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# Assessing Value for Money

The case of donor support to FSD Kenya

Working  
Paper

**Sukhwinder Arora, Alan Roe and Robert Stone**  
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## 1. Introduction

In 2001, the UK Department for International Development (DFID) initiated a financial sector programme with the purpose of improving the capacity of Kenya's financial sector to meet the needs of poor rural and urban households as well as of micro, small and medium enterprises – on a sustainable basis. This programme was implemented through the establishment of the Financial Sector Deepening Trust of Kenya (FSD).<sup>1</sup> The FSD programme started its work in 2005 and its first phase ran through 2010. It operates at the macro, meso and micro levels to improve the ability of both poor people and enterprises to access affordable and appropriate financial services. FSD's approach to this large challenge has been squarely based on the 'making markets work for the poor' (M4P) approach, an increasingly influential development paradigm.

During 2010–11, Oxford Policy Management (OPM) conducted a range of reviews and evaluations of FSD's activities, covering the period since its establishment in 2005.<sup>2</sup> The conclusion of these evaluations was that FSD had fully achieved many of the objectives that had been set for it by its sponsors. However, it also noted the inherent difficulties of assessing broad-based and multi-level initiatives such as FSD using traditional methods of project evaluation. These difficulties stem fundamentally from four main points:

- a market-led approach to stimulating change in any development process does not result in any obvious 'hard' outputs that can be measured definitively and then compared with the costs of their production;
- a market-led approach provides a means to facilitate a process of change, but it cannot be expected to supply any detailed *ex ante* statement of the precise activities and events that will eventually emerge from that process;
- an influencing agenda is by definition part of a *process* that necessarily involves other players, meaning attributing the credit for 'success' to any one or any group of players including DFID would invariably be judgemental and may be difficult;<sup>3</sup> and
- the market development approach is based upon a theory of change that involves complex impact pathways<sup>4</sup> operating both directly and indirectly, and at every level of the financial sector. The operations of these pathways are inherently complex and so difficult to evaluate.

As a consequence, the 2010–11 OPM evaluation concluded, in logframe terms, that there was as yet insufficient evidence on which to judge the achievement of FSD's 'goal'. Although there was sufficient evidence to assess progress against the indicators at the 'Purpose' and 'Output' levels, it was nonetheless difficult to assess the extent to which these changes could be attributed to the work of FSD itself. So, although FSD is widely recognised as a highly successful project – possibly one of the most inspired donor aid successes of recent years – it was difficult to evidence this in a fully persuasive manner.

In this present paper, we suggest that this problem has more general significance. In particular, in the current climate where donors such as DFID face increasing political pressures to demonstrate that their aid programmes are providing 'value for money' (VFM), this lacuna in the evaluation process for market-supporting projects such as FSD is a matter of considerable concern. This short paper first outlines the problem more fully (Section 2) and then uses the FSD Kenya case to elaborate a simple but pragmatic approach that illustrates one possible way to address this type of problem (sections 3, 4 and 5). The costs and benefits of the FSD Kenya programme are then summarised in Section 6 and some conclusions drawn in Section 7.

## 2. VFM: the concept

In the past few years, VFM has become the catchphrase around which the response to the political pressures on aid budgets has been organised both by DFID in the UK and by some other aid organisations.<sup>5</sup> Linked as it invariably is to the terms ‘effectiveness’, ‘economy’ and ‘efficiency’ (the ‘three Es’), VFM sounds snappy and persuasive, a concept that seems difficult to argue against.<sup>6</sup> As the recent summary of the issues by the Independent Commission on Aid Effectiveness (ICAI) illustrates, it is relatively easy to assess and explain the usefulness of VFM and its supporting concepts in relation to a project with a well-defined ‘hard’ development objective such as the provision of anti-malarial bed nets. A July 2011 DFID paper illustrates this by showing the chain of effects from the *input* of child vaccination to the *impact* of reduced poverty – MDG4.<sup>7</sup> In such cases, there will typically be some relatively simple metrics available to measure the three Es and also a fourth and related term, namely ‘equity’.<sup>8</sup> Nonetheless, as the same summary paper also noted, there are other aid projects and development objectives – which would include the FSD Kenya objective of extending financial inclusion – that are not so easily measured. However, as the ICAI paper notes, such objectives can often be “*the most transformational, achieving a long-term, sustainable difference which empowers intended beneficiaries*”.

It appears to follow that advocates of VFM are fully justified in arguing for and expecting a rigorous implementation of the concept in those cases where its application can be readily supported by available metrics. But at the same time they need to recognise a degree of fuzziness and imprecision inherent in the VFM concept in other foreign aid cases – some of which can be of great developmental importance. In ICAI’s words again:

*“What matters is not always easy to quantify: we recognise that evaluating the achievement of many objectives within the UK aid programme – such as increasing accountability and reducing conflict and fragility – may rely more heavily on qualitative than quantitative analysis.”*

*“We do not believe it is right to shy away from the difficult-to-measure impacts, as these are often the ones that are most effective in the long term.”*

*“ICAI’s aim is to adopt a **pragmatic approach** [emphasis added], without being prescriptive or mechanistic, to draw timely, evidence-based conclusions about whether programmes are working”.*<sup>9</sup>

The DFID July 2011 paper also states explicitly:

- We don’t just do the easiest things to measure, but the agenda does mean we have to get better at measuring;
- We need to be more innovative in assessing value; and
- We need to be clearer about attribution.

In addition to this ambiguity about whether VFM can always be the hard test that many would like to assume, there is also much confusion about how it differs from other possible approaches to evaluating aid projects. Such approaches include cost–benefit analyses, cost-effectiveness analyses, randomised control trials, approaches linked to results-based management, community scoring and other beneficiary-based assessments and related approaches.<sup>10</sup>

Does VFM perhaps merely represent a convenient envelope that embraces these various different and previously favoured approaches or does it offer a wholly distinct alternative? The judgement from the recent ICAI paper already cited provides one clear but probably controversial set of answers to this question in favour of the first of these two possible answers. Specifically, the techniques of economic analysis (e.g. cost–benefit) and results-based management are referred to by ICAI as two particular approaches for integrating the concepts of VFM and effectiveness into the planning, delivery and review of organisations' activities (para. 2.7). Other techniques, including randomised control trials (RCTs) and community-based participatory methods, are referred to as two among several different ways of addressing the numerous challenges involved in actually measuring VFM and aid effectiveness in practice (paras 3.8 to 3.10). It is of course the case that not all of these techniques could be validly used in relation to all types of foreign aid project. RCTs, for example, are inherently more useful for micro-based projects where it is possible to identify and isolate 'treatment' and 'control' groups. This approach cannot be applied realistically in relation to meso- and macro-level interventions (especially those that involve an influencing agenda). What would be the 'control group' for the work of FSD Kenya in general, or even for measuring the impact of, say, FSD's role in the evolution of the policy and regulatory environment for branchless banking in Kenya?

In short, if we accept the ICAI viewpoint, the selective use of these other (older) techniques in various combinations – different no doubt in different project applications – is but one part of the new and *pragmatic* VFM approach to assessing the effectiveness of aid. This clarification is helpful in some respects but also inherently broad to the point of being almost empty of guidance. It certainly seems to imply that the use of the VFM approach to evaluating the effectiveness of those foreign aid projects that do not have 'hard' objectives will invariably involve large doses of art and subjective judgement, such as about which specific techniques to use and in which combinations. That approach is thus not the hard and rigorous process that the political rhetoric around it may suggest.

What does this imply for the practical assessment of VFM in relation to projects such as the FSD Kenya project? It suggests, we would argue, that the evaluators in such cases are relatively free to 'chance their arms' and to utilise defensible combinations of known techniques that are viable given the data that are likely to be available, the time and other resources available to do the work, and the point at which the reviewers enter the evaluation process.<sup>11</sup> If their approach can meet one of the main ICAI criteria – the need for timely and evidence-based conclusions about whether programmes are working or not – then their approaches, whatever they are, will contribute to the VFM assessment process. The FSD Kenya case is interesting not least because it shows that the use of even a very limited subset of recognised techniques applied merely to some selected components of the project's delivered outputs is more than sufficient to demonstrate the VFM that UK and other taxpayers have received for their aid contributions.

### 3. FSD Kenya: the project scope

As noted earlier, the FSD Kenya programme was established in early 2005 to support the development of financial markets in Kenya as a means to stimulate wealth creation and reduce poverty. Working in partnership with the financial services industry, FSD's 'purpose' is *"to deepen the capacity of Kenya's financial sector to meet the financial needs of poor Kenyans and micro, small and medium enterprise on a sustainable basis."*

The conceptual underpinning of FSD's work derives from the M4P approach which has emerged over the last ten years as an increasingly influential development paradigm. It provided the original impetus for the establishment of FSD Kenya and has guided its activities since then. This approach provides FSD with both its basic rationale and its *modus operandi*. FSD operates at all three levels – *macro* ('rules of the game' in the market), *meso* (industry infrastructure) and *micro* (interaction between suppliers and users of financial services). The approach generates credible evidence to support effective advocacy for a better policy environment to improve market-based incentives and support services and to galvanise policy makers, regulators and retail providers to improve the quality and quantity of the financial services offered to the under-served majority. The market development approach was a significant shift from the earlier dominant model of donors directly supporting selected microfinance organisations to improve outreach and enhance sustainability. The OPM Impact Assessment concluded that *"the market development approach has produced strong synergies across the three levels of projects"* and that *"Effectiveness at the macro level is reinforced by effectiveness at the meso and micro levels and vice versa"*.<sup>12</sup>

The Economist Intelligence Unit in 2010 noted that *"Kenya has a global reputation for innovation and dynamism in microfinance"* and placed Kenya in the top ten countries amongst 54 developing countries assessed on a range of indicators covering the regulatory framework for finance, the investment climate, and institutional development.<sup>13</sup> Consultations by the OPM team during 2008 to 2011 with a diverse set of stakeholders in Kenya confirm this assessment. Of course, many stakeholders and programmes have contributed to this achievement. But independent, separate discussions conducted by the OPM team with a range of senior stakeholders who were at the centre of these developments indicate the catalytic, game-changing role played by FSD. FSD often worked behind the scenes with policy makers, regulators, retail providers and others to consider evidence and weigh likely scenarios, review choices and formulate appropriate strategic responses.

Each of the Kenyan successes (such as the build-up of independent, reliable nationwide market data, the emerging policy commitment to financial inclusion, the mature and proactive regulatory response to the development of M-PESA and agent banking, the emergence and transformation of Equity Bank and its profound impact on the banking sector, and the creation of deposit-taking microfinance organisations) can be linked to one or more of the strategic, high-quality, independent and timely inputs from FSD Kenya. The demonstration and influence of these successes on financial sector development has gone beyond Kenya, giving the country a global profile and respect in this area. FSD has also not hesitated to engage in complex and difficult areas (such as community-based finance, the policy framework for Savings and Credit Cooperatives (SACCOs), SME finance and credit information), even though results in some of these areas will take much more time to reveal themselves and success is not assured.

FSD operates as an independent Trust under the supervision of professional trustees, with policy guidance from a programme investment committee. Funding is provided by a number of development partners working with the Government of Kenya (see end note 1).

## 4. The FSD contribution: the challenge of quantification

### Quantifiable elements

In examining the detailed components of the FSD programme in Kenya through 2010, the OPM team concluded that some of these components can be quantified as to their impacts (given plausible assumptions) and others clearly cannot (even with heroic assumptions). Specifically, what was done and is reported below was an attempt to put numerical values on **four main impacts** that can reasonably be attributed – at least in part – to the efforts made under the FSD programme. These are:

- i. **Increased number and penetration of bank accounts.** In the past few years for which there are firm data, there has been a remarkable increase in the number of commercial bank accounts in Kenya.
- ii. **Money transfers – lower costs and greater volumes.** From a base of almost zero in early 2007, the volume of money transfers made via M-PESA-type routes<sup>14</sup> had risen by July 2011 to some 30 million per month involving 18 million registered customers/accounts – a truly remarkable rate of increase.
- iii. **Increased availability of bank and non-bank financial outlets.** This relates to the increased number of both bank outlets and non-bank outlets (agents) and the consequences for this in terms of reduced travel distances and costs to make financial transactions.
- iv. **The lower risks of SACCO failure.** This relates to the benefits that can accrue (and indeed have already accrued) from a reduction in the rate of loss of members' funds in SACCOs.

### Non-quantifiable elements

Of course, in practice there is no firm dividing line between what is and what is not quantifiable. This is very much a function of the volumes of time and other resources that are available to commit to the task of quantification. The distinction made here therefore assumes the *status quo* on data availability as the OPM work began. Based on this, the non-quantifiable elements were adjudged to include components such as:

- Micro Level
  - M-PESA benefits beyond money transfers
  - Reduced costs of international transfers
  - Lower costs in Government cash transfer programmes
  - Employment benefits from increasing employment in financial organisations and agency arrangements
  - Spill-over benefits from the replication of the money transfer programme in other countries
- Meso Level
  - Benefits from FSD support to MicroSave
  - Benefits from gathering and disseminating the FinAccess data
- Macro Level
  - Benefits from the new Microfinance Institutions (MFI) Law and Regulations on agent banking
  - Benefits from the Mobile Banking Regulation

- Benefits from improved management systems in community-based financial institutions (e.g. Accumulating Savings and Credit Associations)
- Benefits from emergency actions following the post-election violence in 2007
- Improved monetary management in the Central Bank of Kenya (CBK) due to the significant decline in the ratio of cash balances held to total money supply (e.g. currency outside banks as a ratio of M3 and reserve money has gone down from over 0.6 in 2007 to just over 0.4 in 2010 – see Governor of CBK's paper).<sup>15</sup>

These non-quantifiable elements are arguably of central importance to the overall impacts on financial markets, wealth creation and thus poverty reduction that DFID and its donor partners sought to achieve when they launched the FSD initiative in 2005. So, how can these elements be omitted from a quantification of the VFM of the project overall? The answer in this case, and we suggest in many other similar donor projects, is that the absence of any credible means to put quantifiable values on these elements effectively forces their omission from any **fully quantified** VFM analysis. However, for many strong donor projects, including FSD, it may still be possible to demonstrate the VFM in the FSD programme **as a whole** by simply concentrating on a few (in this case four) quantifiable elements as identified above. In marginal cases, the non-quantifiable elements can be brought back into the analysis, while explicitly recognising the limitations of any quantification that is then attempted in those elements. This may be a messy approach compared to one that purports to link up all the element of a project in one neat package of numbers. But it is, we suggest, a superior and more honest approach than one that regards all elements as being equally amenable to quantification.



## 5. Quantification of some main contributions

This section describes the efforts made to actually quantify the four identified elements. In some cases it has been possible to update the earlier OPM work carried out in 2010–11.

### Increased number and penetration of bank accounts

According to CBK data, the number of accounts in the formal financial sector increased from 2.55 million in 2005 to 12.8 million in 2010. Almost 87% of the over 10 million new accounts opened during 2005 to 2010 were added by the banks. The number of accounts per 1,000 adults rapidly increased from 151 accounts in 2005 to 654 accounts in 2010. The increase in the number of accounts that has occurred includes many new accounts that are transaction-based only and/or additional accounts for households already accessing financial services. However, this rapid expansion has greatly increased the number and percentage of Kenyans with *some* access to the **formal** financial system. Outreach to poorer customers is also confirmed by the rapid fall in average deposit size from Ksh 37,505 in 2005 to Ksh 13,056 in 2010.<sup>16</sup> The drop in the real value of average deposits is even higher due to persistent inflation during the six-year period.

FinAccess results confirm that bank usage increased in every single wealth quintile between 2006 and 2009 and also that the proportion of Kenyan adults using a bank, Postbank or insurance product went up from 18.9% in 2006 to 22.6% in 2009. Formal financial inclusion (using M-PESA, SACCOs, and MFIs) increased from 26.5% in 2006 to 40.5% in 2009. However, even though FinAccess results are available for a much shorter period (2006–09), the growth rates are much more modest than the 400% increase (2005–10) recorded in the supply-side data reported by the banks, as cited above. This suggests an increasing proportion of multiple and/or dormant accounts for financially included households.

Improved access to formal financial services is of great significance in terms of the welfare of the persons concerned. It has been noted in several countries that, notwithstanding some significant advantages of informal financial institutions, the formal ones are able to offer a great deal more security and a greatly reduced risk of loss of money. This being accepted, the increased use of formal banking since 2005 has considerably enhanced overall security and thus the real income and living standards of those opening the new accounts.

### Box 1.1 Relative risks for savings services

The FinAccess Kenya 2006 data analysis confirmed that those that have saved in the past but are not currently saving are twice as likely to have lost savings (17.7%) compared to those that currently have a savings product (9%). Savings can be lost through fraud, organisational collapse/closure, or having an inadequate return on investment.

In 2001, MicroSave research in Uganda (*The Relative Risks to the Savings of the Poor People*, by Graham A.N. Wright and Leonard Mutesasira) concluded “Almost all (99%) people saving in the informal sector reported that they had lost some money through informal savings mechanisms and on average they had lost 22% of the amount they had saved in the last year (see table below).”

**Table 1.1 Relative risks to the savings of poor people**

	% of clients who had lost some savings	Average amount lost/average amount saved during the last 12 months (%)
Formal	15%	2.85%
Semi-formal	26%	9.16%
Informal (overall)	99%	22.00%

In this area, two methods of estimating the benefits of this improvement are suggested. The first is based on the **reduced risks of loss** associated with the greater formalisation of banking for many households. Considering a 5% reduction in losses (as compared to much higher figures in Box 1.1 above) applied to 9.88 million additional formal sector accounts with an average value of Ksh 13,056, the one-off benefit is estimated at Ksh 6.45 billion (£50.4 million).

The second benefit is based on the **additional economic value** associated with the increased capacity to save and to have access to credit. The availability of a formal account has a value to the user which is *additional* to the reduced risk of loss considered above. To the extent that the ownership of the account makes possible additional saving that would otherwise not happen,<sup>17</sup> the account holder obtains a benefit equal to the difference between the future value versus the immediate use-value of the funds that are saved. Insofar as the account and the associated transaction record also gives access to formal credit facilities, the owner of the account gets a benefit equal to the net gain from the projects/investments made possible by that credit. Even the attribution of a very small percentage value to these types of benefits (say 1% of Ksh 129 billion account value per annum) would result in a substantial overall benefit, of around Ksh 1.29 billion (£10 million) per annum.<sup>18</sup>

The FSD programme inputs have had a direct impact on many financial institutions and indirect effects on others too. It is significant that 67% of the increase in the number of accounts during 2005 to 2010 was delivered by financial organisations directly working with FSD Kenya (such as Equity, Coop Bank, Faulu and KWFT). The FSD programmes in the identified assisted banks can claim some of the credit for significant expansion. For example, Dr James Mwangi (CEO of Equity Bank) has repeatedly acknowledged the critical contributions made by FSD Kenya and MicroSave (an FSD-supported programme) to the transformation of Equity Bank. This was a critical input in the major reversal of the previous Kenyan banking sector business model – from closing rural branches to rapidly expanding access to unbanked customers.

## Mobile money transfers – lower costs and greater volumes

This relates to the increased volumes and values of money transfers made possible by the FSD-supported innovations and especially those linked to mobile phones and M-PESA (and similar mobile money networks). From a base of almost zero in early 2007, the volume of money transfers made via M-PESA-type routes<sup>19</sup> had risen by June 2011 to some 30 million per month, one of the most radical and rapid changes in money transfer arrangements ever recorded across the globe (see table 1.2 below).

**Table 1.2 Growth in mobile money transactions**

	Item	June 07	June 08	June 09	June 10	June 11
1	Amount transferred (Ksh billion)	1.49	61.07	318.44	597.31	919.22
2	Number of agents	527	3,011	10,735	31,902	46,588
3	Number of transactions (million)	0.48	21.77	125.12	251.25	364.06
4	Average value of a transaction (Ksh)	3,104	2,805	2,545	2,377	2,525
5	Number of registered customers/ accounts (million)	0.18	3.04	7.39	10.44	17.99

Source: CBK Annual Report 2011, p. 56

In this area, a combination of three types of calculations has been used to assess the quantifiable benefits of this huge increase. The first assesses the reduced transaction costs associated with moving from previous *formal* (e.g. bank-based) transfers. The second assesses the economic benefits of wholly *new* transfers (made possible by M-PESA). The third assesses the non-monetary benefits of using a less time-consuming money transfer system when switching from previous *informal* methods of money transfer (e.g. matatu drivers).<sup>20</sup>

The FinAccess 2006 survey suggests that, before M-PESA was launched, the use of formal methods of transfer based on a financial institution such as Western Union or a bank were relatively unpopular. For example, only 18% of transfers used wire transfers and only 7% used bank or post office transfers, a total of just 25%. By contrast, almost 75% of transfers were sent physically using friends or family, a bus or matatu driver or via the Kenya Post Office Savings Bank (KPOSB) account of a friend or contact. However, it should be noted that we do not know how comparable the total *volumes* of such transactions were relative to the current volume of 360 million mobile money transfers. Making the conservative assumption that only 20% of the current volume of transactions was made previously and only 25% of these transfers were routed through formal channels, this gives 18.2 million annual transfers through formal channels (i.e. 5% of the current volume). Two other conservative assumptions have been made – that 70% of current users did not use money transfers before and that only 25% of the current users previously used an informal method of transfer (see Table 1.3 below).

**Table 1.3 Estimated break-down of mobile money transactions (millions)**

	Item	June 07	June 08	June 09	June 10	June 11
1	Shift from formal methods of transfers to mobile money transfers (5%)	0.02	1.09	6.26	12.56	18.20
2	New users (70%)	0.34	15.24	87.58	175.88	254.84
3	Shift from informal methods of transfers to mobile money transfers (25%)	0.12	5.44	31.28	62.81	91.02
4	Total	0.48	21.77	125.12	251.25	364.06

Source: Data and assumptions as described above

To assess the benefits of moving from previously used formal methods of transfers to mobile money transfers (row 1 in Table 1.3), we can compare the cost per mobile money transfer with the costs of alternatives such as wire transfers or bank-to-bank transfers. This is applied to only that part of the money transfers that were previously routed through formal wire and bank routes. For an average transfer amount of £20 (currently Ksh 2,525), the transaction costs using traditional wire or banking methods were at least 10% of the value (much higher for small transactions) as against less than 1.5% with mobile money transfers.<sup>21</sup> Thus, there has been something like an 85% reduction in the cost on these transactions – some £1.70 per average transaction (£2.00 minus £0.30 currently). So, using the assumption explained above of 18.2 million formal transfers pre-M-PESA, the estimate of the cost savings would amount to £30.95 million per annum during 2011 (18.20 X £1.70).

A second method (row 2 in Table 1.3) would be to see the M-PESA innovation as creating a wholly new service, which it largely did. In other words, this assumes that 70% of the current transfers did not take place before and have been triggered by the low cost and ease of these transfers. In this case, the benefits of mobile money could be assumed to equate roughly to the costs that people have been prepared to pay for the new service, less the resource costs of providing the service. As a broad brush approach, if the resource costs were equal to 75% of the price charged (i.e. 0.75 X £0.30 per average transaction or £0.225) then the benefit per transaction would equate to £0.075.<sup>22</sup> When multiplied by the estimated 254.84 million transactions, this would suggest an additional benefit of almost £19.11 million per annum (and rising as new customers sign up).

However, the above analysis relates only to the out-of-pocket monetary costs of the alternative money transfer methods. It takes little account of the additional non-monetary costs that were and are still associated with the non-institutional methods of transferring money. So, a third approach to assessing the benefits – additional to the previous two – is also needed (row 3 in Table 1.3). As noted earlier, before M-PESA almost all money transfers were executed via informal methods such as the use of travelling friends and family, the use of matatu drivers etc. Such methods involve numerous additional costs (see note 21 for some examples) and it is difficult to place a monetary value on these factors: some of the losses/costs are psychological and the extent of the actual losses has not been documented. However, in order to generate a rough figure it would seem reasonable to assume that any given transaction might involve at least 5% of the value of the transfer. Assuming current transfer costs of around 1.5%, that suggests an additional saving of 3.5% for those transactions moving from informal to mobile money transfers. Assuming 91.02

million of such transactions, the benefit measured in this way would be in the region of £63.71 million annually (91.02 million X £0.70).

These three methods are broadly additive, as we have applied each method to different segments of the total number of money transfers (namely: (1) transfers made via mobile money that previously employed *formal* methods of transferring money; (2) wholly new mobile money transfers; and (3) transfers made via mobile money that previously employed *informal* methods of transferring money). Recognising the inherent imprecision of these quantifications, there is nevertheless a sound basis for asserting that all these estimates of benefit are both large and available on an annual basis.

DFID helped set up M-PESA through a £1 million grant to Vodafone. This seed grant was critical. While Vodafone/Safaricom deserve the credit for innovation and rapidly building a successful business and CBK is widely and deservedly credited as instrumental in creating an enabling environment for mobile financial services to take root, FSD's role in providing critical, independent and timely technical support to CBK is less well known. Consultation with key stakeholders confirms that FSD worked very closely with the CBK to create space to test and learn from the development of an innovative product by providing efficient and high-quality technical assistance for the assessment of risks and development of an appropriate regulatory response for the development of the mobile banking business (see Box 1.2).

### **Box 1.2 FSD and M-PESA: the critical regulatory advice**

“In the case of M-PESA, the role of FSD was crucial. When the application from Safaricom first came in to the Deputy Head of the National Payments System (NPS), he decided not to have it considered only in NPS, which could have taken a very conservative approach, but sent it to the Rural Finance division, who would understand the implications very well. He was part of the team that brought together Bank Supervision, NPS and Rural Finance to discuss the issues. At this stage, he and FSD convinced the team that they required an independent assessment of the proposals and their risks, drawing on experience elsewhere in the world. FSD brought in David Porteous, who was able to provide authoritative and convincing evidence to show how it could be done. His report was central to the discussions between the team and Pauline Vaughan and Suzie Lonie of Safaricom/M-PESA. ‘David Porteous brought the magic touch. Without his work, it would have been impossible to win over the conservatives, including the Governor. So without FSD, M-PESA might never have happened.’ (Senior CBK official closely involved in these events – confirmed independently by a second senior official also closely involved at the time).”

Source: Robert Stone, Susan Johnson and Janet Hayes, FSD Kenya: Impact Assessment, Final Report, January 2010 (OPM and University of Bath).

### **Increased availability of bank and non-bank financial outlets**

This third topic relates to the increased number of both bank outlets and non-bank outlets (agents) and the consequences for this in terms of reduced travel distances and cost of making financial transactions. The FinAccess 2007 survey noted that 68.1% of the unbanked population considered banks to be ‘far’ or ‘very far’. Since 2005, when FSD began its work, there has been a large increase in the number of banking and MFI outlets. The number of bank branches increased by 99% between 2005 and 2011. This branch expansion has clearly heavily favoured rural areas. During the same period, the ratio of rural branches

increased from 51% to 73% of the total despite the rapid increase in the overall number of bank branches.

In relation to this item we offer one simple quantification of the benefits that, for some customers of banks and MFIs, will be associated with the greater proximity of a new branch and the associated lower travel and other time costs of banking. In 2010, an average branch served 11,314 customers. A conservative estimate of only 4,000 customers per branch has been used to recognise that newer branches are likely to be somewhat smaller than the average of the existing ones. If the 529 new bank branches opened during the project period each attracted at least 4,000 new customers then this would give a total customer base in the new branches of 2.12 million persons (529 X 4,000). Let us assume that some of these (say 30%) are customers who have previously had a bank account but are now persuaded to move to a facility closer at hand. This means that the beneficiaries in this case number 30% of 2.12 million, i.e. 634,800. If we make the further assumption that the greater proximity generates an additional saving of £6 per year on time and transport for an average customer (for three days plus around six trips per year), the total economic benefit of the shorter distances amounts to £3.80 million per annum (634,800 X £6). This does not include any benefits to the remaining 1.47 million new customers (i.e. 2.12 million less 0.65 million), which are captured in the previous section.

However, this estimate excludes some of the time savings which are also associated with agent banking and other non-bank service points for banks. There have in addition been two related but wholly new developments linked also to mobile telephony:

- First, and most numerous, are the air-time resellers who have been established by Safaricom and other mobile phone companies to act as agents for the receipt of money into a mobile money account and as the point of payment for enabling subscribers to collect cash from their accounts. As of June 2011 there were some 46,588 such agents recognised by Safaricom and other phone payment providers such as Zain and Essar.
- Second, a number of commercial banks have taken advantage of the amendments to the Banking Act by contracting their own agents at various convenient point-of-sale locations such as garages and retail stores to provide a limited agency banking service. This has a loose analogy with the long-standing arrangement whereby KPOSB had a service agreement with rural post office branches to provide a scaled down set of banking services on their behalf. For several years, this greatly increased the outreach of KPOSB. By September 2011, 10 main banks together had already contracted 7,999 agents between them. This represents a very large increase on what was in place before 2009–10.

There is little doubt that this increase in the number and range of outlets has both been *caused by* and is also a *cause of* lower costs of banking for many hundreds of thousands of Kenyans and not least in travel times and associated costs. People in poorer regions are definitely being placed in closer physical proximity to potential financial services as a result of the new agent banking phenomenon. In addition, the time spent by urban residents on basic financial transactions has also significantly come down, which is reflected above.

FSD has contributed here both through its support to particular banks that have then opened new branches and to its less tangible contribution to a much more competitive environment for lower-end banking business that has also encouraged other banks – many of which had closed branches ten years earlier – to open larger numbers of branches. In addition, FSD

has contributed to the development of the enabling environment for agent banking and deposit-taking MFIs.

### **The lower risks of SACCO failure**

This topic relates to the benefits that can accrue (and indeed have already accrued) from a reduction in the rate of loss of members' funds in SACCOs. SACCOs in Kenya, as in other African countries, presented many problems in terms of governability, regulation, supervision, liquidity, etc. Above all, the improved safety of members' funds relies on the availability of a coherent regulatory system that is administered well. There are inadequate data to make a robust estimate of this benefit. However, data available from the FinAccess surveys do enable us to indicate the broad orders of magnitude of the potential losses with and without regulation. Specifically, data from the 2006 FinAccess indicate the following:

- Of those holding SACCO accounts, 4% report losses;
- Of those with commercial bank accounts, 1.7% report losses;
- Of those who *used to have* SACCO accounts, 13% report losses; and
- Of those who *used to have* commercial bank accounts, 8.5% report losses.

The differences between the rates of depositor losses in SACCOs and those in commercial banks provides some broad indication of the greater risks associated with the (poorly regulated) SACCOs as compared to the (well-regulated) banks. Higher losses in SACCOs may also explain the reduction in usage of SACCOs from 13.1% in 2006 to 9% in 2009 (FinAccess data). We cannot assume that the recently improved regulatory system for SACCOs will immediately achieve full convergence in loss rates with those seen in commercial banks, but some closing of the gap is likely.

The 1.87 million members of the 2,213 SACCOS noted by the SACCO Societies Regulatory Authority (SASRA) are estimated to have collected total deposits of £1,098 million.<sup>23</sup> Among these are 230 SACCOs that have front offices and are able to collect deposits from non-members. These front-office savings activities (FOSAs) account for 83% of the membership and 88% of total deposits. The new regulations are focused initially on streamlining the FOSA operations.

By September 2011, some 1.55 million members had deposited £962 million in SACCO front-office accounts. In order to put some numerical value on this development we suggest a two percentage point reduction in the loss rate for those SACCO members who currently hold a SACCO account. These percentages seem reasonable given the data and feedback during interviews. Such a reduction in losses would generate a benefit of around £19.24 million.

FSD has contributed very actively and centrally to the establishment of an appropriate legal and regulatory framework for prudential regulation and supervision of SACCOs in Kenya, including the establishment of SASRA. The Commissioner for Cooperative Development and many SASRA officials noted that without the sustained FSD support to the new arrangements for regulation, these would not yet be in place – they would possibly have been delayed for several more years. In this sense, FSD has contributed to averting possible future partial or complete failures of SACCOs and thus to the associated greater security of members' funds.

## 6. Summary of the costs and benefits

This section brings together the various estimates from the previous section and juxtaposes them against the costs of the FSD programme in order to provide some overall estimates of the VFM of the project.

### Cost of FSD Kenya programme

First, let us briefly consider the costs of the programme in the six-year period from 2005 through end-2010. The total expenditures by FSD in this period amounted to £21.75 million (annual average £3.62 million), of which some 90% were project costs and the rest were the various costs of administering the programmes.

**Table 1.4 FSD Kenya – overall costs (£ million)**

Year	Programme costs – nominal	Programme costs – net present value
2005	0.80	1.57
2006	2.18	3.84
2007	2.84	4.48
2008	3.43	4.82
2009	5.14	6.45
2010	7.36	8.24
<b>Total</b>	<b>21.75</b>	<b>29.40</b>

A discounting rate of 12% has been used to make all costs comparable to the costs in 2011.

### Summary of quantifiable benefits

The various benefits discussed above are not easy to combine together into a single aggregate. This is mainly because some of the estimates refer to *annual* benefits and some refer to *one-off* benefits. Thus, these benefits have been recorded annually or on a one-time basis. The year-wise benefits are summarised in Table 1.5 below. Although some of the annual benefits may increase over time (with increasing volumes) or be available beyond 2015, constant figures have been assumed for the period 2011–15. Symmetrically with the cost analysis, a discounting rate of 12% has been used to make all benefits comparable to the benefits in 2011.



**Table 1.5 Summary of quantifiable benefits**

(£ million unless otherwise stated)

Year	Programme benefits – nominal values										Total benefits – net present values	Level of attribution to FSD Kenya (%)	Total benefits – attributed to FSD Kenya
	Increased formal accounts		Usage of mobile money			Increased proximity of financial organisations	Reduced losses in SACCOs	Total benefits – nominal values	Total benefits – net present values				
	Reduced losses	Increased benefit	Shift from formal bank transfers	New mobile money transfers	Shift from informal money transfers								
2005			0.04	0.03	0.08			0.15	0.30	10%	0.03		
2006			1.85	1.14	3.81			6.80	11.99	10%	1.20		
2007			10.64	6.57	21.90			39.10	61.52	10%	6.15		
2008			21.36	13.19	43.97			78.52	110.31	10%	11.03		
2009			30.95	19.11	63.71			113.77	142.71	10%	14.27		
2010			30.95	19.11	63.71			113.77	127.42	10%	12.74		
2011	50.40	10.08	30.95	19.11	63.71	3.81	19.24	197.29	197.29	10%	19.73		
2012		10.08	30.95	19.11	63.71	3.81		127.66	113.98	10%	11.40		
2013		10.08	30.95	19.11	63.71	3.81		127.66	101.77	10%	10.18		
2014		10.08	30.95	19.11	63.71	3.81		127.66	90.86	10%	9.09		
2015		10.08	30.95	19.11	63.71	3.81		127.66	81.13	10%	8.11		
<b>Total</b>	<b>50.40</b>	<b>50.40</b>	<b>250.50</b>	<b>154.72</b>	<b>515.73</b>	<b>19.04</b>	<b>19.24</b>	<b>1,060.03</b>	<b>1,039.28</b>		<b>103.93</b>		

## Comparing costs and benefits

The central question in regard to VFM is whether the benefits from the programme more than justify the costs incurred.

The total value of *all* quantified benefits is estimated at £1,060 million in nominal terms and the associated net present value is calculated at £1,039 million. Even if we conservatively attribute only 10% of these benefits to the activities of FSD, based on its critical role in triggering many of the changes, the net present value of these quantified benefits attributed to FSD Kenya would amount to £103.93 million.

The above analysis shows that, as against an overall programme cost of £29.40 million, the benefits of £103.93 million that can reasonably be attributed to FSD Kenya are very large indeed, at 3.54 times the costs incurred.

Another way to look at this is to note that only 10% of the net present value of all quantified benefits has been attributed to FSD Kenya. However, actually considering the costs and benefits above, even if only 2.83% of the quantified total benefit was attributed to FSD Kenya, the benefits would still justify the costs funded by donors through FSD Kenya. Moreover, further research on non-quantified benefits is likely to significantly increase this overall level of quantified benefits.

## 7. Summary and main conclusions

This paper has examined the practicability of applying the VFM concept in the case of a large, complex and multi-dimensional donor project designed to enhance financial sector access in Kenya and to reduce the rate of financial exclusion. It has been argued that projects such as the FSD Kenya programme lack directly delivered outputs that can easily be defined and measured. Such programmes pose challenges for VFM assessments that will need to be resolved in many important donor projects: this is not an isolated case that donors should regard as exceptional. Notwithstanding the guidelines already produced by DFID, ICAI and by other aid agencies, specific methodologies will still need to be developed to enable the VFM concept to be applied more appropriately in these cases.

The one, simple solution proposed and exemplified in this note has explicitly recognised two distinct components of the outputs of the Kenya FSD project. These are: a) components with effects that can be quantified (given plausible assumptions); and b) components with impacts that are inherently difficult to quantify even by invoking heroic assumptions. The methodology here has focused almost exclusively on the first of these components. It is suggested that this is a more credible approach than one that seeks to put numerical values on things that are almost impossible to quantify. The note has also recognised that some of the non-quantifiable benefits could be made quantifiable given a larger input of survey and other resources to achieve improved data. Admittedly, this approach can work only in cases where the benefits from a **sub-set** of the impacts from an aid project are large enough **on their own** to justify the **full costs** of that project. But good and well-conceived aid projects will often have this characteristic: their VFM evaluations should not need to go ‘down to the wire’ by having to include every last element of their supposed benefits. Indeed, the margins of statistical error in most conventional methods of aid project evaluation – such as cost–benefit analysis – will often be large to the point that truly marginal projects cannot be assessed as being definitely ‘good or ‘bad’. VFM methodologies are no different. Excellent projects should be capable of being judged at both the intermediate or final stages of their implementation by reference to only a sub-set of their impacts. Equally, weak projects that lack components with quantifiable benefits that can justify all or a significant part of the total project costs easily categorise themselves as ‘probably marginal’. We note also the general and wholly practical point that the absence of any credible means to put quantifiable values on some elements of donor projects implicitly forces their omission from any **fully quantified** VFM analysis, even though the evaluators may not acknowledge this explicitly. In the particular case of the FSD Kenya project, this note has assessed just **four key contributions of the overall project**. It has not sought to quantify the impacts of a second list of important contributions that we have adjudged to be very difficult to quantify – at least for the time being.

The authors of this working paper are aware of the rapidly evolving state of the financial sector in Kenya. This coupled with the availability of improved data on the phenomena that we have reviewed, will make it easier in due course to quantify more elements and to justify the assumptions made above more fully. As better data become available, the authors expect that some of the conservative assumptions made above can be reviewed, some of the non-quantified benefits can be quantified, and the overall benefits to the Kenyan economy and users of financial services are likely to be shown to be much larger than those indicated above. The paper has explicitly stated all the assumptions that have been used, so that these can be subjected to closer scrutiny by other stakeholders, with the present paper being seen as an intermediate step to encourage better VFM analysis in the future.

## End notes

<sup>1</sup> FSD had been and still is actively supported by a broad group of donors led by DFID. Current funders are DFID, the Swedish International Development Agency, the Bill & Melinda Gates Foundation, the Kenya Ministry of Trade and Industry through the Micro, Small and Medium Enterprise Competitiveness project funded by the World Bank, and the Kenya Ministry of Finance under the Micro-Finance Sector Support Credit Programme, financed by Agence Française de Développement.

<sup>2</sup> The OPM team has long experience of working with the Kenyan financial sector and can draw on a number of previous projects and interactions to support the views expressed in this paper. In 2010, OPM was commissioned by the World Bank to work with the Kenyan Treasury to draft the Comprehensive Financial Sector Reform and Development Strategy. In 2010, OPM produced a Project Completion Report of DFID's funding to FSD and a business case for the next phase of funding (2011–15) including an in-depth appraisal of FSD's Strategy document. In 2009, OPM conducted an evaluation of the impact of FSD Kenya's programme. OPM undertook, on behalf of FSD, an assessment of the demand for in-depth banking sector reports. The project assessed the overall supply of banking sector information from various suppliers (both official and private) in Kenya. During 2003 to 2008, OPM worked on a succession of projects concerning the Government of Kenya's financial sector strategy.

<sup>3</sup> Policy advocacy is more effective if it is backed with credible independent advice, creates demand for specific technical support and at every stage the key national stakeholders drive the process. If policy advocates get aggressive in claiming credit for policy change, that by itself may make policy makers more cautious and reduce the influence and effectiveness of the policy advocates in the future.

<sup>4</sup> The relationship between resources expended and their impact is sometimes referred to as the 'results chain' or the 'intervention logic'. The route along which the expenditures travel to create the eventual impact is commonly referred to as the impact pathway.

<sup>5</sup> See: Independent Commission on Aid Effectiveness (ICAI), *ICAI's Approach to Aid Effectiveness and Value for Money*, Report No. 1, November 2011; and *Research Report: Value for Money, Governance and Social Development Resource Centre*, September 2010, <http://www.gsdc.org/docs/open/HD712.pdf>; and also DFID, 2009, *'Eliminating World Poverty: Building our Common Future'*, White Paper, DFID, London (Chapter seven in particular explains DFID plans to ensure VFM).

<sup>6</sup> There are five main links in the chain of effects from inputs to impacts and the quality of each of these different links is affected by one or more of the three Es. However, in this short paper, the main focus is on VFM in the sense of the move from inputs to impacts – the three Es as such are therefore not explicitly considered.

<sup>7</sup> DFID's Approach to Value for Money (VfM), July 2011.

<sup>8</sup> In this specific case, the metrics are: *Economy* – were the bed nets of reasonable quality purchased at the lowest price? *Efficiency* – what proportion of the nets actually purchased were used for their intended purpose? *Effectiveness* – amongst those persons provided with nets, how much did the incidence of malaria decrease? *Equity* – have the nets reached poorer people and minority groups in reasonable numbers?

<sup>9</sup> See also Onora O'Neill's 2002 Reith Lecture, *A Question of Trust*, and its critique of an approach in which "We try to judge quality by performance indicators rather than by seeking informed and independent evaluation" and in particular in which "the real focus is on performance indicators chosen for ease of measurement and control rather than because they measure quality of performance accurately."

<sup>10</sup> In *Poor Economics* (New York, 2011), Abhijit Banerjee and Esther Duflo refer to the need to "step out of the office and look more carefully at the world. In doing so, we were following a long tradition of development economists who have emphasised the importance of collecting the right data to be able to say anything useful about the world." They argue that "the best anyone can do is to understand deeply the specific problems that afflict the poor and try to identify the most effective way to intervene."

<sup>11</sup> For example, a team of evaluators entering at an advanced stage of project delivery as the OPM team did in relation to the FSD Kenya project cannot easily use randomised control trials – such trials ideally need to be planned and initiated at the design stage of a programme.

<sup>12</sup> Specifically, "This has been achieved both through the ways in which different projects have inter-linked at different levels and as a result of FSD's enhanced ability to work at the level of policy development: FSD's policy role has benefited from a deep and detailed engagement at the micro level, which has provided the necessary knowledge, understanding and credibility to enable it to participate effectively in policy discussions."

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<sup>13</sup> ‘Global microscope on the microfinance business environment’, Economist Intelligence Unit, 2010.

<sup>14</sup> By that date other providers had entered the market, although M-PESA still accounted for 98% of all transactions.

<sup>15</sup> Njunguna Ndung’u, *The Appropriate Instruments for Banking for the Bottom Billion: The Kenyan Example*, CBK memo, 29 October 2010.

<sup>16</sup> Only considering accounts below Ksh 100,000 for which disaggregated data is available.

<sup>17</sup> The previous point refers to savings that have definitely happened and merely compares formal versus informal channels for placing that saving. This point looks at *new* saving that is encouraged by the availability of a bank account.

<sup>18</sup> The formal sector has the potential to provide much cheaper credit than the informal sector. The formal sector can lend at around a 20% annual percentage rate (APR) as against 50% APR in the informal sector (i.e. with a net benefit of 30%).

<sup>19</sup> As referred to above, by that date other providers had entered the market but M-PESA still accounted for 98% of all transactions.

<sup>20</sup> As is to be explored below, before M-PESA almost 75% of all money transfers were executed via informal methods such as the use of travelling friends and family, matatu drivers etc. Such methods involve numerous additional costs including: the time costs involved in arranging the transfer mechanisms (e.g. visits to bus stations, finding a willing driver, preparing appropriate packaging of the money, etc.), the costs of the inevitable losses *en route* (e.g. theft, accidents, careless misplacing of the monies, etc.); and the psychological costs of the stress caused by worrying about things going wrong, and long waiting times for both the sender and the receiver to confirm safe delivery etc. It is well nigh impossible to place a value on these factors, especially the psychological components. However, in order to generate a ball-park figure it would not seem unreasonable to assume that any given transaction might involve a total of a half of one day day equivalent of time commitment per month (or loss of work time due to the need to deal with the money transfer).

<sup>21</sup> There is plentiful numerical evidence of the costs of the alternative methods of money transfers presented in a 2003 MicroSave paper by Kabbucho et al, *Passing the Buck: Money Transfer Systems: The Practice and Potential for Products in Kenya*, May 2003. Most of the formal sector alternatives charge minimum amounts, which mean that on a \$30 transfer the **percentage** charge would be at or above 10%. For example, KPOSB transfers using Western Union charged a minimum of Ksh 1,150 (US\$ 14), commercial bank charges for telegraphic and SWIFT transfers had a minimum charge of Ksh 1,500 (US\$ 19), and MoneyGram had a minimum of Ksh 924 (US\$ 12). Informal methods were cheaper in monetary terms but involve greater risks.

<sup>22</sup> i.e. price charged £0.30 minus resource cost £0.225.

<sup>23</sup> Data from a presentation by SASRA on 28 September 2011.