group, June 16