What works for market development: A review of the evidence
What works for market development: A review of the evidence

Sunil Sinha
Johan Holmberg
Mark Thomas

UTV Working Paper 2013:1
Sida
Authors: Sunil Sinha, Johan Holmberg and Mark Thomas

The views and interpretations expressed in this report are the authors’ and do not necessarily reflect those of the Swedish International Development Cooperation Agency, Sida.

UTV Working Paper 2013:1

Commissioned by Sida UTV

Copyright: Sida and the authors

Date of final report: December 2013

Published by: Citat 2013

Art. no. Sida61677en

urn:nbn:se:sida-61677en

This publication can be downloaded from: http://www.sida.se/publications

SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY

Visiting address: Valhallavägen 199.
Phone: +46 (0)8-698 50 00. Fax: +46 (0)8-20 88 64.
www.sida.se sida@sida.se
Table of Contents

Executive Summary .................................................................................................................. 7
1 Introduction ......................................................................................................................... 11
2 Methodology Used .............................................................................................................. 15
  2.1 Reviewing the Literature .............................................................................................. 15
  2.2 Organizing the Findings .............................................................................................. 15
3 Private Sector Development (PSD) .................................................................................. 16
  3.1 A Theory of Change for PSD ...................................................................................... 16
  3.2 What works for PSD .................................................................................................... 17
  3.3 Result Frameworks ...................................................................................................... 27
  3.4 Result Chains ............................................................................................................... 29
  3.5 Conclusions & Recommendation .............................................................................. 36
4 Financial Systems Development (FSD) .......................................................................... 41
  4.1 The Theory of Change ............................................................................................... 41
  4.2 What Works for FSD ................................................................................................... 43
  4.3 Results Frameworks ................................................................................................... 49
  4.4 Results Chains ............................................................................................................ 52
  4.5 Conclusions & Recommendations ............................................................................ 52
5 International and Regional Trade Related Development .............................................. 62
  5.1 The theory of change .................................................................................................... 68
  5.2 What works for trade related development ................................................................. 70
  5.3 Results framework ...................................................................................................... 77
  5.4 Results chains............................................................................................................... 78
  5.5 Conclusions & Recommendation ............................................................................. 86
6 Instruments ....................................................................................................................... 90
7 Appendix A: Agricultural Development ........................................................................ 102
  7.1 A Theory of Change for Agriculture .......................................................................... 102
  7.2 What Works for Agriculture ...................................................................................... 103
  7.3 Results Frameworks .................................................................................................... 110
  7.4 Selected result chains ................................................................................................. 111
  7.5 Agricultural development indicators ......................................................................... 117

List of Figures

Figure 1: PSD- Using the Making Markets Work Better for the Poor ................................................. 16
Figure 2: The Theory of Change for Private Sector Development .................................................. 17
Figure 3: MSME Contribution to employment and GDP ............................................................... 18
Figure 4: Private Investment/GDP in High & Low Growth Countries ........................................... 19
Figure 6: Proposed Results Framework for PSD: DCED ................................................................. 27
Figure 7: An Example of a DFID Program’s Theory of Change ...................................................... 28
Figure 8: Logic Model for a PSD Program .................................................................................... 29
Figure 9: The Market System for Financial Systems Development .............................................. 42
Figure 10: The Theory of Change for Financial Systems Development ......................................... 43
Figure 11: Illustrative ToC for Financial Deepening & Inclusion .................................................... 50
Figure 12: Illustrative Impact pathways from Outputs to Outcome .............................................. 51
Figure 13: Illustrative Impact pathways from Outcome to Impact ................................................ 51
Figure 14: Results Chain for Policies & Institutions ........................................................................ 52
Figure 15: The theory of change for trade related development ........................................... 68
Figure 16: The ToC for trade related development using Systems Dynamics ................................ 69
Figure 17: Export multiples of matching grants schemes .......................................................... 98
Figure 18: Differences in Treated and Control Groups Export performance ............................... 99
Figure 19: Differences in the growth rate of exports and other key outcomes across the treatment and control groups of firms between 2004 and 2008 ................................................................. 100
Figure 20: A Theory of Change for agriculture ............................................................................. 103
Figure 21: ToC for the West Africa Regional Food Markets Program ......................................... 110

List of Tables

Table 1: Design Approaches, Variants and Causal Inference ......................................................... 12
Table 2: PSD indicators ................................................................................................................. 25
Table 3: FSD Indicators ................................................................................................................. 48
Table 4: Trade Indicators .............................................................................................................. 75
Table 5: Agriculture indicators .................................................................................................... 117

List of Case Studies

Case Study 1: Private Infrastructure Development Group (PIDG) ..................................................... 30
Case Study 2: The Malonda Foundation, Mozambique .................................................................... 34
Case Study 3: FIRST Financial sector Reform and Strengthening ................................................. 54
Case Study 4: ARC Weather Insurance Fund .................................................................................. 59
Case Study 5: Financial Sector Deepening Trust Tanzania (FSDT) ............................................... 62
Case Study 6: The Enhanced Integrated Framework (EIF) .............................................................. 74
Case Study 7: Support to Liberia’s WTO Accession through the Swedish National Board of Trade (NBT) .............................................................................................................................. 76
Case Study 8: Establishment of a system for Authorized Economic Operators (AEO) in the EAC .... 83
Case Study 9: Export Promotion of Organic Products from Africa (EPOPA) ................................. 85
Case Study 10: Africa Enterprise Challenge Fund (AECF) ............................................................. 94
Case Study 11: EcoEnergy Sugar Production PPP, Tanzania ......................................................... 95
Case Study 12: The Agricultural Business Trust Initiative (aBi) Trust in Uganda .......................... 114
Glossary

AECF  Africa Enterprise Challenge Fund
ADB  Asian Development Bank
AGOA  Africa Growth and Opportunity Act (of the United States)
ATM  Automated teller machine
BASIX  A livelihood promotion institution based in Hyderabad, India
BDS  Business development services
BEST  Business Environment Strengthening
BLCF  Business Linkage Challenge Fund
CBO  Community based Organization
CEM  Country economic memorandum (of the World Bank)
CGAP  Consultative Group to Assist the Poor
CGIAR  Consultative Group on International Agricultural Research
CGS  Credit Guarantee Scheme
CUTS  Consumer Unity & Trust Society, an international NGO based in India
DAC  Development Assistance Committee (of the OECD)
DCED  Donor Committee for Enterprise Development
DDA  Doha Development Agenda
DFI  Development finance institution
DFID  Department for International Development
DRC  Democratic Republic of Congo
EAC  East African Community
EC  European Commission
ECF  Enterprise Challenge Fund
ECG  Evaluation Cooperation Group (of the multilateral development banks)
EFinA  Enhancing Financial Innovation & Access, promoting financial inclusion in Nigeria
EFTA  European Free Trade Association
EPZ  Export processing zone (or free trade zone)
ESW  Economic and Sector Work
FAI  Financial Access Initiative (of New York University)
FAO  Food & Agriculture Organization of the United Nations
FDCF  Financial Deepening Challenge Fund
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
</tr>
<tr>
<td>FINO</td>
<td>Financial inclusion network &amp; operations</td>
</tr>
<tr>
<td>FIRST</td>
<td>Financial Sector Reform and Strengthening (of the World Bank)</td>
</tr>
<tr>
<td>FRICH</td>
<td>Food Retail Industry Challenge Fund</td>
</tr>
<tr>
<td>FSAP</td>
<td>Financial Sector Assessment Program (of the World Bank and IMF)</td>
</tr>
<tr>
<td>FSD</td>
<td>Financial systems development</td>
</tr>
<tr>
<td>FSDP</td>
<td>Financial sector development programs</td>
</tr>
<tr>
<td>GCR</td>
<td>Global competitiveness report</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>GIS</td>
<td>Geographic information system</td>
</tr>
<tr>
<td>GTFP</td>
<td>Global Trade Finance Program</td>
</tr>
<tr>
<td>HFC</td>
<td>A bank in Ghana</td>
</tr>
<tr>
<td>IBRD</td>
<td>International Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ICA</td>
<td>Investment Climate Assessment</td>
</tr>
<tr>
<td>ICRW</td>
<td>International Center for Research on Women</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communication technology</td>
</tr>
<tr>
<td>IEG</td>
<td>Independent Evaluation Group (of the World Bank)</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>IFPRI</td>
<td>International Food Policy Research Institute</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IOCOR</td>
<td>Incremental output to capital ratio</td>
</tr>
<tr>
<td>IPA</td>
<td>Innovations for Poverty Action (of Yale University)</td>
</tr>
<tr>
<td>J-PAL</td>
<td>Abdul Latif Jameel Poverty Action Lab (of the MIT)</td>
</tr>
<tr>
<td>LOC</td>
<td>Line of credit</td>
</tr>
<tr>
<td>M-PESA</td>
<td>Mobile phone money transfer</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and evaluation</td>
</tr>
<tr>
<td>M4P</td>
<td>Markets for the poor</td>
</tr>
<tr>
<td>MDB</td>
<td>Multilateral development bank</td>
</tr>
<tr>
<td>MGS</td>
<td>Matching grant scheme</td>
</tr>
<tr>
<td>MIGA</td>
<td>Multilateral Investment Guarantee Agency (of the World Bank)</td>
</tr>
<tr>
<td>MSME</td>
<td>Micro, small and medium enterprise</td>
</tr>
<tr>
<td>NBFI</td>
<td>Non-bank financial institution</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
</tr>
<tr>
<td>NDC</td>
<td>Non-financial defined contribution</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organization</td>
</tr>
<tr>
<td>NONIE</td>
<td>Network of networks for impact evaluation</td>
</tr>
<tr>
<td>NTB</td>
<td>National trade barrier</td>
</tr>
<tr>
<td>ODA</td>
<td>Official development assistance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation &amp; Development</td>
</tr>
<tr>
<td>OPM</td>
<td>Oxford Policy Management</td>
</tr>
<tr>
<td>PCG</td>
<td>Partial credit guarantee</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-private partnership</td>
</tr>
<tr>
<td>PSD</td>
<td>Private sector development</td>
</tr>
<tr>
<td>QCA</td>
<td>Qualitative Comparative Analysis</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and development</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomized control trials</td>
</tr>
<tr>
<td>RTA</td>
<td>Regional trade area</td>
</tr>
<tr>
<td>SDC</td>
<td>Swiss Development Cooperation</td>
</tr>
<tr>
<td>SECO</td>
<td>Swiss Economic Cooperation Organisation</td>
</tr>
<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>SME</td>
<td>Small and medium enterprise</td>
</tr>
<tr>
<td>SNV</td>
<td>Dutch NGO working with international development</td>
</tr>
<tr>
<td>SQAM</td>
<td>Standards, quality assurance and metrology</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>TA</td>
<td>Technical assistance</td>
</tr>
<tr>
<td>TCB</td>
<td>Trade capacity building</td>
</tr>
<tr>
<td>TFP</td>
<td>Total factor productivity</td>
</tr>
<tr>
<td>TMEA</td>
<td>TradeMark East Africa</td>
</tr>
<tr>
<td>ToC</td>
<td>Theory of change</td>
</tr>
<tr>
<td>ToR</td>
<td>Terms of reference</td>
</tr>
<tr>
<td>TVET</td>
<td>Technical vocational education and training</td>
</tr>
<tr>
<td>UNESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
</tr>
<tr>
<td>UNIDO</td>
<td>United Nations Industrial Development Organization</td>
</tr>
<tr>
<td>UNU</td>
<td>United Nations University</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
USD  United States dollar
WB   World Bank
WDR  World Development Report
WFP  World Food Program
WTO  World Trade Organization
Executive Summary

This pre-study serves two main purposes: i) to inform Sida of the evidence of what works for market development and the results frameworks and results chains derived from it; and ii) to identify the gaps in evidence and recommend what Sida should focus on in evaluating its market development portfolio. It focuses on private sector development (PSD), financial sector development (FSD), trade, and the use of instruments. Given the relevance and importance of agriculture to market development, we have also included an appendix to cover this.

Our methodology has been to conduct a broad review of the literature to develop theories of change (ToC) and then subject the main results chains to the scrutiny of evidence. Evidence has been drawn from studies using a wide variety of methods of evaluation. We have focused in particular on the findings of synthesis evaluations as these are able to rise above project implementation factors to assess what that type of intervention achieves. This has enabled us to identify gaps in evidence and recommend what Sida should focus on in evaluating its market development portfolio.

Based on the findings of this pre-study, we recommend that Sida undertake a full-fledged thematic evaluation of its support for market development. Throughout the study, we found there were a number of widely accepted assumptions that underpin donor programs that were not well-supported by evidence. Furthermore, most synthesis evaluations concluded that whilst outputs had been monitored effectively, few interventions had evaluated the outcomes and impacts resulting from them. Thus, a thorough evaluation will enable Sida ascertain where they are in regards to the development of robust ToCs, the evidence to support the assumptions that underpin them and how effective their interventions have been in delivering outcomes and impacts.

The methodology we have used should help to guide Sida’s evaluation of its portfolio enabling it to assess:

i) the extent to which the Sida portfolio accords with the ToCs for PSD, FSD and trade, and the balance of its investment across their constituent results chains;

ii) whether country/results strategies have been informed by a diagnostic using the indicators set out in this report; whether interventions were designed using a systems approach; and whether the choice of instrument used was informed by their strengths and weaknesses;

iii) how far the design of projects and, especially, the development of ToCs, logic models and M&E systems, has been informed by the evidence presented.

PSD

The evidence that private investment and private sector led productivity increases are causal factors in delivering faster, sustained growth is very strong. However, whilst these factors are necessary, they appear not to be sufficient to create jobs and deliver inclusive growth.

There is good evidence that policies to improve the investment climate, and human capital, boost growth. However, identifying priorities and the correct sequencing of reforms remains a challenge which calls for more contextual research that takes account not only of what is the binding constraint, but also the feasibility and timescale of implementation. Support functions that help to secure property rights, improve the functioning of labour markets, and develop innovation and productivity systems have also proved to deliver results. However, they need to adopt systematic approaches that take account of complementary interventions to deliver results.

Industrial policies may be needed to make growth more inclusive. However, the evidence in support of industrial policies delivering results is weak, especially their ability to address regional disparities in income and create jobs. More evidence is needed of the types of industrial policies that work, taking into account the varying contexts in which they may be applied. The evidence in favour of
providing support for entrepreneurship and investment in micro, small and medium enterprises (MSMEs) suggests that providing non-financial business development services (BDS) results in modest gains that are strengthened if dovetailed with access to finance initiatives and by targeting transformative enterprises. More systemic approaches to BDS, such as supply side stimulation and embedded services, achieve both stronger impacts and are more sustainable.

The M4P approach has the potential to address many of the weaknesses of traditional PSD programs by addressing the underlying causes rather than symptoms of market failures and through delivering system wide, sustainable impacts. The approach, however, would benefit from a better definition of what constitutes systemic change and through the more rigorous evaluation of programs.

In conflict-affected environments (CAEs), a combination of restoring macro stability; building infrastructure to create employment and address a possible binding constraint to growth; promoting entrepreneurship; and improving the functioning of value chains that matter for the poor, is proven to be effective. In transition economies, it is important to build the institutions of a market economy and to privatise state owned enterprises to reduce state monopolies and introduce a hard budget constraint are important, but they need to take account of adjustment costs.

Based on these findings, we recommend that the Sida’s evaluation focus on: i) the balance between investment climate reforms, the development of support functions and industrial policy; ii) the job creation impact of all PSD interventions; and iii) commissioning a rigorous evaluation of M4P programs to see if they really add value compared to conventional approaches. In addition, it should examine the extent to which programs implemented in CAEs and transition economies have taken account of what is appropriate in that context.

**FSD**

Macro level evidence supports the view that financial stability and deepening play a vital, causal role in growth and poverty reduction. Macro stability, good prudential regulation, and the preparation of contingency plans to cope with bank failures and financial crises help to promote stability. Good support functions that help to reduce information failures, secure transactions using movable and immovable forms of collateral and exercise creditor rights, are effective in promoting financial deepening. Promoting bank downscaling, micro finance that targets the needs of transformative enterprises, and the supply of long-term finance, are effective in promoting deepening.

Macro evidence in support of inclusion is much weaker and micro level evidence has questioned whether microfinance is the magic bullet some had claimed. This evidence does not, however, amount to devaluing the importance of inclusion. Even if it is not a macro driver of growth, it is still important on the grounds of equity, enabling the poor to fulfil their latent potential.

Moreover, the limited impact it has may be more to do with the traditional product of group savings, lending with weekly repayments, and the small size of the financial shock they create, than the utility of these financial services to the poor. Experimental methods, including randomized control trials (RCTs), confirm that financial literacy, appropriate products, particular forms of micro credit and micro savings, can produce worthwhile outcomes and impacts. This suggests that it is important to carry out much more research to improve the microfinance business model and its associated products. Additionally, there is a need to target the recipients of microfinance more carefully to support transformative enterprises. The one size fits all approach tried to date may be the cause of the poor results delivered to date.

In CAEs, the focus should be on stability, deepening and inclusion with the bulk of resources directed at microfinance and bank lending to MSMEs as they are more likely to create jobs. In transition economies, the focus should be on building support functions and restoring liquidity to overcome financial blockage.
The important areas that Sida should focus on in its evaluation are: i) the balance of its FSD portfolio across stability, deepening, and inclusion; ii) the extent to which the approach to financial deepening has adopted a systems approach including strengthening support functions; iii) whether the role of non-bank institutions in providing long term finance has been recognised; iv) the extent to which projects to deepen MSME finance have targeted transformative enterprises; and v) the extent to which projects to promote inclusion have relied on the ‘miracle of microfinance’ or been informed by real evidence on what works for the poor. In addition, it should examine whether its programs in special environment have been adapted to the context.

**Trade**

Trade is a complex system with many interconnected parts which can, through feedback loops, act to enable or hinder progress. As such, its ToC should be a dynamic model that charts flows rather than as a linear progression from inputs through to impacts.

The evidence that higher levels of trade are associated with faster growth is strong. There is good evidence to support that trade openness is associated with growth. However, the evidence in support of regional trade agreements doing so is weak. The literature suggests that in both CAEs and transition economies, a dual track strategy is needed, opening up some sectors whilst allowing others to remain protected to minimise the cost of adjustment. More research is needed to identify the costs of adjustment brought about by greater trade openness and what can be done to mitigate them.

Export diversification and exporting sophisticated products are causal factors in delivering higher levels of income. Though often neglected in the literature, higher levels of imports also contribute to growth and reduce the cost of living, benefitting the poor. The evidence that access to and cost of infrastructure, transport costs and trade facilitation affect the level of trade and growth is also compelling.

Sida’s evaluation of its trade related assistance showed that most of its programs were highly relevant and made good progress. However, their results chains could not be traced through to the types of poverty reduction and cross cutting objectives that Sida aims to deliver. This is a finding that also applies to other evaluations of trade related assistance which have traditionally taken the form of case studies, and before and after evidence. One example of how better results chains would improve outcomes and impacts is ensuring that risk based systems for trade facilitation, such as the support Sida is providing for the authorized economic operator scheme in East Africa, do not undermine competition and fail to benefit producers and consumers.

In evaluating its trade portfolio, Sida should examine: i) the balance of its portfolio across trade policies, trade infrastructure, transport costs, trade facilitation, and more direct interventions in support of export promotion; ii) how far the costs of adjustment and their mitigation is taken into account, including dual track strategies for special environments; iii) the extent to which its projects develop and use logic models that trace effects through to impacts, especially on the poor; iii) whether its support for trade facilitation takes into account the risk of unintended anti-competitive practices; and iv) whether export promotion projects adequately attempt to address the underlying market failures.

**Instruments**

**Capacity Building:** Provided the recipients and providers of technical assistance are well chosen, capacity building does deliver outputs. However, there is a growing recognition that such capacity building is best done within a systems approach with complementary interventions to ensure that it results in its intended outcomes and impacts. The possibility of internal resistance to change, and the influence of political economy issues, needs to be better integrated into the design of programs.
There is a need for better evaluations to measure the outcomes and impact of capacity building programs and this is what Sida should focus on in its evaluation.

**Challenge Funds:** The challenge fund is a versatile instrument that delivers good results in terms of numbers of beneficiaries and development returns. However, the instrument is meant to promote innovation and is not suited to delivering systemic change in markets. Moreover, it runs the risk of failing to deliver financial and economic additionality, and the public benefits and wider spillovers that public investment requires. These dangers are understood and a set of principles has been developed to avoid them. However, if fund managers fail to adhere to them, they run the risk of only providing a subsidy to a few, selected enterprises or of taking on roles that they are unsuited to play, such as serving as a mechanism to finance SMEs. As part of its evaluation of its market development portfolio, Sida should review challenge funds focusing on whether the principles are being adhered to, and how results measurement can be improved.

**Guarantees:** Overall, guarantees have proven a valuable instrument that makes it possible to undertake desirable investments in high-risk countries and sectors. Funds can be leveraged several times providing good returns to guarantors. Its main weakness is that, if poorly managed, they generate low financial and economic additionality and may become an instrument of political control and patronage. Good design should be able to overcome this drawback by ensuring that the conditions for success are in place. There is a need to carry out a more detailed assessment of the use of guarantees funded by Sida to measure their real financial and economic additionality.

**Direct Grants:** The evidence suggests that grants can be an effective instrument in market development. The use of RCTs and quasi experiments shows that they can claim attribution and provide additionality. However, their use is vulnerable to adverse selection and moral hazard, and they suffer from the problem of displacement and substitution effects to which all private sector interventions are prone; although, there are ways to overcome these weaknesses. Their use can also be questioned on the grounds that they do not deliver systemic change by addressing the market failures that made their use necessary in the first place. Sida should examine the extent to which its grant making programs have taken account of these risks and whether they have built in rigorous enough methods for evaluating impact.

**General Recommendation**

As a general point, it should also be noted that a risk with innovative approaches to market development is that, inevitably, many are initially untested when first employed. What is not productive is that they are frequently scaled up and used out of context before rigorous evidence in support of their efficacy is available. There is a need for greater evidence to be available of what works and in what context before innovative approaches are accepted as being effective.

**Agriculture**

The evidence that agriculture is fundamental to market development is overwhelming. At low levels of development, it is the major source of productivity gains, the provider of inputs and labour for economic diversification, and the means for the poor to improve their incomes. In CAEs, it is vital to delivering the peace dividend. However, the role it plays in market development evolves as economies develop. Policies need to change from input subsidies, to strengthening markets, and support for R&D. Sida needs to examine how its market development portfolio has integrated agriculture and been shaped by the evolving role of agriculture. In particular, it needs to assess what functions can be entrusted to the private sector as its role evolves.
1 Introduction

This pre-study serves two main purposes. Firstly, it aims to inform Sida of the evidence of what works for market development and the results frameworks and results chains derived from it. Secondly, it identifies where the gaps in the evidence are and, based on this, makes recommendations as to what Sida should focus on in evaluating its market development portfolio.

This Final Report sets out the findings and conclusions of four tasks set out in the terms of reference (ToR):

- Task 2: Peer Review of Results Frameworks.
- Task 3: Present Example Results Chains with Indicators and Sources of Verification.
- Task 4: Present Example Results Chains with Indicators and Sources of Verification for Specific Instruments.

The findings and conclusions of Task 5, Present Sida Specific Recommendations, are presented in this report under tasks 1-4.

The ToR requires that this pre-study focus primarily on the areas of private sector development (PSD), financial systems (FSD) and international trade. We have organised the report as follows:

- Section 2: Approaches to Evaluation sets out the current thinking on what constitutes good practice in designing and implementing evaluations. This serves to contextualise the way we have presented our findings and the types of evidence used to inform them.
- Section 3: Sets out the methodology we have used including the use of evidence.
- Section 4, 5 and 6: examines what works, indicators the results frameworks used and sets out the results chains for PSD, FSD and international trade.
- Section 7 examines the use of instruments in PSD, FSD and Trade.
- Appendix A: sets out the ToC and results framework for agriculture; a results area that Sida frequently needs to include in its results strategies and which is vital to market development.
- The ToR requires us to comment on the application of our conclusions in “special environments” where Sida is active, i.e. fragile states and countries in transition. Such comments are provided at the end of each section on “what works”.

The ToR also requires us to apply the conclusions from our analysis to a set of Sida interventions, of which we were given a list of 14 such interventions to consider. The status of Sida’s role in these interventions varies: in some of them Sida’s support has concluded, in others it is ongoing or just beginning. We have provided comments on these interventions in boxes embedded in the text of the report. It is important to underline that our comments on these case studies are based on the information available in the public domain, in two cases supplemented by reports sent to us by Sida. A list of all the 14 cases is provided at Appendix B: Approaches to Evaluation.

1.1 The Focus on Evidence & Evaluation

As a result of the cut-backs in government spending that followed the global financial crisis, and the publication of several popular books\(^1\) that have questioned its effectiveness, the efficacy of aid has come under greater scrutiny. Donors, multilateral development banks (MDBs) and development finance institutions (DFIs) have had to become more accountable for delivering results. They have responded by placing greater emphasis on the evaluation of their programs\(^2\) in order to provide better evidence of what works to deliver aid effectively\(^3\).

This greater focus on evaluation has sparked intense debate on what constitutes robust evidence and the methods used to evaluate aid programs. The debate on evidence and methodology has been
heightened by the rejection of the previously formulaic approaches\textsuperscript{4} to development in favour of more pragmatic thinking based on what works: in Bill Easterly’s terminology, planners versus searchers\textsuperscript{5}.

In addition, over the past ten years, an intense debate has ensued between those who have adhered to macro level development, based on cross-country evidence using econometric regressions, and those who prefer to rely on micro level evidence, based on experimental approaches such as randomized control trials (RCTs). The former has been successful in identifying factors that contribute to economic growth and poverty reduction across time-periods and country contexts. The proponents of the micro level approach have made strident claims that only the use of data produced using well designed experiments constitutes “hard evidence”\textsuperscript{6} of whether the poor actually benefit from interventions. The key strength of RCTs is that they get over the problems of correlations, unobserved variables and endogeneity, that do not prove causality (in the case of econometric regressions), and the selection bias that afflicts many quasi experiments that use control groups, and before and after comparisons\textsuperscript{7}. RCTs are able to show whether an intervention caused the outcome, and thus the benefits attributed to it.

Whilst initially feted for its use of the scientific method\textsuperscript{8}, more recently, several limitations of the RCT methodology have emerged\textsuperscript{9}. For example, it can be used to evaluate only a limited set of direct outcomes, over a short period of time, not the wide set of outcomes that development interventions often aim to deliver over the longer term. It is only applicable to a limited set of interventions where it is possible to randomize treatment and where there is a single intervention being undertaken. So, it is not possible to use it to determine the impact of policy and institutional changes, or where the whole idea is to ensure wide spill-overs that affect large sections of the target population\textsuperscript{10}. Nor is it usable on complex, multi-component programs. In a recent study\textsuperscript{11}, the ToR set by DFID state that ‘Some have suggested that only 5% of development programs of donors such as DFID are suitable for randomised controlled trials.’

The key criticism made by eminent development thinkers (i.e. Martin Ravallion of the World Bank and Professor Dani Rodrik) is the limited external validity of RCTs: the results hold in the context that the experiment is conducted but may not be applicable in other contexts. This is a weakness accepted by the leading proponents of RCTs (i.e. Professor Abhijit Banerjee). As such, RCTs are no more informative to policy makers than less rigorous methods\textsuperscript{12}.

It also provides for a poor learning platform for program implementers as the operational processes to deliver the interventions are not the subject of evaluation. So, whilst it measures the achievement of objectives, it provides little information about why a program might have failed. RCTs also fail to take account of qualitative methods, especially participatory methods that Sid\textsuperscript{13} and the DAC have emphasized in the past as being part of their response to the Paris Declaration. The distinction between qualitative and quantitative evidence is now far less rigid, with many qualitative assessments also capable of quantified analysis. Finally, the high cost of RCTs makes them suitable only to large-scale assessments.

Fortunately, guidance provided by the Network of Networks for Impact Evaluation (NONIE), which represents the views of the main evaluators of aid, and work commissioned by DFID, has been able to put the different types of evaluation methods, and the evidence gained from them, into context. A useful construct, taken from a recent DFID commissioned study\textsuperscript{14}, sets out the following typology of evaluation methods:

<table>
<thead>
<tr>
<th>Table 1: Design Approaches, Variants and Causal Inference</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Approaches</strong></td>
</tr>
</tbody>
</table>

12
### Table: Methodologies for Impact Evaluation

<table>
<thead>
<tr>
<th>Methodology Type</th>
<th>Example Methods</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>RCTs, Quasi Experiments, Natural Experiments</td>
<td>Counterfactuals; the co-presence of cause and effects</td>
</tr>
<tr>
<td>Statistical</td>
<td>Statistical Modeling; and Longitudinal Studies EconomRICS</td>
<td>Correlation between cause and effect or between variables, influence of (usually) isolatable multiple causes on a single effect</td>
</tr>
<tr>
<td>‘Case-based’ Approaches</td>
<td>Interpretative: Naturalistic, Grounded theory, Ethnography Structured: Configurations, QCA, Within-Case-Analysis, Simulations and network analysis</td>
<td>Comparison across and within cases of combinations of causal factors Analytic generalisation based on theory</td>
</tr>
<tr>
<td>Participatory</td>
<td>Normative designs: Participatory or democratic evaluation, Agency designs: Learning by doing, Policy dialogue, Collaborative Action Research</td>
<td>Validation by participants that their actions and experienced effects are ‘caused’ by program adoption, customisation and commitment to a goal</td>
</tr>
<tr>
<td>Synthesis studies</td>
<td>Meta-analysis, Narrative synthesis, Realist based synthesis</td>
<td>Accumulation and aggregation within a number of perspectives (statistical, theory based, ethnographic etc.)</td>
</tr>
</tbody>
</table>

NONIE\(^{15}\), studies by DFID\(^{16}\), and the Development Research Group of the World Bank\(^{17}\), now advocate the use of *mixed methods*; selecting the method to suit the type of intervention and its comparative advantage in answering the key evaluation question.

Of particular interest to this study is the fact that these documents advocate the explicit articulation of a theory of change (ToC). There is wide variation of the use of TOCs\(^ {18}\). Some map the way that diverse activities lead to a particular outcome, through the development of simple logical frameworks and logic models to monitor and evaluate (M&E) programs. Others are a reflective tool to set out theoretical and behavioural assumptions that will be tested in the process of implementation. At their best, they combine both setting out the inter-linkages between activities and making explicit the assumptions on which the program is premised. They are both a tool for M&E, and for learning.

---

1 See for instance, White Mans Burden by William Easterly and Poor Economics by Banerjee & Duflo.
2 Evidence of the growing importance of evaluation can be found in the formation of the Network of Networks for Impact Evaluation (NONIE) which brings together the OECD Evaluation Network, UN Evaluation Group, Evaluation Cooperation Group (ECG) and International Organization for Cooperation on Evaluation (IOCE) to provide guidance to evaluators. Also, International Initiative for Impact Evaluation (3ie), funded by DFID and Bill & Melinda Gates Foundation, has been established to assist evidence basing policy making.
3 Building the Evidence to Reduce Poverty: the UK’s policy on evaluation for international development, DFID, June 2010.
4 This is most closely associated with the work of Dani Rodrik who questioned the universal applicability of the Washington Consensus.
5 White Man’s Burden: Why the West’s Efforts to Aid the Rest Have Done So Much Ill and So Little Good. William Easterly (Penguin, 2006).
10 For example, the whole aim of the Making Markets World for the Poor Approach is to deliver systemic change that affects the market as a whole.
12 The New Development Economics; We Shall Experiment, but How Shall We Learn? Rodrik D. 2008


Broadening the Range of Designs and Methods of Impact Evaluation, DFID 2012


Review of the Use of the Theory of Change in International Development, Isabel Vogel for DFID, 2012
2 Methodology Used

2.1 Reviewing the Literature

We have focused our work on a review of the vast body of literature that informs the theory and empirical evidence on the three main constituents of market development, namely PSD, FSD and trade. As set out in the Inception Report, we have focused on the 13 donors of interest to Sida. Inevitably, a large volume of literature that is cited in all three areas comes from the World Bank Group and donors such as DFID that play a prominent role in market development. We have also given prominence to high quality studies and evaluations carried out by leading academics, including those involved with institutions such as the Abdul Latif Jameel Poverty Action Lab that are pioneering RCTs and attempting to rethink development.

As agreed with Sida, we have focused on guidelines, meta-studies and synthesis evaluations as they help to provide insights and are able to rise above program specific factors. We have also, on a selective basis, spoken to those involved in evaluations for DFID and the World Bank to gain insights on what is reasonable to expect in terms of developing results chains and frameworks. This has helped us to assess the evidence from a more realistic standpoint.

2.2 Organizing the Findings

Organising the findings to answer the four questions posed in the ToR has not been easy essentially because of the huge volume of literature and the diversity of topics covered. To make the findings accessible we have organised our findings on each key area as follows:

- **Theory of Change**: We start with presenting a ToC for each area informed by the main areas of intervention, outputs, outcomes and impact described in the literature. This serves as the frame for the subsequent presentation of findings.
- **What Works**: We have then addressed the first question ‘What Works’ setting out the evidence in support of the main outcomes considered important by the ToC.
- **Results Framework**: This provides examples of ToCs and logic models used by donors.
- **Results Chains**: Sets out the implicit logic models used and evidence in support of the main areas of intervention and activities set out in the ToC.
3 Private Sector Development (PSD)

3.1 A Theory of Change for PSD

A stronger and better functioning private sector is recognised as a vital instrument for the pace and pattern of growth and hence how the poor participate in and benefit from the growth process.

The literature on PSD is extensive. Two main source documents provide a comprehensive treatment of the fundamental conditions for the private sector to deliver growth: The World Development Report 2005; and The Global Competitiveness Reports (GCR) particularly 2008-09. Combining the two, the main drivers through which PSD contributes to growth are: i) delivering higher levels of private investment; and ii) increasing productivity through competition and innovation.

Further evidence of the impact of investment on growth and job creation is presented in 4.2.2 below. In addition, a large volume of theoretical and empirical literature shows that investment to accumulate capital cannot alone account for the major differences in wealth between countries: it needs to be accompanied by productivity growth to do so.

The 2008-2009 GCR found that, together, macro level conditions (such as macro policy, social infrastructure and political institutions) that affect investment, and micro level factors that affect productivity and competitiveness of firms (including the business environment and company operations), explain 85% of the differences in prosperity amongst countries (equalising for natural resource endowments and geographical advantages). The evidence that both investment and gains in productivity are needed for the private sector to deliver economic growth is compelling.

Based on these main global reports, as well as further findings of our broad literature review, we have established a ToC for PSD. The ToC suggests five different areas of intervention in support of PSD: Policies and Institutions; Support Functions; Industrial Policy; Promoting Entrepreneurship & Investment; and Productivity & Competitive Markets.

The first two areas of intervention, policies and institutions and support functions, constitute the creation of an enabling environment for PSD. The latter three are direct interventions intended to support the private sector in delivering faster growth that is more inclusive. The need for them is the recognition that, even if the environment for PSD is generally favourable, because of market failures, the private sector may not be able to deliver rapid, sustained growth or direct investment to the types of enterprises and regions that would make growth more inclusive. They aim to deliver socially worthwhile public goods such as the growth of sectors and industries from which large numbers of the poor earn their livelihoods, to maximize job creation and to arrive at a more equitable pattern of growth geographically.
The need for these, more direct interventions, has been a matter of much debate. Many leading experts on PSD have argued that more direct intervention amounts to ‘picking winners’, an activity in which the public sector has little expertise and which frequently leads to markets being further distorted to the benefit of the rich and powerful. However, over the past decade, by referring to the fact that most rapidly growing East Asian Economies implemented industrial policies that included direct intervention, proponents of a new form of industrial policy have succeeded in re-introducing its relevance. The new approach, set out in GCR 2008-09, concludes that whilst a sound enabling environment is necessary for growth, it needs micro competitiveness to be sufficient for delivering prosperity; and that calls for industrial policy and support for firm level competitiveness.

Further research: However, the debate is still not resolved with many still cautioning against picking winners. As noted in the sections below, much more analysis is needed to establish if and what forms of industrial policy and more direct firm level intervention are effective.

The ToC represents a systems approach to PSD following the market systems approach used for Making Markets Work Better for the Poor as set out in Figure 1. Based on this approach, Figure 2 below sets out the ToC for PSD.

**Figure 2: The Theory of Change for Private Sector Development**

### What works for PSD

This section examines the evidence in support of the contention, implied in the ToC above, that higher levels of entrepreneurship, the development of small and medium enterprises, a better investment climate, higher productivity and competitive markets lead to increased rates of growth and poverty reduction.
3.2.1 Entrepreneurship & SMEs

Entrepreneurship is the basic building block of PSD. Individuals that own enterprises as well as managers of firms (intra-entrepreneurship) bring together land, labour and capital to create wealth. The theoretical literature postulates that the level of entrepreneurship is positively correlated with the level of investment and innovation, giving rise to Schumpeter’s new combinations, and driving growth and job creation as shown in the logic model below.

The empirical literature, based on macro, cross-country evidence, shows some support for this view. Klapper (2004) shows a general but weak correlation between increased entry rates of formal firms and business density (firms per 1,000 population) and economic development. Similarly, in a later paper, Klapper (2006) concludes that economic and financial development are both positively and significantly correlated with the entrepreneurial entry rate and business density. Thomas and Wim (2008) find that entrepreneurial start-up firms drive structural transformation through innovation. These findings suggest that it is important to reduce barriers to the formation of formal enterprises through reducing business regulation.

However, other research has questioned the linear relationship between levels of entrepreneurship and growth. Taking account also of informal enterprises, research has shown that entrepreneurship is U shaped: the numbers of enterprises falls with increases in per capita GDP as fewer, more capable firms produce more output, and then rises again as the trend towards self-employment increases in the richest countries. This is confirmed by studies that show how informal output and employment fall, and SMEs gain in prominence, as countries move from low to middle income.

Figure 3: MSME Contribution to employment and GDP

The literature points to the size of firms as an important determinant of growth and job creation. Cross-country evidence supports the view that a higher proportion of output produced by MSMEs is correlated with faster growth. The WDR 2013 shows that the greatest amount of employment creation and destruction in the developing countries is in microenterprises. Ayyagari, Demirguc-Kunt and Maksimovic agree that MSMEs produce the highest net job creation in developing countries. There is some evidence that, if MSMEs make up a higher share of the economy, it has a pro-poor impact, but this is not conclusive.

However, it is widely acknowledged that, in the developing countries, a high percentage of MSMEs fail to fulfil their potential. They contribute little to productivity gains and economic growth, and do
not easily transition into medium or large businesses. Doubts have been cast also about the quality of the jobs they provide.

These findings suggest that a high proportion of informal, micro firms are a means of survival (or subsistence) for their owners and do not contribute much to growth or employment. It is a smaller number of mainly formal MSMES that contribute to growth, job creation, and economic transformation. Researchers are now focusing more on the quality of entrepreneurship rather than its quantity in order to identify the types of MSMES most likely to grow and provide better incomes for entrepreneurs and their capacity to provide jobs for others. As Banerjee and Duflo show, only a few, transformative enterprises are able to continue to increase average profits, and hence the incomes of their owners, and are therefore able to provide employment for others. Also known as gazelles, the WDR 2013 shows that it is through supporting these transformative enterprises that increased productive employment will be created.

**Conclusion & Further Research:** From the above, it can be concluded that entrepreneurship and the growth of small businesses do impact positively on economic development and job creation but that the focus of programs should, however, be on transformative enterprises. This is an area where further research is needed, particularly on macro evidence of the contribution to employment and output made by firms of different ages, size and industries, as well as micro research on how to identify transformative enterprises, and what percentage of the stock of enterprises, has the attitudes and attributes to be considered transformative. Attempts are being made to identify transformative enterprises, based on the attitudes and attributes of their owners, but the evidence base is still very small.

### 3.2.2 The Investment Climate

There is strong macro evidence to support the view that private investment is a driver of growth, job creation and poverty reduction. The G20 Working Group on PSD shows that high-growth countries have a bigger share of private investment in GDP. A cross-country study by Phetsavong and Ichihashi (2012) finds that, in Asian economies, private domestic investment plays the most important role in contributing to economic growth, followed by foreign direct investment (FDI). Calamitsis, Basu and Ghura (1999), and Devarajan, Easterly and Pack (2001), find that the level of private investment was significant and positive in explaining cross-country growth rates in Sub-Saharan Africa. Importantly, these studies find no correlation between public investment and growth.

There is consensus among donors and academics that improving the investment climate is a central driver of private investment, and hence growth and job creation, with large pro-poor impacts. For instance, the WDR 2005 finds that a good investment climate is a key driver of private investment and hence economic growth, job creation and inclusive growth. It states that a good investment climate provides opportunities and incentives for firms to invest productively and expand, driving...
economic growth and job creation. A better investment climate improves the situation of poor people in several ways: as workers, finding a job is the most promising path out of poverty; as consumers, through the variety and reduced costs of the goods and services they consume; as users of infrastructure, through improving infrastructure; as entrepreneurs, though improved property rights and access to finance. The report cites the cases of China and India, where the share of private investment in GDP almost doubled at the time that economic growth took off and poverty declined rapidly.

Other literature also links the investment climate to private investment and job creation. Dollar et al. find that a good investment climate provides opportunities and incentives for firms to invest productively, create jobs, and expand, therefore promoting economic growth and poverty reduction. This is why the WDR 2013 considers a good investment climate as fundamental for job creation. It cites studies that show the cost of forgone output and employment in Africa is a result of its poor business environment. And, it documents how business environment reforms increased employment in Mexico. There is compelling evidence also of how individual components of the investment climate, such as macro stability, infrastructure, and the business environment, contribute to growth and job creation as shown in 4.3.1 below.

However, what is less clear is how to identify priorities for improving the investment climate. The traditional tool used by the World Bank has been the Enterprise Surveys which inform its investment climate assessments. Reliance on these subjective surveys was criticised by leading development economists (Haussmann et al 2008) because they failed to take account of the various constraints faced by different types of firms and the fact that the sample frame itself was a result of the way constraints had affected firms. This view has been challenged by empirical research carried out by the World Bank that has found Enterprise Surveys show a systematic pattern of results, demonstrating that investment climate constraints are related to stages of economic development and that they can be confirmed by objective measures.

In addition, leading economists (Rodrik, Haussmann & Velasco, 2005) have questioned the feasibility and effectiveness of attempting to improve the very large numbers of factors that make up the investment climate. They propose a decision tree methodology to identify the binding constraints to entrepreneurship and investment. The application of the methodology, however, is not straightforward. There are issues with respect to the sequencing and timescales involved in delivering reforms. For example, if infrastructure is the binding constraint, it may need billions of dollars and many years to deliver reforms. What should governments do in the interim? Moreover, the application of the methodology has not been subjected to rigorous evaluation.

Furthermore, recent jobless growth, despite rising levels of private investment, especially in Africa, shows that the relationship between the quantum of investment and job creation is not straightforward. Many other factors are involved in translating investment into formal jobs. This has resulted in a focus on the pattern of growth, especially the labour intensity of the industries and size of firms that are leading growth.

Conclusions & Further Research: The macro evidence that private investment is associated with higher growth and job creation is strong. And, there is good evidence to suggest that a better investment climate results in higher levels of private investment. However, identifying which of the many factors that make up the investment climate should be prioritised is not straightforward. World Bank enterprise surveys provide some guidance but are subjective. The binding constraints methodology needs further refinement with respect to timing and sequencing and needs to be subjected to rigorous evaluation to see if it really adds value.

The greatest gap in evidence is to establish the relationship between private investment and job creation. Private investment may be a necessary condition but does not appear to be sufficient. What other factors play a part has been the subject of analysis by the World Bank who proposed the
MILES framework (Macro, Investment, Labour institutions, Education and skills, and Social Protection). A multi donor trust fund\textsuperscript{54} was established in 2007 to: i) help countries design labour market policies and strategies to create more and better jobs, and, simultaneously; ii) carrying out policy research to learn how efficient labour markets can contribute to growth and development goals, especially poverty reduction. However, although the framework is still used to inform studies, such as the IFC’s Jobs Study\textsuperscript{55}, the intended aims of the trust fund appear to have remained elusive.

A recent synthesis evaluation of the World Bank Group’s youth employment programs by its Independent Evaluation Group (IEG) came to the conclusion that ‘evidence on what works in youth employment is scarce’.

3.2.3 Productivity

A large body of literature shows the very strong contribution that productivity makes to growth across countries. The 2008-2009 GCR shows empirically that up to 30\% of prosperity differences between countries stem from micro level differences in firm level productivity. The Global Competitiveness Index shows that less competitive economies rely on factor driven growth, whereas more advanced developing economies also benefit from efficiency (meaning productivity) driven growth.

Several publications document the importance of increased total factor productivity (TFP) for economic growth. The World Bank’s disaggregation of the growth experience of South Asian countries\textsuperscript{56} empirically verifies that the faster growth experienced by Bangladesh and India during the 2000s was due mainly to increases in TFP growth. Rodrik and Subramanian\textsuperscript{57} also find that, in India, the growth surge was due to an increase in productivity amongst large firms in the 1980s.

The evidence, documented mainly in the World Bank’s country economic memoranda and investment climate assessments, shows considerable variation in regards to labour productivity. These variations affect growth and job creation. The share of labour costs in value added is an important determinant of the demand for labour: the higher the share, the lower the incentive to create more employment. As seen in Figure 5, that incentive varies considerably across the developing countries.

\textit{Figure 5: Labour Productivity and High Unit Labour Costs}

\begin{center}
\begin{figure}
\begin{tikzpicture}
\begin{axis}[
    width=\textwidth,
    height=0.5\textwidth,
    axis lines=left,
    xlabel={Country},
    ylabel={Unit Labour Costs ($/h$)},
    xticklabels={S. Africa, Brazil, Kenya, India, Indonesia, Nigeria},
    xtick={1,2,3,4,5,6},
    ytick={0,0.1,0.2,0.3,0.4,0.5,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100},
    yticklabels={0,0.1,0.2,0.3,0.4,0.5,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100},
    yticklabel style={font=\footnotesize},
    xticklabel style={font=\footnotesize},
    yticklabel style={text width=2cm,align=center},
    xticklabel style={text width=2cm,align=center},
    xbar,]
\addplot+[ybar,fill=black] table[x index=0,y index=1,] {data.csv};
\addplot+[ybar,fill=red] table[x index=0,y index=2,] {data.csv};
\end{axis}
\end{tikzpicture}
\end{figure}
\end{center}

\textit{Source: An Assessment of the Investment Climate in Nigeria, World Bank, 2009}

The evidence also shows considerable variation in the productivity of capital. This affects the ability of countries to turn investment into growth. Some countries are able to convert modest levels of investment into major gains in GDP, whilst others require major increases in investment to achieve modest growth\textsuperscript{58}.
In addition to firms delivering productivity (technical efficiency), the aggregate level of productivity in a country is determined through structural transformation (allocative efficiency). The literature supports the view that productivity growth usually starts with agriculture. Warr\(^{60}\) (2006) studied the TFP growth in the agricultural, industry and service sectors in Thailand and Indonesia and found that all TFP growth, at the sectorial level, derived from agriculture. The Operationalizing Pro-Poor Growth program\(^{60}\), led by the World Bank, showed that agricultural productivity growth is a crucial factor in explaining the rate of poverty reduction.

Evidence also suggests that, at later stages of development, productivity gains come from labour and capital being re-deployed from agriculture to industry and service sectors where they are more productive. UNIDO’s Industrial Development Report (2009)\(^{61}\) finds that successful developing countries have tended to increase the diversity and sophistication of the products they produce and export. This is associated with industrialisation and structural transformation. There is strong empirical evidence that industrialization has been fundamental to economic development. In fact, the best example of pro-poor growth that the world has seen, China, experienced both a surge in agricultural productivity and manufacturing productivity, with labour moving out of agriculture into manufacturing\(^{62}\).

WDR 2013 concludes that, overall, increases in productivity do not detract from job creation and may actually enhance it. However, there are wide differences in the employment intensity of growth and the effect of employment on reducing poverty.

Based on cross-country data, as well as synthesis of in-depth country studies, there is evidence that i) structural transformation of employment towards manufacturing and other non-farm sectors, ii) education, and iii) lowering of the dependency burden, are the main explanatory variables in the reduction of poverty through employment. Islam (2004)\(^{63}\) and Bernabè and Krstić (2005)\(^{64}\) both set out the link between poverty reduction and the employment intensity of growth, and prove the importance of structural shift towards manufacturing in explaining why employment and labour market variables emerge as significant for pro-poor growth. Datt and Ravallion\(^{65}\) show that a combination of increased farm and non-farm productivity caused poverty to fall fastest in the Indian states.

**Conclusions & Further Research:** The evidence shows that growth of productivity is crucial for sustaining rapid economic growth. It determines how efficient investment is in causing growth, and how the productivity of labour, in relation to its cost, is a major element in determining the demand for labour. Productivity growth usually starts with agriculture, and this is where the focus of an intervention should be at early stages of development. But when countries start to achieve higher levels of development, productivity increases due to a shift of resources to the industry and service industries where productivity is higher. So supporting structural transformation is important.

In general, the causes of why TFP grows rapidly in some countries, and not in others, are not well understood. More empirical analysis is needed in this area to assess how managerial skills, innovation systems, exposure to world markets, and instruments, such as cluster development and value chain improvement, do or do not contribute to the growth of TFP.

**3.2.4 Competitive Markets**

Perfect competition is a pre-condition of the efficient functioning of markets and, hence, to the theories of welfare founded on them. Based on this, Arrow and Debreu expounded that there was no administered solution that could possibly increase welfare compared to the general equilibrium arrived at through competitive markets. However, the reality is that market failure in developing countries is widespread\(^{66}\) and, consequently, market outcomes are frequently determined by power and wealth, which disadvantages the poor. The WDR 2006 shows that failure to allocate resources to
their most productive use, and the inability of large parts of the population to fulfil their latent potential, is bad for growth and equality and, hence, for poverty reduction.

There are also strong theoretical grounds, backed up by empirical evidence, that the presence of a monopoly causes sizable welfare losses in the range of 0.1 to 13% of GDP\textsuperscript{67}. The harmful effect of cartels on consumers, especially the poor, is documented in a recent paper by the OECD (2013)\textsuperscript{68}. Ellis and King examine a large number of case studies showing that, where competition is limited, even if producers benefit from some of the highest levels of productivity in the world, the incomes they receive are low\textsuperscript{69}. OECD 2013 shows how dominant market power disadvantages the incomes of smaller producers, and the wages earned by them as workers.

The lack of competitive markets thus hurts the poor directly in two ways; i) as consumers, their cost of living is pushed up by high prices; and ii) as producers, entrepreneurs and the employees of MSMEs, they suffer from barriers to entry and growth. Empirical evidence of the benefits of trade openness, competition policy, and other measures to ensure that competitive markets lead to growth and poverty reduction is, however, not clear-cut and often contested. Competition, say from more advanced foreign producers, may actually hurt the poor as producers if they lack the technology to compete with them, as is the case in many agricultural products.

The World Bank (2003) and the OECD (2007)\textsuperscript{70} both find that countries with more competitive markets can increase incomes and output per capita and, hence, lower rates of poverty\textsuperscript{71}. Godfrey (2008)\textsuperscript{72} finds that anti-competitive firm behaviour, inappropriate competition policy, and the blocking of necessary reforms, play key roles in restricting competitiveness, which ultimately hampers economic growth. Kitzmuller and Martinez Licetti (2012) find empirical evidence showing that policies to increase market competition can improve a country’s economic performance.

Conversely, the literature includes evidence that measures that are needed to make markets more competitive are not always without adverse effects. There is a vast amount of literature written by notable economists, such as Rodrik and Stiglitz, which finds that East Asian countries grew through protecting domestic markets whilst pursuing aggressive export promotion. Empirical research has found that innovation is U shaped with respect to competition, increasing as competition develops but then falling when strong market power is needed to afford the research and trials inherent to product development. Thus, greater competition spurs innovation in low and middle income countries, but not in more advanced countries\textsuperscript{73}.

Moreover, ways of bringing about competition have not always delivered. Hence, whilst the liberalisation of marketing of key commodities worked in some countries, in others, the old market failures that caused governments to intervene resurfaced\textsuperscript{74}. The literature points to the fact that effective enforcement of policies is essential if competition policy is to have its intended effect. Studies by the Consumer Unity and Trust Society have not always found the introduction of competition policies to have had desired impacts\textsuperscript{75}.

This has spurred donors, such as DFID, SDC, and Sida, to develop a new approach to developing efficient markets that serve the interests of the poor\textsuperscript{76}. The approach treats markets as systems and aims to deliver systemic change that affects incentives and behaviour by addressing the underlying causes of market failure rather than their symptoms. The Making Markets Work for the Poor Approach (M4P) facilitates and catalyses pro-poor change brought about by actors in the system rather than intervening in the market directly. It does so by facilitating market players to perform market functions that they are either currently not performing or performing inappropriately. Therefore, the strategy of M4P intervention is to determine a pathway which leads to ‘crowding-in’ of market functions and players. Through such interventions it aims to deliver both large scale and sustainable, system wide impacts. It explicitly targets the poor to reverse the consequences of market failure and adverse power relations. It should be noted, however, that care must be taken
when designing and implementing such interventions to ensure they do not in fact crowd out existing, well-functioning market forces.

The approach is still in its pilot stage but offers great potential if applied in appropriate conditions. For example, a DFID funded M4P intervention in Lesotho not only managed to ensure that the garment industry did not decline as a result of the end of preferential access enjoyed by the country under the Multi-Fibres Agreement, but helped employment to increase by over 12,000 between 2003 and 2008. Productivity in Lesotho’s garment industry is now amongst the highest in the world. The FinMark Trust was instrumental in the launch of the Mzanisi account which, at its height, led to the previously excluded black population opening 5 million new accounts. Katalyst, a DFID and SDC funded program in Bangladesh, is credited with over 2 million beneficiaries most of whom are in the rural areas of the country where poverty is most endemic. It has helped hundreds of thousands of farmers increase their incomes through improving the market for agricultural inputs.

There will always be some problems associated with evaluating PSD programs in general that also apply to M4P programs. Firstly, as documented by Sida, PSD programs are subject to substitution and displacement effects that make it difficult to measure the net gains delivered. Given that M4P programs facilitate change brought about by others, assessing attribution and additionality are especially problematic.

Secondly, there is the difficulty of assessing systemic change. The Springfield Institute, key proponents of M4P, define systemic change as a change in the underlying causes of market system performance, typically in the rules and supporting functions, that can bring about more effective, sustainable and inclusive functioning of the market system. It goes on to list a number of changes that might be regarded as systemic, these include:

- Improved delivery (such as increase in access or participation rates, improved quality or levels of satisfaction).
- Changes in practices, roles and performance of important system players and functions.
- Changed attitudes of, and evident ownership by, market players.
- Demonstrated dynamism of market players and functions (for example, responsiveness to changed conditions in the system).
- Independent and continuing activity in the system (i.e. the extent to which changes are maintained after direct intervention support has ceased).

Based on the above, the definition, and indicators, of what constitutes systemic change generally refer to and rely on changing incentives to change behaviour, elements that are notoriously difficult to measure.

The DCED Standard for Results Measurement, a practical framework that aims to enable programs to monitor their progress towards their objectives, attempts to offer a means by which to measure this change. Essentially, the standard comprises eight key elements:

- Articulating the Results Chain
- Defining indicators of change
- Measuring changes in indicators
- Estimating attributable changes
- Capturing wider changes in the system or market
- Tracking program costs
- Reporting results
- Managing the system for results measurement

The standard relies on validating such indicators and changes through secondary sources, where applicable, and carrying out before and after surveys to measure outcomes and impacts. It provides
for market trends to measure additionality. As such, the DECD framework provides a better monitoring system than most and a way of tracking outcomes and impacts at a reasonable cost and so has been adopted by many M4P programs. What the standard does not constitute is a proper experiment with counterfactuals and so cannot constitute hard evidence that academics would accept.

Further, in practice, M4P programs such as the multi-donor Katalyst program in Bangladesh, have limited their ambitions on system wide change; its own guidance limits the scope of systemic change to sub-systems. So, for instance, instead of looking at the seed system, it looks as the sub system of the core participants developing seeds for the poor.

Lastly, none of the M4P programs have been the subject of an independent evaluation carried out by using quasi-experimental or mixed methods. And, whilst successes are well publicised, the many failures of programs, and unintended negative consequences, are not well known. As a result, all that is available is well documented case studies that do not constitute more than prima facie evidence of efficacy.

Despite the serious methodological challenges involved in such complex programs, especially with measuring systemic change, it is vitally important that donors subject these programs to more rigorous evaluation before scaling up the use of the approach. It should be possible to use non-linear ToCs that trace how systemic change can be brought about and pick up negative, unintended consequences. Moreover, the data limitations that have affected these programs are surmountable81.

**Conclusions and Further Research:** There are strong theoretical grounds for suggesting that competitive markets are crucial for economic efficiency, and, hence, for growth, and that monopolies hurt the poor most. However, the empirical evidence is not always clear-cut. There are many examples where restricting competition in the short term can provide long term gains. There is a need for further research to establish how competition regimes can be made more effective in addressing consumer welfare, whilst providing room for exceptions (based on objective criteria), that enable greater investment and innovation to deliver benefits in the longer term.

### 3.2.5 Indicators

Based on the evidence of what works, the crucial indicators for PSD are shown in Table 2. To use the indicators as a diagnostic tool, the performance of the country in question needs to be compared with peers in the region, and countries at similar levels of economic development.

<table>
<thead>
<tr>
<th>Table 2: PSD indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Entrepreneurship &amp; SMEs</strong></td>
</tr>
<tr>
<td>Rate of business entry, density</td>
</tr>
</tbody>
</table>
% of transformative enterprises | % of firms reporting constraints to be main obstacle confirmed by objective indicators. Constraints faced by SMEs. Binding constraints analysis. |
---|---
Productivity of agriculture Productivity of median manufacturing firm Composition of GDP & employment by sector, industry |
Market concentration in key industries in which poor participate Incidence of consumer welfare losses accounted for by poor Effectiveness of competition, consumer protection regime |

| Contribution of informal and formal SMEs to GDP & Employment | % of workforce in formal employment. Analysis using MILES framework |
---|---|
Labour productivity & share of labour costs in value added |
Outcomes and systemic constrains in key markets in which poor participate Likelihood of delivering systemic change in markets in which poor participate |

### 3.2.6 Special Environments

Applying the PSD ToC to a conflict-affected environment (CAE) is not easy. The problem is that all the conditions for PSD may be absent and the resources available very limited in relation to the need. Further, the need to deliver and then sustain a peace dividend is pressing: the evidence shows that the risk of a return to conflict is greatest in the five years immediately following its cessation.\(^{82}\)

In response, donors have attempted to apply the binding constraints methodology to CAEs to prioritise their support, only to reveal a problem with the methodology: it takes no account of the resources and timescales for addressing the binding constraint. Hence, in Sierra Leone, it was clear that the binding constraint was the country’s shattered infrastructure which limited investment to a few, high return mineral industries.\(^{83}\) But the scale of the problem was so great that there was little hope of addressing the problem in less than 5-10 years, which begged the question as to what should be done in the meanwhile.

The DCED has provided guidance on PSD in a CAE.\(^{84}\) It recommends that in addition to the basics of improving governance and security, and rebuilding infrastructure, donors should focus on three areas: i) the business environment; ii) applying M4P to important value chains and markets; and iii) promoting public private partnerships (PPP) to address the infrastructure deficit and the delivery of basic services. The guidance recognises the importance of making progress quickly pointing to the quick wins that business environment reforms, applying M4P to important markets, and PPP projects, could deliver. However, the evidence in support of the guidance is weak.

A literature review of promoting inclusive growth in CAE’s takes a broader view.\(^{85}\) It notes the importance of macro stability, improving tax revenues, building infrastructure to create employment, the promotion of entrepreneurship, and the improvement of the investment climate for PSD. It shows that sector policies towards agriculture, finance and industry have a role to play. It suggests that there is a need for distinctive policies for CAE’s which might take the form a dual strategy towards trade integration, as discussed under trade below. It cites a large body of literature examining what is needed for inclusive growth and its relevance to CAEs.

In transition economies, the development community’s focus was to develop a market economy. The European Bank for Reconstruction and Development (EBRD) therefore developed a transition index that contained many of the standard growth indicators. It also developed transition indicators that focused on the extent of progress on privatisation, and enacting the basic legislative and
regulatory framework for a market economy: hard budget constraint, bankruptcy and competition laws etc. The EBRD Transition Reports, published annually, track progress on the indicators.

In general, the indicators are a good predictor of growth. The evidence shows that the reforms needed to make progress on the indicators are a causal factor to growth. It also demonstrates that there is a virtuous circle between growth and reforms. It should be noted that there is some evidence that some transition countries are able to grow without the reforms, but they benefit from special circumstances.

What is less certain is whether the focus on bringing about the wholesale reforms, needed to make rapid progress on the index, was the best course of action for maximising growth and minimising the costs of transition. It is also pointed out that, faced with the same challenge, China’s approach of encouraging private enterprise in special economic zones, and in township and village enterprises, led to faster growth at far less social cost in terms of unemployment and the withdrawal of social protection.

3.3 Result Frameworks

The DCED has produced a results framework for PSD (Figure 6).

*Figure 6: Proposed Results Framework for PSD: DCED*

Typically, DFID tends to use ToCs that are more involved. An example of a program that aims to provide finance and skills, but relies on others to bring about investment climate reforms, is shown below:
Figure 7: An Example of a DFID Program’s Theory of Change

**Inputs**
- Fund manager with expertise in impact investment for SMEs.
- Expertise in implementing business linkage programmes, delivering cost-effective BOS for transformative enterprises, and organizing business plan competitions to promote entrepreneurship.
- Support from stakeholders including government, private sector, and other donors.

**Activities**
- 5.5 million investment and support for selected SMEs.
- UK expenditure on business linkage programmes costing £5 million.
- £5.4 million BOS provided to 12,000 transformative enterprises.
- Be Your Own Boss business plan competition held annually.

**Outputs**
- 25 SMEs increase investment, productivity & output.
- Business linkages increase productivity generating £20 million of additional value.
- Increased capacity of MTEs for growth.
- Entrepreneurial skills developed, new enterprises established.

**Outcomes**
- Short run: Increased contribution of assisted SMEs to growth, economic diversification & job creation.
- Long run: Impact investment in SMEs established as an attractive asset class with several more funds crowding in.

**Impacts**
- MSMEs significantly increase output, create jobs, and drive economic diversification.
- Improved linkages promote spillover of productivity enhancing technology.
- Women’s entrepreneurship and opportunities for paid employment increase.
- Zambia develops a private sector capable of delivering faster, more inclusive growth.

**Human Capital**
- Investment in health & education.

**Infrastructure**
- Investment in roads, energy.

**Access to Finance**
- Innovative SME finance.

**Business Environment Reforms**
- Reforms supported.

- Increased labour productivity.
- Greater productivity, competitiveness.

- Increased private, domestic investment.

- Increased investment, competitiveness.
The DCED’s “Standard for Measuring Results in Private Sector Development” promotes the importance of using logic models with control points for independent estimation and verification. These logic models can be relatively simple, although they become more complex if they aim to deliver systemic change, as illustrated by one used by the Africa Enterprise Challenge Fund (AECF).

3.4 Result Chains

The following sections provide details of the five areas for PSD interventions presented in the ToC, describe the results chains, and set out the most relevant evidence of their efficacy from the literature reviewed.

3.4.1 Policies & Institutions

Figure 8: Logic Model for a PSD Program

[Diagram of a logic model with various inputs, activities, outputs, and resulting changes highlighted]

- **Policy/institutions for greater entrepreneurship & private investment**
  - TA: Macro stability
  - TA: Good governance, rule of law
  - Funding: TA: Investment in human capital
  - TA: Financial stability
  - TA: PPP framework for infrastructure, services
  - TA: Trade policy, Industrial policy, investment regimes
  - TA: Business environment reforms, competition, consumer policy

- **Improved Investment Climate**
  - Reduced investment risk
  - Reduced cost of doing business
  - Productive workforce
  - Infrastructure constraints reduced
  - Competitive markets
  - Increased consumer confidence

- **Outcome**
  - Improved investment climate
  - Higher private investment

- **Impacts**
  - More sustained growth
  - Job creation for the poor
  - Poverty reduction
Policy and institutional interventions aim to establish an enabling environment for entrepreneurship and investment, and for the growth of productivity and competitiveness. They include the policy framework and institutional mechanisms for implementing industrial policy.

There is strong evidence that shows policy reforms and institutional investment impacts positively on macro stability, human capital, and the investment climate. Sirimaneetham and Temple (2009), and Lopez (2005), both conclude that growth is positively associated with macroeconomic stability. Polasek et al. (2003) conclude that, overall, the impact of investment in education and training leads to higher productivity and earnings for the individual and has a positive and significant impact on national economic growth. Education and training also emerge as important for regional development and, hence, feature prominently in industrial policies that address regional imbalances (Gennaioli et al., 2012).

**Case Study 1: Private Infrastructure Development Group (PIDG)**

PIDG is a not for profit trust that enables donors to pool funds in support of private investment in the development of infrastructure. The trust funds and oversees 7 operational entities. The activities of these include the following: technical assistance to establish PPP regimes and support individual transactions (DevCo, TAF); help to private investors to raise funds (InfraCo. Africa and Asia); support to invest equity and loan finance (EAIF); provision of guarantees in support of private finance for infrastructure (GuarantCo); and the establishment of a credit line to enable private investment in response to the global financial crisis (Infrastructure Crisis Facility). The Trust’s companies also monitor the emerging needs of the infrastructure market and respond accordingly.

The results reported are impressive, with the sum of over $10 billion of private sector investment committed to operational projects that serve 97.6 million people. Thus, generating 185,479 operational jobs and contributing $3.1 billion in government revenues. However, the results appear to be reported using a system modelled on IFC’s DOTS system that is based on self-reported data and considers all projects to be additional, without examining what would have happened without the involvement of PIDG companies. It includes in its job creation impacts full time equivalents of indirect employment which does not take account of displacement effects. The development impacts reported are in the form of case studies rather than rigorous evaluations, a feature shared with other PPP interventions as noted in chapter 7.

PIDG has become a focal point for donors to channel resources in support of private participation in infrastructure. Nine donors have become members. There is a lean project management unit that helps the members exercise oversight. The structure developed is flexible enabling donors to fund what they consider a priority, and for entities to react to the market place. Individual entities can be shut down if they are no longer needed and new ones created. The corporate status of each entity can vary. What that suggests is that the Trust itself is designed to be a long term, if not permanent, structure. That is no doubt better than a project by project approach with short term time horizons. The need for private investment in infrastructure in the developing countries is long term. However, in the interest of promoting a systemic response, it would be appropriate for the Trust to set out and report progress against the exit strategies for some of its entities in terms of addressing the market failures that gave rise to them in the first place.
Many studies conclude that improving a country’s Doing Business Indicators through large-scale business environment reforms will improve its investment climate (Klapper and Love (2010)). Evidence from cross-country studies (e.g. Klapper (2006)) shows that reforms to improve the ease of starting and operating a business are associated with increases in the number of new firms registering. They are also associated with sustained gains in economic performance, including improvements in employment and productivity.

However, there are concerns that delivering sizable impacts calls for major reform. Klapper and Love (2010) find that small reforms, in general less than 40 per cent reduction in the costs, days, or procedures required for business registration, do not have a significant effect on new firm creation. They also find important synergies in multiple reforms of two or more business environment indicators. Bruhn and McKenzie (2013) summarize the evidence on the effects of entry reforms, and related policy actions, to promote firm formalization. Despite more than a decade of reforms aimed at making it easier and cheaper for microenterprises to formalize themselves, they find that most of these policies result only in a modest increase in the number of formal firms, if at all. One reason is that most informal firms appear not to benefit on net from formalization, and thus the ease of formalizing alone is not enough of an incentive to generate this change.

A synthesis evaluation of contract enforcement undertaken for several donors also questions whether some business environment reforms really do deliver their intended impact. The evaluation found that the link between improvements in contract enforcement and investment was weak, with much of it coming from studies that assumed the link to be proven. Other studies have found that reducing the time for enforcing contracts need not result in increased access to finance.

Overall, there has been a reassessment of the benefits of improving a country’s standing in the Doing Business Index. Earlier studies suggested strong impacts, averaging 2.25%, on the rate of growth from moving from the top to the bottom quartile. A recent study by Eifert (2009) has shown a much weaker impact and that too only in relatively poor but well governed countries. The World Bank Group is also re-assessing the doing business indicators recognizing that they do not pick up important aspects of the business environment. Nevertheless, in many countries, improving the business environment remains an important area for donor assistance in support of PSD.

Based on econometric estimates for a sample of 136 countries from 1960–2005, Calderón (2009) finds that infrastructure stocks and service quality boost economic growth. Because of the huge sums and project risk involved, infrastructure constraints may be beneficially addressed though PPP. A synthesis study for the Ministry of Foreign Affairs of the Netherland found that PPP projects serve the purpose of resource mobilization, but that few PPP projects study development impacts. It also finds that fewer still compare them against the do nothing situation or against valid counterfactuals. The financing arrangements focus on cost sharing and not risk sharing. Hence, their main benefits are that they enable projects to go ahead that may not have without the private sector’s ability to supplement public resources.

Crime not only discourages firms from investing, but it also increases the costs of doing business. The literatures concludes that corruption has a negative impact on economic growth (Mauro (1995); Kaufmann et al. (1999); Mauro (1995)). Only a few studies have looked at the effects of corruption on the economic prospects of firms. Gaviria (2002) finds that both corruption and crime substantially reduce sales growth, and that the reported levels of corruption and bureaucratic interferences are positively correlated at the firm level. Aterido et al. (2007) estimate that an increase in the incidence of bribes of 10 percentage points reduces the employment rate of large firms by approximately 1.4 points. At the micro level, a study of Ugandan firms by Fisman and Svensson (2007) finds that a one-percentage point increase in the bribery rate is associated with a reduction in firm growth of three percentage points, an effect that is about three times greater than that of taxation.
**Conclusions & Further Research:** The evidence that better policies help the private sector increase its contribution to inclusive growth is strong. Better policies help to improve the investment climate and increase productivity. However, as is the case with reforming the investment climate, it is not easy to identify priorities and develop an appropriate sequence of policy reforms. Further, whilst the general relationship between a better business environment and higher investment and, hence, growth is sound, there is a need for more contextual analysis of what business environment reforms matter and what results can be expected. It appears that piecemeal reforms are not effective and impacts depend very much on the context in which reforms are implemented. Having identified this as potential area for further investigation, we would recommend that this would be a good area for the full Sida evaluation to focus on in the future.

**3.4.2 Support Functions**

<table>
<thead>
<tr>
<th>Support functions of key markets</th>
<th>Improved access to markets</th>
<th>Markets work better for the poor</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA: Access to, cost of finance</td>
<td>• Greater survival rate of firms,</td>
<td>• Private sector better attuned to needs of the poor</td>
<td>• Increase, sustained growth</td>
</tr>
<tr>
<td>TA: Access to land, security of tenure</td>
<td>• SMEs increase investment outcomes</td>
<td>• Poor better able to participate in and benefit from growth</td>
<td>• Poverty reduction</td>
</tr>
<tr>
<td>TA: labour market reforms, TVET system</td>
<td>• Improved labour market outcomes</td>
<td></td>
<td>• Job creation for the poor</td>
</tr>
<tr>
<td>TA: Quality of Standards, quality assurance, accreditation, metrology (SQAM)</td>
<td>• Higher quality products</td>
<td></td>
<td>• Increased income for the poor</td>
</tr>
<tr>
<td>TA: Certification services</td>
<td>• Greater ability to innovate, increase productivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D, innovation systems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA: Productivity systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Support Functions enable firms to bring together the factors of production needed for entrepreneurship and investment, and the institutions needed to improve productivity and competitiveness. It should be noted that some of the key support functions for PSD are covered under the FSD and trade sections.

Galiani and Schargrodsky (2010) studied the effects of land titling in Argentina and found that families with titles substantially increased their investment in housing, reduced their household size, and enhanced the education of their children relative to the control group. Deininger et al. (2011) analysed the effects of titling on land rental markets. The study shows that tenants’ productivity is higher than the landlords by between 17 and 26 percentage points. This suggests that land titling has the potential to increase land rental, and that this could significantly enhance productivity. However, as discussed in 5.4.2 below, there is compelling evidence that land titling alone is not sufficient to deliver the intended outcome of increasing investment. It needs complementary reforms, especially access to finance, to be effective.

Card, Kluve and Weber (2009) undertook a meta-analysis of active labour market policies (199 program estimates drawn from 97 studies between 1995 and 2007). About one-half of the programs have both a short-term impact point (for a one-year post-program horizon) and a medium-term impact point (two-year horizon). They find that job search assistance programs have relatively favourable short-run impacts, whereas classroom and on-the-job training programs tend to show better outcomes in the medium-run, than in the short-run. This and other studies show that a comprehensive approach to labour markets, such as the MILES framework, is needed to have a strong impact.
The role played by innovation in improving productivity is associated with the work of Schumpeter, amongst others. The OECD has been undertaking work on the development of national innovation systems. It finds that a systematic approach that addresses interactions amongst enterprises; the links between research institutions, universities, and enterprises; mechanisms for the diffusion and transfer of knowledge to firms to innovate; and personnel mobility, is most effective. However, hard evidence in support of the impact that investment in innovation systems actually has (taking account of a counterfactual), is limited. Sida’s synthesis evaluation of 10 programs to support innovation systems and clusters shows that they were able to increase the capacity for research and to transfer knowledge. However, the evidence at an outcome and impact level was weak.

Conclusions & Further Research: The evidence supports the view that support functions such as land titling and labour market policies help to improve investment and job creation. However, they need to be accompanied by other institutional reforms to be effective. There is a need for further research to understand the complementarity of reforms needed to improve impact. The theoretical grounds for investing in innovation, and in productivity improvement systems, are strong. There is also empirical evidence of programs achieving their desired outputs. However, better evidence is needed at outcome and impact level to assess the value for money that interventions are able to deliver. Both these areas, the complementarity of reforms and the evidence at outcome and impact levels, should be investigated further during the full Sida study.

3.4.3 Industrial Policy

In his book, “The Rise of the Rest”, Amsden (2001) states the importance of industrial policy. He examines the impact on ‘latecomers’ of being economically caught up in an environment in which knowledge is difficult to access, and finds that it constitutes an entry barrier of incumbent firms. In their recent authoritative survey of the current literature on industrial policy, Harrison and Rodrigues-Clare (2010) conclude that empirical evidence on the effectiveness of various forms of industrial policy is scarce. However, Lin and Monga (2010) advocate the importance of certain industrial policies, such as providing improvements in “hard” and “soft” infrastructure, as well as protecting some selected firms and industries that defy the comparative advantage determined by the existing endowment structure. They critically analyse past failures of industrial policies and argue that the failure of such policies is most likely to arise from mistakes made by policymakers in the growth identification process. They find that only those industrial policies that try to facilitate the development of new industries that are consistent with the latent comparative advantage of the economy, are likely to succeed.

An important tool of industrial policy is the promotion of foreign direct investment (FDI) and exports. Referring to the large consensus of the impact of FDI on economic development (see private investment below), Loewendahl (2001) finds that the most successful investment promotion agencies have developed an integrated investment promotion strategy that combines marketing and company targeting, with after-care and product development. In their cross-country study Harding
and Javorcik (2011) conclude that investment promotion is resulting in higher FDI flows to countries in which information asymmetries are likely to be severe. They find a dollar spent on investment promotion will increase FDI inflows by 189 dollars and that an additional job created by a foreign affiliate requires just 78 dollars in investment promotion spending.

Addressing regional imbalances has proven to be more challenging. The economies of agglomeration that take hold in fast growing cities and regions, attract investment to those regions and help to boost productivity and competitiveness. The WDR 2009 report, Reshaping Economic Geography, recognizes the inevitability of the concentration of growth but shows that, gradually, disparities do fall. It suggests a combination of institutions, infrastructure, and incentives to reduce disparities. However, for the most part, the report is far better at identifying policies that are ineffective, such as tax incentives and inappropriately located special economic zones, than documenting what has worked. The report, however, does note a few successes in overcoming regional disparities, such as the US’s approach to its Appalachian region, but the main benefit of the policies advocated seems to be through encouraging migration, not what policy makers intend.

Conclusions & Further Research: The evidence suggests that those measures that promote FDI and industrial policies that aim to improve soft and hard infrastructure, do produce good results. However, information on the effectiveness of industrial policy is scarce. This is an area where a major research effort is needed combining the resources of the MDBs, IFIs and donors. A similar conclusion holds for those policies aimed at addressing lagging regions. An increasing proportion of the world’s poor are now located in the lagging regions of middle income countries. Though concentration may be inevitable, better policies are needed to address incomes in these regions. WDR 2009 does not provide strong enough evidence of what works.

### Case Study 2: The Malonda Foundation, Mozambique

Malonda is a private foundation, established with Sida support, to promote investment in the Niassa region of Mozambique. The region is vast and rich in natural resources. Sida’s support started in 1997 and has consisted of inter alia preparatory studies and improvements in infrastructure. Malonda is half way through its strategic plan which aims to attract local and foreign investment in four sectors (agriculture, forestry, tourism, and mining); provide microcredit; and support wildlife conservation.

In the past, the organization had recorded successes in the forestry sector. The press reports suggest that progress on the current strategic plan were not ‘very visible’, though it had played a role in the revival of the Matama Agricultural complex where companies are growing soya. In June 2013, Sida stopped all funding to Malonda after the results of a forensic audit revealed fraud.

The original aim of supporting a private foundation, supported by government, to promote investment in an underdeveloped area with good potential, was based on a sound logic model. The successes in forestry showed that it was possible to attract foreign investors when the assets on offer were attractive, even if the infrastructure of the region remained poor. Malonda had struggled beyond that one sector but the foundation had become the focus of other developmental activities in the region, such as microcredit.

Ultimately, the case study highlights the risks of providing financial assistance to organizations where the prime driver may differ from that of the donor. In the case of Malonda, the drive to become financially sustainable led to them utilizing a more ‘interventionist’ approach rather that the enabling and facilitating role Sida had originally envisaged. This motivation arguably led to them undertaking investments and interventions that were not as well considered as they should have been and where proper due diligence was weak.
3.4.4 Promoting Entrepreneurship & Investment In MSMEs

The DCED's BDS — Guiding Principles for Donor Intervention\(^\text{106}\), provides guidance on how to improve the performance of small and medium enterprises (SMEs) in developing countries to achieve higher economic growth and more employment, thereby reducing poverty. Danida’s ‘Synthesis of Evaluations on Support to Business Development’\(^\text{107}\) analysed 60 representative reports (out of a database of 240 reports) on business development. The Danida report finds that there tends to be a greater degree of success for support to financial institutions, especially those targeting SMEs and micro-enterprises, than for programs supporting the provision of non-financial BDS.

Cho and Honorati\(^\text{108}\) (2013) critically reviewed 37 impact evaluations on business training and entrepreneurship programs. They find that, overall, these programs have a positive and large impact on business knowledge and practice, in particular, for youth. They find that at a disaggregate level, providing a package of training and financing is more effective for promoting self-employment. They also find that financial support appears more effective for women, and that business training is more effective for existing entrepreneurs than other interventions to improve business performance.

McKenzie and Woodruff\(^\text{109}\) (2012) find that, over short time horizons, there are relatively modest impacts, as a result of training, on the survival rates of existing firms. However, they do find stronger evidence that training programs help prospective owners launch new businesses more quickly. Most of the studies found that existing firm owners do implement some of the practices taught in training, but that the magnitudes of these improvements, in practice, are often relatively modest. McKenzie and Woodruff claim that many evaluations suffer from low statistical power, because of too small time horizons. To date there is little evidence to help guide policymakers as to whether any impacts found come from improved productivity.

An independent evaluation of the Chilean government’s BDS program undertaken by Tang\(^\text{110}\) (2009) showed that the program has had little impact. However, Awasthi\(^\text{111}\) (2011) showed that a very large Enterprise Development Program in India had a strong effect on sales and profitability, with differences between the treatment and control group that were statistically valid.

**Conclusions & Further Research:** The evidence suggests that non-financial BDS may have some benefits in terms of promoting entrepreneurship and the accumulation of knowledge. However, the evidence shows that the provision of BDS needs to be accompanied by access to finance. More research on whether the targeting of transformative enterprises would make a difference to these results would be useful. In the section on instruments, there is evidence that the provision of matching grants to exporters (who are likely to be transformative) does have positive impact compared to the control group.
3.4.5 Productivity & Competitiveness

Sida’s synthesis evaluation of 10 programs to support innovation systems and clusters shows that they were able to increase the capacity for research, and the transfer of knowledge, through clusters. However, the evaluators noted the lack of evidence to measure outcomes and impacts in many of the programs.

Danida’s synthesis evaluation of support to business development finds that interventions supporting supplier and producer enterprises, which are organised in clusters or value chains, have a systemic impact on the stakeholders and actors operating in those clusters or value chains. However, it should be noted that there are only a few evaluations of the long-term impact and sustainability of these interventions.

Ketels (2013) summarises the current debate on cluster policy and finds an increasing consensus that the presence of clusters enhances economic outcomes. On the question of whether this increase is due to the cluster policies actually implemented, evidence shows the significant impact of both types of cluster policy/intervention – such as government efforts to create agglomeration artificially, as well as government efforts to use existing agglomerations to deliver economic policies or upgrade a region’s competitiveness more effectively.

Another important instrument to improve productivity and competitiveness is technical assistance in value chain development. A systematic review by the Ministry of Foreign Affairs Netherlands reviewed 38 studies (18 sub-Saharan Africa, 15 Asia, 3 Latin America and the Caribbean, 2 Worldwide). Although, they found a positive net impact of value chain development interventions on food security, the impact evaluations studied did not provide any evidence that value-chain development specifically benefited vulnerable people. This finding is supported by evidence from other reviews showing that efforts to include smallholders in high-end export markets often fail.

Conclusions & Further Research: The evidence points to programs aimed at improving productivity and competitiveness, involving innovation systems, clusters and value chain interventions, have a beneficial impact in transferring knowledge and benefitting participants. However, systematic evidence of outcomes and impacts is scarce. Therefore, it is not possible to arrive at the cost benefit ratio of such interventions. This is an area worthy of further research.

3.5 Conclusions & Recommendation

The evidence that private investment and private sector led productivity growth are causal factors in delivering faster, sustained growth is very strong. However, whilst these factors are necessary, they appear not to be sufficient to create jobs and deliver inclusive growth. A range of more direct
interventions, including industrial policy, the promotion of entrepreneurship and investment, and the improvement of productivity and competitiveness, may be necessary alongside them. The need for these interventions, however, is contested as evidence that they work is patchy. The greatest gap in research is the lack of understanding of how to create productive jobs.

There is good evidence that policies to improve the investment climate and human capital boost growth. However, identifying the priorities, and the correct sequencing of reforms, remains a challenge which calls for more contextual research that takes account not only of what is likely to deliver the highest impacts, but also the feasibility and timescales of implementation. More research is needed also to establish the pre-conditions under which specific reforms are likely to deliver results and the complementarity between reforms: small, individual reforms appear to deliver little impact.

Support functions that help to secure property rights, improve the functioning of labour markets, and develop innovation and productivity systems, have also proved to deliver results. However, they too need to adopt systematic approaches. The evidence in support of industrial policies is weak and this perpetuates the debate as to their use. More evidence is needed of the types of industrial policies that work, including addressing regional disparities, taking account of the varying contexts in which they may be applied.

The evidence in favour of providing support for entrepreneurship and investment in MSMEs suggests that providing non-financial BDS results in modest gains which will be strengthened if dovetailed with access to finance. There is a need to improve the identification of transformative enterprises and see what effect BDS may have on them. Cluster and value chain development also deliver modest results and they may not always benefit the poor and vulnerable.

The M4P approach has the potential to address many of the weaknesses of traditional PSD programs by addressing the underlying causes rather than symptoms of market failures and delivering systemic, sustainable impacts. The approach however would benefit from a better definition of what constitutes systemic change, and through more rigorous evaluation of programs. Like all PSD programs, evaluations of M4P programs are problematic, but the problems can be overcome.

In CAEs, a combination of restoring macro stability, building infrastructure to create employment (and reduce an important growth constraint), promoting entrepreneurship and improving the functioning of value chains that matter for the poor, is effective. In transition economies, it is important to build the institutions of a market economy and to privatise state owned enterprises to reduce state monopolies and introduce a hard budget constraint taking account of adjustment costs.

It is recommended that, in carrying out its evaluation of its market development portfolio, as applied to all the areas covered in this pre-study, Sida examine:

i) the extent to which the Sida portfolio accords with the ToCs for PSD, FSD and trade and the balance of its investment across their constituent results chains;

ii) whether results strategies have been informed by a diagnostic using the indicators set out for each area; the country portfolios use of a systems approach; and the use of instruments informed by their strengths and weaknesses.

iii) assess how far the design of projects and, especially, the development of ToCs, logic models and M&E systems, have been informed by the evidence presented.

iv) whether programs in special environments are adapted to their context.

In addition, we recommend that Sida focus its evaluation on the balance between investment climate reforms, the development of support functions and industrial policy and two key areas that are likely to figure prominently in its results strategies in future:
• **Job Creation**: Examine its PSD portfolio to assess its impact on job creation focusing on the effectiveness of investment climate interventions, the role played by types of enterprise (survival vs. transformative), size of business (MSE, SMEs, large) and investment in different types of industry in creating informal and formal employment in the private sector.

• **M4P**: Commissioning a rigorous evaluation of M4P programs in its portfolio and selected programs financed by others that examines the counterfactual, takes account of displacement effects and assesses attribution. The evaluation should aim to shed light on the conditions under which facilitation is likely to work and what may be needed to overcome barriers to change caused by risk aversion and vested interest.

---


20 *Promoting Pro-Poor Growth – Policy Guidance for Donors,* Published by OECD’s DAC, 2007.


22 *The Global Competitiveness Reports* are published annually by the World Economic Forum.


26 GCR 2008-2009, chapter 1.2.

27 Critics of industrial policy argued that there was no need for industrial policy of any type and therefore no need to intervene in markets or at the level of the firm. The Private Sector In Development: entrepreneurship, Regulation and Competitive Disciplines Klein M and Hadjimichael b, World Bank, 2003

28 Industrial Policy and Development, Mario Cimoli, Giovanni Dosi and Joseph E. Stiglitz, OUP, 2009

29 J. Schumpeter The Theory of Economic Development: An inquiry into profits, capital, credit, interest and the business cycle) 1911


32 Entrepreneurship and structural economic transformation, Gries, Thomas; Naudé, Wim, UNU-WIDER, 2008

33 Thurik, R. Entrepreneurship, Economic Growth and Policy in Emerging Economies, UN-WIDER


38 The Divide between Subsistence and Transformational Entrepreneurship Antoinette Schoar, MIT & NBER, 2010

39 Poor Economics, Banerjee A and Duflo E, Public Affairs , 2011


51 For example, see the World Bank’s MILES Framework.
54 web.worldbank.org › Topics › Social Protection & ... › Labor Markets
56 More and Better Jobs In South Asia. World Bank, 20XX
57 From Hindu Growth to Productivity Surge: The Mystery of the Indian Growth Transition, Rodrik D & Subramanain A, IMF, 2004
60 Pro-Poor Growth in the 1990s: Operationalizing Pro-Poor Growth Research Program, World Bank, 2005.
62 The Enigmas of TFP in China: A meta-analysis
65 Why has Economic Growth been More Pro-Poor in some Indian States than others. Datt G & Ravallion M, 2001.
68 Competition & Poverty Reduction: Background Note by OECD for Roundtable on Cartels & the Poor, 2013
71 World Bank, Global Economic Prospects and the Developing Countries, pp. 85-86 (2003),
73 Competition and Innovation: an Inverted-U Relationship. Aghion P et al. 2005
74 Commodity Market Review, 2007-2008, FAO.
75 Competition Policy Enforcement Experiences from Developing Countries and Implications, Sengupta R & Dube C, CUTS, 2008.
78 Aid for Trade in Lesotho: ComMark’s Lesotho Textiles and Apparel Program, ODI, 2009;
79 www.katalyst .com.bd/case studies
83 DFID Sierra Leone: Private Sector Development Strategy Program Diagnostic Report August 2008
84 PSD In Conflict-Affected Environments: A Resource Kit for Practitioners, DCED 2010.
85 Literature review of what we know about promoting inclusive growth in Conflict-Affected Environments (CAE), Jonathan Di John and Ignacio Fiestas, DFID, 2010
86 Transition reports setting out the indicators are published annually by the EBRD.
87 Reforms and growth in transition: re-examining the evidence, Elisabetta Falcetti, Tatiana Lysenko and Peter Sanfey, 2005
88 http://www.enterprise-development.org/page/framework-evidence
89 *Macroeconomic Policy and the Distribution of Growth Rates, Sirinameetham, V & Temple J, 2006, C.E.P.R.
90 Pro-Poor Growth: How important is macro stability, Lopez H, World Bank 2005
91 Growth in Regions. Gennaioli N, I La Porta R, Lopez De Silanes F, Shleifer A March 2013
96 Aboal D, Noya N, Rius A (2012) A systematic review on the evidence of the impact on investment rates of changes in the enforcement of contracts. London: EPPI-Centre,
100 Public Private Partnerships in Developing Countries, IOB Study, Ministry of Foreign Affairs of the Netherland, April 2003.
4 Financial Systems Development (FSD)

4.1 The Theory of Change

The proposition that the financial system is crucial for economic development is derived from the five crucial roles that it plays in enabling economic growth: i) mobilizing savings; ii) allocating resources; iii) enabling the trading of goods and services through lending and payment services; iv) monitoring managers and exerting corporate governance; and v) enabling the trading or hedging of risk\textsuperscript{113}.

In the past, development economists differed in their views on whether the development of the financial system was a cause of economic growth, or a result of it. Over the last decade, researchers have been able to test for the direction of causality and establish that FSD leads to growth and not the other way round. There is now a very persuasive set of studies, using cross-country data sets, which show a robust relationship between FSD and growth. Moreover, the studies show that financial deepening reduces poverty\textsuperscript{114}.

These findings have spurred the development community to assess what policies are needed for FSD, and the outcomes that are needed to maximise the financial systems impact on growth and poverty reduction. Drawing on the joint World Bank, IMF Financial Sector Assessment Program (FSAP) assessment, and the findings of other studies, the World Bank’s Making Finance Work for Africa\textsuperscript{115} organised what is needed into three strands: stability, especially macro stability; certainty, focusing on contract enforcement; and transparency of policies and commercial practices.

In terms of outcomes needed for FSD to maximise its impact on growth and poverty reduction, the literature focuses on three aspects:

- Financial deepening - measures the extent to which the financial sector is providing credit to the private sector, enabling businesses to invest and consumers to fund purchases;
- Long term finance - enables firms to raise equity and to borrow long term to fund investment projects that take time to generate returns, and to enable households to afford housing;
- Financial Inclusion - ensures that those who are often excluded (e.g. SMEs, farmers, the poor) have access to one or more financial services.

Using the market systems approach, the financial system is depicted in Figure 9 below. The main constituents of the system are:

- **Rules**: Policies and institutions, with respect to the financial system itself, and commercial laws and their enforcement, form the Rules of the game that govern the system.
- **Support Functions**: The infrastructure of the financial system (e.g. payment systems, registries), institutions that are involved in providing information (e.g. financial surveys, credit information bureaus, research & product development), and related markets for providing the skills and services (e.g. financial reporting, corporate governance), form the Support Functions.
- **Core Market**: The core market is made up of individuals, households and businesses on the demand side, and banks, micro finance institutions, and other non-bank financial institutions which make up the supply side.
Using the literature, Figure 10 below sets out the theory of change for FSD.
4.2 What Works for FSD

We review below the extent to which the literature supports the contention that a stable, deep, and inclusive financial sector leads to sustained economic growth and poverty reduction.

4.2.1 Stability

The evidence in support of the importance of stability derives from the consequences of bank failures and the periodic financial crises that affected Latin America in the 1980s, Mexico in 1994-1995, Asia in 1997-98 and much of the world in 2008.

The effect of bank failure in reducing economic activity became clear very early on in the development of the modern financial systems. It led to bank supervision becoming a key role of central banks. The Asian financial crisis showed that such a crisis could reverse years of progress on economic growth and poverty reduction. In an internationally integrated financial system, it revealed that the contagion could spread to other countries from Thailand and, eventually, affecting the rest of the world.

The recent global financial crisis has also provided evidence of such a crisis causing economic contraction. CGAP and the World Bank (2010) shows that, across 142 economies, the volume of deposits and loans shrank, with a median decrease of 12 per cent in the ratio of deposit value to gross domestic product (GDP), and a median decrease of 15 per cent in the ratio of value of loans to
GDP. Nearly 60 per cent of the economies experienced a contraction in real per capita income in 2009 as a result of this reversal of financial deepening.

To ensure stability, what matters is a combination of macro stability, and sound micro prudential regulation and supervision of financial institutions. However, micro prudential regulation, in the form of international standards and codes promulgated by the Basel Committee on Banking Supervision, can require banks to increase their capital reserves and hence reduce their lending. Evidence from Brazil and India gives credence to this argument119. There is a need to balance stability with deepening through better contingency planning and resolution mechanisms. Learning the lessons that have emerged from the recent crisis, the IMF has now added a risk matrix, assessing the standards of supervision and regulation, as well as improved its analytical tool kit of assessing the links between the financial sector and the broader economy, as part of FSAPs. They now also examine the contingency plans in place to deal with a bank failure or a full-blown financial crisis120.

Conclusions & Further Research: Even though it is usually presented in the form of the negative consequences of instability, evidence in support of the importance of stability to deliver growth and poverty reduction is strong. However, care is needed to ensure stability does not come at the expense of deepening. For instance, donors might wish to support the Basel Committee in developing standards more suited to the needs of developing countries and the IMF in its approach to dealing with bank failures. This is something Sida could investigate further in its full evaluation.

4.2.2 Deepening

Over the years, a comprehensive body of literature has built up which shows that financial deepening, measured as the ratio between private credit/GDP, is a causal factor in economic growth and reducing inequality and poverty. Much of this literature uses sophisticated economic techniques to look beyond correlation (i.e. difference in difference) and to test for the direction of causality (e.g. Granger tests), and so can be considered to provide strong evidence. Cross-country papers that conclude financial depth contributes to growth include; Levine, Loayza, and Beck (1999)121, Levine et. al. (2000)122, Honohan (2004)123, Gerard and Honohan (2003)124, and Honohan and Beck (2007)125.

In Finance, Inequality and Poverty, Beck, Demirgüç-Kunt, and Levine (2004)126 find that financial development causes faster economic growth and reduces income inequality by disproportionately boosting the incomes of the poor. These results are robust after controlling for other country characteristics and potential reverse causality. Beck, Demirgüç-Kunt, and Levine (2007)127 show that almost 30 per cent of the variation across countries in rates of poverty reduction are attributable to cross-country variation in financial development.

There are also interesting studies that show the direct impact of FSD on poverty, especially in regards to the correlation between:

- Access to finance and child labour, indicating that in the absence of developed financial markets, households appear to resort to child labour to cope with income variability (Deheejia and Gatti, 2002;128 Beegle, Deheejia and Gatti, 2003129).
- Access to finance and hunger, indicating that financial sector development significantly reduces undernourishment (Claessens and Feijen, 2006).130

These effects have been confirmed by meta studies. Multiple studies have documented a robust negative relationship at the country level between indicators of financial depth and the level of income inequality as measured by the Gini coefficient (CGAP, 2012)132. And they seem to be robust to country contexts. For example, in the transition economies, SECO (2011)133 finds considerable positive effect of financial sector development on economic growth in the long term because a well-functioning financial sector is essential for private sector-led growth. Sackey and Nkrumah (2012)134
also find statistically significant positive relationship between the financial sector development and economic growth in Ghana.

**Conclusions & Further Research:** The evidence in support of financial deepening as being a causal factor in growth and poverty reduction is conclusive. There is a need for some more research to examine how credit to the private sector results in these impacts, especially the impact it has on poverty.

### 4.2.3 Higher saving as % of GDP

In regards to this issue there are two questions to consider; i) whether higher national savings results in growth; and ii) whether savings are the causal factor for growth, or is the relationship the other way round.

In theory, one of the main functions of the financial system should be to raise savings to enable the growth of investment. Empirical evidence in support of this contention, however, is not clear-cut. There are studies that support the theory. For instance, Kriechhaus (2002)\(^{135}\), in a study of 32 countries, notes that a higher level of national savings led to higher investment and consequently caused higher economic growth. Conversely, Baharumshah et al. (2003)\(^{136}\) investigated the growth rate of savings behaviour in five Asian countries: Singapore, South Korea, Malaysia, Thailand, and the Philippines. Based on time series data from 1960-1997, the authors found that the growth rate of savings did not cause economic growth in the countries, except for Singapore.

Many studies find that savings rise as a result of growth, rather than being the causal factor. Although some find that the relationship is bi-directional. Saltz (1999)\(^{137}\) investigated the direction of causality in 17 developing countries, and found that, for nine countries, the causality was from economic growth rate to growth rate of savings. For only two countries was the direction of causality reversed. Similarly, Mohan (2006)\(^{138}\) states that empirical results suggest that economic growth caused the increase in savings in 13 countries. The opposite results prevailed in only two countries. In five countries, the causation was bi-directional. Again, Odhiambo (2009)\(^{139}\) finds a bi-directional causality between savings and economic growth to prevail in the short run in South Africa, and a distinct unidirectional causal flow from economic growth to savings to dominate in the long run.

**Conclusions & Further Research:** The evidence presented is not conclusive as to whether higher national savings do lead to higher growth. Further, the evidence does suggest that savings are not a causal factor in growth. These findings need to be interpreted carefully. Whilst savings may not be a causal factor in growth, because growth may start from other sources, they nevertheless do play a role. And, even if that role is small at a macro level, at the micro level of households and enterprises, they play a crucial role in smoothing consumption, financing the acquisition of consumer durables and housing, and play some role also in financing business; at least for a proportion of the poor.

### 4.2.4 Inclusion

The theoretical case for financial inclusion is based on the potential loss of contribution to growth, and poverty reduction, from those who are denied access to finance (e.g. SMEs and the poor). This is contradicted by the assertion that, so long as resources are allocated to their most productive use, whether some types of firms or households do not have access is irrelevant for aggregate welfare. Very often, large, more capable businesses and the rich are able to generate wealth better than small entrepreneurs.

At the macro level, the evidence is not clear-cut in support of either side but, if anything, tends to support the contention that inclusion does not matter. The best that those in favour of inclusion can do is to show that financial depth is broadly correlated with access and that financial depth does reduce inequality and poverty. This is what led CGAP\(^{140}\) (2012) to conclude that most cross-country
evidence relates to the benefits of financial depth, rather than to broad financial inclusion in terms of growth, inequality, and poverty.

Micro evidence in support of inclusion is also mixed. There is a very large volume of literature that shows that SMEs are denied access to finance, and that this hampers their ability to grow (IFC, McKinsey 2010). For example, the Ayyagari, Demirgüç-Kunt, and Maksimovic (2006) and Beck and Demirguc-Kunt (2006) papers both find this. Ayyagari, Demirgüç-Kunt, and Maksimovic (2007) find that lifting the access to finance constraint also increases innovation. Finance for All concludes that increased access to finance to SMEs leads to the entry of new firms, enterprise growth, innovation, and risk reduction.

However, the evidence on microfinance is much less conclusive. In the past, there was a general belief that microfinance (including micro credit, micro savings, and micro insurance) was a powerful instrument enabling the poor to smooth their consumption and build up human capital and material assets that allowed them to grow their enterprises and insure their risks. There was general support for both microcredit and micro savings. Sida’s Guidelines on Microfinance concluded that access to finance, both savings and credit, helped to provide the lump sums required to invest in basic household assets such as land, housing, health and education. It noted that studies from different parts of the world confirmed the role of microfinance in contributing to the empowerment of poor people in general, as well as empowering particularly disadvantaged groups, including women. The literature it reviewed also showed that those micro-entreprises which borrow tend to increase their net returns, thus improving the income for the entrepreneur and her/his family. Causality between access to credit and business growth was not proven but a strong correlation was evident.

However, over the past decade, evidence has mounted that questions the universal applicability of the benefits of microfinance and, even when it is effective, the scale of transformation in people’s lives that it brings about (Karlan and Zinman, 2010; and CGAP, FAI, IPA paper, 2011). Several studies using RCTs showed that, for the large part, credit was used mainly for consumption purposes with less than a third of microfinance customers using it to invest in the growth of their businesses. For the small proportion that used the credit to start up new businesses, consumption fell as they cut back on expenditure to finance their business. The effect on those who had established businesses already was rather modest. In some cases, micro-credit was found to make some people worse off because income from their business did not grow sufficiently to pay the extra interest on borrowing (Stewart et al 2010). There was no impact on measures of health, education, or in empowering women in household decision-making.

This is not to say, however, that the effect of reducing the cash constraint is not strong. McKenzie and Woodruff (2008) report the results of a randomized experiment that gave cash and in-kind grants to small retail firms in Mexico, providing an exogenous shock to capital. They found that the capital generated large increases in profits, with the effects concentrated on firms that were more financially constrained. The estimated return to capital was at least 20 to 33 per cent per month, three to five times higher than market interest rates. Other studies also report high marginal returns to capital. However, as Banerjee and Duflo (2011) show, the immediately high returns do not last long: the average profits earned from the business increase modestly and then flatten out.

Banerjee and Duflo (2011) point out that microfinance, by its nature, cannot be counted upon to facilitate large businesses to be created and financed. If the objective is create wealth and jobs, the evidence points to the need to lend to transformative entrepreneurs, those who have the attitude and ability to grow their business and create jobs for others. In doing so, the real gap in credit that matters is between the maximum amount of money that micro credit provides, and the minimum that the banks are willing to lend. What is needed is to up-scale micro finance and downscale bank lending.
According to Stewart et al. (2010), the theoretical basis for micro saving is stronger, as it does not expose the poor to greater risk. Dupas and Robinson (2011) found that, despite large withdrawal fees, a substantial share of market women using savings accounts were able to save more, and increased their productive investment and private expenditures. However, overall, the evidence on micro saving delivering impact was very limited. Both microcredit and micro-savings have a generally positive impact on the health of poor people, and on their food security and nutrition, although the effect on the latter is not observed across the board.

There is some evidence to suggest that other forms of inclusion also matter. A strong case can be put forward on theoretical grounds that micro insurance can help to overcome the risk aversion that prevents the poor from adopting new agricultural methods or developing new enterprises. However, the little evidence that there is from randomized evaluations would suggest that the poor do not really value micro insurance.

The evidence that access to bank accounts makes a difference to outcomes for the poor is stronger. For example, research in India found that a one per cent increase in the number of rural bank branches led to a drop in poverty of 0.34 per cent and an increase in output of 0.55 per cent, mainly because access to finance made it easier for poor people to diversify out of agriculture. Beck et al. (2007) study banking sector penetration across 99 countries and conclude that branch and ATM density figures are highly correlated with aggregate loan and deposit accounts per population, therefore giving access and promoting deepening.

The recent development of other delivery channels enabled by information, communications technology (ICT), such as mobile banking or e-banking, can also reduce the cost of access and significantly improve the use of financial services. In relation to outcomes of ICT, the evidence focuses on the benefits of easier access and convenience of usage. For example, the Financial Inclusion Network & Operations Paytech Ltd. (FINO Paytech Ltd.), which uses bio-metrics, has so far reached 47 million clients in India. Payment services, such as M-PESA, help to reduce the cost of transaction services benefitting the poor and the less poor alike. They help people using informal sources of finance to become formally banked. FAO (2010) finds that ICT based services make it easier for women to gain access to capital by reducing the need for women to travel long distances, allowing them to sidestep social constraints that restrict the areas women can visit or the people with whom they can interact.

**Conclusions & Further Research:** In contrast to the compelling evidence in support of financial deepening’s contribution to growth and poverty reduction, macro level evidence in support of inclusion is weak. However, this may be due to difficulties in measurement. CGAP state that our lack of knowledge about the macro-level effects of financial inclusion stems, in part, from the challenges associated with measuring it, on a consistent basis, both across countries and over time based on surveys of users and potential users of those services. Demirgüç-Kunt and Klapper (2012) also find that there are huge data gaps, as well as a lack of clear understanding about the specific ways in which financial inclusion promotes income equality and reduces poverty. This is an area where much more research is needed and as such should be studied further in the full Sida evaluation.

Micro level evidence in support of access to finance for SMEs is strong. But the micro level evidence on microfinance suggests that it is capable of benefitting a significant but small proportion of users and will deliver only modest gains to them. However, this may be because the level of credit, and the savings products provided, are limited and, hence, are incapable of delivering large scale impacts.

In addition, there is some evidence that traditional practices in microfinance, such as group lending with weekly repayments, may undermine its utility to users. Such practices, increase transaction costs and, thus, interest rates, without reducing loan default, and thereby increasing its profitability for microfinance institutions. Organising weekly collections and groups increases the cost of lending.
Relaxing these constraints could help to reduce the cost of borrowing making micro credit more attractive. Field and Pande\textsuperscript{164} (2008) found that relaxing the discipline of weekly payment does not increase the rate of default. Gine and Karlan (2006)\textsuperscript{165} concluded that individual, as opposed to group lending, does not increase default rates either.

These findings suggest that there is a need for a great deal of further research to examine who is likely to benefit from microfinance, what products are needed, and how traditional practices could be altered to make the product more attractive without comprising profitability.

4.2.5 Indicators

Based on the evidence of what works, the crucial indicators for FSD are shown in Table 3. To use the indicators as a diagnostic tool, the performance of the country in question needs to be compared with peers in the region and with countries at similar levels of economic development.

<table>
<thead>
<tr>
<th>Table 3: FSD Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stability</strong></td>
</tr>
<tr>
<td>Quality of prudential</td>
</tr>
<tr>
<td>regulation &amp; supervision.</td>
</tr>
<tr>
<td>Deposit insurance &amp; contingency plans for handling individual bank failures and systemic risks.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Profitability of banks, financial institutions.</strong></td>
</tr>
<tr>
<td>Liquidity and capital adequacy ratios.</td>
</tr>
<tr>
<td><strong>Risks to financial stability reported in FSAPs.</strong></td>
</tr>
</tbody>
</table>
4.2.6 Special Environments

In CAEs, there is an overwhelming case for re-establishing a functioning financial sector as soon as possible. Delivering the peace dividend of sustained growth in economic activity, and the improvement in opportunities to improve livelihoods, requires a functioning financial sector. This is why the literature review of promoting inclusive growth in CAE’s, commissioned by DFID, advocates that the financial sector be given special attention by donors.\(^{166}\)

However, the review cautions against focusing solely on the provision of microfinance to countries, as donors did originally. Any threat to financial stability could have serious implications given the fragility of public confidence in nascent financial systems, as proven by the example of Afghanistan where a run on a bank threatened the viability of the whole baking industry for a time. In addition, it points out that the small loans provided by microfinance are not likely to create the jobs that the workforce need. Microfinance provides social protection rather than serving as an engine of growth. Hence, working on the financial deepening agenda is vital.

In the transition economies, assistance to the financial sector was aimed at contributing to economic transition and, therefore, the sector adopted market based principles. As a result, the specific objectives of intervention were three fold:

i) to restore the viability of the financial system to overcome the financial blockage that resulted from the large numbers of firms that were found to be unviable under a harder budget constraint imposed by the transition to a market economy, and to enable the banks to start to lend to the newly formed and privatised enterprises;

ii) building the institutional architecture that the financial sector needed to operate in a market economy. That meant strengthening the central bank and developing all the support functions set out below such as developing commercial laws to define creditor rights, bankruptcy laws and insolvency regimes, and establishing credit bureaus to enable the banks to assess credit worthiness; and

iii) transfer the state owned banks to private ownership.

The EBRD’s record in achieving these objectives was admirable. It provided credit lines to reduce financial blockage and restore the ability of the banks to lend; and technical assistance to develop financial infrastructure and transaction support for privatisation. A synthesis evaluation of EBRD’s support to the financial sector confirms this view.\(^{167}\)

4.3 Results Frameworks

In this section, we set out the results frameworks used by donors focusing on theories of change and logical frameworks (log frame).
The results frameworks used by other donors to gauge their interventions depend upon the scope and nature of their interventions. The scope of donor programs varies tremendously. Some limit their program interventions to delivering particular outputs, such as addressing parts of rules and support functions, or, more typically, improving the delivery of particular financial services such as microfinance. Figure 11 below, taken from a zero draft of a financial sector model for deepening and inclusion developed by a donor, provides a useful illustration of what a program that uses a systems approach may look like.

**Figure 11: Illustrative ToC for Financial Deepening & Inclusion**

With access as the main desired outcome, donors such as DFID, develop a ToC of the type illustrated by the two figures below:
Sustainable improvements in the livelihoods of poor people in rural areas

The financial sector delivers a wider range of financial services to more people and businesses in rural Zambia.

Large enterprises better able to finance expansion

Number, range and size of SMEs able to grow, particularly agribusinesses

More value added along agricultural value chains

Microenterprises better able to take advantage of economic opportunities

Households can manage their financial portfolios more efficiently

Sustained economic growth

Sources of income for smallholders more diversified and reliable

Households better able to withstand shocks and to finance lifecycle events

Sustainable improvements in the livelihoods of poor people in rural areas

---

Note: The dashed lines have no substantive significance — they are there to make it easier to distinguish the different pathways.

---

Figure 13: Illustrative Impact pathways from Outcome to Impact
4.4 Results Chains

In this section, we set out the main results chains used to bring about stability, deepening, and inclusion, and examine the extent of evidence in support of them.

4.4.1 Policies & Institutions for Stability, Deepening and Inclusion

An illustrative results chain for policy and institutional reforms that would contribute to increasing stability, deepening, and inclusion is set out in Figure 14 below.

![Figure 14: Results Chain for Policies & Institutions](image)

Macro stability: Many studies have found a strong correlation between macro stability, brought about by sound monetary and fiscal policies, and faster more sustained growth and poverty reduction\(^{168}\). This is because macroeconomic instability tends to be accompanied by high rates of inflation and large changes in the exchange rate, which are mostly associated with higher nominal interest rates and shorter loan maturities, making access to credit for enterprises more costly. Research has confirmed that macroeconomic instability is an important obstacle to access to finance (Boyd et al. (2001)\(^{169}\); Honohan (2003)\(^{170}\)), particularly on the decision to make long term loans (Sorge and Zhang (2007)\(^{171}\)). Moreover, the fear of macroeconomic and financial instability also inhibits financial innovation that helps to promote access to credit (Demirgüç-Kunt et al. (2008)\(^{172}\)). Beck et al. (2005)\(^{173}\) find that macroeconomic issues (captured by high interest rates and lack of money in the banking system) significantly reduce firm growth rates and that these effects remain significant even after controlling for the level of financial development in a given country.

The Role of the Public Sector: In many developing countries, the public sector is an active player in financial markets and is also the main borrower from the banking sector. Among others, financing of the fiscal deficit, state-owned enterprises, and government infrastructure projects tend to enjoy preferential access to bank credit. As a result, there is public sector borrowing that crowds out credit from financial institutions to the private sector, reducing the incentives for the private sector to participate in financial markets because of higher interest rates (Demirgüç-Kunt et al. (2008)\(^{174}\)).

Effective Financial Sector Regulation and Supervision: Evidence on regulatory reforms and better banking supervision is also strong. Beck, Demirguc-Kunt and Martinez Peria (2007)\(^{175}\) used information from 209 banks in 62 countries and found that more competitive banking systems, brought about by liberalisation of licensing regulations to open up the banking system to foreign and
domestic private participation, is associated with financial deepening. Beck et al (2005)\textsuperscript{176}, Sackey and Nkrumah\textsuperscript{177} (2012), and SECO (2011)\textsuperscript{178} also find that improved banking reforms, monetary management, and long term structural improvements at the macro level leads to financial sector deepening and increased bank credit to the private sector.

Based on a synthesis study of three evaluations of financial sector reforms financed by the World Bank, carried out by the Independent Evaluation Group (IEG), evidence suggests positive changes in governance, regulatory frameworks, and market structure and efficiency in recipient countries. However, the evaluation found that, although the financial sector was deeper in countries that received funds, it was not significantly more than those that did not. For instance, credit to private sector (% of GDP) grew at an annual rate of 0.4% in borrowing countries, less than it did for non-borrowing countries (1.7% per annum). So better governance and supervision are necessary conditions for stability and deepening, but are not solely sufficient.

Commercial Law Development and Enforcement of Contract: The development of commercial laws and their enforcement plays a vital role in determining the extent of creditor rights and enforcing liens (mortgages) over property and, hence, on the willingness of the banks to lend. It also affects the growth of firms and so affects the demand for loans. There is a large body of evidence that demonstrates that commercial law reform and better corporate governance contributes to financial deepening. Levine, Loayza, and Beck (1999)\textsuperscript{179}, Knack and Keefer\textsuperscript{180} (1995), Dollar and Kraay\textsuperscript{181} (2003), and Rodrik et al.\textsuperscript{182} (2004) have all written papers that find evidence that shows this to be the case.

Ineffective bankruptcy laws: in a recent paper, Cirmizi et al. (2010)\textsuperscript{183} find that there is a consensus in the literature that effective bankruptcy laws, that allow viable firms to reorganize and unviable ones to liquidate or be sold, are a necessary condition for economic growth. A recent study by Visaria\textsuperscript{184} (2009) on the impact of improved insolvency regimes found that the introduction of Debt Recovery Tribunals in India reduced delinquency in loan repayment rates by between 3 and 11 per cent.

Poor enforcement of contracts: problems with contract enforcement can make lending especially difficult in developing countries (Beck et al.\textsuperscript{185} (2006)). Cumbersome contract enforcement deters potential lenders and investors due to uncertainty and high risk. A good court system enables the banks to exercise their rights over collateral pledged against the borrowing by firms ensuring that their contractual rights would be honoured in the face of contract breach, allowing them to commit necessary investments and to expand without worrying about contract reneging (Xu\textsuperscript{186} (2010)). This is confirmed by Beck and Levine\textsuperscript{187} (2003), who find that an effective legal environment facilitates firms’ access to finance. There is also extensive evidence that well-functioning courts and improved contract enforcement is correlated to the growth of formal firms (Dabla-Norris and Inchauste\textsuperscript{188} 2007; Ojah et al.\textsuperscript{189}, 2010; Johnson et al.\textsuperscript{190} (2002); and Aterido et al.\textsuperscript{191}, 2007). However, Beck et al.\textsuperscript{192} (2005) find that, although there is a negative relationship between the reported “general legal system” constraint and firm growth, not all specific problems of the legal system are equally relevant. For example, the quickness of courts does not affect firm growth significantly.
Case Study 3: FIRST Financial sector Reform and Strengthening

FIRST is a multi-donor program with 9 donors and partners, including Sida. It provides technical assistance to help developing countries improve the functioning of their financial systems with a particular focus on implementing the recommendations of FSAPs. In its first phase, DFID contracted out its management to a private sector service provider. In its current phase, it is run by a project management unit (PMU) based at the World Bank.

The independent mid-term review of Phase II was generally favourable showing that the earlier slow-down in commitments and disbursements that took place when the World Bank took over the management of the program has now been remedied. Demand for FIRST’s service has never been higher and it originates in both the less developed and least developed countries. Africa accounts for a sizable percentage of disbursements (41%); though that is slightly lower than the target (50%). Demand for crisis response programs was particularly high of late.

However, the evaluation was concerned mainly with the output rather than the outcome and impact of the assistance that the program provides. It did find that progress on financial sector indicators was faster in countries receiving FIRST assistance than those without but did not show how that was attributed to the assistance provided by FIRST. The evidence that the assistance provided by the program leads to positive outcomes was based largely on the fact that it is responding to FSAPs which have already identified it as being important. That, however, does not provide proof that FIRST delivered outcomes and impacts that made it an attractive return to donor investment.

The FIRST Consultative Group (3rd Meeting) appears to be aware of this stating that FIRST should adopt a more systematic, programmatic approach implementing broader programs that deliver results. As a result, the original FIRST mission to provide small quick independent support to remedy financial sector vulnerabilities, the impacts of which were difficult to measure, has now been modified by the adoption of a more programmatic window for larger FSD programs. In conjunction with this change, it also recommended that analysis of potential results should be incorporated into all FIRST projects. This will improve FRICH’s ability to monitor and evaluate program outcomes and impacts.

The review also found that legal reform projects were found to be highly successful but there was a need for better dialogue. This is a recognition of the need to take better account of potential resistance to change which can block the implementation of reforms designed though technical assistance.

In addition, in should be noted that the program was originally conceived as a mechanism to respond to the needs of the key stakeholders in the developing countries; thereby it was an independent facility that helped developing country institutions respond to the findings of FSAPs. There is a danger that being housed in the World Bank jeopardises that positioning, so that the program is regarded as a World Bank instrument. The donors may wish to consider whether the current arrangement, whereby the donors have effectively set up a trust fund at the World Bank, should remain in place for the long term. Or whether an alternative institutional mechanism, such as forming an independent trust housed outside the Bank, may not serve its intended purpose of helping the developing countries source international expertise to serve their strategies and plans.

Conclusions & Further Research: There is strong evidence in support of better policies and institutions delivering financial stability and deepening. However, there is still a need for further research to establish how policies could be improved. One of the greatest areas of need is to
examine why, despite the growth of competitive markets, efficiency does not seem to improve. For example, the level of competition in the banking sectors of most African countries is now intense. Yet the spread between deposit rates and interest charged on loans has not fallen and, thus, continues to hamper financial deepening and inclusion.

4.4.2 Support Functions for Stability, Deepening & Inclusion

An illustrative results chain for support functions that would contribute to increasing stability, deepening and inclusion is set out in the figure below.

Many of the market failures that prevent financial deepening and inclusion can be traced back to problems with information and the ability to exercise liens over collateral. In their seminal paper, Stiglitz and Weiss\textsuperscript{193} (1981) traced back the unwillingness of banks to lend to small business, and the high interest rates they charge, to the lack of information on credit worthiness.

Credit bureaus: The development of credit bureaus and credit information systems is an attempt to reduce these informational asymmetries. Papers by Djankov et al.\textsuperscript{194} (2007), Brown et al.\textsuperscript{195} (2008) and Beck, Demirguc-Kunt and Martinez Peria\textsuperscript{196} (2008) found that credit bureaus promote credit. However, the first two papers also both find that information infrastructure only increases impacts on the availability of credit in countries that do not have existing functioning creditor rights. Sorge and Zhang\textsuperscript{197} (2007) use cross-country data to find that countries with better quality credit information (broader coverage of public and especially private registries) are characterised by a higher share of long-term debt as a proportion of total debt. Using firm-level survey data across 24 transition economies, Brown, Jappelli, and Pagano (2009)\textsuperscript{198} find a positive association between the quality of the credit information and the ease of external financing. Beck, Demirguc-Kunt and Martinez Peria\textsuperscript{199} (2008), however, also find that non-financial factors, such as the development infrastructure and the extent of media freedom, have similar outcomes. So, credit information needs to work with other factors.

Property rights and registries: in low and middle-income countries, between 70 per cent and 80 per cent of firms applying for a loan are required to pledge some form of collateral. Enterprises often find it difficult to meet these requirements because they lack sufficient assets to serve as collateral (Fleisig et al., 2006)\textsuperscript{200}. As a result, collateral requirements significantly constrain access to finance (Beck et al., 2005). One way to address this constraint is by better defining property rights (de Soto, 2000). Claessens\textsuperscript{201} (2006) finds that better protection of property rights increases the use of
external finance by small firms significantly more than by large firms, mainly because of more bank and equity finance. Consistently, Johnson et al. (2002) find that entrepreneurs in transition economies are more likely to reinvest their profits if they feel more secure about the protection of property rights in their countries.

There is recognition, however, that whereas there are many instances when secure titles to land have helped firms and individuals to access finance, by itself, land registration may not cause access to finance to improve. In a meta study of the evidence, USAID concludes that there is a need for related conditions to be in place, especially a developed financial sector, as well as capable, credit worthy entrepreneurs with good business plans. That does not mean that it is not desirable to improve land registration, but that it is not a magic bullet.

The use of property as collateral requires the use of collateral registries for recording liens over immovable assets. Evidence in support of the effectiveness of collateral registries is only now beginning to emerge and is generally positive. IFC (2010) undertook a recent survey of 33 countries worldwide (both those with modern collateral regimes and those with unreformed regimes). It found that modern registries help increase the volume of credit to firms. A group of selected countries with reformed, secured transaction systems with electronic registries averaged 158,736 loans secured with movable property per year (2000-2009), while a selected group of countries with non-electronic registries averaged just 3,106 such loans per year (2000-2009). Love et al. (2013) find that, across 73 countries using difference in difference techniques, the introduction of registries for movable assets is associated with an increase in the likelihood that firms can access credit; a rise in the share of the firm’s working capital and fixed assets financed by banks; and a reduction in the interest rates paid on loans.

**High transaction Costs and Credit Scoring:** Financial institutions (i.e. commercial banks) are sometimes reluctant to lend to small and medium firms because of the high transaction costs involved in the lending process and the high risk intrinsic to SME lending (Beck and De la Torre, 2007). This is because transaction costs can exceed the expected risk-adjusted returns, and financial institutions are not able to capture economies of scale when lending to SMEs (that request relatively small loans). But cost barriers can also stem from deficiencies in institutions and market infrastructure that make it expensive to gather information on debtors/projects, value assets appropriately, and monitor and enforce contracts (de la Torre et al., 2007).

As a result, new credit scoring techniques have been developed that use information provided by credit information bureaus. These are only now beginning to be used in more advanced financial systems such as Chile and Argentina. So it is not yet possible to measure outcomes. Other techniques such as psychometric tests and socio economic profiles are being employed to assess borrowers. These need to be evaluated further but offer promising ways of reducing transaction costs.

Lastly, better information on the needs of the poor, through FinScope and financial diaries, can help show the financial sector how to develop appropriate products. For instance, the FinScope survey of South Africa was instrumental in helping the FinMark Trust to engage with the banks to develop the Mzansi account which, at its peak, enabled 5 million new, low cost accounts to be opened.

**Conclusions & Further Research:** The evidence that Support functions contribute to financial deepening is strong. There are two major gaps in information that research could address: i) better tools for identifying worthwhile borrowers, especially new borrowers that have no credit history; and ii) surveys of the poor to establish what products they would use and really benefit from.
### 4.4.3 Long Term Finance

<table>
<thead>
<tr>
<th>Long term Finance</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA: Capital market development; infrastructure, training</td>
<td>Returns on savings increases</td>
<td>Stock markets contribute to growth</td>
<td>Increased, sustained growth</td>
</tr>
<tr>
<td>TA, guarantees: stock, bond issuance, collective investment schemes</td>
<td>Increase in contracted savings</td>
<td>Poor have access to insurance and pensions</td>
<td>Poverty reduction</td>
</tr>
<tr>
<td>TA, guarantees: research, product development, securitization</td>
<td>SMEs able to raise long term finance</td>
<td>Impact investors deliver financial &amp; social returns</td>
<td></td>
</tr>
<tr>
<td>TA: private equity, impact investment</td>
<td>More households have insurance, pensions</td>
<td>Impact investors develop businesses &amp; industries that matter for the poor</td>
<td></td>
</tr>
</tbody>
</table>

As noted above, the lack of long-term finance is mentioned frequently by entrepreneurs as a constraint to the growth of their businesses. The underlying cause of why long term finance is not available is the shortage of long-term deposits in the banking systems of most developing countries. The banks are in danger of a mismatch of time scales between assets (loans) and liabilities (deposits), if they lend long term holding only short-term deposits.

In addition, access to third party equity (beyond the entrepreneur and family and friends) is limited by the lack of development of stock markets. For businesses undertaking projects with long gestation periods, or who need to keep debt to equity ratios in check, this can represent a significant constraint.

**Stock Markets:** Many researchers initially found that the correlation between the growth of stock markets and economic development was weak. However, support of the role they play has been mounting. Demigurc-Kunt and Levine (1996)\(^{211}\) show that financial development is associated with not only an increase in the assets of the banking system, but also with the growth of the assets of non-bank financial institutions and stock market capitalization. Such financial development causes an increase in long term growth. At the firm level, as stock markets develop, contrary to the belief that the issuance of stocks would reduce debt to equity ratios, firms appear to increase the level of debt; confident that they can access equity if needed. This helps them to grow faster. Stock markets contribute to economic development through helping the banking system to raise capital and by encouraging firms to borrow more from the banks.

The evidence with respect to the causality between stock markets and growth is even less strong with many authors finding reverse, bi-directional, or no causality. Filer et al.\(^{212}\) (1999) find that there is a causal relationship between stock markets that are active and liquid in low income countries, but find no causality in countries where stock markets are under-developed and none in high income countries.

The ADB carried out a synthesis study\(^{213}\) of its support to stock market development in 5 Asian countries. It found that the assistance provided was relevant, but that it did not make a major impact on the volume of trade or liquidity of most markets and, hence, its contribution to economic growth was negligible. Assistance was only likely to have a major impact if it was accompanied by wider commercial law development to improve creditor rights. The ADB also needed to develop a more strategic approach to assistance in this field, sequencing the assistance to match local priorities shaped by the level of development of the financial system.
Pensions & Insurance: If anything, the evidence of a causal relationship between pensions and insurance markets and economic growth is even more flimsy than for stock markets, though there are good quality studies in support of both. The key role that they play in promoting growth is in increasing contracted savings and, hence, mobilising long-term savings that can be deployed for long term investment. For individuals and households in developing countries, they represent the best (if not only) social protection they are likely to receive.

However, in many countries, the state dominates both pensions and employment protection and, on the whole, state funded schemes perform poorly. Progress on the ground on pension reform is problematic. Where there are state institutions with statutory or de facto monopolies, it is difficult to persuade governments to liberalise markets and reform public institutions. Private pensions and the insurance market are very poorly developed. The World Bank has been advocating the development of both public and private pillars of pensions, and advocating for non-financial defined contribution (NDC) pension schemes. With the support of the Swedish Social Insurance Agency, the World Bank has taken stock of the experiences of such schemes, especially Sweden’s, which was one of the first. It concludes that they have proved resilient in coping with changing demographics and economic shocks such as the global financial crisis. For employees, they provide greater equity and flexibility with respect to retirement age. With some modifications, they could play a vital role in helping countries cope with ageing populations and increase the very low level of coverage of pensions in developing countries.

The World Bank, IMF, and the MDBs have all been involved in the development of insurance markets. These efforts have generally proved effective. A synthesis evaluation of support for insurance showed that, on the whole, programs had been able to achieve their objectives. However, as is the case with stock markets, the impact in terms of increasing the numbers of policies and premiums paid is limited.

Progress is being made rapidly in terms of increasing access to micro insurance, despite the apathy to it reported by Banerjee and Duflo. In 2007, the MicroInsurance Centre reported that there were 78 million micro insurance policies across the world. By 2012, there were over 160 million policies in India alone. The major stumbling blocks are regulations that do not take account of the different business models for micro as against conventional insurance, the lack of suitable distribution channels, poor ability to deliver products (e.g. health insurance in countries with poor health systems) and the lack of reinsurance.
Case Study 4: ARC Weather Insurance Fund

The African Risk Capacity (ARC) is a fund to insure African countries against drought and resultant famine. To create a risk pool for Africa, a method to assess risk is required as well as a financial strategy to manage that risk. The Africa RiskView is a tool developed to combine existing rainfall-based early warning models on agricultural drought in Africa, with data on vulnerable population to form a standardized approach for estimating food insecurity response costs across the continent. African governments can choose how much of the risk they wish to transfer to the fund and what proportion of the cost of the disaster the fund will pay out. These choices determine the premiums that they will need to pay. Donor support is required to build up the capital of the Fund before the paying of premiums makes it viable. To date, 6 donors are supporting the Fund.

Its overall aim is to give African governments greater ownership of disaster response by reducing the reliance on donor-driven responses. Its economic justification lies in the fact that the ARC will enable African governments to respond more quickly to disasters preventing their vulnerable citizens from falling into poverty traps.

The aims of the ARC are admirable but the publically available documents do not provide answers to some key questions. For example, the ARC is expecting the Green Climate Fund (GCF) to provide reinsurance. How certain is this and what is the fall back option if the GCF does not oblige? What is the objective of establishing an ARC Insurance Company? Will it invest the funds and what will be its investment policy? And, how does the involvement of the AU ensure a better outcome than a purely privately developed mechanism? Without answers to these questions, it is difficult to set out how a plausible results chain that shows how the ARC will add value.

CGAP has developed performance indicators for micro insurance providers. However, there have been few studies of the outcomes and impacts of micro insurance except to show that there is low take up of this product. Randomized experiments also show reluctance of take up because of price and liquidity constraints on the part of the buyer. The few studies on outcomes conclude that free insurance leads to increased cash crop production; greater investment in farms; and investment in riskier crops with higher expected yields (Mobarak and Rosenzweig (2012); and Karlan et al. (2012).

Private Equity and Impact Investment: The financial literature related to the development of social enterprise in developed and developing countries has increasingly focused on the issue of ‘patient capital’. As opposed to the mainstream financial sector’s concern with high return, short payback investments, the type of social enterprise that can transform people’s lives requires long term finance, both debt and equity. This has given rise to Impact Investment with most of the better known fund managers members of the Global Impact Investing Network (GIIN).

The market for impact investment is set to grow very rapidly, driven by the desire on the part of investors (institutions and high net worth individuals) to have their money deliver social benefits, and mounting evidence that such funds need not trade-off financial for social returns. Moreover, there is evidence that industries in which private equity funds are active, tend to increase productivity, output and employment more than those without, that these enterprises increase productivity, growth and outperform controls and are amongst the best governed in their industries. Though many private equity funds target improving governance, the major gains appear to come from technical assistance. Much of the current evidence is from developed countries, but the studies note the spread of private equity to developing countries (China, India) and report similar, if not higher, gains in these countries.

Hard, quantifiable evidence from the impact industry specialising in investment in SMEs in Africa remains scarce and there is a wide variation in what is reported. What is possible is to gather data...
from several funds that are comparable. That evidence suggests that investing patient capital and providing support to transformative SMEs in Africa can provide tangible gains in the form of increased output and employment in a cost effective way. However, much better evidence is needed to assess the outcomes and impacts of Impact Investment.

**Conclusions & Further Research:** Despite the sound logic for firms needing long term finance and the proven absence of it in the developing countries, macro evidence linking the growth of stock markets, pensions and insurance to growth is weak: there is no evidence of causality. However, at a micro level, growing demand for private pensions and micro insurance suggests that there is a need for more research to be undertaken of what is needed by the poor and marginal poor. Impact investment also holds promise and therefore, again, more rigorous evaluation is needed to assess what it can deliver.

### 4.4.4 Financial Deepening

<table>
<thead>
<tr>
<th>Input</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TA, grants: business support services</td>
<td>• Better investment projects</td>
<td>• Increased, sustained growth</td>
<td>• Increased, sustained growth</td>
</tr>
<tr>
<td>• TA: Downscaling commercial bank lending, reducing transaction cost</td>
<td>• SMEs able to access finance</td>
<td>• Poverty reduction</td>
<td></td>
</tr>
<tr>
<td>• TA: Microfinance up-scaling</td>
<td>• Micro business able to grow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• TA: credit guarantee schemes</td>
<td>• Banks more willing to lend to SME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• TA: grants: research, product development, Islamic banking</td>
<td>• Greater supply of cash flow based project/transaction finance to SME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• TA: cluster, value chain lending</td>
<td>• Stronger disciplines on borrowers reduces non-performing loans</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The overwhelming evidence in support of private credit being a causal factor in growth and poverty has caused the MDBs and DFIs to support financial deepening. Over half the IFC’s investments are in the financial sector and that sector is the largest recipient of investments made by European DFIs. Donors, such as DFID, have been more concerned with inclusion, though this is now changing.

Overall, the IEG’s evaluation of IFC operations in support of SME lending is positive. It finds that the success rate, in economic and financial terms, was good across its investment arm and its advisory services. Further, it found that project success was, in general, associated, with good development returns; with the possible exception of equity investments. However, it has been pointed out that there are shortcomings in the way that the IFC and other DFIs report development outcomes. The IEG concurred stating that the IFC’s Poverty Focus and Results are oriented towards the pace of growth, rather than the pattern.

The World Bank is also a major player in financial deepening. The IEG’s synthesis evaluation of its assistance notes that the Bank has made good progress in providing technical assistance to change regulations, build institutions and provide lines of credit; although the latter is declining. The Bank has embraced an agenda of upscaling microfinance and downscaling bank lending. It notes though that the gains to countries that have had World Bank assistance, as against those which have not, are marginal and that, overall, the level of financial depth remains low.

In their field-experiment in Sri Lanka, De Mel, McKenzie and Woodruff (2008) used a randomized experiment to measure the return to capital (through microfinance) for a sample of microenterprises. They find the average real return to capital is 4.6 to 5.3 per cent per month, which is substantially higher than the market interest rate. When examining the heterogeneity of treatment effects they find that returns vary with entrepreneurial ability and with household wealth,
and that treatment impacts are significantly larger for enterprises owned by males, than by females (no positive return).

DFID has traditionally focused on inclusion. Starting with the FinMark Trust, the series of financial sector deepening trusts it established in East Africa, and its Enhancing Financial Innovation and Access in Nigeria (EFInA) program, all aimed at inclusion. Most of these programs were judged a success, with the East African trusts successful in working with savings and credit cooperatives and MFIs. DFID’s financial sector programs are increasingly attempting to upscale micro finance and downscale bank lending using a M4P approach.

Conclusions & Further Research: The evidence suggests that not only is private credit a causal factor in growth and poverty reduction, but that programs aimed at increasing SME lending to contribute to financial deepening also provide good financial returns and development impacts. There is scope for additional research to improve the measurement of development returns. This is an area where donors have not played an active role in the past but the up-scaling of micro finance and downscaling of commercial bank lending are now becoming more central to donor programs.

4.4.5 Financial Inclusion

The Financial Inclusion Experts Group of the G20 has produced a set of principles in its report ‘Innovative Financial Inclusion’ 226. The principles include empowerment of the poor through financial literacy and consumer protection; diversity of products and service providers; innovation using ICT and branchless banking; and regulatory reforms that maintain the integrity of the financial system (i.e. anti-money laundering), whilst removing unnecessary restrictions and enabling branchless banking.

The DFID financial deepening trusts are continuing their work with SACCOS and MFIs, increasing bank penetration, promoting ICT based financial innovation, and addressing SME and rural finance. In general, they have been reviewed favourably. The recent assessment of value for money provided by the FSD Kenya showed it was delivering good value for money for donor support 227. EFInA was also reviewed favourably and DFID is proposing a new phase of the program.

CGAP, the major donor funded intervention to promote financial inclusion, has also received a favourable mid-term review 228. The review found its 3 goals of building financial market infrastructure, fostering an enabling policy environment, and more effective funding for access to finance, to be highly relevant. The organization has been commended for the progress it is making.

Encouragingly, randomized experiments, conducted by J-PAL and the Innovations for Poverty Action (IPA) have shown many examples of how financial literacy and micro savings do contribute to the smoothing of consumption and that micro credit can improve livelihoods for specific types of households and enterprises. The IPA’s Global Financial Inclusion Initiative documents several
promising methods of improving inclusion that may be scaled up from their current experimental stage.29

**Case Study 5: Financial Sector Deepening Trust Tanzania (FSDT)**

FSDT has established itself as a valuable institution attracting support from 8 donors, including Sida. It promotes better, more secure livelihoods though financial access. It has adopted a systems approach to financial sector development providing policy support, support to improve support functions, and technical assistance to microfinance institutions and the banks targeting agricultural and rural finance and SME finance. It has been commended for its work by the central bank and the industry. The list of projects it has undertaken is impressive and the case studies it presents provide examples of how financial sector institutions may be strengthened. In common with other institutions of its type, FSDT has not undertaken rigorous evaluations of its interventions with counterfactuals to prove attribution and additionality.

The Trust is currently exploring an opportunity to implement a co-financing deal around m-banking. There have been some concerns raised in regards to this as there is a risk of distorting competition. What is important in providing support for firm level innovation is to ensure that the interventions do not lead to benefits being captured by a single entity for private gain but lead to wider public benefits. That may be ensured by either investing in a project that builds infrastructure or other support function, such as a platform that can be used by other firms, and ensuring that there is competition from similar service providers. Where the infrastructure constitutes a natural monopoly, then safeguards need to be put in place to regulate pricing.

**Conclusions & Further Research:** As noted earlier, the macro evidence in support of inclusion contributing to growth and poverty reduction is weak and micro evidence questions the view, promoted by Professor Yunus and others, that microfinance was effective in helping a high proportion of the poor escape poverty. Nevertheless, the evidence suggests that, with better products attuned to the needs of the poor, it is possible to deliver worthwhile outcomes and impacts. Much more research is needed to establish what works and why so that the best approaches can be scaled up.

### 4.5 Conclusions & Recommendations

Macro level evidence supports the view that financial stability and deepening play a vital, causal role in growth and poverty reduction. Macro stability, good prudential regulation and the preparation of contingency plans to cope with bank failures and financial crises help to promote stability. Good support functions that help to reduce information failures, secure transactions using movable and immovable forms of collateral, and exercise creditor rights have been proven to promote financial deepening. Promoting bank downscaling and micro finance up-scaling, the use of long term finance including through stock market development, pensions and insurance, and private equity and impact investment are effective in promoting deepening.

Macro evidence in support of inclusion is much weaker and micro level evidence has questioned whether microfinance is the magic bullet some had claimed. This evidence does not, however, amount to devaluing the importance of inclusion. Even if it is not a macro driver of growth, it is still important on the grounds of equity, enabling the poor and excluded to fulfil their latent potential.

Moreover, the limited impact it has may be more to do with the traditional product of group savings, lending with weekly repayments, and the small size of the financial shock they create, than the utility of these financial services to the poor. Experimental methods confirm that financial literacy,
appropriate products, particular forms of micro credit and micro savings, can produce worthwhile outcomes and impacts. The RCTs that have shown the limitations of micro savings, micro credit and micro insurance do not suggest that they deliver no benefits, but that only a small but significant proportion benefits; and that too by a small amount. This suggests that it is important to carry out much more research to improve the microfinance business model and its associated products. Additionally, there is a need to target the recipients of microfinance more carefully. The one size fits all approach tried to date may be the cause of the poor results delivered to date.

In CAEs, the focus should be on stability, deepening, and inclusion, with the bulk of resources directed at microfinance and bank lending to MSMEs as they are likely to create jobs. In transition economies, the focus should be on building support functions and restoring liquidity to overcome financial blockage.

Other important areas of research that Sida could undertake that would help to achieve the objectives of stability, deepening and inclusion are:

1. What is preventing competition from reducing spreads and what interventions are needed for it to do so?
2. Better information on product needs and delivery channels of the currently excluded; and
3. How to identify transformative enterprises who are first time borrowers.

The important areas that Sida should focus on in its evaluation are:

1. the balance of its FSD portfolio across stability, deepening and inclusion;
2. the extent to which the approach to financial deepening has adopted a systems approach including strengthening support functions;
3. whether the role of non-bank institutions in providing long term finance has been recognised;
4. how far has Sida’s programs come in supporting MSME finance that targets transformative enterprises;
5. have projects to promote inclusion relied on the ‘miracle of microfinance’ or been informed by real evidence on what works for the poor;
6. have projects in special environments been adapted to their context.

119 International Codes and Standards (C&S) and Development Finance: Gottschalk R and Sodre CA, IDS, 2005.
120 A Case Study of Brazil
127 Beck, Demirgüç-Kunt, and Levine (2007) Finance, Inequality, and the Poor
131 Economic Cooperation and Development Division at the State Secretariat for Economic Affairs (SECO) (2011) SECO’s Contribution to Financial Sector Reform in Developing and Transition Countries
133 Economic Cooperation and Development Division at the State Secretariat for Economic Affairs (SECO) (2011) SECO’s Contribution to Financial Sector Reform in Developing and Transition Countries
141 Two Trillion and Counting: Assessing the Credit Gap for SMEs in the Developing World, IFC & Mckinsey & Co. 2010
147 CGAP, FAI, IPA paper (2011) Latest findings from randomised evaluations of microfinance
149 Steward, van Rooyen, Dickson, Majoro, de Wei D. What is the impact of microfinance on poor people? A systematic review of evidence from sub-Saharan Africa. EPPI Centre, 2010
151 Poor Economics, Banerjee A and Duflo E, Public Affairs, 2011.
152 Poor Economics, Banerjee A and Duflo E, Public Affairs, 2011.
154 Financial Inclusion Program in Bangladesh, Stage 2 Report, Nathan Associates and OPM for DFID, 2012
155 Microfinance institutions in the development of financial markets, Teberger E, CEPAL Review 81.


Demirgüç-Kunt and Kenney (2011) Rural women’s access to financial services: Credit, savings and insurance, FAO 2011


Literature review of what we know about promoting inclusive growth in Conflict-Affected Environments (CAE), Jonathan Di John and Ignacio Fiestas, DFID, 2010, September 2010


Beck, Demirguc-Kunt and Martinez Peria (2007) Banking Services for everyone? Barriers to bank access and use around the world. World Bank


203 Land titling and Credit Access: Understanding the Reality. USAID Issue Brief
204 Access to Finance: Annual Review Report, IFC 2010
205 Collateral registries for movable assets : does their introduction spur firms' access to bank finance ? Love I, Martinez Peria MS, Singh S, World Bank, 2013
208 De la Torre, Augusto, Maria Soledad Martinez Peria, and Sergio Schmukler. 2007. “Bank Financing to Small and Medium Enterprises: Survey Results from Argentina and Chile. World Bank
210 FinScope Consumer Survey 2011. ZIMSTAT
214 Averting the old age crisis : policies to protect the old and promote growth. Pension Primer, World Bank


Literature review of development returns to DFIs investment in private enterprises, Nathan Eme, 2011

Assessing International Finance Corporation’s (IFC) Poverty Focus and Results, IEG, 2001

World Bank Assistance to the Financial Sector, A Synthesis of IEG Evaluations, 2011


CGAP Phase IV Mid-Term Evaluation Revised Report, AYANI, April 2012.

www.poverty-action.org/financial inclusion
5 International and Regional Trade Related Development.

5.1 The theory of change

Donors increasingly recognise that the level of trade and its benefits are determined by a wide range of policies and institutional arrangements at and beyond the border. In fact, trade may be regarded as a market system\textsuperscript{230} with trade policies framing the rules of the game; trade facilitation and trade related services performing key support functions; and importers and exporters involved in the core market. Of course, in the case of trade, there are many markets involved for the goods and services traded, each with their own core functions of production and exchange. However, during the process of trade, they share common support functions and rules of the game.

In terms of the outcomes needed for international and regional trade development, in order that it maximise its impact on growth and poverty reduction, the key ones are:

- Creating an enabling environment for trade
- Reducing the cost of trade logistics
- Lowering the cost of crossing borders
- Improving services that promote exports
- Increasing export diversification

\textbf{Figure 15: The theory of change for trade related development}

<table>
<thead>
<tr>
<th>Policies</th>
<th>Trade Infrastructure</th>
<th>Trade Facilitation</th>
<th>Export Services</th>
<th>Export Competitiveness, Diversification</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA: Trade infrastructure, facilitation policy</td>
<td>TA: PPP frameworks for trade infrastructure</td>
<td>TA: clear &amp; forwarding services</td>
<td>TA: Certification to enter higher value markets</td>
<td>TA: grants: benchmarking systems, productivity improvements</td>
</tr>
<tr>
<td>TA: research, evidence &amp; advocacy</td>
<td>TA: Export Processing Zones, guarantees, financing for PPP contracts</td>
<td></td>
<td>TA: Trade finance, export credit guarantees, long term finance, forex transactions</td>
<td>TA: skills</td>
</tr>
</tbody>
</table>

\textbf{Enabling Environment for Trade}
- Improved trade agreements
- Reduced tariffs, NTBs, streamlined procedures
- Consumer protection, competition, FDI regimes
- Capacity of govt., private sector and civil society to participate in trade negotiations
- Stronger advocacy
- PPP framework enables private investment

\textbf{Reduced cost of trade logistics}
- Private investment in trade infrastructure addresses capacity constraints, efficiency
- Reduced time and cost of transport
- Better logistics services increase reliability, reduce losses during transit
- EPZs attract investment in export industries

\textbf{Lower cost of crossing borders}
- Progress on cost of doing business indicators
- Electronic document filing, clearance
- Single windows, community based system
- One stop border posts
- Risk based inspection, authorised economic operator regime
- Clearing & forwarding agents trained to improve time and cost of clearance

\textbf{Improved services promote exports}
- SMEs enabled to enter new markets
- Improved financial services increase investment by exporters, reduce trade transaction costs
- Better standards, quality assurance & certification help penetrate higher value markets

\textbf{Outcomes}
- Increased international and regional trade
- Increased domestic and international trade
- Increased FDI
- Increased benefits from trade for consumers
- Consumers benefit from lower cost of imports
- Domestic competitiveness improves through lower cost of capital and intermediary goods
- Exports increase as a result of lower transport costs, better logistics

\textbf{Impact}
- Economic growth and poverty reduction
- Diversified export base
- Higher value products
- Greater productivity and competitiveness of exporters
- Productivity spill overs into other industries.
5.1.1 Applying Systems Dynamics to Trade

Trade is a complex system in which its constituent parts interact dynamically. It is, therefore, subject to a new methodology to assess the workings of complex systems, systems dynamics. Funded by DFID, a pilot is being undertaken to assess whether the methodology can be applied to trade. The initial findings are promising. If the methodology is proven to be useful, it would change the ToC for trade from a simple, linear process of moving from inputs through to outcomes and impacts, into a process of mapping interactions within the system and feed-back loops as shown in Figure 15. The methodology could be applied to a wide range of ToCs which involve the mapping of complex systems with high levels of interdependence and feed-back loops. In Figure 15 below, the systems dynamics methodology is applied to ToCs for export interventions, however, it should be noted that the same would apply to imports, but in reverse.

Figure 16: The ToC for trade related development using Systems Dynamics

The system is driven by the incentives provided by the profit motive (profitability), subject to access and capacity. Profitability is a function of competitive advantages, tariff policies (at home and importing countries), entrepreneurship, identification of opportunities, and the cost of trade facilitation and trade related services. Access is determined by a combination of policies (e.g. outright bans, Non-Tariff Barriers) and infrastructure (e.g. roads, railways, ports). The capacity to trade is largely determined by trade facilitation (e.g. of the customs service and other agencies) and trade related services (e.g. financial, transport and logistics).

At each stage of the process, the model enables the user to identify the key enablers and disablers. Hence, in the case of access, having a greater density of roads and improvement in the condition of the roads network, and more border posts, enables trade. The number of items covered by bans, or where a combination of high tariffs and levies or the use of NTBs approximates a ban, is a disabler. Better training of customs staff is an enabler of capacity, whereas the number of procedures to trade is a disabler. For profitability, a reduction in tariffs in the destination country for an export, or the country’s own tariff for imports, is an enabler; whereas the need to pay bribes to officials, or the high time and cost of trade facilitation, is a disabler. The ‘Profitability’ box in Figure 15, illustrates the impact of corruption on profitability. It therefore demonstrates the impact/cost on exporters of paying corrupt officials as compared to the profit they stand to make.
Perhaps the greatest value added of systems dynamics is the fact that it recognises that the systemic nature of trade makes it difficult to draw simple and reliable connections from any particular intervention to subsequent changes in outcomes. What is possible is to arrive at overall correlations of the type provided in the evidence section above, but a simple logic model of an intervention through to outcomes is not appropriate as it fails to take account of interactions between parts of the system that produce the following effects:

- **Accumulations**: Key entities in all such systems accumulate and deplete over long periods of time – for example, the physical capacity of border crossings or roads, numbers and activity-rates of traders etc. Outputs and Outcomes will therefore reflect changes made many years previously, and continue to do so into the future.

- **Interdependence**: Different activities effect connected parts of the same system. So improved road-links, for example, may have a substantial effect on trade, or none at all, depending on other factors, such as capacity-constraints at border-crossings. An Input of £X or Y person-days into any single change may thus have a substantial impact, or none at all.

- **Feedback**: An unavoidable consequence of interdependence is that any Input/Activity may cause Outcomes that feed back to reinforce or disable the initial change. Traders who find good opportunities across a border will encourage traders to engage in the same activity; a reinforcing feedback. On the other hand, quicker border crossing times may encourage more traders to cross, causing those same crossing delays to increase once again; a self-limiting, or balancing feedback.

- **Thresholds**: Parts of the system may be unresponsive over a wide range of change to a certain factor, but reach a point where the change has been sufficient to cross a threshold that triggers substantial behavioural change. For example, traders may not feel it is worth the effort of attempting a border crossing if their potential revenue from that effort is $X-$3X, but when that potential reaches $4X, many traders find it sufficiently attractive to act.

The systems dynamics methodology enables programs to develop a model of the trade system that maps the key enablers and disablers and the systemic interactions that need to be taken into account in delivering outcomes. It enables programs to monitor whether, taking account of feedback loops, there really has been progress and whether the gain has been sufficient to reach tipping points for thresholds beyond which behavioural changes are likely to be sustained.

### 5.2 What works for trade related development

We review below the extent to which the literature supports the view the trade openness, export diversification, and a reduced cost of imports leads to sustained economic growth and poverty reduction.

#### 5.2.1 Trade openness

There is sound evidence in both the theoretical and empirical literature of the positive link between trade openness and economic growth. Although there are some cases in which trade openness could be harmful for growth, and there is some scepticism over whether it is a causal factor (Rodriguez and Rodrick, 2001)\(^232\), most theoretical literature suggests that trade openness is positively associated with economic growth (Grossman and Helpman, 1991\(^233\); Barro and Sala-i-Marti, 1995\(^234\); and Obstfeld and Rogoff, 1996\(^235\)).

This is confirmed by the empirical literature, which also concludes that trade openness has a positive effect on growth, particularly in the long term, by stimulating investments and increases in productivity. Using cross country analyses, Sachs and Warner (1997)\(^236\) and Frankel and Romer (1999)\(^237\) persuasively demonstrate positive correlations between countries openness and faster
economic growth. More recently, Wacziarg & Welch (2008)\textsuperscript{238} suggest that over the 1950–98 period, countries that liberalized their trade regimes experienced average annual growth rates that were about 1.5 percentage points higher than before liberalization. However, the evidence of the impact of increased regional trade on economic growth remains inconclusive. Brada and Mendez (1988)\textsuperscript{239}, considering six regional trade agreements (RTAs) in a growth accounting framework, find that these RTAs have positive but very small effects on members’ investment and income levels. Based on growth regressions, De Melo et al. (1992)\textsuperscript{240} find insignificant growth effects for several RTAs. Henrekson et al. (1997)\textsuperscript{241} show that EC and EFTA membership has positive and significant effects on economic growth, but this result is not robust to the inclusion of different control variables. Vamvakidis (1998) finds that none of the five RTAs during the 1970s and 1980s led to faster growth, probably because most of these agreements were among small, closed, and developing economies (except the EU). All of these papers use dummy variables to measure RTAs.

Apart from these papers, Badinger (2005)\textsuperscript{242} studies the growth effects of the EU integration using an integration index calculated as the weighted average tariffs and trade costs. He finds a sizable effect of the EU integration on income level but this effect is not robust to the inclusion of dummies, including for time. Condon and Stern (2011)\textsuperscript{243} undertake a systematic review that finds that the US Africa Growth and Opportunity Act (AGOA) has had a positive impact on apparel exports from a small number of Sub-Saharan African countries. However, it also finds that, outside of the apparel sector, there is little or no evidence that AGOA induced gains in any other sectors in these countries.

The literature also points towards a positive link between trade openness and poverty reduction. Dollar & Kraay (2004)\textsuperscript{244} demonstrated a link between trade openness, and reductions in levels of poverty, through growth. They show that developing countries that implement open trade policies experienced an increase in growth rates from 2.9% in the 1970s to 3.5% in the 1980s and 5% in the 1990s. The increase in growth rate then leads to increases in income for the poor. The link has been found to be stronger in the long term than in the short term, and if accompanied by other developmental interventions. In a study based on 14 country case studies that analyse the impact of the Doha Development Agenda (DDA), Hertel and Winters (2005)\textsuperscript{245} concluded that the impact of the DDA on poverty reduction showed mixed results in the short term, but positive results in the long run.

A recent literature review by Basnett et al. (2012)\textsuperscript{246} finds that the empirical literature supports the presumption that trade liberalisation reduces poverty in the long run and on average. For developing countries (which tend to have scarce capital and abundant labour), increased trade allows for a higher return to labour, and in turn an improvement in the income distribution towards wages and the poor. This can happen through a number of different transmission channels, including lower prices; increased competition; the creation of economies of scale; and the creation of new industries and global value chains. Consistently, a CUTS International report (2009)\textsuperscript{247} states that studies undertaken so far suggest that trade liberalisation can be made an effective tool for poverty amelioration and reduction if accompanying policies (such as irrigation, nutrition, access to agro inputs, and other policies, including sound macro and development strategies) follow.

**Conclusions & Further Research:** Despite the reservations expressed by some leading economists regarding causality, the evidence in support of trade openness leading to growth is strong and there is some evidence also that it leads to poverty reduction. However, it is generally agreed that opening up to trade may cause short term losses. More research is needed on policies needed to accelerate and mitigate the harmful effects of the adjustment process.

**5.2.2 Export diversification**

The literature positing the views that there is a link between export diversification, export growth, and overall growth, is abundant. Lederman and Maloney (2007) in a cross-country framework found evidence that export concentration is negatively correlated with growth. After controlling for the
effects of factors like investment and rule of law, Agosin (2007) found that export diversification alone, and in concert with per capita export growth (a measure of diversification-weighted export growth rate), is highly significant in explaining per capita GDP growth over the period 1980-2003 in Asia and Latin America. He concluded export diversification to be an important factor to the differences in growth performance of Asia relative to Latin America. In a dynamic growth framework, Hesse (2008) established a non-linearity in the relationship between export diversification and economic growth for the period 1962-2000, with developing countries benefiting from diversifying their exports, whilst more advanced countries performed better with export specialization.

The literature also shows a positive link between improved productivity, exports and economic growth. For example, Hausmann, Hwang, and Rodrik (2006) develop an indicator that measures the productivity level associated with a country’s export basket. This measure is positively correlated with economic growth. In other words, countries that produce high-productivity goods enjoy faster growth than countries with lower-productivity goods. Cadot (2007) found that the composition of a country’s export basket (more value-added products rather than raw materials) seems to matter for its long-run growth.

Conclusions & Further Research: Evidence in support of export diversification leading to higher growth is also strong. However, evidence that tracks how the benefits of export diversification are transmitted (through spillovers), and what can be done to accelerate the process, is still weak.

5.2.3 Imports

Improving trade infrastructure, trade facilitation and trade policies is likely to benefit consumers, as costs of goods are likely to be lower. Such improvements will also benefit firms as the import of inputs for production will also be lower. The welfare of consumers, however, is typically not well represented in the empirical literature on trade policy measures, and their effect on growth and poverty reduction. The scanty evidence includes:

- Bussolo (2001) estimates the distributional effects of transaction costs in Columbia. He finds that a reduction in transaction costs can have strong positive effects on private consumption and, therefore, on households’ welfare and their absolute poverty.

- Volker et al. (2012) focus on how import bans affect poor people in Nigeria and show that, by raising the cost of living, they increase the number of people living below the poverty line. Many of the banned goods are necessities for which there is strong demand from the poor, who cannot afford the inflated prices. Moreover, import bans raise the price of inputs to producing industries, including those with the highest growth and employment potential. The study finds that converting the bans to tariffs would result in an average increase in household incomes by 9%, lifting 3.2 million people out of poverty.

Conclusions & Further Research: Much of the literature on trade focuses on the benefits of exports. Far less attention has been given to imports even though it is well known that high tariffs and NTBs result in potentially huge losses of consumer welfare. There is a need to remedy this through more and better research.

5.2.4 Trade Facilitation & Transport Costs

As tariff regimes have become less restrictive in the wake of multilateral and bilateral trade agreements, trade transaction costs have become at least as significant a barrier to trade as tariffs, if not more. Therefore, facilitating trade by reducing trade transaction costs (through streamlining procedures, developing risk based clearance systems, setting single windows) is likely to present a major opportunity for developing countries to increase the volume of trade.
A number of studies have found a strong link between trade facilitation and trade flows. For example, Freund and Rocha (2011)\textsuperscript{253} analyse transit times, documentation, and ports and customs for countries in Sub-Saharan Africa, and find that transit times have the most economically significant effect on exports. They estimate that a one day reduction in inland travel times leads to a 7% increase in exports, importantly they emphasise that transit times are heavily dependent on institutional factors such as border delays, road quality and blocks, fleet class, competition and security.

Subramanian, Anderson and Lee (2012)\textsuperscript{254} estimate the effect of reducing trade transactions times on exports. Their results show that reducing the time to export could potentially increase trade by 0.64% on average for Sub-Saharan African countries. Furthermore, Djankov et al. (2010)\textsuperscript{255} collected data from 98 countries on the number days it takes to move standard cargo from the factory gate to the port, and found that each additional day that a product is delayed prior to being shipped reduces trade by more than one per cent. The study also found that delays have an even greater impact on exports of time-sensitive goods, such as perishable agricultural products.

Hufbauer et al (2010) estimate that exports of their sample of 22 countries would increase by USD$86.8 billion if underperforming countries are brought halfway to the global average in selected areas of trade facilitation. They estimate that these trade gains would translate into estimated GDP gains of USD$117.8 billion annually. Hoekman et al. (2009)\textsuperscript{256} found that, in Sub-Saharan Africa, a 10% reduction in exporting costs increases exports by 4.7%, a greater impact than would come from further reductions in tariffs by richer economies.

Portugal-Perez and Wilson (2010)\textsuperscript{257} analyse data on hard (physical infrastructure and ICT) and soft (border efficiency and regulatory environment) dimensions of trade facilitation and find that trade facilitation reforms substantially improve the export performance of developing countries. Their analysis demonstrates very large trade gains, with improvements in trade facilitation boosting the merchandise exports of all sample countries by USD$1,137 billion.

Hoekman and Nicita (2008)\textsuperscript{258} find that tariffs and nontariff measures remain a significant source of trade restrictiveness for developing economies despite preferential access programs. Their research shows that the value of trade preferences as reflected by a measure of the relative preference margin is very low for most country pairs. The authors conclude that measures to improve logistics performance and facilitate trade are likely to have the greatest positive effects in expanding developing country trade, increasing the trade impacts of lowering remaining border barriers by a factor of two or more.

Limão and Venables (2001)\textsuperscript{259} demonstrate that, in Sub-Saharan Africa, raising transport costs (including shipping costs) by 10 per cent reduces trade volumes by more than 20 per cent. Buys et al (2006)\textsuperscript{260} simulate the effects of road upgrading and estimate that connecting all of Sub-Saharan Africa’s capitals to population centres with more than 500,000 inhabitants would translate into a US$250 billion increase in trade volumes over 15 years.
Case Study 6: The Enhanced Integrated Framework (EIF)

The EIF is a multi-donor, multi-agency initiative that helps the least developed countries mainstream trade in their national development/poverty reduction strategies, identify their aid for trade needs, and providing direct donor assistance to meet such needs. The EIF was an answer to the challenges faced by the Integrated Framework (IF) which had proved largely ineffective. It brought to bear a much larger resource envelope ($250 million) on a broader range of implementation issues than the IF. Sida contributes to the Trust Fund.

The EIF has been able to mainstream trade with most national development strategies now featuring trade. It has also developed its architecture of assistance based around a Diagnostic Trade Integration Strategy (DTIS) and provides follow up action to implement its core elements, whilst encouraging donors to contribute the rest. Wider ownership of the trade agenda is supposed to be ensured by designated national focal points who are supposed to consult widely with the private sector and civil society, and ensure that the trade agenda is embraced government wide, not just the trade ministry.

However, in practice, the follow up to the DTIS still relies on donor support which may not be forthcoming. And, much depends upon the effectiveness of the national focal point to ensure there is ownership that delivers the public and private investment needed. Reforms can be bogged down through political resistance to change and by a misalignment with institutional incentives. The program has no governance mechanism that can help to overcome these problems should they occur. The program also remains country focused and so is not effective in strengthening regional agreements and the institutions that are becoming more important for the LDCs. Whilst the evidence of regional trade agreements remains weak, they are still recognised as a force for trade policy and trade facilitation reform, thus the failure of the EIF to work with them is a weakness.

Several studies have pointed out that the evaluation of aid for trade initiatives is problematic given their wide remits that may not permit counterfactuals, and the fact that their impact on poverty can be far down a logic chain. The evaluation of the EIF is mainly confined to project level case studies of project outputs so suffers from these weaknesses. After 4 years of operations, it should have been possible to evaluate a sample of projects more rigorously.

Conclusions & Further Research: The evidence in support of trade facilitation and transport costs being important determinants of the growth of trade is very strong. However, evidence of what is needed to improve trade facilitation and transport is less strong, as shown under Results Chains below.

5.2.5 Indicators

Based on the evidence of what works, the crucial indicators for trade related development are shown in Table 4. To use the indicators as a diagnostic tool, the performance of the country in question needs to be compared with peers in the region and countries at similar levels of economic development.
Table 4: Trade Indicators

<table>
<thead>
<tr>
<th>Trade Openness</th>
<th>Export Diversification</th>
<th>Imports</th>
<th>Trade Facilitation &amp; Transport Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports + Imports/GDP</td>
<td>Concentration indices for exports</td>
<td>NTBs on important constituents of the cost of living index</td>
<td>Time and cost of clearing borders</td>
</tr>
<tr>
<td>Average weighted tariffs, non-tariff barriers</td>
<td>Growth of non-traditional exports</td>
<td>Average weighted tariffs, non-tariff barriers</td>
<td>Cost and time of internal transport</td>
</tr>
<tr>
<td>Distortion, variability of exchange rate</td>
<td>Non-tariff barriers</td>
<td>Growth of non-traditional exports</td>
<td>Cost and time of transport to international markets</td>
</tr>
<tr>
<td>Membership of WTO and compliance with bound rates</td>
<td>Income levels associated with basket of exports (EXPYS)</td>
<td>Cost of imported food and important consumer items relative to other countries</td>
<td>Customs modernisation</td>
</tr>
<tr>
<td>Membership of RTAs and compliance</td>
<td>Sophistication, value added content of major exports</td>
<td>Comparative cost of imported inputs</td>
<td>Single windows, community based systems</td>
</tr>
<tr>
<td>Exchange rate liberalisation &amp; management</td>
<td>Geographic dispersion of exports</td>
<td></td>
<td>Corridor diagnostics</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Port, airport capacity and charges</td>
</tr>
<tr>
<td>Economic competitiveness</td>
<td>Spillovers from new exports</td>
<td>Loss of consumer welfare due to trade policies.</td>
<td>Investment in infrastructure</td>
</tr>
<tr>
<td>Productivity of exporters vs. non-exporters</td>
<td>Effect of new exports on growth &amp; employment</td>
<td>Distributional impact of trade policies</td>
<td>Customs legislation and governance</td>
</tr>
<tr>
<td>Loss of consumer welfare due to trade policies</td>
<td>Value added in new vs. traditional exports</td>
<td>Downstream effects of import restrictions on growth and employment of other industries</td>
<td>Shipping, freight forwarding, transport &amp; logistics services</td>
</tr>
</tbody>
</table>

5.2.6 Special Environments

The literature review commissioned by DFID on policies for inclusive growth in CAEs\textsuperscript{261} contains a useful analysis of how trade policy may be adapted to this environment. It notes that whilst there are very good examples of how the revival of exports (e.g. coffee in Uganda) can serve as a powerful initiator of inclusive growth, it notes that a rapid, cross-the-board liberalisation of the economy could lead to loss of incomes and employment when it needs a peace dividend. Moreover, the process of opening up the economy leads to winners but also losers. When the losers are part of powerful elites or from one side of the conflict, the consequence can be an unravelling of the elite bargain or wider consensus for peace that ended conflict.

The authors suggest that many countries in the Far East, including Malaysia, Indonesia and more recently China, adopted a Dual-Track Growth Strategy. Such a strategy pursues two tracks at the same time. Track 1 consists of adopting policies to promote exports such as special economic zones and support for export industries. Track 2 consists of maintaining the livelihoods of those who would...
suffer from open trade by continuing to protect industries vital for employment and maintenance of social stability.

Qian (2003) sets out how that enabled China to take advantage of the growth and employment provided by export oriented special economic zones and gradually phase out its old uncompetitive state owned enterprises when the employment they provided was no longer needed. This enabled the country to avoid the precipitous decline of GDP and large scale unemployment which the former centrally planned economies of Eastern Europe experienced as a result of their rapid opening up of their economies. Thus, Dual-Track Growth strategies are relevant to CAEs and countries in transition.

**Case Study 7: Support to Liberia’s WTO Accession through the Swedish National Board of Trade (NBT)**

This project aims to prepare post-conflict Liberia for its accession to the WTO. The NBT has the specialist expertise to help the country prepare a roadmap for accession and help build the capacity in the country to implement it.

The results framework for the program reveals two key weaknesses of trade policy support in general: i) it assumes that WTO accession will lead to PSD, create jobs and reduce poverty without spelling out the long logic chain between the outcome and impact; ii) it does not spell out how it will identify and mitigate the potential costs of adjustment that are inevitable given the deep ranging policy reforms needed for accession.

Several studies have noted that the benefits of WTO Accession do not lie in improved market access as most LDCs already have preferential access. Rather they stem from the adoption of predictable, rule based systems that make the country more attractive for foreign direct investment (FDI) and domestic investors. Further, it is up to the country to assess what the costs of adjustment will be and then to reflect that in their offers to the WTO. The results framework for this program does not attempt an explanation as to why it is important to increase investment. FDI already represents over 50% of Liberia’s GDP so presumably the target beneficiaries will be domestic investors. However, the private sector is weak and so may not be able to respond to the improved business environment. No mention is made of assessing or mitigating the cost of adjustment.

Of course, Liberia has the right to join an international body such as the WTO and it is natural that it would turn to its trusted development partner Sida for help in doing so. However, the results framework should show an appreciation of how the upside will be secured and the downside risks assessed and mitigated.
5.3 Results framework

The results framework used by other donors depends on the scope and nature of their interventions. In general, however, donors that aim to use a systems approach to develop international and regional trade use theories of change along the lines set out above.

As an illustration, we present below three theories of change developed by different donors: DFID, Finnish Government, and USAID. The key (long-term) outcome indicators in all three are increased trade and increased investment. The key impact indicators are increased economic growth and poverty reduction.

An example of ToC that DFID uses in its “aid for trade” programs is presented below:


The Finnish Government uses the following conceptual framework for the evaluation of Finnish Aid for Trade.


The following Results Framework model depicts how USAID analyses the impact of its technical assistance aimed at improving trade performance.
5.4 Results chains

5.4.1 Improving trade policies & support functions

Firms face policy and institutional constraints in the form of complex trade laws, agreements, and tariff systems; burdensome regulations; inadequate enforcement of contracts; and poor capacity of trade-related personnel. The literature points at trade policy being an important determinant of the level of trade in any given country.

Helble, Mann, Wilson (2009) estimate the responsiveness of trade flows to specific types of foreign aid directed to enhancing trade competitiveness in developing countries. They find that relatively small amounts of aid targeted at policy and regulatory reform, in contrast to aid for broad sector-
specific projects, or trade-related infrastructure, has relatively greater elasticity with respect to trade flows. They estimate that a 1% increase in aid directed toward trade policy and regulatory reform (amounting to about US$11.7 million more such aid) could generate an increase in global trade of about US$818 million, a rate of return on every dollar of this type of aid of about US$697 in additional trade.

In addition to the improvement to general trade openness, trade policy can be directed at specific industries. A recent review of the literature, Basnett et al. (2012) find that enhancing and reforming trade policies significantly lowers the costs of trading in the processed agriculture and primary agriculture sector, therefore increasing trade. Studies of industry specific government policy reforms often include quantitative indicators of successful outcomes, such as increases in production, exports and incomes, or even evidence of improvements in gender equality and environmental sustainability. However, there are very good examples also of poor policy formation which result in rent seeking. Expertise is required in this area.

A few researchers have studied the effects of institutional quality on trade. Anderson and Marcoullier (2002) find that higher transactions costs associated with poorly enforced commercial contracts, and lack of transparency and impartiality in government policies, significantly impede international trade. They find that a 10 per cent increase in a country’s index of transparency and impartiality (a composite index defined by the authors) leads to a 5 per cent increase in its import volume, other things being equal. Similarly, De Groot (2004) examines institutional quality as reflected by such dimensions as effectiveness of governance, regulatory quality, voice and accountability, rule of law, and control of corruption, and finds a positive and significant link between improved regulatory quality and increase in bilateral trade.

The main focus on delivering policies for greater trade openness, to develop specific industries, and to improve institutional capacity, has been on training negotiators and building institutional capacity. Support has been provided in the context of the WTO and the Doha Development Agenda by the WTO itself, and by the UN agencies UNCTAD and UNDP. Donors have supported the building of capacity to support the Economic Partnership Agreements (EPAs). The regional development banks, especially the Asian Development Bank (ADB) and the Inter-American Development Bank (IADB), have provided assistance on a regional basis, helping their member countries develop capacity to influence the WTO, RTAs, and bilateral trade agreements.

In a major evaluation of aid for trade, the WTO/OCED provide country case studies that highlight the benefits of such capacity building efforts. They highlight in particular the empowerment of trade negotiators, the involvement of the private sector, and raising awareness amongst the general public so that greater knowledge can be accompanied by greater support for trade related reforms.

However, in common with other capacity building efforts, the major shortcoming of this evaluation was that most of the case studies covered stopped at the level of output; of those covered, only 8% of case studies covering capacity building, and 14% addressing trade policy support, reported outcomes.

**Conclusions & Further Research:** Whilst the evidence in support of changes in trade policies and the improvement of institutional quality to increase trade is strong, the evidence that the support provided to build key players capacity to improve policies and institutions works, is weak. In part, this is because capacity building support has often been provided without defining and measuring specific outcomes as discusses further under Instruments in Chapter 7 below.
5.4.2 Evidence in support of improving trade infrastructure

Trade infrastructure is key to increasing trade flows in developing countries. There is evidence that having trade-related infrastructure in place, from road corridors to Export Processing Zones (EPZ), tends to have a significant positive impact on the countries’ exports.

Looking at trade-related infrastructure (e.g. port/road improvements), Basnett et al. (2012) indicate that a 10% increase in Aid for Trade investment in improving transportation and energy results in a 6.8% increase in manufacturing exports. Similarly, Francois and Manchin (2007) find export performance, and the propensity to take part in the trading system at all, depends on access to a well-developed transport and communications infrastructure. Studies by Limão and Venables (2001) and Buys et al (2006) have been cited earlier.

The direct and indirect costs associated with the transportation of goods is seen as one of the key drivers of trade costs and consequently one of the main barriers to trade in the developing world:

- Rizet and Gwet (1998) in an analysis of seven countries in three continents demonstrated that, for distances up to 300 kilometres, the unit costs of road transport in Africa were 40–100 per cent more than rates in South east Asia;
- MacKellar et al (2002) estimate that transport prices for most African landlocked countries range from 15% to 20% of import costs; a figure three to four times more than in most developed countries

In examining the causes of high transport costs, the World Bank finds that although investment in infrastructure increased traffic volumes and reduced transport costs, it did not reduce transport prices. It points to regulatory constraints that restrict competition, cartels, delays at border crossing points, and high fuel costs as the main contributors.

Cali and te Velde (2009) find that aid for trade facilitation and infrastructure has a significant effect in reducing trade costs and in increasing export values they also find that amongst sectorally targeted aid, infrastructure has a significant impact on export values. IEG (2006) evaluates World Bank assistance for trade and concludes that assistance on trade logistics—ports, customs and trade finance—had a mixed record, though one that improved over time. Cheon et al review the outcomes of institutional reforms and ownership changes in 98 major ports worldwide and find that, overall, they have had positive impacts on productivity and efficiency. Ferro et al show that investment in energy has a positive and significant impact on export of manufactures.

Looking specifically at EPZs, Aggarwal (2005) evaluates the performance of South Asia’s EPZs using a comparative analysis among India, Sri Lanka, and Bangladesh. The empirical analysis concludes that there are large variations in impacts. The development of infrastructure and promotion of good governance are key factors in determining the success of EPZs in terms of export performance.
Conclusions & Further Research: The evidence supports the view that investment in trade infrastructure helps to promote trade. However, what it suggests is that investment in ‘hard infrastructure’ needs to be complemented by support for the ‘soft infrastructure’ of institutional reforms. It also needs to ensure that competition results in gains in reduced costs that can, and are, passed on to users. There is need for further research to determine what soft reforms would help to bring transport costs in Africa down to comparable levels in the rest of the world.

5.4.3 Evidence that improving trade facilitation increases trade

As tariff regimes have become less restrictive in the wake of multilateral and bilateral trade agreements, trade transaction costs have become at least as significant a barrier to trade as tariffs, if not more. Therefore, facilitating trade by reducing trade transaction costs (through streamlining procedures, developing risk based clearance systems, setting single windows) is likely to present a major opportunity for developing countries to increase the volume of trade.

A number of studies have found a strong link between trade facilitation and trade flows. In a note that synthesises the literature, Uma Subramanian of the World Bank\(^{278}\) reaches three conclusions:

i) trade logistics reforms have a notable effect on countries ability to export and imports cost-effectively;

ii) trade facilitation enhances the productivity of firms; and

iii) targeted reforms can enable firms to use working capital more effectively.

She lists a number of studies that estimate the effect of reducing trade transaction times on exports. For example, Subramanian, Anderson and Lee (2012)\(^{279}\) conclude that reducing the time to export could potentially increase trade by 0.64 per cent on average for Sub-Saharan African countries. They also show that these reforms effect growth.

Using *Trading Across Borders* data on a large subset of developing countries over time Cali and te Velde (2009)\(^{280}\) examine the effects of aid for trade (AfT) on the costs of trading. They find that aid for trade facilitation has a significant impact in terms of reducing trade costs. A USD$1 million increase in AfT is associated with a 6% (or USD$70) reduction in the cost of packing goods and loading them into a 20-foot container, transporting them to the port of departure, and loading them onto a vessel or truck.

Hummels et al. (2007)\(^{281}\) pioneered a method for expressing the costs of transport and logistics related delays as a percentage of a good’s value, calculating tariff equivalents for import and export waiting times. They found that the tariff equivalents in Sub-Saharan Africa for time to export are more than four times the tariffs currently faced by exporters, meaning that, not only are average
trading costs higher in the region in terms of cost per container, but they are also high in terms of the cost of waiting times and delays either at port or passing through customs.

The evidence suggests that, in general, programs to support trade facilitation work. A synthesis evaluation of the implementation of single windows suggests that the results of implementation have been good. The IFC’s evaluation of its trade facilitation program in Columbia shows how it has helped reduce the time to export and import and has improved the country’s position in the Doing Business Report by 9 places. The IFC also reports that, with Sida’s support, the reforms it has introduced to facilitate trade in Liberia, have resulted in faster port clearance, saving the private sector considerable time and cost which has resulted in an increase in trade. Sida’s support for the introduction of authorised economic operator and preferred trader schemes in EAC and SACU, through the Columbus project, were evaluated as part of its support for capacity building by the World Customs Organisation. The assistance was found to be relevant and making good progress in building capacity, though no results had been generated. The evaluation noted the need to overcome to resistance to change.

The problem of most evaluations of trade facilitation reforms is that they are mainly confined to case studies or before and after evaluations that do not include a counterfactual. Nevertheless, based on an experiment in the Cameroons, the World Bank’s ‘Where to Spend the Next Million’ (2011) shows that the introduction of modern management practices, such as performance contracts, can improve the performance of customs.
Case Study 8: Establishment of a system for Authorized Economic Operators (AEO) in the EAC

Sida has formed a tripartite partnership with the EAC and the World Custom’s Organisation (WCO) to support the EAC to introduce a regional AEO scheme. The WCO is providing capacity building support to the national customs bodies where the scheme is being piloted.

A regional AEO scheme working to the WCO Framework of Standards to Secure and Facilitate Global Trade (SAFE) could make a substantial contribution to facilitating trade in the region. The fact that it applies regionally would enable it to leapfrog other regional trade groups that have struggled to achieve mutual recognition of AEO status across member countries. For the firms that achieve AEO status, it would enable the time and cost of imports and exports to fall substantially and that would help to boost trade, benefitting producers, consumers and, ultimately, the growth rate.

There are two major potential pitfalls to the scheme delivering these benefits:

i) Poor governance. Whilst all the national customs services have committed to it, unless the schemes are implemented with strong leadership and oversight, they could be rendered ineffective through rent seeking and sheer intransigence on the part of officials on the ground;

ii) Disadvantaging SMEs and limiting competition. If only the large are able to qualify, it could establish a less than level playing field for SMEs. Further, if only a few firms qualify, they may not experience any competitive pressure to pass on the benefits of faster clearance of goods to consumers or producers.

There is a need, therefore, to ensure good governance over the scheme’s implementation by involving the private sector in exercising oversight over its operation. Further, it is important to ensure that the pilot list of AEOs is increased to ensure a level playing field for SMEs and sufficient competition to remove the danger of oligopoly.

Conclusions & Further Research: Evidence that reduced time and cost of crossing borders results in increased trade is strong. There is also plenty of evidence that programs that provide technical assistance to support the reform of customs and the establishment of single windows and community based systems are effective. However, they are usually the subject of before and after evaluations that may not allow the gains recorded to be attributed to them.

Importantly, the design of trade facilitation programs and the literature on evaluating them does not appear to take account of internal incentives and the political economy of reforms. This is surprising given that the role played by corruption in increasing the time and cost of crossing borders is well understood. Research is needed to understand how governance issues can be better managed. Further, in developing risk based approaches to trade facilitation, including AEO schemes, it is important to ensure that they do not disadvantage small businesses and are wide enough in their coverage to ensure that a small group of large companies do not enjoy an unfair competitive advantage. If these risks are not managed and mitigated, there is a danger that the potential benefits from trade facilitation may be lost.
5.4.4 Evidence that improving trade export services increases trade

Improving export services such as export promotion services, developing SQAM, or facilitating trade-related financial services, is believed to have a significant impact on the capacity of a country to trade.

Export promotion services are important to develop awareness of export opportunities and stimulate interest for export in the business community, as well as assisting firms in planning and preparing for export market involvement. The literature seems to show some evidence of the positive impact of supporting export promotion services on trade volumes. Brenton and von Uexkull (2009) evaluate whether technical assistance in export development programs has been successful and, in general, find that these programs induced a stronger export performance in the targeted sectors. However, they qualify this by saying that these programs appear to be more effective where there is already significant export activity, and that there are concerns that the support may be channelled to sectors that would have prospered anyway.

Sida’s own evaluation of trade related assistance covers several programs that provided export promotion and (organic) certification services. The evaluation of these programs was generally positive, though it noted that, frequently, their results chains were not defined sufficiently enough to see how they contributed to Sida’s development objectives.

Some papers show that public institutions operating abroad, such as trade promotion organisations, have significant effects on aggregate bilateral trade (Gil et al., 2008). Álvarez 2004 studies the activities undertaken by Chile’s national export promotion organisation, PROCHILE, and concludes that instruments managed by this organisation had a positive and direct effect on the number of destination markets to which firms export and, indirectly, after a period of four years, on product diversification. Other studies, however, indicate that the impact of export promotion services is limited. In Ireland, for example, grants aimed at increasing investment in technology, training, and physical capital, when large enough, appear to be effective in increasing exports of firms that are already exporting, but are not effective in encouraging new firms to enter international markets (Görg et al 2008). A study based on US data indicates that average states’ expenditures on export promotion per firm do not significantly influence the probability that they will export (Bernard and Jensen 2004). Thus, the evidence varies with public institutions differing in their effectiveness.
As shown in the following chapter, the use of grants to exporters on a matching basis has a strong track-record. Synthesis evaluations and individual country experience using difference in difference methods show good impacts.

---

**Case Study 9: Export Promotion of Organic Products from Africa (EPOPA)**

This program financed the promotion of exports of organic products to Europe mainly from Uganda and Tanzania. It was supported by Sida from 1997 – 2008. The support focused on small farmers and included management assistance, staff training, field officer training in organic agriculture, training and mobilization of farmers, providing farming techniques and farm inputs such as seeds, product quality management, market surveys and buyer contacts, various forms of sales promotion in major markets. The program was managed jointly by two companies in Sweden and in the Netherlands.

According to the ‘Organic Exports – A Way to a Better Life?’ report produced by Agro Eco and Grolink, the two implementing agencies of EPOPA, the program was largely positive. A total of 24,000 farmers in Tanzania and a total of 87,000 farmers participated in the program. Considering the average size of households, it means that some 600,000 people have been beneficiaries of the program. The program had a high impact on participating farmers according to an evaluation undertaken by Sida in 2004, with price increases ranging between 20% and 300%. EPOPA was an early example of how the poor could be helped to access attractive export markets for organic produce. It was equally an illustration of demand led growth of farmers’ productivity.

EPOPA does appear to have made some headway addressing the underlying market failures that gave rise to the need for the intervention. It supported the set-up of organic certification bodies such as UgoCert in Uganda and TanCert in Tanzania. They also initiated regional cooperation and certification in East Africa which resulted in the development if the East African Organic Products Standard. Whilst clearly there remain a number of market failures, such as lack of information, problems in related markets for training and certification, and coordination failures which may well resurface when farmers are faced with new market opportunities, EPOPA supported businesses have largely continued their business after EPOPA, with many expanding their businesses.

Trade finance lies at the heart of the global trading system by providing critical liquidity and security to enable the movement of goods and services. Although the absence of an adequate trade finance infrastructure is recognised in the literature (UNESCAP, 2005 ; Chauffour and Farole, 2009 ; Gregory et al., 2010) as a barrier to trade, little empirical work has been undertaken on the relationship between trade financing costs and international trade volumes specifically. Amongst the limited evidence, Ronci (2004) and Thomas (2009) find that whilst the availability of trade finance is a significant explanatory factor, it accounted for only a small portion of the variability in trade flows. Kohler and Saville (2011) find that higher interbank lending rates, which represent a tightening of trade finance, reduce exports substantially suggesting that the availability and cost of trade finance matter.

In fact, most of the research work undertaken points to the higher costs and, in some cases, decreased availability of trade finance during times of financial crises. For example, examining performance by sector in 23 historical banking crises, Lacovone and Zavacka (2009) conclude that financial problems amplify the impact of negative demand shocks on exports. The authors find evidence of slower growth in export-oriented sectors that are reliant on external financing. Similarly, Auboin and Meier-Ewert (2003) find that Indonesia’s growth of exports at the peak of the Asian crisis...
was seriously affected by the difficulty of financing imported raw materials, spare parts, and capital equipment used in its export sectors.

Finally, Felbermayr and Yalcin (2011) examine data on export credit guarantees issued by the German government and find a robust export increasing effect of guarantees. They also find the effect is larger for export markets with poor financial institutions and in sectors that rely more on external finance. Evidence on the success of such schemes from developing countries is limited though as export credit support is less common in these countries. There seems to be no empirical evidence in the literature on the impact that metrology systems (i.e. SQAM) and certification have on trade flows.

Conclusions & Further Research: Though the evidence is not clear cut, with some failures noted, in general, support for the promotion of exports appears to have a good track record. Given the importance of export diversification, one area that warrants greater research is what type of support is effective in helping firms to develop new product markets, particularly for products with high productivity (cost discovery). This is explored further in chapter 7 under Direct Grants.

5.5 Conclusions & Recommendation

Trade is a complex system with many interconnected parts which can, through feedback loops, act to enable, or hinder, progress. As such, its ToC may be portrayed as a dynamic model that charts flows rather than as a linear progression from inputs through to impacts.

The evidence that higher levels of trade are associated with faster growth is strong. There is good evidence to support that trade openness is associated with growth. However, the evidence in support of regional trade agreements doing so is weak. The literature suggests that in both CAEs and transition economies a dual track strategy is needed to open up some sectors, whilst allowing others to remain protected to minimise the cost of adjustment. More research is needed to identify the costs of adjustment brought about by greater trade openness and what can be done to mitigate them.

Export diversification and exporting more sophisticated products are causal factors in delivering higher levels of income. Though often neglected in the literature, higher levels of imports also contribute to growth and reduce the cost of living, benefitting the poor. The evidence that access to, and cost, of infrastructure and trade facilitation, affect the level of trade and growth is also compelling.

Sida’s evaluation of its trade related assistance showed that most of its programs were highly relevant and made good progress. However, their results chains could not be traced through to the types of poverty reduction and cross cutting objectives that it aims to deliver. This is a finding that applies also to other evaluations of trade related assistance which have traditionally taken the form of case studies and before and after evidence. One example of how better results chains would improve outcomes and impacts is ensuring that risk based systems for trade facilitation, such as the support Sida is providing for the authorized economic operator scheme in East Africa, do not undermine competition.

Some of the shortcomings of evaluation of trade programs are being addressed. The World Bank’s ‘Where to Spend the Next Million’ brings more rigorous evaluation methods, including RCTs and quasi-experiments, to bear on the subject. The use of these methods validates the proposition that trade is an important area for supporting growth, and ensure that the poor benefit from it.

There is still considerably more research required to assess:

- how trade policies can be more pro-poor, specially by developing measures to manage and mitigate the costs of adjustment
how transport costs can be reduced and
how the internal and external resistance to trade facilitation reforms can be overcome.

In evaluating its trade portfolio, Sida should focus on:

i) the balance of its portfolio across promoting trade policies including regional trade agreements, trade infrastructure and transport costs, trade facilitation, and more direct interventions in support of export promotion;

ii) how far the costs of adjustment and their mitigation is taken into account in trade projects;

iii) the extent to which its projects develop and use logic models that trace effects through to impacts, especially on the poor;

iv) whether its support for trade facilitation takes into account the risk of unintended anti-competitive practices;

v) do export promotion projects attempt to address the underlying market failures.

---

231 Strategy Modelling to support DFID’s Aid for Trade program: Nigeria case-study. Warren K & Ramalingam. 2013

Trade Logistics Reform. Linking Business to Global Markets, Note 355, World Bank


Subramanian, Anderson and Lee , World Bank, 2012


Single Windows and Supply Chains in the Next Decade, ECLAC 2011.

Cultivating Economic Growth and Investment in Liberia, The Liberia Investment Climate Advisory Program, IFC


Sida’s Trade Related Assistance, Results and Management. Goppers K and Lindahl C. Sida 2009.


6 Instruments

6.1.1 Capacity Building

Whilst there is a long history of donors and the MDBs providing technical assistance (TA) to a broad range of institutions relating to PSD, FSD and Trade, in the early 2000s, the emphasis changed from TA to capacity building. This occurred so as to assist institutions to develop capacity in-house and so break the reliance on aid.

In regards to PSD, the main application of capacity building has been towards helping public institutions involved in shaping the business environment to develop the capacity to make and implement better policies and regulations, and to improve the services they provide. The evaluation literature on the subject frequently starts with the admission that it is difficult to measure capacity as it is really a process rather than an outcome/output. Even if policies were changed and services improved, it is often difficult to attribute the change to the capacity building activities. The synthesis report of the evaluation of Dutch support for capacity development reached similar conclusions.

Donor capacity building efforts were also hampered by the fact that the institutions involved were part of the wider civil service and were often thwarted by the terms and conditions of employment which did not reward individual performance or institutions by the outputs they delivered; regularly making any progress unsustainable. As a result, programs now favour building the capacity of institutions to undertake specific reforms, particularly business environment reforms. The wide publicity received when the Doing Business Indicators were launched, and the potential of business environment reforms in terms of growth, motivated governments and donors to attempt reforms.

The literature shows that results vary. DFID conducted a synthesis evaluation in 2004 that was generally favourable of the programs and found good example case studies of successes. However, it noted an absence of measurable outcomes and impacts. A synthesis evaluation of SECO’s business environment programs found that, overall, they had been very effective. The most successful were those that had used IFC to deliver the assistance needed.

Conversely, well-designed programs that have been closest to the principles of the Paris Declaration, in terms of supporting locally owned initiatives, have failed to make the progress expected. Tanzania’s Business Environment Strengthening (BEST) failed to make progress for many years. In Ghana, the National Medium Term Private Sector Development Strategy (PSDS 1), which was essentially a business environment reform program, also failed to make the progress expected until it was restructured. The critical lessons that emerged were the need for strong political commitment, leadership from the top in the institutions involved, and a strong implementing team with the authority and incentive to demand change.

What has emerged in recent years is that it takes more than just good TA to enable institutions to deliver reforms. The World Bank Group guide states that a successful BEE reform program needs to go beyond “promoting” reform to facilitating and enabling changes in behaviour that will make the reform effective and long-lived. The DCED (2008) also supports this view.

The use of capacity building in support of FSD takes various forms, from supporting central banks, insurance and stock market regulators, to strengthening individual MFIs and banks. The latter is probably the biggest recipient of donor resource and, thus, is considered below.

The Evaluation Cooperation Group (ECG), which brings together the evaluation departments of the major MDBs and IFIs, has recently carried out a synthesis evaluation of support for microfinance, including supporting banks, to downscale their lending. It found that, overall, there was satisfaction at the outputs delivered by programs to build capacity amongst MFIs and to help banks
downscale. The main indicators used were savings mobilised, loans given, and repayment rates. The report was, however, critical of the lack of measurement at the outcome and impact level and urged that rigorous evaluation should be carried out. Another synthesis evaluation\textsuperscript{101} was undertaken by IFC of its Capacity Building Facility’s 39 access-to-finance projects for SMEs. The results and recommendations were very similar to the ECG. The findings on project effectiveness were positive and they showed that projects are most viable and scalable when developed within commercial institutions.

There is tremendous variation in the way that donors define trade capacity building (TCB). The largest donor in the field of TCB is the US. A synthesis evaluation of USAID’s TCB\textsuperscript{302} showed it to be very effective stating ‘on a predictive basis, the results of the regression show that an additional $1 of USAID TCB assistance is associated with a $42 increase in the value of developing country exports two years hence’. The study found a statistically valid correlation between USAID TCB and improvements in the country’s score on the Heritage Foundation’s Trade Freedom Index and applied tariff weighted averages showing that countries did liberalise their trade regimes as a result of USAID assistance. It also found a strong correlation between USAID TCB and improvements in private sector trade related practices as measured by gains in exports.

The correlation between USAID TCB and more cost-effective movement of goods across borders, however, was weaker. There was no correlation with the Logistics Performance Index, a widely respected indicator of the efficiency of moving goods to international markets. There was a statistically valid correlation with the Trade Freedom Index which has a customs component. The result is surprising given that the World Bank Group shows that many countries have made progress in reducing the time and cost of trading across borders, as measured in the doing Business Index, often with donor support.

Sida’s evaluation of its trade related assistance showed good progress in educating trade negotiators and building capacity. However, it found that it was not possible to trace though the outputs to outcomes in terms of higher trade or impacts in the form of poverty reduction\textsuperscript{103}.

**Conclusions, Further Research & Recommendations for Sida Evaluation:** Provided the recipients and providers of technical assistance are picked well, capacity building does deliver outputs. However, there is a growing recognition that such capacity building is best done within a systems approach, with complementary interventions to ensure that it results in intended outcomes and impacts. The possibility of internal resistance to change and the influence of political economy issues needs to be better integrated into the design of programs. There is a need for better evaluations to measure the outcomes and impact of capacity building programs and this is what Sida should focus on in its evaluation.

### 6.1.2 Challenge Funds

The challenge fund instrument has the potential for delivering strong social impacts whilst using a portfolio approach to mitigate project risk\textsuperscript{104}.

The DFID funded Financial Deepening Challenge Fund (FDCF) was considered a major success\textsuperscript{305}. It leveraged over 5 times DFID’s investment in investment by the private sector and successfully catalysed innovative projects in wholesale finance for microfinance, leasing, micro insurance, and mobile phone based payment systems. FDCF supported M-PESA which now provides cheap money transfer services to over 26 million customers. The project completion review of the FDCF concluded that the program had delivered excellent value for money, however, it was recognised that the FDCF had not carried out a rigorous evaluation of impacts.

Since then, an independent impact evaluation has been carried out of M-PESA. The impact study carried out by Mbiti and Wei\textsuperscript{106} was positive stating that ‘while we find little evidence that people use their M-Pesa accounts as a place to store wealth, our results suggest that M-Pesa improves
individual outcomes by promoting banking and increasing transfers’. The study found that M-PESA had caused the price of transferring money to fall.

There have been a number of concerns raised in regards to challenge funds in relation to them distorting competition. However, in the case of M-PESA, there is evidence that it is facing strong competition now in both Kenya and Tanzania. However, it is the case that Safaricom has enjoyed first mover advantage and continues to do so in Kenya. For example, the company was able to sign up a large number of agents on an exclusive basis and that means that newer entrants struggle to do so. A change in regulation is needed to declare these exclusive arrangements anti-competitive. It is this type of more systemic approach that challenge funds are poor at delivering and why they need to be part of wider efforts to promote systemic change.

The best-known case study of a challenge fund project to increase trade is the Great Lakes Cotton project funded by Business Linkage Challenge Funds (BLCF) in Malawi which doubled that country’s cotton exports over a 2 year period. It also increased the incomes of over 200,000 farmers by 20% with a grant of £300,000. The DFID funded Food Retail Industries Challenge Fund (FRICH) has also scored notable successes in increasing exports of food from Africa to the UK and Europe catalysing innovation in the supply chains of European supermarkets and large importers. It has helped African producers, including some based in conflict affected countries such as the DRC, develop new, more attractive channels to market and increase incomes earned by enabling producers to access higher value markets for organic and fair trade certified products.

The instrument has, however, also been criticised on several fronts. A review of donor partnerships with business, recently published by DCED, summarizes lessons learnt from the (few) reviews of challenge funds that have been undertaken. It notes that there are concerns over establishing input additionality (how much more did the private sector invest), output additionality (would the project have gone ahead without the challenge fund), and development impacts claimed because most challenge funds rely on self-reporting mechanisms. It suggests that better results measurement, using the DCED’s Standard for Results measurement, as the Enterprise Challenge Fund and the Africa Enterprise Challenge Fund (AECF) do, could help to improve measurement. It is generally supporting of business partnerships, especially those with the potential to deliver systemic impacts.

In addition, some commentators have questioned the extent to which it really is able to leverage additional investment from its recipients (input additionality) and whether it has delivered additional outputs, citing the example of findings of evaluations of innovation grants to the private sector in the UK. Actually, the evidence cited does not say there is a lack of input additionality, stating that much of the empirical literature finds for additionality, though the case is most convincing when the recipient is a young or smaller business. Nevertheless, if this criticism holds, the challenge fund instrument would simply serve as a means to subsidize some businesses, with the potential to distort market outcomes without any public gains.

The design of challenge funds is aware of these potential risks and most put in place principles to safeguard against them. However, in practice, these safeguards may not be followed:

1. Financing innovative projects not the business. The grant or non-recourse loan is directed to enable the firm to undertake a particular, innovative activity, such as introducing a new product or service that will benefit the poor, not to support the business itself. The grant manager is expected to check that the funds are used for the purpose intended. However, in practice, challenge funds have started to regard themselves as an SME financing mechanism where they are financing the business. This runs contrary to the principles of challenge funds and is unlikely to work as this instrument lacks the capability of impact investors to exercise oversight over the business and the legal liens exercised by banks over assets.
2. Proven public benefits but uncertain financial returns. As shown in the diagram below, the aim of a challenge funds is to invest in projects whose public benefits are proven but whose financial returns are uncertain. They must have the potential for financial sustainability to ensure that, if they succeed, they can be sustained by their own returns but an ex-ante analysis should show their risk adjusted returns to be below an acceptable commercial return. In practice though, fund managers may not carry out an ex-ante analysis of financial returns and may end up having only a vague idea of public benefits.

3. The minimum contribution needed to trigger a ‘no-go to a go decision’. In order to ensure financial additionality, reduce moral hazard, and maximise value for money, the fund manager is tasked to invest the minimum amount of funds needed for the project to go ahead. To date, most challenge funds report financial leverage of over 1 and, as noted earlier, some report a leverage of 5, so financial additionality is high. However, there is some evidence of the proliferation of challenge funds leading to several providing assistance to the same company which may cause a waste of public funds and may distort markets. Companies that are good users of public funds tend to receive more funds and deliver better returns across all types of innovation. So it is to be expected that such businesses receive grants for several projects. However, there is little justification for several challenge funds providing funds for the same project. Sound due diligence by the fund manager and better oversight by donors should eliminate the danger.

4. Ensuring that the project is not likely to ahead without the support of the challenge fund. The principle of triggering a no-go to a go decision should ensure output additionality. However, it is very hard to prove that the project would not have gone ahead without the contribution made as there is no counterfactual. So, what evaluators have done is to go back over the projects that challenge funds have rejected and assessed how many have gone ahead without the contribution from the challenge fund. In the case of the FDCF, very few had, showing that the projects funded were also unlikely to have gone ahead without the assistance. This is confirmed by personal interviews with successful applicants. For example, Nick Hughes, the inventor of M-PESA, informed the AECF design team that he had been turned down 4 times by Vodafone’s internal investment function before he was given a grant by FDCF. It was only after he received that grant that he was able to convince Vodafone to go ahead. However, it is possible that challenge funds may not always be rigorous in ensuring that the project would not go ahead without their help.

5. Paying by results. The instrument that challenge funds are supposed to use to provide the contribution is a performance based contract paying for public benefits if, and when, they are delivered. That is supposed to avoid the possibility of moral hazard and/or project failure resulting in waste of public funds. However, some have not used such an instrument, opting instead for cash flow based support which makes the fund culpable for supporting the business and, thereby, incurring the risk of moral hazard.

6. Ensuring crowding-in through replication. As the main rationale for any innovation grant is the spillovers that will follow from others adopting the technology or product, it is incumbent upon the managers of challenge funds to ensure replication through publicising
successes. The failure of the first generation challenge funds (e.g., FDCF, BLCF) to crowd in others was considered one of their main weaknesses even though M-PESA did change the market for mobile money transfer services in East Africa. Today all the main mobile phone companies provide money transfer services across East and West Africa. M-PESA remains the dominant provider in Kenya and Tanzania because of its first mover advantage but it is losing market share. In the other countries of East, and now West Africa, it is not the dominant provider. It is the case that the publicity that M-PESA attracted has played a key role in promoting the spillover of mobile phone based money transfer facilities. However, not all challenge funds have promoted spillovers. Where there is intellectual property involved, this is understandable, but in other cases fund managers should be tasked to promote replication.

7. Delivering systemic change by working with the public sector. The reviews of the FDCF and BLCF noted that the instrument was not suited to delivering policy or regulatory change, or the improved institutional delivery of support functions provided by the public sector. Without such changes, it may not be possible to deliver impact. The design of the AECF therefore tasked the fund manager to work with programs that could promote such change but it has not succeeded in doing so. Even the proponents of the instrument admit that it is not suited to delivering systemic change: it works by promoting innovation to overcome market failure but may not address the underlying causes of market failure. This is a valid criticism to which the obvious response it to embed the instrument within a wider M4P program as DFID programs in Uganda (CrossRoads) and Nigeria (GEMS) have done.

Case Study 10: Africa Enterprise Challenge Fund (AECF)

The AECF was established in 2008 to promote pro-poor business innovation with a budget of $50 million. It has now raised $207 million and its donors have grown from 4 to 7. The independent mid-term review of the AECF found that it was likely to meet its targets. It is already benefiting 600,000 households, and thus in excess of 2 million people, delivering gains averaging $244 per household. The total benefits therefore amount to $148 million compared to total disbursements of $33 million. This is a development rate of return (DRR) 4.5 times the funds it has disbursed. Like all direct instruments to promote innovation, the majority of its benefits arise from a small number of projects, with a long tail of projects that contribute a small amount. The project failure rate is in line with other instruments that promote innovation.

A recent strategic review found that it has mainly focused on agribusiness, though rural finance was an equally important area for it to address. The results show that (i) models that benefit the poor as consumers have a larger number of beneficiaries than those that benefit the poor as producers; (ii) Producers benefit the most in partnerships in the agricultural sector; and (iii) Multi-stakeholder coalitions tend to have larger-scale results than matching grants to an individual company or joint venture. It also found that financial sector projects achieve high outreach in terms of numbers of beneficiaries but delivers modest benefits per beneficiary. Nevertheless, the aggregate benefit delivered is high.

Due to decisions made by its donors, the fund was becoming an instrument for financing innovative SME start-ups and providing cash flow support. The instrument is not suited to this given its light touch structure. Its M&E system should also be able to provide better results measurement using the DCED Standard with some evidence of the counterfactual.

Conclusions, Further Research & Recommendations for Sida: The challenge fund is a versatile instrument that is quite easily adapted to new challenges. To make it effective, it is important that
fund managers are tasked with following the principles above. The measurement of outcomes and the impacts of challenge funds leaves something to be desired. In particular, better evidence is needed of how the logic model of projects, developed through the use of the DCED Standard, is working and the comparison of the impacts delivered with counterfactuals. Sida should commission a review of challenge funds as part of its evaluation of its market development portfolio.

6.1.3 Guarantees

The IEG of the World Bank undertook a synthesis evaluation of guarantee instruments issued between 1990-2007 (IEG 2009). The guarantees were mainly used to help develop infrastructure, support the financial sector, and to develop the manufacturing and service industries. The evaluation found the guarantee instrument to be especially valuable in enabling worthwhile projects to be undertaken in high-risk sectors and countries. It also found that the instrument played a particularly worthwhile role in the financial sector where moral hazard and information asymmetries abound. The IFC has found that its partial credit guarantees serve a valuable purpose in enabling banks in the developing countries to raise lines of credit internationally at more competitive rates.

The IEG did note, however, that there were limitations on measuring the outcomes and impacts of the projects. It found that the use of guarantee products in each of the three institutions fell short of expectations, because of both external and internal factors. The findings were, however, critical of organisational structures, not of the instrument, as that plays a catalytic role with high levels of additionality and attribution.

---

### Case Study 11: EcoEnergy Sugar Production PPP, Tanzania

EcoEnergy is an agro-industry project that will produce sugar for the domestic market in Tanzania, as well as electricity for the national grid and bio-ethanol processed from excess sugar cane. The project will include a large-scale modern farming operation, as well as an outgrower scheme aimed at smallholders. The project is a private Swedish company working in partnership with the Government of Tanzania (PPP). It will be financed by a consortium of development banks, including the ADB. Sida has financed preparatory studies and will be requested to provide a loan guarantee to the bank consortium to guard against potential cost overrun and/or delays in revenues during the start-up phase.

Land is available, farm input supply and water management has been secured, the market for sugar has been established, and there is an enabling environment for supplying power to the grid. Prospects for agricultural growth resulting from the project seem positive and the supply of power from a renewable source no doubt valuable.

However, there are key questions that need to be addressed as to why a guarantee is warranted. As set out in the Tanzania Investment Centre’s presentation of investment opportunities, Tanzania is a stable country politically and economically, and sovereign risk guarantees are available from MIGA. Moreover, there are already 4 large sugar operations in existence in Tanzania. So, the loan guarantee cannot be justified on the basis of promoting innovation or encouraging investment in high-risk countries and sectors. Nor can it be justified on the basis of a strong impact on poverty. The Environmental and Social Impact Assessment shows that whilst 7,800 h.a. will be used for establishing the nucleus estate, half that amount of land will be used for the outgrower scheme. The numbers of farmers benefitting will be low.

The other use of the guarantee instrument, particularly for FSD, is credit guarantee schemes (CGS) that help to overcome the risk aversion of the banks, caused by information failures, to lend to SMEs. Beck, Klapper, and Mendoza (2008) show that, among the 76 schemes in 46 developed and developing countries, mutual guarantee funds tend to operate in high-income countries whilst most middle and low-income countries have publically operated funds. They found that risk cover and
rates of default varied tremendously: 40% of the reviewed schemes offer guarantees of up to 100% which reduces leverage, which is not good practice as it encourages moral hazard. Hansen et al. (2013)\textsuperscript{14} find that most schemes in Africa are small and that whilst they are able to make a contribution to improving access to finance, the contribution is small. Levitsky (1997) estimates that, on average, CGSs create 30% to 35% of financial additionality.\textsuperscript{315} Honohan (2008)\textsuperscript{316} finds that there are success stories of direct government intervention in the financial market using CGS but warns of the dangers of guarantee schemes that are introduced because of their political attraction rather than because of likely welfare improvements. In that case, their benefits are low.

In Chile, Larrain and Quiroz (2006) find that the guarantee scheme increases the probability of small firms to get a loan by 14% and the volume of lending by 40%. In Canada, Ridding (2007)\textsuperscript{317} estimated that 75% of guarantees are used by firms that would not have been able to obtain a loan otherwise and find that credit guarantee schemes have the opportunity to contribute not only to credit additionality, but also to technology, knowledge spillover, and economic additionality. Roper (2009) finds that KOTEC (a program that provides credit guarantees to new technology-based enterprises) had a positive effect on sales growth and productivity in the firms to which it caters. In particular, the firm evaluation process and the systems to support technology implementation have contributed to a high survival probability of loans.

IFC 2008 finds that not all banks will require risk-sharing facilities but, for a certain segment, risk-sharing can provide the critical catalyst to support a bank’s move into a new market.\textsuperscript{318} A review of IFC’s 15 years of experience with risk-sharing facilities in the sustainable energy space demonstrated that, prior to receiving the risk sharing facility, the partner banks were unwilling to put significant levels of their own funding into a new segment such as sustainable energy. However, with risk-sharing arrangements, participating banks’ lending to sustainable energy projects grew by 21% -129% per annum, well beyond what, if anything, had been done in previous years.

The above paints a mixed picture of success with some evaluations concluding that the CGS instrument has limited financial and economic additionality and others that they are effective in contributing to financial deepening through high financial additionality. It may be concluded that the CGS is a worthwhile instrument but needs to be used in specific conditions and with the following criteria in mind:

1. Schemes should be designed so that the relationship between the participating financial institution and the guarantor is purely commercial. Where public institutions are involved in providing the guarantee, governance arrangements should ensure their independence and prevent political interference.

2. To ensure financial additionality, the participating financial institutions need to be liquid and must be willing to put their own funds at risk. Ideally, recipients should be first time borrowers or belong to an industry or type of business that has been excluded previously.

3. For sustainability, the banks must be willing to change their loan appraisal criteria and processes to reduce their reliance on collateral and be willing to pay a commercial premium for the guarantee in due course.

4. Recipients must be appraised for their ability to deliver economic additionality in the form of higher investment, output and jobs.

5. Rigorous M&E should be incorporated into the design with the scope to use experimental methods for evaluation.

In regards to trade guarantees, both developed and larger developing countries have export credit agencies that guarantee the payment by an importer for the specified good or service, thus enabling the exporter to raise finance to produce the good. The IFC’s Global Trade Finance Program (GTFP) enables IFC to assume the trade-related payment risk of financial institutions in developing countries.
by issuing guarantees to their correspondent (usually international or regional) banks. By mitigating the risks of trade transactions, the program aims to help less creditworthy countries and firms gain access to finance by reducing funding and regulatory compliance costs, improving liquidity in banks, lowering the costs of finance, decreasing collateral requirements, and supporting relationships between financial institutions. The GTFP has grown rapidly with its exposure, increasing from $500 million in 2006 to over $3 billion in 2011. It played a major role in ensuring that the drying up of trade finance following the global financial crisis hurt the trade of developing countries only for a short time. The IEG of the World Bank has commissioned an evaluation of the IFC’s GTFP but the results have not been made public.

**Conclusions & Further Research:** Overall, guarantees have proven a valuable instrument that make it possible for economically desirable investments to take place, overcoming the problem of information failures and country and sector risks. Its main attractiveness for donors is that it results in the economic activity taking place with a reasonable possibility that its financial support will not be called upon. Thus, over time, the contingent liability of the guarantee can be removed from the donor/DFI’s balance sheet, and the funds can be redeployed to other development uses. Funds can thus be leveraged several times. Its main weakness is that it is possible that it generates low financial and economic additionality and may, on occasion, become an instrument of political control and patronage. Good design should be able to overcome its drawbacks ensuring that the conditions for success are in place.

There is a need to carry out a more detailed assessment of the use of guarantees by Sida to measure their real financial and economic additionality. The case study above leaves room for considerable doubt as to whether the loan guarantee would deliver economic additionality.

### 6.1.4 Direct Grants

Though donors have provided direct grant assistance to firms in various forms, the most common use of grants for PSD is in the form of matching grant schemes (MGS) to enable SMEs to purchase BDS services. Previously, the provision of knowledge and skills was considered a public good. The market failure in the development of the market for BDS was diagnosed as information, as firms did not place a high enough value on BDS services of a strategic nature. So, providing financial assistance was expected to overcome the market failure after which SMEs were expected to be more willing to pay for the service themselves. The recipient of the grant was expected to contribute to the total cost of BDS to avoid moral hazard. A variant on the MGS was the use of voucher schemes but, essentially, the same logic model applied.

The World Bank commissioned a synthesis evaluation of ten MGSs in 2001 which found that the participant firms increased output (sales or exports) several times the value of the grant. However, the schemes were expensive in terms of administrative costs and there was serious doubt cast as to their sustainability. In terms of developing the BDS market, it was unlikely that they would achieve their purpose of getting more SMEs to use BDS. The concerns over sustainability were also backed up by the DCED’s Guidelines to donors in supporting BDS for small enterprises. As a result, the guidelines suggested that donor support should be targeted at developing the market through raising awareness of the benefits of using BDS as well as increasing the supply of good quality BDS. The subsidy should be given before the transaction and after it, not for the transaction.

In 2003, the ILO produced its BDS Primer. It advocated for more use of embedded BDS provision whereby large firms in the value chain provide knowledge and skills to their smaller suppliers and distributors. The Primer documented many examples of this happening with minimal donor or NGO support. The sustained supply of such services is assured because the large firm has a commercial interest in developing better supply or distribution chains. This is why many M4P programs facilitate the supply of embedded services, with programs such as Katalyst claiming major successes.
Another approach to BDS provision was to stimulate the greater supply of low cost, but good quality services. This took the form of training large numbers of individuals in supplying BDS services. Though the output of such schemes was impressive, there was far less proof that they delivered the outcomes of making good quality BDS services affordable to SMEs and so increased their use, or that they delivered the impact of increasing output or employment.

A less well-known approach which has been piloted by the World Bank is to stimulate the supply of BDS by incentivising good quality BDS providers to innovate new products and business models to serve large numbers of MSMEs. For example, the World Bank financed MSME Project in Nigeria provided matching grants to 69 BDS providers who provided over 25 new products and services to 20,000 MSMEs. An independent evaluation found that, on average, the quarterly sales of recipients increased 112% compared to a decrease in sales amongst the control group of MSMEs receiving BDS from other sources, so the difference was statistically valid at a 95% level of confidence. This pilot project spent just $3.5 million at an average cost of $175 per MSME, so BDS was found to be highly cost effective. Cost recovery was approaching 70% so there was progress in achieving commercial viability.

For all their limitations, traditional MGSs have continued and, some, do produce good results. For instance, the Facility for New Market Development (FNMD) to Strengthen the Private Sector in the Occupied Palestinian Territories was a MGS funded by DFID. Its evaluation reported strong outputs and employment gains amongst recipient firms. IFAD has recently produced a Technical Note on Matching Grants that recommends their use subject to safeguards.

Like all direct support to firms, the use of MGS suffers from the problem of adverse selection (selection bias), whereby those who need the support least, seem to receive it most. And they are prone to moral hazard as the recipient has little to lose if the services are not used properly. Further, in evaluating their outcomes and impacts, care needs to be taken to account for substitution and displacement effects, and in attribution of results. Awareness of these issues has caused much more rigorous evaluation methods to be used. Recent studies, using these methods, do show notable gains in output suggesting that knowledge does make a difference if it is provided by high quality service providers. However, many more evaluations are needed to assess whether the results emerging from these studies are generalizable across contexts and countries.

In regards to FSD, on a small scale, grants have been used to carry out experiments on the effect of providing finance to firms. McKenzie (2009) synthesizes impact evaluations in the area of finance for PSD. Findings of 2 randomized experiments of giving grants to poor microenterprises show that grants do substantially raise incomes for the average firm receiving a grant, and estimate real returns to capital of 5.7 per cent per month (Sri Lanka), and even 20 per cent per month in Mexico. McKenzie finds returns to be highest for high ability, credit-constrained, firm owners. This is consistent with the view that credit market failures prevent talented owners from getting their firm to its optimal size. However, that is not a justification for giving grants on a wider scale. The provision of grant funding on a large scale is likely to suffer from political interference, adverse selection and displacement, and substitution effects. Most importantly, it would crowd out the financial system setting the country back in terms of economic development.

A number of studies have been undertaken to ascertain the impact of direct grants to boost trade. Phillips (2001) compiled the potential export multiple for different matching grants schemes. His findings are shown in the following figure below:

Figure 17: Export multiples of matching grants schemes

<table>
<thead>
<tr>
<th>Export multiples of comparable matching grants schemes</th>
<th>Export Multiple</th>
<th>Lifespan of project (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India Industrial Export Project 1986</td>
<td>37:1</td>
<td>5</td>
</tr>
</tbody>
</table>
India Export Development Project 1989  
Indonesia Export development project 1986  
Kenya Export Development Project 2991  
Mauritius Technology Diffusion Scheme 1994

<table>
<thead>
<tr>
<th>Project</th>
<th>Ratio</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>India Export Development Project 1989</td>
<td>50:1</td>
<td>7</td>
</tr>
<tr>
<td>Indonesia Export development project 1986</td>
<td>36:1</td>
<td>6</td>
</tr>
<tr>
<td>Kenya Export Development Project 2991</td>
<td>42:1</td>
<td>4</td>
</tr>
<tr>
<td>Mauritius Technology Diffusion Scheme 1994</td>
<td>124:1</td>
<td>5</td>
</tr>
</tbody>
</table>

The data on outcomes and impacts, however, was weak. The methodology used in the evaluations surveyed by Phillips was poor not taking account of differences between the treated and untreated groups, or allowing for selection bias.

In Chapter 3 of the World Bank’s report on “Where to Spend the next Million, Can Matching Grants Promote Exports? Evidence from Tunisia’s FAMEX II Program”, Julien Gourdon et al. (2011) overcame the problem of selection bias in a matching grant scheme. In this evaluation, firms were “matched” across the treated and non-treated groups. Figure 18 presents the raw (unmatched) differences in the growth rate of exports and other key outcomes across the treatment and control groups of firms between 2004 and 2008.

*Figure 18: Differences in Treated and Control Groups Export performance*

![Figure 18](image)

Figure 19 plots the matching impact of the grant program (Famex) on annual growth rates of total exports, the number of exported products, and of destinations, served by firms in the treatment group against matched counterparts in the untreated group. Using difference in difference, the matched differences are statistically significant at the 5% confidence level. This shows that a well-directed MGS scheme can play a valuable role in boosting exports contributing to growth and, depending on what is exported, possibly also poverty reduction.
Figure 19: Differences in the growth rate of exports and other key outcomes across the treatment and control groups of firms between 2004 and 2008

Conclusions, Further Research & Recommendations for Sida: The evidence suggests that grants can be an effective instrument in market development. The use of RCTs and quasi experiments shows that they can claim attribution and provide additionality. Their use is vulnerable to adverse selection and moral hazard and they suffer from the problem of displacement and substitution effects to which all private sector interventions are prone. However, there are ways to overcome these weaknesses. In addition, their use can be questioned on the grounds that they do not deliver systemic change by addressing the market failures that made their use necessary in the first place. Again, it is possible to make their use more systemic. Supply side BDS and supporting embedded services are examples, but, they need to be part of a suite of measures to address the underlying market failures.

There is a need for a better methodology to measure the effectiveness of grants that also takes account of displacement and substation effects. Moreover, further study is needed to set out how their use can lead to more systemic impacts, taking on board the contexts in which Sida is likely to use them most. Sida should examine the extent of additionality delivered by its programs providing grants, and assess how far they took account of potential displacement and substitution. They should also use difference in difference or RCTs to measure impacts.

290 WBI. 2004. YEMILE MIZRAHI. Capacity Enhancement Indicators; Review of the Literature, World Bank
295 REVIEW OF DFID ACTIVITIES IN THE ENABLING ENVIRONMENT, White S & Fortune P, DFID 2004,
296 Independent Evaluation - The Role and Effectiveness of SECO Cooperation in Business Environment Reform, 2011.
300 Making Microfinance Work. Evidence from Evaluations, ECG, 2010
302 Aid for Trade: Delivering Results: A Cross Country Evaluation of USAID’s Trade Capacity Building. MSI, 2010
Sida’s Trade-Related Assistance: Results and Management. Goppers K & Lindahl C, Sida Evaluation, 2009


David Elliot Blog

The Impact of Direct Support to R&D and Innovation in Firms. Paul Cunningham, Abdullah Gök, Philippe Laredo, NESTA, 2013

Personal interview with Nick Hughes


Levitsky, J. (1997), Credit Guarantee Schemes for SMEs – an international review Small Enterprise Development.

PARTIAL CREDIT GUARANTEES: PRINCIPLES AND PRACTICE Patrick Honohan, 2008


Independent Evaluation of IFC’s 14 Sustainable Energy Finance Risk Mitigation Facilities being finalised for publication


This approach is closely associated with the work of XXXXX for GIZ

Facility for New Market Development (FNMD) to Strengthen the Private Sector in the Occupied Palestinian Territories, Final Evaluation, 2011.


7 Appendix A: Agricultural Development

7.1 A Theory of Change for Agriculture

From the sections above, it is clear that agriculture is central to market development. The section on PSD shows that, at the initial stages of development, the major gains in productivity come from agriculture. In addition, a high proportion of the workforce of developing countries is employed in agriculture. As a result, many of the new approaches to development, such as M4P and challenge funds, have been piloted in the agricultural sector. Therefore, even though not required by the terms of reference, we have developed a ToC and examined the evidence in support of agricultural interventions.

What follows in this section is a ToC for agriculture together with a presentation of the evidence supporting the linkages underlying the theory. This is followed by an examination of a set of key result chains embedded in the ToC. We focus on the issues that we consider most relevant to market development.

The ToC traces the inputs or activities that Sida might support, outputs of these activities, intended outcomes, and expected impact on agricultural growth and poverty reduction. There are overlaps with the other ToCs developed in other sections of this report; this is inevitable in view of the close relationships between the key components of market development and their common focus on poverty eradication. The ToC is a simplified model of a vast number of complex relationships that go not only in the vertical direction, but also horizontally.

The ToC is based on a sample of some 30 reports reviewed for this assignment, the list of references in Annex 3 to the ToR, and our general knowledge of the sector. The sample of reports can be classified roughly in three categories: (i) impact studies and evaluations; (ii) policy guidelines and research/working papers; and (iii) donor guidelines and M&E handbooks. Most of these reports were selected in the inception stage, using the ToR as a guideline. A first list was provided in the inception report, a more complete list is at the end of this section.

A main source of the evidence of linkages in the ToC presented below is the World Bank’s World Development Report (WDR) 2008, the theme of which was agriculture. That report draws on a wide range of documents inside and outside the Bank, including 62 background papers and notes, as well as consultations held in several countries (including Sweden). At the time it represented the cutting edge of thinking on this subject. It was later supplemented by a meta-analysis of 86 impact evaluations in agriculture issued by the Independent Evaluation Group (IEG) of the World Bank in 2011.
7.2 What Works for Agriculture

7.2.1 Agriculture and poverty.

In view of the importance of the poverty-reduction objective as an overall guide for Swedish development cooperation, we start with an examination of role of agriculture in that regard.

The strong evidence emerging from the literature is that growth in agriculture is central to poverty reduction in low-income economies. The World Bank (2008)\(^{327}\) and IEG (2010)\(^{328}\) classified countries in three categories: agriculture-based, transforming, and urbanized. The first category includes countries mostly from Sub-Saharan Africa, the second a number of middle-income countries in East Asia, North Africa, and the Middle East, and the third countries from e.g. the Western Balkans and CIS. In the agriculture-based countries, the share of agriculture in GDP was 25 per cent, in the transforming countries 12 per cent, and in the urbanized countries 9 per cent.

In the agriculture-based economies, agricultural development is essential to growth and poverty reduction, yet productivity lags substantially behind that of transforming and urbanized economies. The transforming economies are less dependent on agriculture for overall growth, but agriculture and rural development are needed to reduce poverty and narrow the rural-urban divide; an example of a country in this category is India with large pockets of rural poverty. In the urbanized countries, poverty is no longer primarily rural, and agriculture contributes only modestly to growth\(^{329}\).

A recent paper by IFPRI suggests a typology of smallholder farms and appropriate strategies and interventions\(^{330}\). Subsistence farms are divided into two categories: those with profit potential and

---

Figure 20: A Theory of Change for agriculture

<table>
<thead>
<tr>
<th>Enabling environment</th>
<th>Support Functions</th>
<th>Rural Infrastructure</th>
<th>Agricultural markets</th>
<th>Non-farm activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Agric. policy and institutions;</td>
<td>• Agric.R&amp;D;</td>
<td>• Rural roads network;</td>
<td>• Marketing linkages and networks;</td>
<td>• Non-farm economic activities for the poor;</td>
</tr>
<tr>
<td>• Land policy and registration;</td>
<td>• Financial services,</td>
<td>• Transport services;</td>
<td>• Institutions; value chains;</td>
<td>• Public works; support to SMEs;</td>
</tr>
<tr>
<td>• Pricing;</td>
<td>• guarantees;</td>
<td>• Telecommunications;</td>
<td>• ICT;</td>
<td>• Energy-saving activities;</td>
</tr>
<tr>
<td>• domestic and export crop promotion;</td>
<td>• Agric. extension services;</td>
<td>• Irrigation networks;</td>
<td>• Private sector involvement;</td>
<td>• Water capture;</td>
</tr>
<tr>
<td>• investment plan;</td>
<td>• Farm input supply;</td>
<td>• Markets and trading</td>
<td>• Product quality and grading</td>
<td>• Gender focus</td>
</tr>
</tbody>
</table>

Improved Enabling environment
- Bias in policy and pricing against rural areas and agric. reduced
- Cash crop promotion strengthened
- Land policy improved

Improved agric. Productivity
- Availability of retro-enforcing farm inputs increased
- Availability of improved crop varieties increased
- Focus on women and youth raised

Better rural Infrastructure
- Rural infrastructure improved
- Markets and trading centers established
- Irrigation networks improved

Better functioning markets
- Marketing institutions strengthened
- Price information improved
- Private sector involvement in input and output markets increased
- Value chains created

Higher Productivity & Competitiveness
- Productive non-farm activities identified and supported
- SMEs strengthened
- Use of firewood and water improved

Outcome
- Capable agricultural sector drives investment & productivity

Impact
- Agricultural growth, poverty reduction
- Increased and better focused public expenditure on rural areas
- Land registration widely available
- Increased imports of cash crops
- Reduced transport costs
- Improved availability of modern marketing facilities (storage, quality control)
- Improved agric. productivity
- Increased involvement of women and youth in agric.
- Increased involvement of women and youth in agric.
- Increased on-farm employment
- Improved access to markets
- Better prices for agric. Produce
- Strengthened value chains
- Increased private sector involvement in marketing
- Improved opportunities for off-farm employment
- Increased range of business opportunities for diversify incomes

---

\(^{327}\) World Bank (2008)
\(^{328}\) IEG (2010)
\(^{329}\) IFPRI
\(^{330}\) IFPRI
subject to “soft” constraints (such as limited access to markets and information, financial capital, infrastructure, and smallholder friendly technologies), and those without profit potential and subject not only to the “soft” constraints, but also to “hard” constraints (such as low quality soil, low rainfall and high temperatures, remote location). Then there is a third category of smallholder farms, those that are commercial and subject to the “soft” constraints as well as limited access to capital, insurance and other risk reduction tools. These three categories are grouped in the three categories of countries mentioned above (low income and agriculture-based, transforming, and urbanized) to suggest intervention strategies for each category.

Further evidence of the link between agricultural growth and poverty reduction is provided in a seminal paper by Mellor (1999)\textsuperscript{331}. He discusses the role of agriculture as a growth multiplier oriented towards non-tradable goods and services that use under-employed labour. Hence agriculture stimulates a sector that cannot be activated by increased foreign demand and that mobilizes resources that would otherwise be idle. Those resources are primarily labour and, hence, the source of poverty reduction. He estimates that the impact on other sectors of getting agriculture moving is 2 – 3 times as large as the initial agricultural growth.

This applies also to employment. With an income elasticity of demand for locally produced consumption goods in low-income economies estimated at 1.5, a 5 per cent growth rate in agriculture would give a rate of growth in employment of 7.5 per cent, the additions to employment in the agriculture stimulated local non-farm sector is twice that of agriculture. That is the key point about the agricultural growth impact on poverty\textsuperscript{332}.

De Janvry and Sadoulet (2009)\textsuperscript{333} show that rural poverty reduction has been associated with growth in crop yields and in agricultural labour productivity, but that this relationship varies sharply across regional contexts. They find that on average overall growth originating in agriculture is at least three times as effective in reducing poverty as overall growth originating in the rest of the economy. Market-oriented smallholder farming is the most effective of several alternative ways to help rural households move out of poverty.

Additional evidence of the relationship between agricultural productivity and poverty is provided by Thirtle et al (2001)\textsuperscript{334}. He finds that a 1 per cent increase in crop yields leads to a reduction in the percentage of people below the poverty line of 0.6 – 1.2 per cent. The R & D cost of generating a 1 per cent yield gain can be calculated and will be small relative to the value of the gain, so R&D will be a cost effective means of poverty reduction.

A policy paper for DFID (2005)\textsuperscript{335} also underlines that links between agricultural growth and the wider economy appear to be strong. For the low-income countries, other sources of growth may exist, but few can match agriculture in its ability to reduce poverty and stimulate wider economic growth. Using Nigeria and Zambia as examples, the paper says that mineral wealth has not provided a platform for broad-based poverty reduction and economic growth comparable to that of agriculture and rural development.

In the aforementioned paper, Mellor also argues that the multiplier of public sector investment in agriculture is far greater than for non-agriculture, that public investment is important to agricultural growth, and that such state spending reduces poverty through its effect on crop yields. His conclusion is that pressure to reduce public sector deficits related to agriculture should be applied with caution with regard to its effects on the reduction of poverty.

The importance of agricultural productivity growth as a crucial factor in explaining the rate of poverty reduction in low-income countries, as outlined in the evidence presented above, is consistent with the evidence presented earlier in this report in Chapter 3 on PSD, section on productivity. There is strong evidence cited there that, in most of these countries, productivity growth starts with agriculture.
7.2.2 Constraints on agricultural development.

But if the evidence is so strong that agricultural development reduces poverty, it is reasonable to ask why this has not happened, or at least is happening so slowly, e.g. in most SSA countries. The World Bank\textsuperscript{336} has suggested four hypotheses to explain the divide between the promise and reality in agriculture:

- Agricultural productivity growth is intrinsically slow, making it hard to realize the growth and poverty-reducing potential of agriculture.
- Macroeconomic, price and trade policies unduly discriminate against agriculture.
- There has been an urban bias in the allocation of public investment as well as mis-investment within agriculture.
- Official development assistance to agriculture has declined.

The Bank itself refutes the first, saying that in countries where agricultural commodities are mostly tradable, there are many examples of countries where factor productivity has grown faster in agriculture than in industry; Brazil and Chile are cited as examples. But in countries where agriculture is less tradable, such as in SSA, the sector is likely to grow more slowly than other sectors. There is considerable evidence that there has been a strong policy bias against agriculture, particularly in SSA countries, including overvalued exchange rates, taxes on agricultural exports, and low food prices to favour urban consumers. In the face of such policy biases, interventions in agriculture have often met with poor success causing fatigue in donor circles and the decline in ODA. While this is now slowly changing, the deleterious effects of market imperfections biased against small-scale farming often remain. The low level of public spending on agriculture in low-income countries, 4-5 per cent of national budgets, is insufficient for sustained growth, and the Bank argues that at least a doubling of public spending would be required to reverse current trends.

Development assistance to agriculture has declined dramatically from a high of about 18 per cent of all ODA in 1979 to some 5 per cent today\textsuperscript{337}. This trend seems to fly in the face of the strong focus on poverty eradication expressed by most donors. However, new approaches to agricultural development based on decentralization of government services, participation of beneficiaries, and more private sector involvement, including public-private partnerships, hold greater likelihood of success.

7.2.3 The M4P approach in agriculture.

One such new approach is Markets for the Poor or M4P, an analytical approach introduced in 2001 and embraced by donors such as DFID, Swiss Development Cooperation and Sida. It is relevant to ask whether the M4P approach has contributed to greater food security.

The M4Phub website has a section on agriculture which lists 14 projects\textsuperscript{338}. The information available on these projects varies, in some cases it is quite extensive, in other cases it is limited to short summaries. Some of the projects are very recent and have not yet yielded any significant results, while some have been ongoing long enough to be meaningfully evaluated. These projects seem to have several features in common:

- They start from the premise that the poor are dependent on market systems for their livelihood, that these systems in various ways fail to benefit the poor, and that systemic change of these systems is required to allow the poor to gain sustainably from participating in the market.
Most of them offer one or several innovations designed to raise the incomes of the poor and to be sold in the market on commercial terms, assuming that market systems can be reformed.

For the innovations to be disseminated there are usually four prerequisites: (a) the innovations are tested and developed, often in collaboration with public R&D services; (b) finance is available, usually through existing commercial banks, allowing the poor to acquire the innovations; (c) an institution is created to allow dialogue between beneficiaries and the public or private service providers; and (d) an increasing role for the private sector, complementing or replacing public services.

Katalyst II in Bangladesh is one of the few agricultural M4P projects that has been subject to an independent evaluation.339 This large program with cumulative contributions by donors of USD55 million since 2003 is generally assessed as successful; “very good value for money” according to the evaluation. It includes one program to promote the cultivation of maize as a cash crop, not for food but for feed for poultry production. This has caused “maize output to soar”, increasing from 94,000 MT in 2000 to 161,700 MT in 2010, promoting contract growing in collaboration between the public agricultural services and private seed companies. Katalyst also has a seed program promoting improved varieties of maize and vegetable seeds. Mini-packs of vegetable seed have been very successful resulting in up to 20 per cent increases in yields for over 450,000 users. While the evaluation cautions that some features of Katalyst are not working as well as expected, that all foreseen systemic market changes have not yet happened, it would seem that the program is making a significant contribution to poverty reduction by connecting the poor to markets.

On PrOpCom in Nigeria there is no independent evaluation, however, two case studies were prepared by the program itself, with contribution from the Springfield Centre, one on tractor leasing and the other on fertilizer marketing.340 The program developed a lease-financing model involving a guarantee to a commercial bank and strengthening a local association of tractor owners and operators to acquire and lease tractors to farmers. It also created a market adapted to small farmers by packaging fertilizers in smaller units which facilitated adoption and resulted in yield increases for maize of some 30 per cent and concomitant income growth for adopters/small farmers. While these case studies are not independent evaluations, they suggest that the program is successfully creating new markets adapted to small farmers.

Overall, the tentative conclusion is that the M4P approach in agriculture may over the long term be making a contribution to improved pathways out of poverty. Many of the characteristics of these 14 projects are not new, value chain innovations/training/finance/institutions have featured in rural development programs for many years. What is new is the focus on the market and on private sector involvement, but with the exception of Katalyst, no evaluation of the approach is yet available. Even Katalyst though has not been subject to evaluation using a rigorous methodology. All that is available are good logic models with independent points of verification. That methodology has been certified as gold standard by the DCED. But it is far short of what academics would consider hard evidence: it does not include any counterfactual let alone take account of displacement and substitution effects.

**7.2.4 Farm input subsidies.**

A controversial issue in agriculture everywhere relates to subsidies. This is very present in the rich countries of the EU, as well as in the low-income countries of SSA. In the latter large-scale input subsidy programs have grown in popularity over the last decade. However, subsidies can often have unexpected effects and evoke some of the policy failures that have affected agricultural performance, as mentioned above.

The pioneer in this regard is the agricultural input subsidy program in Malawi, implemented against the explicit advice of the World Bank in 2005/2006. This was thoroughly evaluated in 2008 by a team
funded by DFID and USAID\textsuperscript{341}. More recently, there has been a paper published by the Nordic Africa Institute commenting on the performance of the program\textsuperscript{342}.

When the 2008 evaluation was carried out the subsidies had been in force in two cropping seasons. Its overall conclusion was that the program had made important contributions to the government’s objectives for pro-poor growth. Incremental production of maize due to subsidies on fertilizer and seed is estimated at 670,000 MT out of what was a record total maize production in 2006/7 of 3.4 million MT. In later years, the incremental production is estimated to have exceeded 1 million MT, although this figure has to be adjusted for displacement of commercial purchases that would have taken place in any case. The government of Malawi paid for the subsidies out of the national budget, in 2008/09 this was equivalent to 16 per cent of the total national budget. The role of the private sector in fertilizer distribution has increased but could easily expand further, enabling the government to reduce program costs. The evaluation concludes that there do not appear to have been adverse effects on macroeconomic stability or on budgetary allocations to other sectors. There remain several issues that could improve the performance of the program, including clearer overall objectives and better targeting of beneficiaries, not least poor women.

A recent study by the Zambian research institute IAPRI in collaboration with Michigan State University refutes the claim sometimes made that the input subsidy programs create welfare benefits for poor consumers by putting downward pressure on retail maize prices through the production increases they engender\textsuperscript{343}. Using data from Malawi and Zambia they conclude that fertilizer subsidies have no statistically significant effect on retail maize prices. This is consistent with independent findings that there has been virtually no change in rural poverty rates in either country since these large-scale input subsidy programs were scaled up.

7.2.5 Warehouse Receipt Systems.

One approach closely linked to increasing private sector involvement in agricultural marketing and the liberalization of trade is called Warehouse Receipt Systems (WRS). A farmer deposits his crop in a licensed warehouse and can use his warehouse receipt to meet his short term need for cash by borrowing from a bank or other lending institution. The system has the benefits of mobilizing credit to agriculture by creating secure collateral for farmers, smoothing market prices by facilitating sales throughout the year, reducing the risk in agricultural markets, improving food security, helping to create commodity markets which enhance competition, and providing a way to gradually reduce the role of government in agricultural commercialization\textsuperscript{344}.

Similar systems have been in use in a variety of countries for many years, but no independent evaluation has been found. The evidence available from low-income countries in SSA is mixed, albeit mostly anecdotal. In Tanzania\textsuperscript{345} and Ghana\textsuperscript{346} positive experiences have been cited, while there is a report from Uganda\textsuperscript{347} saying that the licensed warehouses are struggling to attract projected volumes of maize from farmers. Reasons for the difficulties in Uganda include long transport distances to licensed warehouses and the limited quantities delivered by smallholders.

7.2.6 Private sector involvement

As indicated above, there is strong evidence of an increasing role of the private sector in agricultural development, often complementing or replacing government presence in the provision of agricultural commodities and services. The meta-analysis by IEG of agricultural impact evaluations finds that interventions implemented by the private sector show a high level of positive outcomes, particularly for input technology interventions\textsuperscript{348}. The role of the private sector in agricultural development is clearly growing with novel approaches to involvement by the sector in agricultural extension, R&D, and provision of farm credit. This finding is supported by ADB (2010) in its study of performance evaluations of 25 loans granted by the bank for agriculture and natural resources\textsuperscript{349}.
Still, no evaluation study has been found that specifically examines the role of the private sector in agricultural development in low-income countries.

7.2.7 Vulnerable groups.

The importance of empowering women in their role as agricultural producers is highlighted by several studies, for example the World Bank (2008)\textsuperscript{350}, IEG (2011)\textsuperscript{351} and UNIDO (2011)\textsuperscript{352}. In the smallholder sector, women are often more likely to be engaged in subsistence farming and less likely to cultivate cash crops, although women’s participation in agricultural self-employment differs across regions; for example, in China there is no feminization of agriculture\textsuperscript{353}.

Although women have broadened and deepened their involvement in agricultural production in recent decades, many development policies and programs continue to discriminate against women and, as a result, have poor impact on rural poverty. One example referred to in the foregoing is the agricultural input supply program in Malawi. In that country rural poverty is largely female since most women do not have rights to own land. The subsidy program is to a large extent servicing male-headed households, as eligibility is based on the communities identifying farmers with access to productive resources. As a result of poor targeting of beneficiaries, the program has had limited impact on poverty despite its success in raising production\textsuperscript{354}.

The paper by UNIDO argues that gender-based constraints are often inadequately understood when value chains are designed. It also discusses the engagement of unemployed youths in agricultural value chains which would open prospects of integrating educational and youth-targeted strategies to include young people in the development process. However, no evaluation has been found that explores the impact of agricultural development on incomes and employment of youth.

7.2.8 Special environments

A literature review was carried out for DFID in 2010 of what is known about promoting inclusive growth in fragile and post-conflict states, what the review refers to as Conflict-Affected Environments (CAE)\textsuperscript{355}. With regard to agriculture the paper makes several points, most of which are consistent with the ToC shown above.

In CAEs there is a strong case for physical infrastructure rehabilitation. Such investment is particularly important for growth in agriculture to help link smallholder farms to markets. Although, of late, infrastructure has mostly been left by donors to the private sector, the review argues that in CAEs there is a case for public intervention in rebuilding and developing infrastructure.

The review refers to “a wealth of literature” that recognizes the important role that agriculture plays to promote inclusive growth in low-income countries and stresses that “the most effective path for agricultural growth to reduce poverty and inequality is through increasing agricultural productivity”\textsuperscript{356}. In post conflict situations, interventions in agriculture can deliver fast results and help the population benefit from the peace dividend. In several CAEs the implementation of agricultural market reforms has had a significant impact on inclusive growth, one example cited is the liberalization of coffee marketing in Uganda in 1991/92 which generated high pro-poor growth in the country. Equitable land distribution is also important to realize inclusive growth, as illustrated in the review by the de-collectivization of farmland in Vietnam in the 1990s. When there are market failures, and particularly when smallholder farmers are risk-averse, supporting agriculture through subsidized inputs, as in the case of Malawi mentioned above, has proven successful. Financial sector development is of vital importance to facilitate and sustain growth in CAEs, not least to enable the private sector to contribute to economic growth and job creation. However, the review cautions that in CAEs the private sector is often weak, facing thin or missing markets and lacking the skills and tools to generate growth.
The review does not explicitly cover the transition economies, typically countries in Central Asia and the Western Balkans, although many of its findings apply to them also. In these countries the central institutions have often a proud history but have been left to decay because of poor support and incentives. There is a need to provide knowledge of modern approaches, indeed basic insights in the functioning of a market economy, through technical assistance and training. Specifically, it will be important to promote private sector involvement in agricultural production and marketing by providing added incentives through rewards to improved product quality. The privatization of state-owned enterprises in farming and agricultural marketing should be supported. It will be important to build on niches where there is experience from previous production of quality produce, e.g. horticulture or sheep farming or milk production. Sustainability, both in the financial and environmental sense, will be a key consideration since that concept was virtually unknown in the past.

7.2.9 Conclusions

In this section we summarize the conclusions with regard to what works in agriculture, keeping in mind that we have examined the sector from a perspective of market development and that our purpose is not to provide a comprehensive overview of all the issues involved in development of agriculture. We refer to the ToC in Figure 20 which spells out the key factors in agricultural change.

A first conclusion is that there is strong evidence in the literature, corroborated in the discussion in Chapter 3 on PSD, that productivity growth in agriculture is crucial to poverty reduction in low-income countries.

A second conclusion is that, in order to get agriculture to grow, the following logic chain is usually followed by projects:

- Development of yield-enhancing innovations
- Enabling small farmers acquire them
- Creating more favourable market conditions
- Higher agric. growth, reduced rural poverty

Yield-enhancing farm inputs are developed through agricultural R & D. Farmers are informed about them (trained) through an extension system, marketing agents provide the inputs which farmers acquire with the help of credit, sometimes linked to a Warehouse Receipt System. But increased productivity will only lead to increased incomes if rural infrastructure is improved and markets function better.

A third conclusion is the added emphasis on pro-poor markets for agricultural produce and services, a consequence of the M4P concept. By stressing marketing linkages coupled with increased private sector involvement farmers can get improved access to markets and better prices for their produce, contributing to reduced poverty.

Fourth, from the perspective of market development, the evidence suggests an emerging role for the private sector in agriculture, complementing the public sector or substituting for it. This extends across the logic chain shown above: it can apply to agricultural research on specific cash crops, agricultural extension for similar crops, finance, rural and marketing infrastructure.

Fifth, the literature supports the view that the revival of agriculture is vital for delivering the peace dividend in CAEs. Both connecting the poor to markets and measures to increase productivity should be given priority. In transition economies, the agenda for agriculture includes revival of public institutions and promoting private investment.
7.2.10 Gaps in the literature

The evolving role of the private sector in agriculture has been poorly documented. In the future, agricultural R&D and extension will increasingly be demand-led by the private sector and civil society instead of, as in the past, exclusively the domain of public agencies; the same applies to financial services and marketing. This is in part a reflection of the inability of the public sector to discharge such functions effectively, in part an emerging paradigm that increasingly relies on private initiatives. This applies more to the successful low-income countries that have expanded their exports of unprocessed agricultural produce, but it is a development likely to spread to most countries. But precisely how this will happen is not covered in the literature. There is a need for analysis of what the pros and cons are, which trade-offs are involved, what regulatory powers that government would need to acquire, and in which country situations certain approaches are most appropriate.

7.3 Results Frameworks

There were only a few results frameworks on agriculture found. One DFID intervention, the West Africa Regional Food Markets Program (WAFM), has the following ToC shown below:

*Figure 21: ToC for the West Africa Regional Food Markets Program*

WAFM intervenes through a policy facility and a challenge fund. The former aims for institutional reforms as the key output, particularly those related to reducing non-tariff barriers as well as other policy and bureaucratic barriers to regional trade in food. Examples of such barriers include seasonal export bans or surcharges on food imports. The facility seeks to reduce such barriers to trade, while overcoming the political economy issues that are a barrier to reform. It provides financial and technical assistance to relevant institutions to target policy and institutional reforms affecting trade in food.

The challenge fund is an instrument to catalyse pro-poor innovation. The process of selecting projects is open to all and the selection is made by a panel of independent assessors, using criteria laid out by the owner of the fund (i.e. DFID). Bidders are expected to be able to demonstrate their ability to implement, as no capacity building is involved. The fund can support projects in finance,
transport, improvements in farmer productivity, and marketing business models further down the value chain, e.g. farm storage systems or women’s cooperative for cash crop marketing.

7.4 Selected result chains

Derived from the ToC in Figure 20 a set of result chains leading from input to impact are outlined below. It is not possible in this space to go into detail on all possible result chains in agriculture, and therefore those seen to be the most significant in the reviewed literature and relevant to market development have been selected\textsuperscript{357}.

7.4.1 Agricultural policy and institutions

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA: Agriculture and macro policy, including pricing and domestic and export crop promotion</td>
<td>Management of key institutions improved</td>
<td>Increased and better focused public expenditure on agriculture</td>
<td>Increased growth of agricultural GDP</td>
</tr>
<tr>
<td>TA: Support to preparation of investment plan</td>
<td>Policy bias against agriculture and rural areas removed or reduced</td>
<td>Pricing structure conducive to increased production of food and cash crops</td>
<td>Raised incomes in rural areas</td>
</tr>
<tr>
<td>TA: Legal frameworks</td>
<td>Cash crop promotion strengthened</td>
<td>Increased exports of cash crops</td>
<td></td>
</tr>
<tr>
<td>TA: Management methods</td>
<td>Data on agriculture improved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TA: Improved statistics on agriculture.</td>
<td>Agricultural investment plan improved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Policy dialogue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Support to improve agricultural policy (top left box in Figure 20) will involve capacity building in all its forms of key agricultural institutions, including departments of the Ministry of Agriculture and equivalent, and stakeholder organizations such as the apex level of farmers’ associations and similar groupings. It will entail technical assistance (TA) and training of short and long duration, i.e. to ensure that institutions comply with international standards with regard to the grading of produce. Importantly, the support will include policy dialogue, often conducted in concert with multilateral institutions such as the World Bank. Designing and implementing an agricultural price policy could be one element; preparation of an investment plan for agriculture could be another.

Outputs would reduce any anti-agriculture bias in national and regional policies. This would include better targeting of national programs; the example of the agricultural input supply program in Malawi has already been cited. There should be an investment plan outlined by the government to address infrastructure shortcomings in the countryside. Promotion of specific cash crops, including crops for export, should be covered by the policy. An outcome should be more focused public expenditure, a prerequisite for growth in the sector.

The World Bank has outlined how support for agricultural policy and institutions is an example of an input that will have vertical as well as horizontal outputs\textsuperscript{358}. A sound agricultural policy will target the institutions most important to growth not only in the short term but also in a strategic long-term perspective. An example is those active in agricultural R&D, very much a long term, strategic concern, is mentioned below.
7.4.2 Agricultural R&D

The Growth Commission, in its report, quoted the World Bank\textsuperscript{359} as saying that agricultural research and extension yields returns of around 35 per cent in Sub-Saharan Africa and 50 per cent in Asia. This is the driver of the development of the agricultural technology that leads to the productivity increase in the sector that leads to crop yield increases and hence to raised incomes and reduced poverty (provided, of course, that related results chains, for example in marketing, are supportive). Support to agricultural research is one of the most cost-effective ways to raise rural incomes, the point made by Thirtle et al (2001) and cited above\textsuperscript{360}. More evidence of the importance of R&D to raise agricultural productivity by smallholders is provided by the World Bank and IEG respectively, and by a vast body of reports produced by the Sida-supported Consultative Group on International Agricultural Research (CGIAR).

Support to agricultural R&D often takes the form of research support to public agricultural research institutes, involving capacity building of the concerned organizations and training of key staff, often overseas. Outputs will include increased availability of yield-enhancing farm inputs, including increased availability of improved crop varieties.

Suitable institutions must exist to disseminate technologies developed through R&D. There has been much discussion over the years of the most suitable approach to agricultural extension. A study for the World Bank concluded that Farmer Field Schools did not “induce significant improvements in yields or reduction in pesticide use by graduates relative to other farmers”\textsuperscript{361}. A later evaluation by IFPRI of the National Agricultural Advisory Services (NAADS) in Uganda, which uses an innovative approach that targets the development and use of farmer institutions, empowering them to procure advisory services and conduct demand-driven monitoring and evaluation of such services, concluded that NAADS had “significant success” in increasing the capacity of farmers and “significant impact” on crop productivity\textsuperscript{362}.

There is a move towards more demand driven approaches to agricultural R&D and extension, involving increasing service provision by the private and the nonprofit sectors\textsuperscript{363}. There are new approaches to linkages between agricultural research, extension, and education which often run in parallel with efforts to decentralize government functions in general\textsuperscript{364}. However, this is a fairly recent development, and we have not been able to find any independent evaluations.
### 7.4.3 Financial services

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>Outcomes</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• TA: Macro policy</td>
<td>• Wider range of financial services and products delivered in rural areas</td>
<td>• Network of rural lending institutions created or strengthened</td>
<td>• Sustainable improvements of the livelihoods of small farmers</td>
</tr>
<tr>
<td>• TA: Banking laws and regulations</td>
<td>• Volumes of farm credit increased</td>
<td>• Volumes of farm credit increased</td>
<td>• Rural poverty reduced</td>
</tr>
<tr>
<td>• TA: Development of financial products adapted to small farmers’ needs (incl. crop insurance)</td>
<td>• Innovative financial products introduced</td>
<td>• Financial sustainability of lending institutions enhanced</td>
<td></td>
</tr>
<tr>
<td>• TA: Development of network of banking institutions in rural areas</td>
<td>• Financial sustainability of lending institutions enhanced</td>
<td>• Lending to poor farmers and women increased</td>
<td></td>
</tr>
<tr>
<td>• TA: Capacity building of lending institutions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Financial support to lending institutions (incl. revolving funds, guarantees)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Several reports provide evidence that access to credit, whether for short-term working capital or productive capital investments, plays a key role in facilitating and promoting agricultural production. Rural credit is complicated by the seasonal nature of agriculture, weather and price-related risks, and the dispersed nature of farming. Availability of credit is a constraint to the adoption of high-value farm inputs in most low-income and many middle-income countries. The paper by IFPRI mentioned above suggests a total financing gap for the agricultural sector in developing countries in 2008 of USD107.5 billion corresponding to 39% of total needs, saying that “current capital flows to agriculture remain grossly insufficient in the face of upcoming agricultural demand.”

The situation is particularly acute in much of rural Africa where a combination of agricultural risk, scarce borrower information, cumbersome legal procedures, and high transaction costs mean that many financial service providers are reluctant to serve poor farmers. DFID argues that in such circumstances government subsidy and guarantees (although not interest rate subsidies) may be justified. The availability of credit will enhance the uptake of improved farm technology and, hence, contribute to increased productivity. The IEG concludes that policy changes or reforms were most effective when farmers had access to improved farm inputs coupled with financial services.

Support to financial services could include capacity building, including technical assistance and training. More importantly, it would include financial support to revolving funds and/or guarantees to banks, or lending institutions to guard against the risks involved in lending to small farmers with poor collateral. A related subject is crop insurance that forgives credit in the event of poor rains, but a study from Malawi yielded the counter-intuitive conclusion that uptake of such insurance was significantly lower than for farmers not offered insurance with the loan.
**Case Study 12: The Agricultural Business Trust Initiative (aBi) Trust in Uganda**

The aBi Trust supports agribusiness development in the private sector to strengthen the competitiveness of Uganda’s agricultural and agro-processing sectors. The trust is a multi-donor entity jointly founded by the Governments of Uganda and Denmark and supported by several other donors, including Sida. The core of the operations is an endowment that generates income to ensure the Trust’s sustainability.

The Trust provides (i) value chain services leading to improved incomes of farmers from producing six agricultural commodities (maize, pulses, coffee, oilseeds, horticulture and dairy), (ii) financial services supporting agribusiness development by providing credit to financial institutions to facilitate lending to agribusiness, and (iii) a gender for growth fund that fully integrates gender equality in all aBi Trust activities and supports innovative approaches to gender equality in agriculture.

It has achieved coverage of 96% of the country currently working with some 170,000 beneficiaries, 62,000 of whom are women. The website shows strong impacts in the form of increased incomes over the baseline. However, there is no indication of how these results compare with the control group and, hence, the extent to which the impressive results can truly be credited to aBi.

The limited availability of medium and long-term finance as well as high interest rates is a major barrier to sustainable agricultural production increases in Uganda. The aBi Trust seeks to overcome this barrier using several different financial instruments including credit lines and guarantees. The evidence provided suggests that these instruments are producing good outputs but there is no evidence of the extent of financial and economic additionality they generate, or their outcomes and impacts.

The aBi Trust has established itself as a valuable channel for donor support for agriculture and financial services. Recently, 2 new programs have been added; i) a program supported by DFID that provides a guarantee fund intended to strengthen lenders’ ability to finance SMEs involved in road construction; ii) and a challenge fund supported by KfW that will finance innovations in lending to agriculture and MSMEs.

Whilst currently the program is engaging in a number of initiatives that maybe perceived as interventionist, and therefore may risk some market distortion, the trust does also appear to have an exit strategy planned to ensure markets function better once support is withdrawn. In this light, it will be important that an assessment is undertaken to evaluate the systemic impacts of the interventions.

Furthermore, the role of the aBi Trust as a vehicle for implementation of a broad variety of different development activities with support from a multitude of donors evokes questions regarding its objectives. The annual report shows that management is concerned with the financial sustainability of the Trust itself commenting on the returns earned by investing funds at its disposal and the extent to which that income and from fees earned from donors covers its expenditures. Adding new programs, including in non-core areas such as road construction, provides income, but may deflect the Trust from its original mission and stretch management capability.
7.4.4 ICT

In the past decade there has been a rapid expansion of information and communication technologies (ICT) in low-income countries driven by the private sector. This has been particularly notable in Africa where investments in ITC grew from USD4.2 billion in 2002 to USD13.5 billion in 2007. In 2008, Africa had the world’s fastest rate of growth in mobile phones, in some SSA countries there was growth of 40 per cent. Yet penetration is still low, internet penetration is at 7 per cent and broadband less than 1 per cent, so the potential for further growth remains immense (www.africaeconomicoutlook.org). Support to ICT involves developing applications in sectors such as governance, health, education and agriculture through technical assistance and training.

ICT can be particularly useful to reduce agricultural marketing costs. This was explored by Aker in Niger who found that the availability of mobile phones in the grain trade reduced price dispersion across markets by a minimum of 6.4 per cent and reduced intra-annual price variation by 10 per cent (Aker, 2007). A dissertation by Islam demonstrated how mobile phones can provide crucial information to farmers in Bangladesh (Islam, 2007). Unsurprisingly, mobile phones have a greater impact on price dispersion for markets farther away and for those with low road quality, an important feature in a country with a poor rural road network. Private sector investment in ITC and enhanced government regulation of the industry will strengthen value chains and help farmers get better prices for their produce. Support to ICT can include capacity building of institutions involved in the regulation of the telecommunications industry.

Lai et al. (2012) argues that use of ICT for management information systems in agricultural and rural development projects will enhance the efficiency of M&E systems by allowing capture of web-based data and integration with GIS and remote-sensing applications. While not all projects can benefit from such technology, with fast developing connectivity and IT systems options, the lack of modern telecommunication infrastructure is becoming a decreasing constraint. ICT is a sector where the private sector has an important and increasing role to play, as Sida well knows from its support to the Swedish Program for ICT in Developing Regions, SPIDER.

7.4.5 Marketing linkages
A policy paper for DFID underlined that poorly functioning markets for inputs and products have been a major challenge to agricultural development. Getting agriculture moving requires improving access to markets and developing modern marketing chains. This will require the government to encourage private sector participation i.e. by removal of restrictions and controls on agricultural products, putting in place effective standards for quantifying and grading products, improving physical access through investments in infrastructure, improving access to marketing information by facilitating use of ICT as discussed above, and improving the access of traders and producers to finance and insurance markets.

A study by ADB concluded that greater involvement of the private sector in the marketing chain, including the provision of inputs and services, was one of the main factors determining the performance of agricultural programs. There are recent trends, documented for example by the evaluation of Katalyst in Bangladesh, of commercial farm input suppliers providing training to the consumers/farmers in lieu of the conventional public extension services. Several papers suggest that value chain analysis provides a valuable visual framework for understanding the “structural connective tissue linking small farmers with input suppliers, processors, traders and final consumers.” Visser et al. has documented a promising value chain approach in Ethiopia involving a business-to-business (B2B) model. It makes smallholders benefit from value chain development by addressing constraints and opportunities along the supply chain with processors, traders, exporters and farmers’ organizations as the key actors. The design of pro-poor value chains is also discussed by UNIDO.

Reduced transport costs resulting from improved rural road networks in combination with improved marketing infrastructure and strengthened value chains, particularly for specific cash crops, will lead to increased incomes for smallholders and reduced poverty as well as increased exports. This is illustrated by several studies, including those cited in the preceding paragraph.

### 7.4.6 Land policy and registration

An assignment completed in July 2013 for Sida, under the framework contract for agriculture, forestry and environment, resulted in the report *Results and indicators for improved land, water use, food production and sustained ecosystem service functions*. It provides six result chains in the following areas: (i) land administration, (ii) systematic land registration, (iii) land consolidation, (iv) decentralization of resource management, (v) privatization of forest ownership, and (vi) training and education in land management. No further result chain is therefore shown here.
The World Bank has reviewed how a progressive policy covering the ownership and usage of land and an accompanying system for land registration is an essential ingredient of an enabling environment conducive to agricultural growth. Well-functioning land markets are needed to transfer land to the most productive users and to facilitate participation in the rural non-farm sector and migration out of agriculture. In the absence of secure property rights many small farmers will have difficulty to access the credit that is necessary for them to acquire the improved farm inputs that they need to raise the productivity on their land. Mellor argues that agriculture fails as an engine of growth when incomes are highly skewed to the rich, in rural societies often associated with land ownership, and that, in such situations, what is most needed is a radical redistribution of assets.

Land reform can promote smallholder entry into the market, reduce inequalities in land distribution, and increase efficiency; it can also help recognize women’s rights to land. There is evidence that changes in property rights through land tenancy reform increases agricultural productivity. A study by Banerjee et al (2002) found that in West Bengal such changes could explain around 28 per cent of the subsequent growth of agricultural activity and overall economic improvements. This finding was largely corroborated by a subsequent study by Bardhan and Mookherjee. This later study stressed the importance of accompanying changes in land titling with kits of farm inputs, credit and other support services to sustain productivity growth. IEG showed that interventions strengthening land titling led to productivity improvements in two-thirds of the interventions. There is a strong case for the link between land policy and agricultural growth.

7.5 Agricultural development indicators

Sets of indicators for monitoring and evaluation of agricultural performance are provided by Olubode-Awosola et al. as follows:

- Prioritised indicators for M&E of direct agricultural performance (10 indicators)
- Selected indicator to monitor trends in poverty and hunger (7 indicators)
- Selected indicators to monitor trends in agricultural production (5 indicators)
- Selected indicators to monitor trends in agricultural trade and investment
- Selected indicators to monitor trends in the natural resource base (6 indicators)
- Selected indicators to monitor trends in plant and animal health (2 indicators)

The recent paper by Tengnäs on agricultural results and indicators cites some 20 sources to provide about 200 indicators grouped under 23 different headings. The literature we have reviewed for this assignment does not contribute much to this exhaustive list. The one exception we have found is the aforementioned paper by Olubode-Awosola et al. that provides indicators said to focus on agriculture in southern Africa but which, for the most part, are relevant globally. They are shown under six different headings above.

The use of agricultural indicators will obviously depend on for what purpose they will be used. Inputs and outputs are usually relatively easy to measure in the context of projects, while outcomes and impacts require separate data collection. Table 5 shows for purposes of illustration indicators from Olubode-Awosola et al. related to outcomes and impacts shown in the ToC in Figure 20.

<table>
<thead>
<tr>
<th>Table 5: Agriculture indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>ToC outcomes and impact</td>
</tr>
</tbody>
</table>

117
<table>
<thead>
<tr>
<th>Improved agricultural productivity</th>
<th>Agricultural yield</th>
<th>Quantity of crop/animal output per ha/livestock unit (LU)</th>
<th>Ton/ha Unit/LU</th>
<th>Growth in crop yield and animal off-take rate</th>
</tr>
</thead>
</table>
| Improved agricultural productivity (ctd) | Agricultural mechanization and intensification | - Percentage of total area that is irrigated.  
- Rate of total fertilizer used.  
- Rate of improved seed variety used.  
- Number of tractor hours used.  
- Rate of pesticide used.  
- Number of animal stock per farm household. | Per cent Kg/ha Kg/ha Hour/ha Type/kg/ha Number/unit | Agricultural intensification and mechanization as means of technical progress.  
Livestock intensification and growth in livestock production activities. |
| Reduced transport costs; improved access to markets | Market access indicators | Transportation cost; percentage of public spending on transportation channels; country’s exports as percentage of regional exports; regional exports as percentage of world exports; country’s exports as percentage of total production. | $/ton/km Per cent | Marketing cost with regard to transportation cost.  
Derived incentives for export. |
| Prices for agricultural produce | Food price | Trend in food price | - | Trends in food supply |
| Rural poverty | Poverty gap | Mean shortfall from the poverty line of $1/day | $ | Change in the living standard of people |
| Agricultural growth | Agricultural growth | GDP agriculture as percentage of total GDP | Per cent | Rate of agricultural growth |

---

329 World Bank, op. cit.
332 Ibid.
336 World Bank, op. cit., page 38.
For Sida the agriculture sector accounted for 4.8 per cent of disbursements in 2012.

These are: (i) Agro Forestry Improvement Partnership, Bangladesh; (ii) Cambodia Agriculture Value Chain Program; (iii) Creating Market Alliances Against Poverty, Georgia; (iv) Enterprise for Pro-poor Growth, Sri Lanka; (v) Katalyst Phase II, Bangladesh; (vi) Livestock Development in the Syunik Region, Armenia; (vii) Making Agricultural Markets Work for Zambia; (viii) Markets for Meghri, Armenia; (ix) Private Sector Development, South Serbia; (x) Private Sector Led Rural Growth, Mozambique; (xi) Promoting Pro-Poor Opp in Commodity and Service Markets (PrOpCom), Nigeria; (xii) Rural Livelihoods Development Program (RLDP), Tanzania; (xiii) SAMARTH-Nepal Market Development Program; and (xiv) Samriddhi, Bangladesh.

The M4PHub website has been taken down and replaced by www.enterprise-development.org/page/m4p which has roughly the same content.


See www.enterprise-development.org/page/m4p


Giovannuci, op. cit.

Available at www.observer.ug/indix, 22 July 2012.

IEG, op. cit.


World Bank (2008), op. cit.

IEG (2011), op. cit.


World Bank (2008), op. cit.


Ibid., page 33.

By Technical Assistance (TA) is understood long and short term consultancy support as well as training in various forms.

World Bank (2008), op.cit.

Ibid.

Renborg (2010) finds returns of 13-17 per cent above price level changes to agricultural research in Sweden during 1944/45 – 1986/87, although with a time lag of 16-18 years.


An example is the Katalyst II program in Bangladesh, see Alamgir,(2012).

IEG (2011), op. cit.

On this subject, see for example the World Bank (2008), op. cit. and IEG (2011), op. cit.

Fan et al., op cit., page 9.
367 DFID (2005), op.cit.
368 IEG (2011), op.cit.
370 See www.africaeconomicoutlook.org.
372 Islam, M. Sirajul (2011): Creating opportunity by connecting the unconnected: mobile phone based agriculture market information service for farmers in Bangladesh. Örebro Studies in Informatics No. 4, Örebro University
374 DFID (2005), op. cit.
375 ADB (2010), op. cit.
376 Alamgir, Dewan et al. (2012), op. cit.
379 UNIDO (2011), op. cit.
381 World Bank (2008), op. cit.
382 DFID (2005).
383 Mellor (1999), op.cit.
386 IEG (2011), op.cit.
388 Tengnäs (2013), op.cit.
What works for market development: A review of the evidence

At a time of austerity at home, aid agencies have come under greater pressure to justify spending money on the poor in developing countries. New research has cast doubt on old certainties and questioned the approach to aid (i.e. planners vs searchers) and the evidence on which it is based (conventional methods vs randomised experiments). This report takes stock of the evidence on what works for economic development focusing on private sector development, financial sector development, trade, and the efficacy of instruments used in support of them. It sets out theories of change and logic models for each area and tests the extent to which the evidence supports them. It shows that several assertions are over-played or unproven (e.g. doing business reforms, financial inclusion) and that there are vital gaps in knowledge in regards to creating jobs and reducing regional inequalities that are vital for reducing poverty. It finds that a cycle of over-claiming the benefits of new interventions without the evidence to back them followed by complete abandonment without learning lessons when limitations are observed, is hampering the search for learning what works.