Centre for the Study of African Economies

University of Oxford

Research Summary

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Director: Professor Paul Collier

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List of abbreviations

AAIS	Addis Ababa Industrial Survey
AERC	African Economic Research Consortium
AIDS	Acquired Immune Deficiency Syndrome
CERDI	Centre d'Etude et de Recherche sur le Développement International, Clermont-Ferrand
CPI	Consumer price index
CPRC	Chronic Poverty Research Centre
CSAE	Centre for the Study of African Economies
DFID	Department for International Development
EPRC	Economic Policy Research Centre, Kampala
ERHS	Ethiopian Rural Household Survey
ESRC	Economic and Social Research Council
ESRF	Economic and Social Research Foundation, Dar es Salaam
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GPRG	Global Poverty Research Group
HIV	Human Immunodeficiency Virus
IDPM	Institute for Development Policy and Management
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
JAE	Journal of African Economies
JDS	Journal of Development Studies
LSE	London School of Economics
NGO	non-governmental organisation
RPED	Regional Programme on Enterprise Development
SARB	South African Reserve Bank
SSA	sub-Saharan Africa
TMES	Tanzania Manufacturing Enterprise Survey
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisation
WHO	World Health Organization
WIDER	World Institute for Development Economics Research

Director's report

The CSAE is a node for a global network of research on Africa and other low-income economies with related development problems. Its core modes of operation are therefore partnerships, visitors, workshops, and the many fluid arrangements of modern team-based scholarship. We now have so many of these relationships that if I tried to list them I would be in danger of offending someone by inadvertent omission, so I will just give a few examples.

Over a decade ago we launched the *Journal of African Economies*. It is now a highly successful journal with a large circulation, academically well-regarded and financially secure. Some of the surplus that it generates is now being ploughed back into creating Visiting Fellowships for African scholars, a scheme run in collaboration with the African Economic Research Consortium. Our first JAE Fellow, Rosemary Atieno, has just completed her stay, working with Abigail Barr and Francis Teal. We hope that she will inspire many people to follow in her footsteps.

The Centre bridges the academic and policy worlds. A decade ago another African woman wrote to us from the World Bank, asking if she could use her vacation to study at the Centre for a month. Ngozi Nkonjo-Iweala is now the Nigerian Finance Minister, and so spectacularly successful that she is currently *Finance Minister of the Year*. For the past year, we and St Antony's College have been hosting John Githongo, whose courage in revealing political corruption in Kenya is now world news. A group of us joined with John to run a weekly research workshop on the theme of corruption.

The Centre's research conference, held each year in March, is probably the main global gathering for the subject. A new and very welcome development is that the African Economic Research Consortium now selects ten of its members as participants.

In short, I would like people to regard the Centre as a global facility. Our core work will always be quantitative research, and the data gathering that underlies it. As this Research Summary shows, for this we continue to be a powerhouse. But our approach is broad: we fully embrace the loose modern structures of networking, and the central importance of user engagement.

Section 1: CSAE and economic research on Africa

The Centre for the Study of African Economies (CSAE) is part of the Department of Economics at Oxford University. From 1991 to 2001 it was a Designated Research Centre of the Economic and Social Research Council (ESRC), carrying out an extensive programme of research on Africa. It now receives ESRC funding as part of the Global Poverty Research Group (GPRG), with the Institute for Development Policy and Management (IDPM) at the University of Manchester.

The CSAE continues to specialise in the application of social science to African economies, and as well as funding from the ESRC, receives funding from DFID, UNIDO and the World Bank. This funding is important for allowing the CSAE to work on areas complementary with those resourced by the ESRC.

This Research Summary reviews the work being undertaken at the CSAE. In this first section, we report on how work at the CSAE is extending the knowledge base for Africa by data collection, interaction with users, training and dissemination. Section Two discusses research with reference to recent policy issues; Section Three highlights three current research projects; and the GPRG work is reviewed in Section Four. A full account of the work of the GPRG can be found in the 2005-06 GPRG Research Summary. All the work has in common a concern to investigate issues and understand policies relevant to the welfare of Africa.

The Centre's objective has been, and remains, to make a significant contribution to the transformation of African economic performance. In order to meet this objective the Centre undertakes the following specific activities:

- Publishing significant theoretical and empirical findings
- Establishing itself as a focus of collaboration between researchers and users
- Seeking co-sponsorship
- Engaging with users
- Engaging in the training of postgraduate students

The Centre is distinctive in three respects:

- Its research has required the collection of substantial amounts of primary data
- It has sought to develop both micro and macro approaches to growth and poverty
- Its work is collaborative between institutions and across disciplines

Our objective in developing these three areas has been to build the research infrastructure that will allow us to pursue our primary research objective – the production of excellent research geared to an improvement in Africa's economic performance. In the sections that follow we will highlight some of that research.

Extending the knowledge base for Africa: Micro surveys

Both microeconomic and interdisciplinary research rely on using data from households and firms. The Centre has been actively involved in a long-running panel data survey in rural Ethiopia and Zimbabwe. The firm studies carried out by Centre staff, or with Centre assistance, now cover Ghana, Ethiopia, Tanzania, Kenya and Nigeria. Comparative data on other countries – Burundi, Côte d'Ivoire, Cameroon, Zimbabwe and Zambia – have also been collated. In the areas of both household and firm data the Centre has developed extensive expertise in the design and implementation of questionnaires, data coding and field work.

In recent years the range of surveys undertaken by the Centre has been extended to include survey work on NGOs and coffee farmers in Uganda, panel labour market surveys in both Tanzania and Ghana and surveys of Ghanaian cocoa farmers. A report on the work of NGOs in Uganda can be found in the reports section of the CSAE website: Abigail Barr, Marcel Fafchamps and Trudy Owens, 'Non-governmental organizations in Uganda: A report to the Government of Uganda'. The panel labour market surveys in Ghana and Tanzania are designed to capture movement between jobs so that the sources of lifetime earnings can be measured (see Section Three for an account of progress on this work).

The household data collection in Ethiopia is a panel that, for a subset of the sample, can trace households over the period from 1989 to 2004. For the main sample, which covers 1477 households, detailed panel data have been collected for six rounds since 1994. This provides a unique long-term panel data set to analyse the changes in socio-economic conditions and welfare over the last 15 years and has resulted in more than a dozen PhD dissertations for Ethiopian and non-Ethiopian students, more than 50 papers in journals and collections, and has informed rural development policy advice to the Ethiopian government and international agencies.

The CSAE has also been participating in an extensive range of firm-level studies. In Ghana, seven rounds of a firm and labour market survey were carried out from 1992 to 2003 providing a data set spanning twelve years from 1991 to 2002. A survey of Tanzanian firms was conducted in 1999 that followed up firms first interviewed in the early 1990s. These data allow an analysis of the impact of the reform programme in Tanzania on its manufacturing sector. In the year 2000, a follow-up survey of Kenyan firms first interviewed in the early 1990s was carried out. In the case of both the Tanzanian and Kenyan surveys, substantial success was achieved in providing a link between firms over the decade. During 2001, the CSAE collaborated with the Regional Industrial Development Centre (RIDC), Lagos, on a manufacturing survey in Nigeria. Last year we began a re-survey of those firms which is currently in progress. In 2002, a further follow-up survey of Tanzanian firms was carried out, enabling a long panel to be created. Firm-level data for the countries have been used to investigate firm growth, labour market outcomes and skill formation. These firm- and household-level data sets are unique within Africa.

Data available on the CSAE website

Seven data sets can be downloaded from the site. For each set there are four components that the user can access: the data set, documentation, programmes and publications.

Ghana RPED data

This data set contains comprehensive panel data on a sample of firms within the Ghanaian manufacturing sector. The data were collected in a series of three annual surveys undertaken in 1992-94 as part of the Regional Programme on Enterprise Development (RPED) organised by the World Bank. The data were collected by a team from the CSAE, the University of Ghana, Legon, and the Ghana Statistical Office.

Firm-level data were collected for the period 1991-93 and data on a sample of workers and apprentices within each firm for the period 1992-94. The sample of over 200 firms surveyed is broadly representative of the size distribution of firms across the major sectors of Ghana's manufacturing industry, including food processing, textiles and garments, wood products and furniture, metal products, and machinery.

Ghana macro data

This data set provides trade data for Ghana's exports over the period from 1900-1999. The export data are divided between non-cocoa and coca exports and the data set includes price series for the real prices to producers of the exports. Variable definitions can be found in Francis Teal, '*Export growth and trade policy in Ghana in the twentieth century*', The World Economy, Vol. 25, No.9, September 2002.

Ethiopia AAIS data

This is the first wave of a panel data set on a sample of firms within the Ethiopian manufacturing sector. The first round of the survey was undertaken in September-December 1993. The questionnaire structure and types of data collected were designed to be consistent with other African manufacturing sector surveys carried out under the RPED. The survey covers 220 firms that were selected on a random basis from manufacturing establishments in the Addis Ababa region, of which 30 are public enterprises.

Ethiopia ERHS data

The Centre is involved in the Ethiopian Rural Household Survey (ERHS), a unique data collection programme, in collaboration with the Economics Department and the Institute of Development Research, both of Addis Ababa University.

Since 1994 data have been collected on about 1450 households in 15 villages across Ethiopia. The data form a panel household survey. Two rounds took place in 1994, a third in 1995. A fourth round took place in 1997 in collaboration with the International Food Policy Research Institute. A fifth round was completed in 1999. About 350 households were also interviewed in 1989 by the International Food Policy Research Institute. Most of these households were included in the later surveys. The data for the 1989, 1994 (two rounds) and 1995 surveys are now available.

Comparative firm-level data (five sub-Saharan countries)

The data are that which underlie the paper 'Rates of return on physical and human capital in Africa's manufacturing sector', published in *Economic Development and Cultural Change*, July 2000. The paper presents standard earnings and production functions for the manufacturing sector of five African countries, Cameroon, Ghana, Kenya, Zambia and Zimbabwe. The data set is unusual in having measures of both physical and human capital.

Tanzania RPED data

This is a comprehensive panel data set on a sample of firms within the Tanzanian manufacturing sector. These data were collected over the period 1993-95 in a series of three annual surveys, referred to here as Waves I-III, as part of the Regional Programme on Enterprise Development (RPED) organised by the World Bank and funded by bilateral donor governments. The data were collected by a team from the Helsinki School of Economics, in collaboration with the Tanzanian Confederation of Industries and the University of Dar es Salaam.

Tanzania TMES data

A fourth wave of the Tanzania Manufacturing Enterprise Survey (TMES) was conducted in late 1999, involving a team of researchers from the CSAE and the Economic and Social Research Foundation (ESRF) in Dar es Salaam. This succeeded in revisiting 89 of the remaining RPED firms and interviewing an additional 103 replacement firms. Firm-level production and accounts data were obtained for 1996, 1997 and 1998, thus giving a maximum number of six observations per firm over the four waves of the survey. This data set is directly comparable to, and can be linked with, Waves I-III of the RPED described above.

Strategy for engagement with research users

The research of the Centre is both disseminated to users and informed by their requirements. The networks that the Centre has sought to build include users, collaborators and contacts. These networks are a key element in both formulating and disseminating research.

Dissemination is achieved by targeting users of the research through a programme of seminars, conferences, presentations and publications which permit extensive interaction with users drawn from business, government agencies, NGOs, policy research institutes and international organisations. Business groups that have been targeted include the British Africa Business Association, private investors in Africa and British exporters. Agencies of governments within Europe, agencies of the US government, the European Union and African governments are all users of Centre research. NGOs and policy research institutes from within Africa have been targeted by means of formal protocol agreements establishing links with the Centre, which are described below. International organisations which have been targeted as users of Centre research include the World Bank, the IMF, the African Development Bank and the Economic Commission for Africa.

The CSAE's strategy for interaction with users and dissemination has the following components:

- The Centre participates in a range of networks which facilitate its work. To further the development of these networks, the Centre has entered into a series of protocol agreements with institutes and government departments in Africa to facilitate the formulation and use of the research undertaken at the Centre for policy purposes.
- A series of publications disseminates the work of researchers at the Centre, its research associates and others.
- Contacts have been made with business organisations with an interest in Africa. These organisations include business associations and firms working in Africa.
- An international conference is held biennially. This focuses on a major aspect of the Centre's research and brings together academics, policy makers and private business groups.
- Centre members give seminars and presentations to business organisations, firms, policy makers, other universities, government departments, international organisations and others concerned with issues of development in Africa.
- The Centre has an active programme for enabling short-term visitors to interact with researchers and for providing a link between its researchers and those active in policy making.
- The Centre has been engaged in substantial teaching and training both inside and outside Oxford.
- Contract work has been undertaken which draws on Centre research and which feeds directly into policy issues.
- The Centre has a website which contains its Working Papers, data from its survey programme, and details of econometrics techniques of particular use to those working on Africa.

Networks

The networks which the Centre has sought to establish have an institutional, a geographical and a project focus.

Africa

The CSAE has a long-standing collaboration with the African Economic Research Consortium (AERC), based in Nairobi. Centre staff work with the AERC in a wide range of activities to build an international network of research, training and teaching. Particular emphasis has been placed on African academics: they have a crucial role to play in developing an informed constituency within the continent. A number of Centre staff attend the AERC's meetings and make important contributions to both the design and the evaluation of the research programme. The AERC and the CSAE have jointly researched trade liberalisation, regional integration and the sources of economic growth in Africa. While the AERC is the most far-reaching of the institutions with which the CSAE collaborates, the Centre has entered into a number of protocol agreements with institutions in individual countries in order to facilitate its research and enable Africans to participate fully in the work. The CSAE has entered, during its time as an ESRC Research Centre, into the following protocol agreements:

- with the Economics Department at the University of Addis Ababa, covering interaction between members of the Centre and the Department, and providing links with domestic policy makers;
- with the Ministry of Finance of the Government of Zambia to provide advice on macroeconomic policy;
- with the Statistical Office of the Government of Ghana for collaboration in the collection and dissemination of information on the country's manufacturing sector;
- with the Economic Policy Research Centre, Makerere University, Kampala for collaboration: a staff member of the EPRC is studying for a doctorate at Oxford and CSAE staff regularly visit the EPRC;
- with the Economic and Social Research Foundation (ESRF) in Dar es Salaam to conduct a series of surveys on the Tanzanian manufacturing sector.

The CSAE has also carried out joint research work with academics from Kenya, Tanzania, Nigeria, Ghana, Zambia, Zimbabwe, Mozambique, Sudan and South Africa.

UNIDO

The CSAE continues to have a programme of active collaboration with UNIDO. In October 1999, the Director General of UNIDO, Dr Carlos Magariños, and the Vice-Chancellor of the University of Oxford, Dr C. R. Lucas, signed a Memorandum of Understanding formally indicating the components of a joint two-year research programme between UNIDO and the CSAE on industrial economics in Africa. In 2002, this was extended for two years. The four main components of this programme are: research on the microeconomics of African industry; collection of primary firm-level data through industrial surveys in Africa; policy briefings for UNIDO senior management; and training of UNIDO staff and African civil servants. During the current year the collaboration has been focused on assisting UNIDO in re-surveying firms in Nigeria's manufacturing sector.

Publications

The publications of the CSAE seek to disseminate research to the wider community and to stimulate debate on African policy issues. The CSAE undertakes the following four major sets of publications:

- The *Journal of African Economies* (*JAE*), launched jointly with Oxford University Press in 1991. The Journal has established itself as the principal forum for applied economic research on African economies. DFID has given financial support for distributing *JAE* within Africa.
- A twice-yearly supplement to the Journal which brings together the papers presented at plenary sessions of the AERC.
- A Working Paper Series which allows CSAE researchers to present

sometimes preliminary versions of their research to a wider readership.

- A series of monographs on African economies published in partnership with Macmillan (now appearing under the Palgrave imprint).

Conferences

Since its inception, the Centre has held a regular series of conferences aimed at policy makers, other academics and institutions of civil society. The 2004 CSAE International Conference 'Growth, poverty reduction and human development in Africa' was held at St Catherine's College on 21-22 March. A generous grant from DFID enabled us to fully fund a large number of participants from developing countries. A plenary session was held on the final day with Jim Robinson (Berkeley), Tim Besley (LSE), Dany Kaufman (World Bank), and Marcel Fafchamps (Oxford) speaking on 'Trust, government and markets'. The keynote speech was on 'Issues pertaining to health and HIV in sub-Saharan Africa' given by Mark Gersovitz from Johns Hopkins University.

The 'Bottom Billion' conference was held at St Antony's College in June 2004, supported by DFID and the World Bank. Explicitly multi-disciplinary in approach, it brought together economists, political scientists and policy makers to address the questions which arise from preventing the poorest falling further behind. Clearly one characteristic of many failing states is conflict, so several of the papers addressed the question as to how conflict could be prevented and the factors that increased the risk of civil war.

In October 2005, Janine Aron and Geeta Kingdon organised a conference, together with Stan Du Plessis of Stellenbosch University, on 'South African Economic Policy under Democracy: a Ten Year Review', held in Stellenbosch, South Africa. Local and international experts reviewed South African economic policy since 1994, and the invited audience of about 65 people included senior government representatives from the Treasury, the South African Reserve Bank (SARB), the Presidency and Statistics South Africa; country representatives of the World Bank, the IMF and DFID; the Chief Economists of Anglo American and more than six private sector banks; and academics from several local universities and business schools, and abroad. Professor Vito Tanzi, formerly the Director of the Fiscal Affairs Department at the IMF, delivered the keynote address; and the conference culminated with reflections on South Africa's future by distinguished invited panellists. The *Journal of African Economies* aims to publish a selection of the papers in a special conference issue. The conference website is: http://academic.sun.ac.za/econ/econconf/index.htm

Seminars and presentations

The CSAE holds two seminars a week in Oxford during term, primarily aimed at academics. These seminars, given by Centre researchers and by others drawn from the national and international academic community, provide reports on work in progress as well as presenting material prior to publication. Centre members have also made many presentations during the course of the year to the political, business and academic communities.

Training and teaching at the Centre

Museveni Scholarship

The Centre for the Study of African Economies invites applications for a scholarship of £10,000 to support Africans wishing to pursue economic research at the University for the degree of Doctor of Philosophy (DPhil). Candidates will be drawn from students accepted for DPhil research by the University of Oxford. The thesis topic should be of relevance to African economies. Museveni Scholars will be attached to the CSAE and will usually be supervised by members of the research team. This funding is made available to the Centre as a result of a very generous donation from the Government of Uganda.

Applications must include a copy of your research proposal, your CV, and details of any other funding applied for or obtained for your DPhil studies. They should be sent to the Administrator, CSAE, Department of Economics, Manor Road Building, Oxford, OX1 3UQ.

The doctoral programme

The core funding for long-term research has enabled the CSAE to build up a substantial doctoral programme: there are currently 31 doctoral students from around the world. There follows a brief description of the thesis topics of the DPhil students attached to the Centre.

S M Ali Abbas
'Fiscal sustainability and growth in SSA: The role of domestic debt'
The Heavily Indebted Poor Countries (HIPC) initiative has helped waive much of the poor countries' external debt burden. But Africa's new social spending programmes, being financed by concessional external finance, are likely to create a similar burden with the same package of risks (currency depreciation, moral hazard on the part of debtors etc) as the first tranche of 'concessional' loans in the 1960s and 70s. While concessional external finance might be the only feasible option in the short run, it is important for African governments to think about proactively developing their domestic debt markets so that budgetary needs can eventually be financed at home and by issuing local currency debt instruments. In this context, my research focuses on public debt sustainability and growth in post-HIPC Africa, exploring i) the impact on the macro-economy of a current debt-financed fiscal expansion, given private sector expectations of future external debt forgiveness; ii) the choice between external and domestic borrowing in view of the underlying risks: interest rate risk, refinancing risk and currency depreciation risk; iii) the possible growth pay-off to developing domestic debt markets and the implications of this for domestic debt strategy; and iv) the viability of converting external debt and grant aid into domestic bonds to boost the average citizen's net asset holding and support domestic financial market development in the region.

Monazza Aslam
'Essays in the economics of education in Pakistan'
This thesis addresses some key issues surrounding gender differences in educational and labour market outcomes in Pakistan. Data from the latest,

nationally representative household level survey from 2001-2002 are used in the first three chapters, and that from a purpose-designed survey used in the last. The first chapter analyses gender differences in intra-household educational expenditure allocation decisions within households. The second extends this by analysing whether pro-male biases in expenditure allocations prevail or disappear within households headed by males or females. The evidence points towards large and significant pro-male biases in educational expenditure allocations. The third chapter questions whether differential labour market rewards for males and females (i.e. differences in returns to education) explain the expenditure allocations. Finally, the last chapter questions whether parents differentially treat females not only by allocating less resources to them but also in terms of the quality of schooling accessed. The relative effectiveness of private and government schools is addressed in the last chapter.

Simon Baptist
'Choosing technology: Theory and evidence from Asian and African manufacturing'
The relative importance of technology, efficiency and factor choice in explaining the differences between Ghanaian and South Korean manufacturing firms is investigated using comparable firm-level panel data sets. Technology is found to be different in each country, and it is demonstrated that incorrectly imposing common technology by running a pooled regression will lead to biased estimates. Within-country variation in efficiency is not informative for the cross-country comparison. It is not possible to detect a significant difference in efficiency between Ghanaian and South Korean firms once differing technology is taken into account. Factor-price differentials, market size and risk are potentially important determinants of technology choice. Technology choice is critical to understanding differences between Ghanaian and South Korean firms, as well as posing theoretical and methodological problems for the measurement of efficiency and productivity.

Tessa Bold
'Economics of informal insurance arrangements'
My thesis explores the implications of endogenous group formation on informal risk-sharing arrangements, both when groups have access to mutual savings and can make ex-ante transfers, and when risk-sharing is efficient and therefore history-dependent. The findings are that access to savings and the possibility to make ex-ante transfers significantly improves the performance of risk-sharing arrangements. This prediction is tested using a unique survey of 78 funeral insurance arrangements in rural Ethiopia. Secondly, I extend the dynamic limited commitment model, which predicts that efficient risk-sharing will show history dependence, to a model of risk-sharing arrangements with endogenous group formation. I show that the predictions of the dynamic limited commitment model are substantially altered in this context, and from this derive testable predictions for the presence of endogenous group formation.

Ingrid Boxall
'The effects of income inequality aversion and procedural fairness on behaviour: An experimental investigation'
In this thesis I investigate when and how individual behaviour is affected by income inequality, specifically analysing aversion to such inequality and the consequences to be considered when formulating policy initiatives. In addition I explore how individual perceptions about whether income or wealth is deserved affect the way in which income inequality impacts on behaviour. For this research I have chosen to use an experimental methodology and have designed a game which will be conducted in South Africa, a country with notoriously high income inequality. This game employs different treatments to examine the prevalence and effects of both income inequality aversion and procedural fairness. Findings of significance could lead to increased understanding of many behavioural issues (crime, unemployment, education, etc), thereby allowing more effective design of policies aimed at improving these concerns.

Cesar Calvo
'Essays on the links between risk and poverty'
I review analytical models where risk aversion is a necessary condition for a poverty trap to arise - when such aversion is only an implicit assumption, I bring it to the core of the model. Having done this, I turn to the concept of 'vulnerability', which both academics and practitioners have used as a tool to remark that economic deprivation is not only about low consumption levels, but also about insecurity and future threats. However, lack of theoretical foundations has precluded any consensus as to how vulnerability should be measured. My research project develops an axiomatic measure of vulnerability - the first one to our knowledge.

Sutapa Choudhury, *(Department of Social Policy)*
'What drives the policy process in developing countries? The case of HIV/AIDS and education in Malawi'
This is a study about factors influencing the policy process in developing countries. I argue that the technocratic model of policy making is an inaccurate portrayal of reality, and using my case study of the response to HIV/AIDS in Malawi's education sector, argue that policy processes are inherently political. I begin with a historical chapter on Malawi's political economy since independence which provides a context. Using interviews, I then analyse the complex tripartite relationship between the state, donors and civil society through a discussion of participation of 'stakeholders', a term which serves to mask the inequalities in the relationship between the actors in the policy sphere. By analysing minutes of meetings, I trace the development of the Strategic Plan for HIV/AIDS in the Ministry of Education over the period 2000-2005 as a lens for understanding how agendas are set, by whom and for whom. The discussion then shifts to a focus on challenges in implementing policy arising from the divergence between the contents of formal policies and the realities on the ground. Finally, the study explores the idea of an evidence base in policy and the extent to which research has been a driver of policy change in Malawi. Here I also analyse data on the impact of AIDS on teachers and whether this has fed into the policy response.

My preliminary analysis is showing that policy does not follow a linear process of identifying a problem, selecting a policy to solve the problem and implementing that policy. Malawi's response to AIDS is rooted in its relationship with donors, the nature of the Malawian state including the features of its bureaucracy, and the centralisation of policy making despite recent attempts to 'consult' more widely.

Victor Davies
'Essays on conflict economies'
My thesis comprises three essays. The first uses an analytical model to show that open access in alluvial diamond digging in a low-income economy could attract excessive labour, dissipating the diamond rents if the opportunity cost of labour is positive. The net benefit to society could be negative, engendering a resource curse. In the second essay I use a global data set to analyse the evolution of seigniorage during and after war. Thus, I add to the limited body of knowledge on the economic consequences of war. The third essay analyses Sierra Leone's 1960-2000 economic growth performance, focusing on the political economy, markets and private agents.

Guarav Ganguly
'Trade and investment in developing countries'
Increased openness to international trade is seen as an important prerequisite for economic success in developing countries, but the exact channels through which the benefits of trade accrue remain unclear. Employing a GMM (Generalised Method of Moments) framework and alternative panel data estimators, this thesis probes the effect of openness to trade on investment in developing countries, from both macro and micro perspectives. The macro part of the thesis looks at the nexus between trade, investment and uncertainty for a large panel of developing countries, while the micro section focuses on Ghana and seeks to investigate the links between export performance and investment using firm-level data.

Godius Kahyarara
'Real earnings and productivity in Tanzanian manufacturing firms'
This thesis analyses the determinants of real earnings and productivity in Tanzania manufacturing enterprises. The analysis is organised into three chapters. The first chapter examines the impact of schooling and job training on real earnings in Tanzania manufacturing enterprises. Specifically, it compares the effects on earnings of schooling and training, by which is meant attending any formal job-related training course, and other forms of learning captured by measures of tenure and experience in the earnings function. The second chapter examines the impact of learning on productivity in Tanzanian manufacturing enterprises. The third chapter assesses the impact of pay method and work supervision on worker earnings in Tanzania manufacturing over the period 1990-2002. Key findings of this thesis are: that returns to schooling and job training in Tanzanian manufacturing firms are non-linear; and general education is more rewarding than vocational education and on-the-job training. Further results are that learning in the form of work experience has a strong effect on firm-level productivity, and workers who exert high efforts are paid more. The results also show that firms that can supervise their employees reduce the necessity to pay higher earnings and supervision affects the earnings through work effort.

Florencia Lopez Boo
'Distributional outcomes of growth and the effects of macroeconomic shocks on returns to education and household's educational decisions: Argentina 1991-2003'
Argentine reforms were characterised by radical market regulation changes during the 1990s that led to increases in GDP along with increases in poverty. At the end of 2001, the most severe economic crisis ever hit Argentina and poverty rates soared to 50% of the population. To cope with this, the government introduced in January 2002 the '*Plan Jefes*' workfare programme as the main public safety net response to the crisis. My thesis deals with a number of aspects linked to the shocks and the policy responses. The following research questions will be particularly regarded: first, how can we separate the effects of changes in inequality and of average growth on changes in poverty? Which particular method would allow us to improve the interpretability of the results? Second, in which manner macroeconomic shocks (and the policy responses to them) may change returns to education over time. Finally, how do educational decisions change within a household across and within sectors, after a given shock?

Xerxes Malki
'The Lebanese in Ghana: Beyond the model of a classic middleman community'
This dissertation examines the Lebanese community in Ghana during the twentieth century, with an emphasis on qualitative assessments of their economic endeavours. Arriving late in the nineteenth century, many Lebanese distinguished themselves as successful business people, especially during the Gold Coast's WWII economic boom. They served crucial roles as 'middlemen' in the colonial cocoa 'cash crop' economy, becoming heavily involved in transport and retail. However, they endured expropriations in the aftermath of demonstrations for self-rule, notably during the Disturbances of 1948. After independence, Ghanaian regimes employed coercive incentives to push the Lebanese into specific economic niches, particularly industry. Commissions of enquiry routinely scrutinised the community, investigating purported Lebanese tax-dodging and bribery. Many Lebanese were expelled following Busia's indigenisation decree, the Aliens Compliance Order of 1969. In response to these pressures, they developed elaborate methods of self-policing, discouraging immigrants from Lebanon and tempering conspicuous consumption. A certain clannishness proved advantageous, enforcing standards of reciprocity and building strength through financial networking. Today the Lebanese retain dominant positions in both industry and service sectors.

John McArthur
'Impediments to productivity and growth in African economies'
Among the competing explanations of Africa's generally stagnant trends in economic growth, those focusing on public institutions have gathered momentum in recent years. The first part of the thesis builds on this, by assessing empirically the firm-level links between bribe paying and productivity across 27 African economies. The results suggest that the country-level effects of bribe paying on productivity are greater than the direct firm-level effects. The second stage of the research looks beyond the role of public institutions, to assess the role of transportation networks in economic development, still with an emphasis

on explaining the poor growth history of African economies. Drawing on recent advances in applied mathematics and network theory, the research studies how the evolution of hub and spokes systems, in the global commercial passenger flight network, can help to identify underlying forms and causes of isolation in global production networks. It is hoped that a better understanding of the links between inter-urban air transport and patterns of economic agglomeration will help explain why many African economies have not grown more quickly.

Adam Mugume
'Essays on macroeconomics in Uganda'
The aim of this thesis is to offer insights into the multidimensional links between some few macroeconomic aggregates, notably consumer expenditure, investment and fiscal deficits, and to contribute to policy analysis in Uganda by quantifying and explaining domestic and external macroeconomic linkages, in relation to the evolution of these aggregates and the channels through which state and control variables have affected them. In particular, it attempts to provide an analytical framework that could provide an input to building a macroeconomic model for Uganda. The thesis comprises four substantive chapters. The first chapter puts together a potentially useful array of detailed information about the stylised facts of the evolution of the Ugandan economy, with reference to the role of incompatible macroeconomic policies, macroeconomic events leading to stabilization, and structural adjustment programmes. It elaborates on structural changes of the economy and the role of external shocks in the dismal economic performance. It also considers the tools of economic management by the World Bank and IMF. The other chapters cover consumer expenditure, investment and public sector deficit, and focus on quantification of the factors that have determined the evolution of these aggregates.

Priscilla Muthoora
'Debt relief and distribution: An application to Madagascar'
My thesis will examine the distributional effects of debt relief. A dynamic Computable General Equilibrium (CGE) model, calibrated with data for Madagascar, will be used to assess intra and intergenerational changes in income distribution from debt relief. To analyse any trade-off between efficiency and equity gains from debt relief, the issue of the optimal fiscal response will then be addressed, with particular emphasis on the structure of indirect taxation. A third line of research provides for an investigation of the interaction of political economy processes with the traditional mechanisms through which debt relief affects distribution.

Catherine Porter
'Do household actions to lower consumption variance lead to lower mean current and future consumption levels in situations where formal consumption-smoothing mechanisms do not exist?'
The thesis examines decision making by households in response to risk and vulnerability, when formal social protection mechanisms do not exist. The empirical work uses up to six rounds (ten years) of the Ethiopian Rural Household Survey data set. The first stage of the thesis examines the impact of

various shocks such as low rainfall, sickness, animal sickness and crop failure on household welfare levels, defined as real consumption per adult equivalent, and analyses both contemporaneous and past shocks and the impact of past consumption on current levels of consumption. The second stage is to map out household responses to risk and shocks such as migration, labour supply choices, receipts of remittances and food aid, and see if these are effective. Further work will test some behavioural links between households' responses to risk and shocks and vulnerability outcomes.

Patrick Premand

'On risk, poverty and economic mobility'

A central challenge in the development literature has been to understand the microeconomic factors behind poverty persistence. In this context, risk has been identified as a crucial cause of poverty, more than just one of its dimensions. The first chapter of my thesis contributes to the literature on risk and welfare dynamics by assessing the impact of hurricane Mitch on contemporaneous consumption growth of Nicaraguan rural households, using three living standards measurement surveys in panel. Reported household losses and satellite-based municipal rainfall are used as complementary measures of the shock. The shock itself is disaggregated into an asset and an output dimension. The static magnitude of hurricane losses is shown to be large, and their multidimensionality to matter quantitatively. However, preliminary results reveal hurricane Mitch had surprisingly little medium-run welfare impact. This encourages further analysis on the potential persistent effects of the shock as well as households' responsiveness ex post.

Bob Rijkers

'Risk and development'

The evolution of credit markets, the impact of risk perceptions on economic decision-making and the dynamics of institutional change are relatively under-explored issues. By analysing data from the Ethiopian Rural Household Survey, and a unique data set on risk perceptions to be assembled specifically for this purpose, this thesis attempts to improve our understanding of the impact of uncertainty on economic organisation and behaviour. Special attention will be devoted to the role of risk and market failure in generating poverty persistence.

Christian Rogg

'Precautionary saving and portfolio management in uncertain environments: Evidence from rural Ethiopia'

This thesis investigates the impact of uncertainty on the saving behaviour of poor households. The empirical analysis focuses on rural Ethiopia, but the approach and modelling techniques are applicable to a variety of settings. I begin with a review of the literature and a discussion of the salient features of asset holdings among sample households. I then consider the role that precautionary savings play in the context of both ex-ante risk-management strategies and ex-post risk-coping strategies. As regards the ex-ante analysis, I conclude that exposure to uncertainty has a significant impact on asset portfolios: households in more uncertain environments hold a smaller share of their wealth in assets with risky returns. More specifically, they hold less livestock, an asset with comparatively more uncertain returns. Furthermore, both the absolute value of risky asset holdings and their portfolio share increase with household wealth, providing empirical support for the commonly made assumptions of decreasing absolute and relative risk aversion. As regards the ex-post analysis, I show that households respond to adverse shocks by dissaving non-financial assets. In particular, they employ both crop/food stocks and some types of livestock as buffer-stock assets. The thesis also explores the links between precautionary savings, consumption smoothing and asset inequality. I show that consumption is smoother than income, particularly for poorer households, and that liquid asset holdings are more volatile than non-liquid ones, again particularly among poorer households. I also find that buffer-stock saving decreases in importance as households become wealthier. This is shown to be true both in relative terms (i.e. portfolio compositions) and in absolute terms (i.e. levels of asset accumulation). Finally, I provide evidence that while uncertainty is not systematically linked to inequality in liquid assets, it is positively correlated with inequality in non-liquid assets.

Justin Sandefur
'Labour markets and African development'
This thesis examines poverty and inequality in Africa as a labour market phenomenon. The first paper documents the trend toward informal employment and small-scale enterprise across Africa. I use panel data from the Ghanaian manufacturing sector – where average firm size has fallen by over 50% in recent decades despite aggregate growth in the sector – to test various explanations of this wider trend. The second paper assesses the impact of wage inequality on industrial development in Africa, matching the panel of Ghanaian manufacturing firms to data on workers in each firm. A large share of wage inequality in the data is attributable to inter-firm wage differentials which cannot be explained by human capital differences. I explore the sources of these differentials (union wage premiums, bargaining, efficiency wage effects, etc) and assess the impact of these wage differentials for labour demand and firm growth. Finally, the third paper (co-authored with Neil Rankin and Francis Teal) examines the determinants of earnings over the life cycle for wage employees and the self-employed. We use a unique panel of worker histories from urban Ghana and Tanzania to measure the role of learning and selection in producing standard cross-sectional age-earnings profiles.

Magnus Saxegaard
'Essays on the analysis of monetary policy in emerging markets'
This thesis includes three papers on monetary policy in emerging markets, highlighting the structural characteristics in these countries which may reduce the applicability of findings from monetary policy analysis in industrialized markets. The first two chapters analyse the effect of liability dollarization and currency mismatch in the balance sheet of the public sector on the choice of exchange rate regime. The existence of such imbalances may help explain the finding that emerging markets typically display a fear of floating their exchange rate. The first chapter develops a theoretical model which enables us to analyze the impact of

foreign currency government debt whereas the second chapter investigates these issues in the context of the Philippines. The third chapter analyses the impact of commercial bank holdings of reserves in excess of statutory requirements on the effectiveness of monetary policy in three Sub-Saharan African countries.

Danila Serra

'The microeconomic and social causes of corruption'

My thesis investigates the causes of corruption at the individual decision-making level and tests for the hypothesis of corruption being a frequency-dependent equilibrium. The measurement problems associated with corruption are overcome by applying a combined methodology involving both a survey and an economics experiment. The combined methodology makes it possible to investigate whether individual participants' values, attitudes and experiences relating to corruption are associated with growing up in different economic and socio-cultural environments and whether they impact on individuals' decision to act corruptly in the context of the game. Preliminary results from a pilot study involving Oxford University students coming from 43 different countries seem to support the hypothesis that corruption is indeed frequency-dependent: younger students who grew up in more corrupt societies acted more corruptly in the game. Further investigations will be conducted from a sample of non-student residents of Oxford characterised by great diversity in terms of socio-economic backgrounds, life histories, and exposure to corruption.

Fraser Thompson

'The impact of location on firm performance in Moroccan manufacturing'

This thesis attempts to provide some insights into the broad question of why some regions in a country prosper, whilst others decline. Many potential explanations have been put forward to answer this question, incorporating roles for geographical factors, institutions and agglomeration externalities. These theories are tested using an extensive firm-level panel data set of Moroccan manufacturing firms dating back to 1985.

The thesis begins by focusing on the effects of localised competition on firm-level productivity, wages and profitability, and finds strong evidence of Cournot-styled price effects. The thesis then explores the interaction of localised competition and a firm's distance from a local technological frontier on productivity levels. Localised competition is found to have a large positive effect on productivity for those firms initially close to the local technological frontier, and far weaker effects for firms further from the frontier. The thesis concludes by providing a joint test of the effects of natural geography, institutions and agglomeration externalities on firm productivity. The evidence supports the pre-eminent importance of local institutions in influencing firm productivity in Morocco.

Nicolas Van de Sijpe

'Fiscal policy and growth in developing countries'

Recent research has shown that a failure to consider both the sources and uses of government funds when examining the impact of fiscal policy on growth leads to a serious estimation bias. As a consequence, many of the conclusions drawn by previous studies are potentially invalid. In addition, very few empirical studies have tested for non-linear effects of taxes and public spending, despite the fact that such effects are predicted by theoretical models. Hence, I want to test for the presence of non-linear effects, taking into account the budget constraint that ties the fiscal variables together. I further plan to explore how the effects of taxes, public expenditure and deficits differ across countries according to observable variables such as, for instance, the level of economic development. In this context, I am particularly interested in testing whether taxes raise the effectiveness of public spending, by invoking scrutiny, and whether this holds in general or only for specific groups of countries (e.g. democracies).

Gaston Yalonetzky

'Economic mobility and poverty persistence in Peru'

Peruvian society has traditionally been regarded as unequal and characterised by low economic mobility. In turn, widespread poverty is still a persistent phenomenon. However, during the last twenty years, most quantitative surveys expose a rather mobile society. At the same time, though, poverty keeps affecting a significant part of the population, even though many of the poor are not always the same people across the years. Therefore, with the use of different quantitative sources, this research's aim is to draw an explanatory picture of the recent decade's patterns of economic mobility and poverty persistence, together with some intergenerational assessments, in order to study the socio-economic transformations that might be making Peruvian society more mobile yet without significantly impacting on poverty persistence.

Andrew Zeitlin

'Economic institutions and labour market dynamics in rural economic growth: The cocoa industry of Ghana'

The Ghana Poverty Reduction Strategy Paper claims that a principal cause of failure in previous development efforts has been the preponderance of 'intractable' structural rigidities in the rural sector. Yet recent, dramatic growth in the cocoa sector of Ghana suggests that rapid rural growth is possible. This thesis seeks to identify the mechanisms enabling the short-run expansion that has occurred and to explain their implications for long-term growth prospects. In so doing, three dimensions of the cocoa industry will be investigated using a recently gathered panel data survey of cocoa farmers. First, the relative importance of labour and non-labour inputs and of the trend toward intensive cultivation will be assessed. Second, the relationship between the recent surplus and investments in both physical and human capital is considered. Of particular interest are factors influencing whether agricultural profits are translated into physical investments in that sector, or may instead lead to investments in education or migratory decisions.

Third, the thesis investigates the hypothesis that economic institutions, principally the geographic variation in the degree and nature of competition among Licensed Buying Companies, serve as a catalyst in these processes of growth and transformation.

Degrees completed

Ruth Hill

'Risk, production and poverty: A study of coffee in Uganda'

A characteristic of rural environments in developing countries is the uncertainty that surrounds life. Poverty can make it harder to deal with the bad outcomes that uncertainty can bring, and poorer households are often left trying to protect against such outcomes by avoiding risk, often at a cost. This thesis is an empirical study of the impact of risk on production choices and investment decisions for poor households. Specifically, it undertakes an examination of risk as it affects coffee producers in Uganda – analysing the risk they face from coffee production and testing its impact on production and investment decisions.

Using data collected on coffee farmers, traders and exporters it characterises the price risk faced by coffee farmers in a post-liberalisation marketing environment. The majority of farmers are found to face a higher variation in coffee income than they are happy with as a result of substantial price risk that they appear unable to insure against. Analysis shows this uncertainty causes households unable to deal with income fluctuations to choose production activities safer than coffee at the cost of lower return. Furthermore, results indicate this impact of risk is larger for poorer households.

However, whilst a simple model of production under uncertainty explains the share of labour allocated to coffee production, the same model does not provide much insight into the share of land allocated to coffee production. As coffee is a perennial crop, the decision to allocate land to coffee production by planting or abandoning coffee trees is reconsidered within an investment framework. An empirical analysis suggests investment in coffee can best be understood by a model of irreversible investment under uncertainty, in the presence of fixed costs of investment and liquidity constraints.

Mizuho Kida

'Social learning in the adoption of new technology in rural Ethiopia: An econometric investigation'

The term social learning refers to the process whereby an individual's choice is influenced by the decisions or behaviours of the neighbours. Such an interdependency or 'externality' arises because (i) new information is created whenever an individual takes an action (i.e. information is endogenous), and (ii) the decision taken by an individual is observable to others in the neighbourhood (i.e. information is a public good).

The key ingredient in the analysis of social learning is the assignment of neighbours. In the literature of agricultural innovations in developing countries, the prevailing practice is to assume a village-wide reference group, i.e. all who live in the same village are *de facto* 'neighbours'. This approach faces a significant empirical problem of identification to disentangle learning effects from other processes at work at the village-wide level that are both spatially and serially correlated.

This study departs from the traditional assumption of village-wide neighbours and implements alternative specifications of reference groups based on the household linkages created by rural village organisations and non-market institutions. Using a large-scale panel survey data in rural Ethiopia, this study tests the idea that there is significant social learning among neighbours in decisions to adopt new crops, and that household linkages created by the traditional sharing arrangements encompass learning linkages between these farmers. The analysis finds evidence to support these hypotheses.

The subsequent analysis of incentives to form household linkages through one of the village institutions, confirms that the ability to share information is an important determinant of household linkages, and that the significant influence of neighbours we find in the earlier analysis is unlikely to be driven by spurious effects due to the endogeneity of household linkages to the determinants of adoption behaviour of farmers.

Neil Rankin
'The determinants of manufacturing exports from sub-Saharan Africa'
This thesis used firm-level data to investigate the determinants of exports at the firm level in five African countries. It specifically investigated the relationship between exporting and productivity and whether there is evidence that more productive firms self-select into the export market and/or whether firms become more productive through export participation. The thesis also examined whether the determinants of exporting differed by export destination, the relationship between the amount exported and firm characteristics, and changes in productivity, output and inputs associated with entry into and exit from the export market. The results from the thesis suggest that the low level of aggregate exports observed in African countries is the result of the small number of large firms in these countries and the small proportion of output exported, rather than a lack of export participation. Thus, policy to encourage aggregate exports needs to focus on creating more large firms, through either firm growth or entry, and on increasing the proportion of output that is exported. There is evidence that firm size is constrained by the size of the local market. A robust result from the thesis is that firms that entered the export market grew employment by more than 50 per cent over the seven year period during which they became exporters. This indicates that exporting offers scope for job creation.

Mattia Romani
'Technology, networks and agricultural productivity: Evidence from Côte d'Ivoire and Madagascar'
Farms across Africa have been associated for a long time with low yields and lack of innovation, but they are still the centre of the economic engine of the continent. The aim of this thesis is to shed some light on the complex interaction between access to technology, diffusion and the combined effect of these two components on farmers' productivity. Ultimately this thesis aims to investigate the potential of policy intervention in this area. The applied work focuses on two different cases. (i) In Côte d'Ivoire the focus is on coffee and cocoa farms, and the potential for innovation. First the impact of extension services is assessed in the context of access to technology; then the focus moves onto the creation of networks among the farmers within villages. (ii) Madagascar farmers grow subsistence crops, mainly rice. Different types of extension are to be found around the country, and the empirical analysis focuses on assessing the effects they have on farmers' productivity using a detailed data set on two provinces of the country. Subsequently, farmers' interactions are taken into account in evaluating the total impact of access to technology.

Marcella Vigneri

'Trade liberalisation and agricultural performance: Contrasting macro and micro evidence from Ghana'

My doctoral dissertation is an empirical investigation of the changes in Ghana's cocoa sector during the period of market reforms. There are three key parts. The first is a macro-economic analysis of the export crop supply response to price incentives. Using a time series approach it is shown that in the presence of an active black market for the cash crop, the incentive to smuggle affects negatively the official deliveries of the cash crop. However, the smuggling incentive is found to be much lower than what other studies have claimed.

The second and third parts of the thesis are microeconomic in nature. Using a nationally representative sample of cocoa farming households, I first investigate the changes in the technology of cocoa production that have taken place between 1990 and 1998. The key finding from this section is that while production per household has remained virtually constant throughout the decade, a major change in factor proportions has taken place: the labour to land ratio fell while the non-labour to land ratio rose. The importance of non-labour inputs to cocoa production has increased both relative to land and, very substantially, relative to labour.

The third part studies the effects of sharecropping contracts and of three different investment choices on cocoa yields. This last section uses a new data set which I collected in 2002, that includes a panel element built on the fourth round of the Ghana Living Standard Survey (GLSS) used in part two of the dissertation. Two new findings are discussed. Higher yields are observed systematically: (a) on land cultivated by sharecroppers, (b) where hybrid trees are prevalent and investment in replanting has taken place. This last result has important implications for the long-run sustainability of Ghana's cocoa sector. Investing in land reforestation and in new varieties remain infrequent practices observed on cocoa farms, as they are both riskier and more expensive investments to the farmers, therefore suggesting the key areas where policy interventions are needed to raise the production potential of the sector.

Section 2: Policy issues in African development

Firm work and poverty analysis

Adeel Malik and Francis Teal

Work on firms and its impact on poverty

One of the central activities that researchers have undertaken at the CSAE for the last ten years has been detailed work on manufacturing firms in Africa, some of which is reviewed below by Måns Söderbom. The research we have undertaken on both Kenya and Nigeria has been funded in part by UNIDO, which has identified the wide and growing gap in productivity levels between developed and the least developed countries, many of them in Africa, as a key policy issue that needs to be addressed in meeting the Millennium Development Goals set out by the UN.

Our work with UNIDO demonstrates the advantages of collaborative funding, which allows research to feed into a range of important policy issues. UNIDO identified five core questions for its research programme as follows:

- How best to foster and monitor the contribution of productivity growth to economic and social advancement?
- What is the impact of the new global setting in such areas as trade, investment and international regulations on the scope of industrial development policies and on the effective contribution of industry to economy-wide productivity growth and to the achievement of the MDGs?
- What are the most efficacious policy tools and forms of industrial governance to promote and support industrial development in the new global setting?
- What are the key barriers to speeding up the transfer, diffusion and absorption of technology and how best to remove them with a view to enhancing productivity growth in developing countries?
- How to maximise the development impact of entrepreneurship and SMEs?

Understanding how and why productivity differs across firms, sectors and countries requires detailed micro level information on firms in the industrial sector. The first round of the Nigerian Manufacturing Enterprise Survey (NMES) was undertaken in mid-2001, and was designed to collect both contemporaneous and retrospective information and to be comparable to other studies of African manufacturing firms.

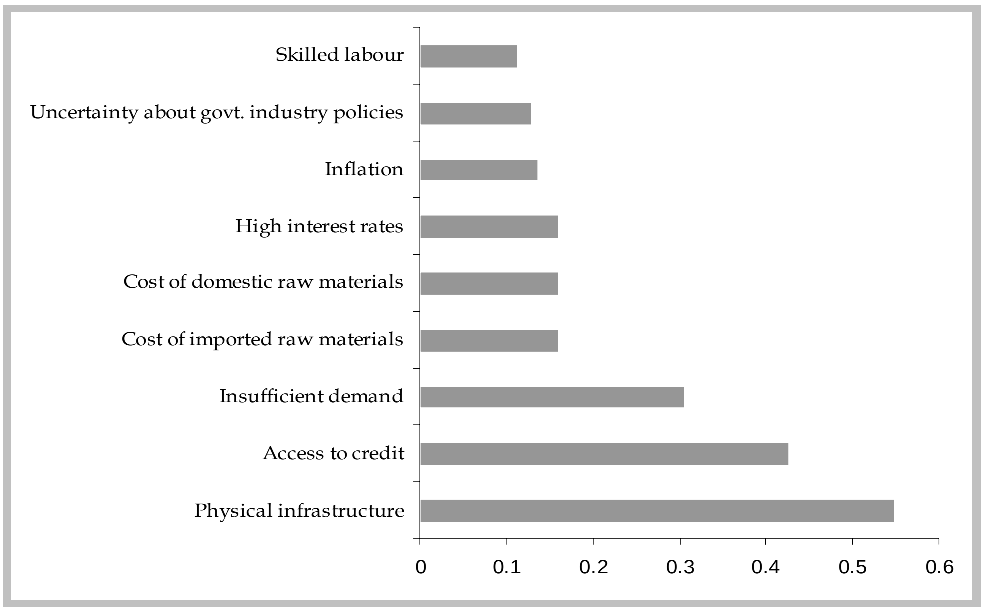
In 2004, as part of its overall research programme, UNIDO organised a follow-up survey to identify the key constraints on the performance of Nigeria's manufacturing sector, and to present answers to the core research questions as to how industrial policy can impact most effectively on poverty reduction. In this section we summarise some of the main findings from the Report on that survey.

Enhancing productivity and growth

Key to understanding the fundamental determinants of poverty is an understanding of the efficiency with which firms operate in developing countries.

The Report begins by identifying the key factors which are seen as constraining productivity by entrepreneurs and managers in Nigeria. Figure 1 reports on nine characteristics of Nigeria's investment climate which are seen as crucial for improving firm productivity.

Figure 1
Perceived main problems



Note: The chart shows the percentage of firms considering a particular category as one of its three principal constraints. [N=124]

The most frequently cited problem in the sample is physical infrastructure: about 55 per cent of the firms regarded ineffective provision of physical infrastructure as one of their three biggest problems. The second most important constraint perceived by firms in our sample was inadequate access to credit: 47 per cent of the firms placed access to credit among their top three problems. The third most frequently cited concern of the firms was the problem of insufficient demand (31 per cent).

The survey evidence points towards a growing dissatisfaction with the country's dilapidated physical infrastructure, in particular the unreliable and irregular power supply. Concerns regarding the ineffective provision of power supply emerged as a consistent theme of the survey:

- When asked to rate the overall quality, integrity and efficiency of services delivered by public institutions, firm respondents gave the worst average score to the services offered by National Electric Power Authority (NEPA).
- 57 per cent of the respondents indicated the prevalence of unofficial payments (bribes) in accessing various public services, including NEPA.
- Firms generally have mains electricity for only less than three days per week.

- A large number of firms – mostly medium and large firms – are forced to rely on self-supply of electricity through private generators, which is about three times more expensive than the NEPA.
- Problems of power supply hit the small producers particularly hard, who are estimated to lose 24 per cent of their annual output to power outages.
- 69 per cent of the firms regarded problems of power supply as the main reason for low capacity utilisation.

These findings differ from those in other surveys of African firms in the importance attached by the firms to the poor quality of the infrastructure. Improving infrastructure can potentially have a large impact on the competitiveness of the firms.

The identification of insufficient demand and access to credit as major constraints is a common finding across firm-level surveys in Africa. In the Report it is shown that a lack of access to credit is in part related to the poor quality of the financial infrastructure that characterises the Nigerian economy, and partly to the problems posed of lending to small firms. The following facts highlight the pressing nature of financial infrastructure problems:

- A strikingly high percentage of the sample – 81 per cent – admitted facing liquidity/cash flow problems during 2003.
- Only about 35 per cent of the firms turn towards bank borrowing to overcome their liquidity problems – the large majority of firms rely on other means, such as personal cash reserves, supplier credit, cash advances from clients, etc.
- A small proportion of firms (27 per cent), mainly large firms, applied for bank loans during the period 2001-03. More than 75 per cent of these loan applications were accepted.
- The majority of firms were deterred from applying for bank loans due to high interest rates and inadequate collateral.
- Banks are not interested in advancing long-term loans – the dominant mode of bank financing is overdrafts.
- Bank overdrafts are mainly accessible to large and medium firms: only 11 per cent of the small firms had any overdraft arrangement during the sample period.

Lack of demand is a problem that flows from the very low level of exporting that characterises the Nigerian manufacturing sector. It is often argued that as Nigeria is a large economy, its manufacturing sector can rely on the domestic market and that there does not need to be a concern with exporting. The data confirm that firms do rely overwhelmingly on the domestic market, but they also show that firms do not grow. While very few firms do export, there is some evidence that those firms are able to grow faster. Both being able to export, and developing an ability to compete with imports are key factors which need to be addressed if the stagnation found from the survey is to change to a pattern of rapid growth.

The impact of industrial policy on poverty reduction

Industrial policy can impact on poverty alleviation in two ways: by impacting on the demand for unskilled labour, and by the enhancement of skill formation. In sub-Saharan Africa in the last decade, most job creation has been in the self-employment sector, particularly in urban areas. Nigeria is no exception to this general trend. The inadequate growth in wage jobs has important implications for a range of policy issues. With the expansion of education, the number of formal sector jobs is failing to keep pace with the growth of school leavers. Higher and higher levels of education are perceived as being necessary to get a job. An expansion of education without an expansion of jobs for the newly educated is a recipe for social unrest.

It is not simply the number of jobs that is of policy concern. It is also the wages these jobs pay. Policy needs to focus on creating high wage jobs. If those making a marginal living in the self-employed sector could be absorbed into a higher paying wage sector, this would provide a powerful mechanism by which incomes for the poorest could expand. It is a mechanism that is driving the growth of the Chinese economy at present, and this mechanism is conspicuously absent both in Nigeria and most African countries. Creating a high wage job creation machine needs to be a central objective of policy.

How do the data from the survey suggest that the demand for labour can be increased? It appears that smaller firms have the greatest potential for job creation for any given level of investment. Figure 2 shows how many jobs get created for US$100,000 of investment and also shows that the differences are very large across the size range of firms. A micro firm, defined as one with less than six employees, creates more than 100 jobs for US$100,000 of investment. This compares with about ten for very large firms, defined as those with more than 200 employees. Thus jobs in micro firms cost about US$1,000 in terms of investment, while those in large firms cost US$10,000. A process of growth among small or micro firms may appear good for job creation, but this process of firm growth has two problems, both in terms of the number and kind of jobs that get created.

The first problem is that while a lot of jobs are created per unit of investment, the amounts of investment are very low. Micro firms use capital very economically, because it is scarce and expensive for them. Few jobs are going to get created because the micro firms are so constrained in their ability to invest.

Figure 2

Where do jobs get created?

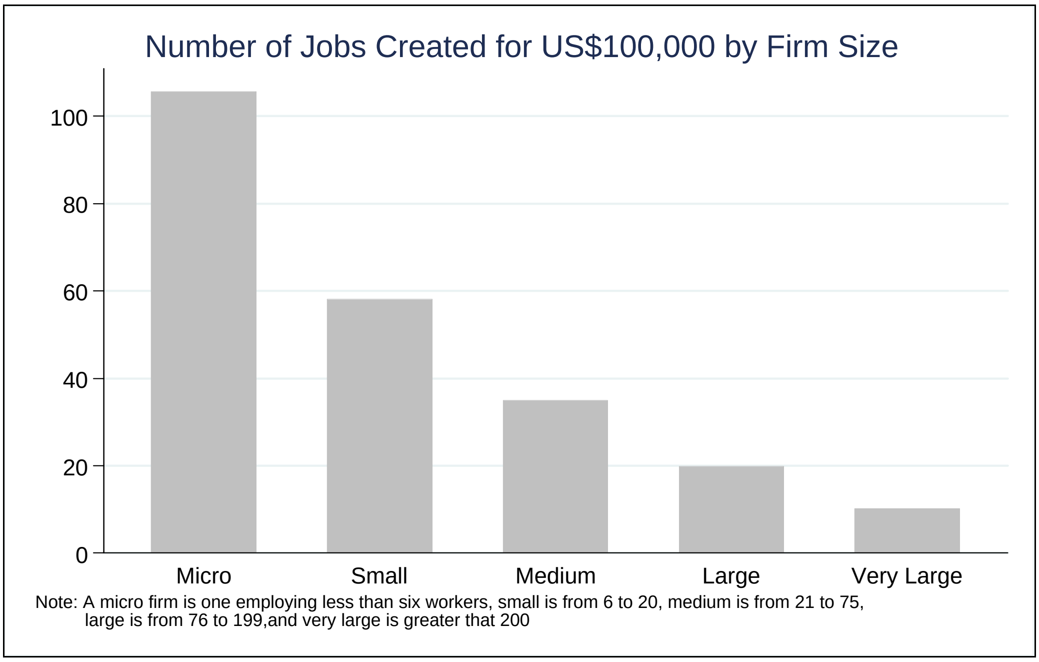
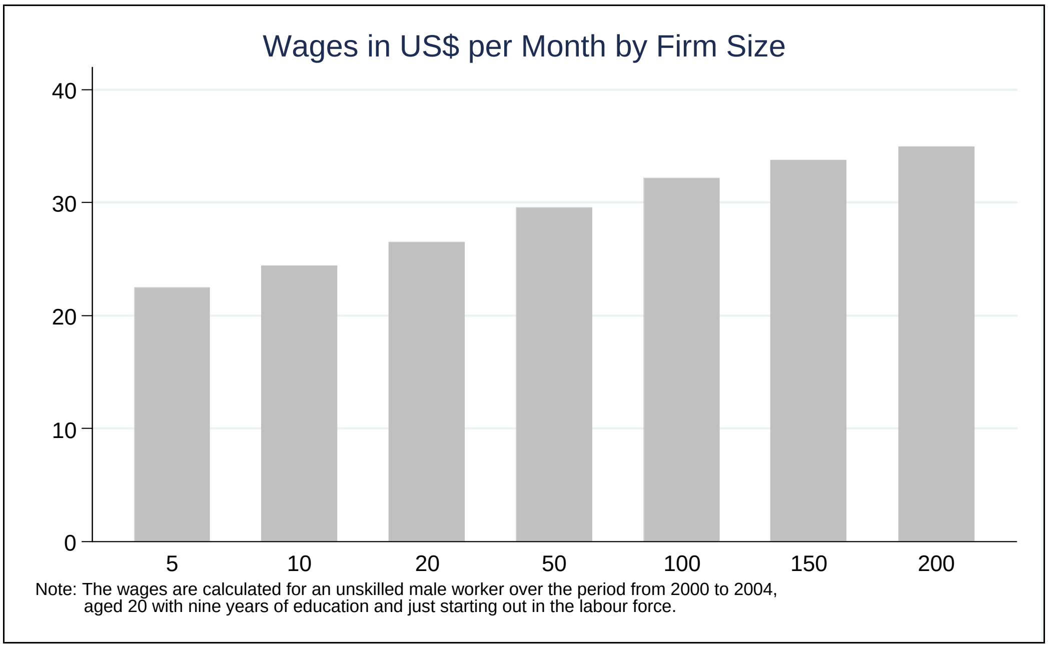


Figure 3

Where do better jobs get created?



Secondly, jobs in smaller firms pay far less well than jobs in larger firms, and these differences across firms of differing size are not due to differences in skills. Figure 3 shows how the earnings of younger workers currently entering the labour market vary depending on the size of firm in which they work. Wages for the young worker in a micro firm are about US$22 per month compared with US$35 per month for those in larger firms, a 50 per cent differential. In summary, micro and small firms are good at creating jobs but not good at producing higher paying jobs.

Wages and increases in education

There is a general finding across research on labour markets in Africa – using both household and firm-level data – that the economic value of education rises with the level of education. Figure 4 shows that this is true for the Nigerian data.

Figure 4

Wages and years of education

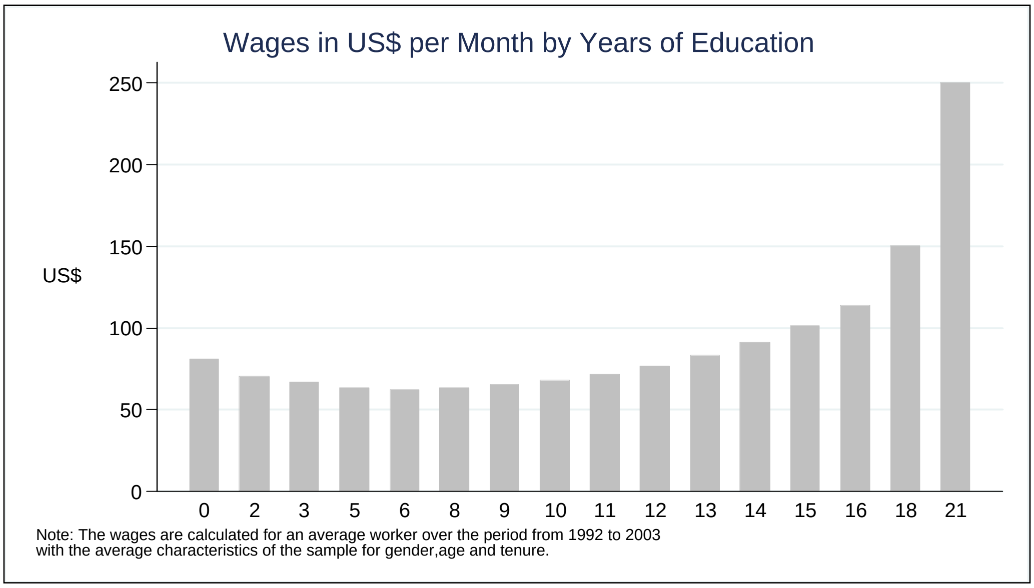


Figure 4 shows how wages for an average worker in terms of their age and tenure in their job vary with the number of years of education they have. The striking feature of the data is that wages rise rapidly only for the relatively highly educated. Indeed, there is no evidence for rises at all until after secondary school has been passed.

This is a very important finding for policy, as it implies that an expansion of education at the primary and secondary level may not generate increases in income for those who stop education before the end of secondary school. An expansion of education without an expansion of jobs for the newly educated is a recipe for social unrest.

What have we learnt from a decade of manufacturing surveys in Africa?

Måns Söderbom

The idea that improved performance of the private sector in Africa can contribute to poverty reduction remains central in the policy discussion. Even though over the last 10-15 years the performance of Africa's manufacturing sector has generally been quite poor (Mauritius is a conspicuous exception), many still believe manufacturing can act as an 'engine of growth' on the continent, creating skilled jobs and positive spillover effects, and through modernisation more generally. In the early 1990s, in order to get a better idea of why things were going wrong in the manufacturing sector, and how matters could be improved, the World Bank decided to field extensive projects involving data collection on firms across many African countries. Such data collection has subsequently become a regular exercise in at least some African countries. The CSAE has played an important role in this context, surveying firms over long periods of time in Ghana, Kenya, Nigeria and Tanzania. As a result of research based on these data, we now know a great deal more about African manufacturing firms than a decade ago. A recent paper by Arne Bigsten and Måns Söderbom, entitled 'What have we learnt from a decade of manufacturing surveys in Africa?', reviews the findings that have come out of this research.[1] In what follows, we discuss the key points emphasised in this review.

The business environment

The business environment has emerged as the prime suspect as to why firm performance in Africa is poor, and improving the investment climate is seen as a policy priority for the continent. Using cross-section data generated by the World Business Environment Surveys, Batra, Kaufmann and Stone (2003) find that the leading constraint cited by the company managers in Africa is financing, followed by corruption, infrastructure and inflation. Firms that report taxes, regulations and financing to be problematic have lower growth rates in sales and investment than firms that are not constrained by these factors. This result is consistent with the view that a good local investment climate is good for local business performance.

Credit

Bigsten et al. (2003) look at formal credit market participation and credit constraints, based on survey data on firms in Burundi, Cameroon, Côte d'Ivoire, Ghana, Kenya and Zimbabwe from the period 1991-1995. Their analysis suggests the demand for formal loans among African manufacturers is low: less than 20 per cent of the firms in the sample had applied for a formal loan in the year prior to the time of the survey. Based on information on why firms did not apply for a loan, Bigsten et al. identify three groups of firms: those without credit demand (55 per cent of the firms in the sample); and, among firms with credit demand, those constrained (33 per cent) and those unconstrained (12 per cent). Looking at firms of differing size, there are large differences. Close to two-thirds of the

[1] Downloadable at http://users.ox.ac.uk/~econ0109/

micro firms appear constrained, but only ten per cent of the large firms. About two-thirds of the large firms choose not to participate in the credit market, compared to only a third of the micro firms. The notion that the smallest firms are credit constrained is supported by regression results indicating that, controlling for other important factors such as expected profitability and indebtedness, the likelihood of a successful loan application varies with firm size. For a micro firm to have an equal chance of getting a loan as a large firm, the micro firm needs to have an average return on fixed capital more than 200 percentage points higher than the large firm.

Labour and skills

Labour costs, and the supply of labour in general and specific skills in particular, are important issues for firm performance. Two general results in this area have emerged from the research on the African survey data. The first is that earnings are positively correlated with education. Jones (2001) uses matched employer-employee data from Ghana and asks if the wage differentials between workers with different levels of education reflect genuine productivity differentials. She estimates a productivity equation and an earnings equation, and in both there is no statistically significant difference between the relative wages paid to workers and their relative productivity levels. This result supports the notion that education and productivity are positively correlated.

Jones (2001) assumes that the return to education is constant. Söderbom, Teal, Wambugu and Kahyarara (2006) relax this assumption, and investigate whether the return to education varies across different levels of education in Kenya and Tanzania 1993-2001. It is often argued that the earnings function is concave in education. In contrast, the results reported by Söderbom et al. indicate that the earnings function is convex, so that the marginal returns to education are lowest for the individuals with the least education. One implication is that giving priority to investment in primary education may have little impact on poverty, unless the individuals affected by the reforms proceed to higher levels of education. The authors argue that convexity may be part of the explanation as to why the rapid expansion of education in Africa has generated so little growth.

The second general result is that wages differ significantly across firms of differing size, even when comparing workers with similar levels of human capital. One of the first papers documenting this is that by Velenchik (1997). Using manufacturing data from Zimbabwe collected in 1993, she reports an estimate of the wage-size elasticity equal to 0.26 for the whole sample. This indicates a very high size-wage gap. For instance, it implies the average wage in a firm with 100 employees is about 80 per cent higher than the average wage in a firm with ten employees. Based on this, Velenchik goes on to investigate if the size-wage gap can be attributed to omitted variables. She considers a very wide range of observable factors, e.g. experience, tenure, education, training, gender, location etc. While the estimated wage-size elasticity falls as a result of controlling for these variables in the regressions, it never goes below 0.10 and is always significantly different from zero. Hence, even conditional on this large set of observable variables, there remains a size-wage gap in the data which is quantitatively important.

There is fairly strong evidence that this is not simply an artefact of omitting unobserved skills from the regressions. We also know that the size-wage gap is quantitatively large. In the case of Ghana, for instance, Söderbom and Teal (2004) estimate that if a firm with 350 employees faced the same wage as a firm with 20 employees, total costs in the large firm would fall by 20-25 per cent. One implication of the large size-wage gap is that firm growth is associated with rising labour costs, which, everything else held constant, will tend to erode firms' profits. So how can growing firms remain profitable? One way would be through improved performance in the form of higher productivity. Söderbom and Teal (2004) investigate whether there is any evidence of increasing returns to scale in Ghanaian manufacturing. However, only weak evidence for increasing returns is found, and constant returns to scale is not rejected. The authors argue that the reason large firms can remain profitable is that they face lower capital costs than small firms.

Doing business

The business environment impacts on how firms do business. Widespread market failures imply that firms face a lot of 'holes' in important markets, such as those for insurance and credit. This is especially pronounced for the smallest firms. Fafchamps (2001) identifies two types of responses that aim to reduce the resulting transaction costs, namely development of relationships and the sharing of information within networks. Essentially, when search and verification costs are high, it makes sense to try to establish long-term relationships and share information with other market participants, in order to economise on such costs. The firm data have been extensively used to shed light on these mechanisms.

Trade credit is a good example of how supplier relationships can be utilised to fill in some of the holes in the formal credit market. Fisman (2001) argues that trade credit plays an important role in firm financing in Africa, mainly by enabling firms to manage raw material inventories more efficiently and by reducing the likelihood of raw material shortages. Trade credit may therefore contribute to higher productive efficiency. Fisman analyses these issues using the first waves of RPED data from Côte d'Ivoire, Kenya, Tanzania, Zambia and Zimbabwe. In these data, trade credit is the dominant form of payment to suppliers for about a third of the firms. There is much variation across countries, however: in Tanzania, trade credit is the dominant form of payment for only eight per cent of the firms; in Zimbabwe the corresponding figure is 69 per cent. Trade credit appears to be more important in countries where the average firm size is relatively high, suggesting that large firms are more likely to use trade credit than small ones. In the formal empirical analysis, Fisman finds that firms that use supplier credit have significantly higher capacity utilisation, and are less likely to have raw material stock-outs, than firms that do not use trade credit. Further, he finds that these results are particularly strong among firms that are characterised as 'constrained' in their access to formal credit. These results are robust to potential endogeneity of supplier credit, which may arise if firms use trade credit as a result of having high capacity utilisation and/or substantial inventories, for instance.

Fisman (2001) suggests that these results imply that there may be significant productivity gains from an increase in the availability of supplier credit. He also makes the point, however, that unless we understand *why* some firms have access to credit while others do not, it will be difficult to provide solid advice to policy makers. The basic reason is that if lack of access to trade credit is driven by market failures – perhaps in the form of lack of public information on credit worthiness, or poor contract enforcement – then policy measures designed to fix these problems would probably have the desired results; but if firms do not get trade credit because they are unreliable, pose a big credit risk, don't want any etc, then it is not clear that improving access should be a policy priority.

Firm performance

Now consider three key aspects of firm performance, namely firm growth, investment and exports.

Firm growth

From a policy point of view, a good understanding of the relationships between growth and certain firm characteristics is important, since it can offer guidance as to what types of firms are likely to be relatively successful and good at creating jobs in the future. The relationship between firm size and growth is of particular interest in the context of African manufacturing, since most firms in Africa are very small. How realistic is it to hope that some of these firms will grow and become successful large firms in the future? The relationship between firm age and growth is also important. For example, if young firms grow quickly, policy measures aimed at encouraging entry may have significant growth effects in the short and medium term.

Related to the issue of firm growth is firm survival. Exit rates in African manufacturing are significant, and highest among the smallest firms. The study by Söderbom, Teal and Harding (2006) is based on a pooled panel data set of firms in Ghana, Kenya and Tanzania that spans a period of five years. These authors find that total factor productivity impacts on firm survival among large, but not small, firms. In other words, being relatively productive does not prevent firms from going out of business if they are small. Among larger firms, however, exit rates do depend on productivity, which is consistent with a 'survival-of-the-fittest' process, documented in the US, the UK and a number of middle income countries.

Investment

African financial markets are the least developed in the world, and it has long been a widespread view among development economists that this reduces investment. That there are financial imperfections in Africa can hardly be disputed, but such imperfections will not translate into binding constraints unless firms have a desire to invest.

The second-hand market for used machinery in Africa is at best shallow, and investment expenditures are therefore often 'sunk' (i.e. investment is irreversible). Theories of irreversible investment under uncertainty predict that investment will be slower to respond to demand shocks if uncertainty is relatively high. Testing empirically for the effects of risk is difficult, as risk is not easily measured. In this context, the design of innovative survey questions has been a major step forward. Pattillo (1998) uses panel data on Ghanaian manufacturing firms from 1994 and 1995 to test various hypotheses from models of irreversible investment under uncertainty. Based on data on entrepreneurs' subjective probability distribution over future demand, Pattillo calculates the variance of demand and uses this as the measure of uncertainty. Her results indicate that uncertainty has a negative effect on investment and that this effect is more pronounced for firms with more irreversible investment. Darku (2001) reports a similar result for Uganda.

Exports

Manufacturing firms in Africa operate in small domestic markets, so if firms want to expand they may have to orientate part of their production towards exporting. Two issues then arise. First, what factors prevent African firms from entering the exports market? Second, are there any benefits, other than market enlargement, associated with exporting? In particular, is there any evidence that firms become more productive as a result of exporting, perhaps because of contacts with foreign customers or exposure to international competition?

One can identify at least two key factors that determine whether a firm will participate in the exports market: the level of the entry barrier, and the cost efficiency of the potential exporter. In their influential paper on the decision to export, Roberts and Tybout (1997) argue that entering the exports market for the first time may be associated with a fixed entry cost. For instance, it may be necessary for the exporting firm to set up a marketing department to investigate marketing channels, meet export orders etc. While entry costs are typically not observed, Roberts and Tybout argue that state dependence in exports – i.e. that lagged participation affects the likelihood of current participation – may constitute indirect evidence of entry costs. The idea is that, in the absence of entry costs, firms will switch in and out of the exports market independently of whether they have exported in the past. If there are significant entry costs, however, then firms that have incurred these costs in the past (and thus will not have to incur them again) will be more likely to export in subsequent periods than firms that have not, because exporting is less costly for the 'insiders' than for the 'outsiders'. In their empirical application, which is based on data on manufacturing plants in Colombia, Roberts and Tybout find strong evidence that insiders are more likely to export than outsiders. This indicates that entering the exports market is associated with significant fixed costs.

Bigsten et al. (2004) carry out a similar analysis based on RPED data from Ghana, Cameroon, Kenya and Zimbabwe from the early 1990s, and find that past export status has a significant effect on the propensity to export. They also find that the magnitude of this effect is large, which is attributed to large entry costs.

From a policy perspective, whether or not firms in developing countries 'learn' from exporting is an important issue, since under learning-by-exporting the competitiveness gap can be reduced endogenously through increased international trade. Bigsten et al. (2004) find relatively strong evidence of learning effects, in the sense that participating in the exports market has positive effects on total factor productivity in subsequent periods. The estimates reported by Bigsten et al. imply that exporting is associated with a productivity gain of 7-8 per cent in an output production function, which corresponds to productivity gains in terms of value-added of 20-25 per cent in the short run and up to 50 per cent in the long run.

The basic policy lesson

The research based on the African firm data has established several new facts, as discussed above. One general finding is that African manufacturing firms have the potential to perform well. While most firms may have experienced limited success, some have performed very well. These tend to be exporters. To enable more firms to achieve similar levels of performance, the adoption of new technology and orientation towards new markets should feature as key goals for African industrial policy. Countries that cannot break out of the current situation, where most manufacturing firms focus on supplying the domestic market with basic products with low value-added, are unlikely to see a significant expansion of jobs in the sector. In such countries, it is hard to see how manufacturing can play a major role in reducing poverty.

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Section 3: Centre projects

South African macroeconomic research programme

Janine Aron and John Muellbauer

In three consecutive projects funded by DFID until 2006, we analyse policy questions concerning monetary policy in South Africa, with implications for sustainable growth. Our latest project further aims to translate lessons from our research to other African countries. While competent econometric modelling is needed, African central banks often lack capacity. To this end we have established the *African Central Banking Network* to conduct collaborative research with African central bankers in various countries into monetary policy issues. We summarise three areas of some recent research below. Full details of our research, with downloadable papers and data, can be found on the CSAE website.

South African economic policy under democracy: A ten year review

The tenth year of democratic government by the African National Congress in South Africa (SA) in 2004 was heralded by a spate of conferences evaluating various aspects of the first decade. CSAE members, Janine Aron and Geeta Kingdon organised a conference, together with Stan Du Plessis of Stellenbosch University, on 'South African Economic Policy under Democracy: a Ten Year Review', held in late October 2005, in Stellenbosch, SA. Local and international experts reviewed South African economic policy since 1994, and the invited audience of about 65 persons included senior government representatives from the Treasury, the South African Reserve Bank (SARB), the Presidency and Statistics South Africa; country representatives of the World Bank, the IMF and DFID; the Chief Economists of Anglo American and more than six private sector banks; and academics from several local universities and business schools, and abroad. Professor Vito Tanzi, formerly the Director of the Fiscal Affairs Department at the IMF, delivered the keynote address; and the conference culminated with reflections on SA's future by distinguished invited panellists. The *Journal of African Economies* at Oxford University aims to publish a selection of the papers in a special conference issue. The conference website is:
http://academic.sun.ac.za/econ/econconf/index.htm

A comprehensive review of monetary policy in SA in the last decade was carried out by Aron and Muellbauer (2005a) for this conference. An invited paper in *World Economics* summarises the key findings of this work (Aron and Muellbauer, 2005b). There is greater appreciation now amongst economists of the negative effect of uncertainty on investment, growth and equality, especially when credit constraints are widespread. This implies an important linkage between the transparency and predictability of the policy environment, and growth and equality. We survey the literature on the inflation and inflation volatility link, the uncertainty and investment link and the inflation volatility and growth link. This framework is used to examine the experience of SA's new monetary policy regime (inflation targeting, IT) in achieving greater macro-stability. We demonstrate, using evidence from four sources of micro-data, that the new monetary regime is more credible, transparent and predictable. We explore the improved response under IT to big external shocks like exchange rate depreciation, as compared with the monetary regime prior to IT. The paradox is examined of success in achieving macro-stability, where greater household acquisition of debt and increased demand can be inflationary and limits national saving, constraining investment unless international capital inflows rise.

We argue IT has not resulted in real interest rate levels that are a hindrance to growth. Contrary to the view of critics, SA's real domestic tax-adjusted cost of borrowing to companies does not seem strongly out of line with competitors. In Table 1, we compare SA's tax-adjusted real interest rates for the last five years with those of the US, UK, Australia, Chile and Brazil. The US and UK as principal export markets offer useful benchmarks, while the remaining three countries are inflation targeters with a similar commodity export dependence to SA. We employ short-term market interest rates, and, for comparability, backward-looking annual inflation rates, adjusting nominal rates for tax using the KPMG annual survey on corporate tax rates.

SA's tax-adjusted real rates largely lie below Chile's and are below Australia's in every year except for 2001. SA's tax-adjusted real treasury bill rates are substantially below Brazil's policy rates (except in 2003, though bank margins are so high in Brazil that bank lending rates always exceed SA's); and they lie below those of the UK, except in 2003 and 2004. From 2003, SA's rates exceed those of the US, where real policy rates have been negative in the aftermath of the 2001 recession and the events of 9/11.

We conclude with lessons from SA's recent successful monetary policy experience for other emerging market countries and for less developed countries' central banks, e.g. in Africa. The constitutional position of the Reserve Bank and the macroeconomic policy framework look stable. However, this may not always remain so. The Reserve Bank would do well to consolidate its popular support by articulating clearly its concerns for the well-being of the mass of the population and explaining how its policies help the poor. Too often, central banks are seen as representatives of wealthy domestic and foreign investors with little concern for the less privileged. It has more generally been observed that enhanced transparency to the public may serve to protect the independence of the central bank (Blinder, Goodhart, Hildebrand, Lipton and Wyplosz, 2001).

There are at least six areas in which such contributions can be made. Firstly, central banks can serve as an example of a transparent, accountable institution in societies with poor governance and scarce accountable institutions. Secondly, central banks can press for the improvements in data collection and construction essential to successful policy formation, and devote their own resources to this end. Thirdly, central banks, being close to credit markets, can improve the system of financial intermediation so vital to economic growth and to helping small-scale enterprises and households to invest. This can occur through improved regulation: through encouraging reform, e.g. cleaning up the publicly-owned banks, whose corrupt practices in many African countries led to large bad loan books; and importantly, improving credit information. To take one concrete example, Mozambique's central bank has helped set up credit reference bureaux to reduce informational asymmetries between lenders and borrowers.

Fourth, central banks can improve competition by encouraging the entry of foreign banks, by encouraging micro-credit institutions, and by requiring all banks to post their credit terms on a central site on a weekly basis. Fifth, central banks should strengthen their research departments and should serve as a think tank for economic and related reforms, e.g. improving property rights, setting up a land registry for the registration of property titles and improving the legal framework. This would encourage credit markets, and economic transactions more generally. Finally, central banks with some constitutional independence and popular support should, where necessary, remind governments at risk of being politically-captured or succumbing to short-term electoral pressures, of the need for fiscal discipline and the advantages of a stable, transparent fiscal framework.

Table 1: Comparative real tax-adjusted market interest rates

	2000	2001	2002	2003	2004	2005(2q)
Treasury bill rates[1]						
UK	1.10	1.48	1.06	-0.42	0.14	0.18
US	0.13	-0.74	-0.61	-1.63	-1.80	-1.32
Australia	-0.60	-1.17	-	-	-	-
Australia[2] (bank acc bill)	-0.47	-1.11	0.31	0.64	1.46	1.51
Brazil	4.31	5.99	4.07	-0.16	4.43	4.73
Chile PDBC	5.11	2.49	0.79	-0.49	0.47	-0.14
SA	-1.59	-0.55	-2.15	0.17	0.34	0.76
Percentage effective corporate tax rates[3]						
UK	30	30	30	30	30	-
US	40	40	40	40	40	-
Australia	37.8	37.8	37.8	37.8	37.8	-
Brazil	36	34	30	30	30	-
Chile	37	34	34	34	34	-
SA	15	15	16	16.5	17	-

Source: Treasury bill rates (60c) and the consumer price index (CPI, 64) are from the International Monetary Fund, International Financial Statistics. The South African CPI measure used is the targeted CPIX (metropolitan and urban) from the South African Reserve Bank. Tax adjustment uses the KPMG survey of corporate tax rates, 2004, 2003, 2002, 2001 and 2000.

Notes:

1) The real interest rates are defined as follows:

$$REALi_t = 100((1+\frac{(1-tax)NOMi_t}{100})\frac{CPI_{t-4}}{CPI_t}-1)$$

2) Australia's treasury bill rates are incomplete in the August 2005 IFS database, ending in 2002. We also show the Bank accepted Bills (90 days) from the Reserve Bank of Australia. For Chile, which has no treasury bill rate as reported in IFS, we use the Interest Rate on Central Bank Discountable Promissory Notes (PDBC or Pagarés Descontables del Banco Central) (90 days) from the Banco Central de Chile.

3) Notes on tax rates for 2004 for the other countries can be obtained from the KPMG survey. For South Africa: The corporate tax rate applicable to companies is currently 30%. However South Africa imposes an additional 'Secondary Tax on Companies' at the rate of 12.5% on any net dividends declared. The effect of this additional tax is that if a company distributes 100% of its retained earnings as a dividend, then an effective tax rate of 37.78% will apply. This does not apply to gold mining companies, which are taxed on a formula basis. Source: Income Tax Act 58 of 1962 as amended by Act No. 30 of 2002 issued by the South African Government.

Towards official balance sheet estimates for South Africa's household sector

Substantial changes in equity values and the value of residential real estate over the past decade have generated new interest in the potential influence of household-sector wealth on the final consumption expenditure of private households. Neither the central bank nor other government statistical agencies in SA publish balance sheet wealth estimates on a market value basis, of the type produced by the US Federal Reserve Board, the Bank of England and the Office of National Statistics in the UK, and now also by a few emerging market countries, such as Hungary, Mexico and Poland (OECD, 2004).

Without information on the market values of the main components of household sector wealth, it is difficult to understand the evolution of aggregate consumer spending and saving and consumer demand for credit in countries with sophisticated financial markets. Behavioural equations for these variables are key components of central banks' macro-econometric models, used in forecasting and policy making. Indeed, asset price fluctuations, particularly of housing and of equities, have raised widespread international interest and controversy in recent years (see Catte et al. (2004) for evidence and a discussion of the role of institutional differences between countries). This has led to a heightened international interest in asset data.

As emerging market countries like SA develop their credit markets, stock markets and other financial institutions, the monetary transmission mechanism will alter and asset price fluctuations will become more relevant, see Coricelli et al. (2005). The macro-econometric models which inform policy for these economies will need to take these behavioural shifts into account. But in the absence of liquid and illiquid household sector wealth measures, the important domestic asset and credit channels of the monetary policy transmission mechanism will be poorly estimated.

It might be thought that SA is subject to the limitations on the asset and credit channels of monetary transmission common to many emerging market countries, as outlined by Kamin et al. (1998). However, this is not so. Table 2 below compares South African indicators of financial development with those of three highly developed economies, France, Spain and Italy, and four emerging market countries, Chile, Hungary and Poland and the relatively affluent African country, Botswana. It can be seen that in ratios of financial deposits to GDP and private credit to GDP, SA is comparable to the highly developed economies and above the emerging market countries, despite the high proportion of poor households, see below. The penetration of life insurance companies, the residential mortgage stock to GDP ratio, and the stock market capitalisation and turnover to GDP ratio are higher than in all comparison countries (save for Spain), though plausible corrections of stock market capitalisation for cross-holdings and offshore listings brings it roughly into line with the industrial countries.

Table 2: Financial market indicators for South Africa and selected countries for 2003

Country	Private credit by deposit money banks and other financial institutions to GDP	Bank deposits to GDP	Life insurance penetration	Stock market capitalisation to GDP	Stock market total value traded to GDP	Mortgage debt to GDP
Industrialised countries						
France	0.88	1.13	0.06	0.67	0.57	0.23
Italy	0.83	0.68	0.05	0.37	0.45	0.11
Spain	1.11	1.46	0.02	0.71	1.12	0.32
Emerging market countries						
Botswana	0.18	0.26	na	0.26	0.01	na
Chile	0.75	0.35	0.03	0.86	0.09	0.17
Hungary	0.38	0.39	0.01	0.17	0.10	0.05
Poland	0.28	0.36	0.01	0.15	0.04	0.03
South Africa	0.75	0.57	0.13	1.36	0.60	0.24

Sources: Data for the year 2003 are from the World Bank's updated database on financial development and structure (see Beck, Demirgüç-Kunt, and Levine, 1999 for definitions). Data on mortgage debt for the year 2002 are from Catte et al. (2004) for France, Spain and Italy; the South African Reserve Bank *Quarterly Bulletin;* Dübel (2003) for Hungary; IMF (2004) for Chile; and for Poland, http://www.housingfinance.org/pdfstorage/Poland.pdf. Life insurance penetration is measured by premiums/GDP.

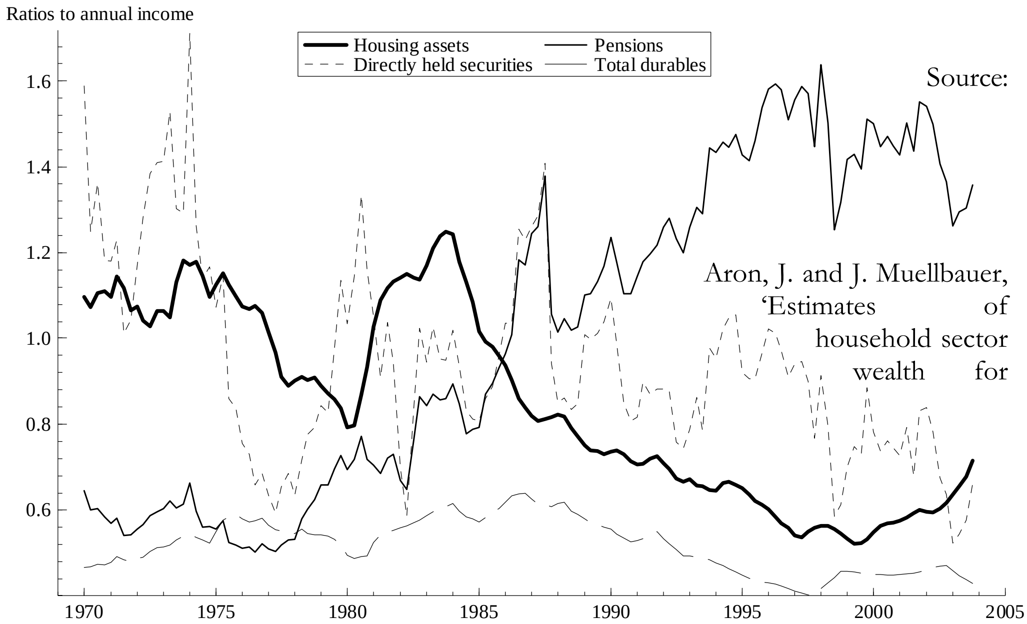
Furthermore, SA is a deeply unequal society. Regrettably this means that the lack of access to assets and credit for a large part of the population counts for little in explaining monetary transmission (i.e. the effects of changes in short term interest rates) for aggregate spending. According to the 1995 and 2000 household surveys, Statistics SA (2002), the percentages of total household spending accounted for by the top quintile in 2000 and 1995 (in parenthesis) were 64 per cent (63 per cent), the top two quintiles 82 per cent (82 per cent), and the top three quintiles 92 per cent (93 per cent). If anything, such surveys are likely to understate the share of spending of the most affluent. For monetary transmission on aggregate spending, the undeniable access of the more affluent to assets and credit will therefore dominate behaviour.

Our recent work (Aron, Muellbauer and Prinsloo, 2006) is the result of a collaboration with the Research Department of the South African Reserve Bank (SARB), and aims to produce comprehensive estimates of household balance sheets for SA. The research draws, where feasible, on best practice from the Office of National Statistics of the UK. Quarterly balance sheet measures to 2003 are provided, and linked to quarterly measures constructed in Aron and Muellbauer (2006a; 2005c). The main balance sheet categories are liquid assets, household debt and various categories of illiquid financial and physical assets, including pension wealth, directly held shares and bonds, and housing. The SARB aims to publish selected items of the quarterly household balance sheets in its *Quarterly Bulletin* on an ongoing basis.

The national income and expenditure accounts of SA are long established. Estimates of final consumption expenditure by households and net saving are available on an annual basis since 1946 and with a quarterly frequency since 1960. The SARB has published flow-of-funds data back to 1970. Information on households' holdings of government and public-enterprise debt securities, their interest in unit trusts (mutual funds), and pension and long-term insurance funds (using a mix of book values and market values) and household debt data also date back to the 1970s. From these data and other sources, it is possible to construct a profile of the main components of households-sector wealth stretching back to the 1970s.

The historical data for liquid assets and long-term insurers from 1975 to the early 1990s were constructed using the methodology in Aron and Muellbauer (2006a), as were private pensions up to 1998. The methods rely, where relevant, on accumulating flow of funds data using appropriate benchmarks, and, where necessary, converting book to market values using appropriate asset price indices. Thereafter, these estimates are linked to data published in the *Quarterly Bulletin*. For ordinary shares, government and corporate stocks and official pension funds, these methods provide data up to 2003. Debt estimates and comprehensive estimates of tangible assets for households and unincorporated businesses were mainly compiled from money and banking and national accounts statistics obtained from the SARB.

Figure 1: Ratios to income of pension assets, housing assets, directly held illiquid financial assets and stocks of consumer durables



Source: Aron, J. and J. Muellbauer, 'Estimates of household sector wealth for South Africa, 1970-2003', *Review of Income and Wealth*, Vol. 52 (2), forthcoming 2006

New work examines the modelling of consumption using these disaggregated wealth data (Aron and Muellbauer, 2006b). There are widespread disagreements about the role of housing wealth in explaining consumption. Much of the empirical literature is marred by poor controls for common drivers both of house prices and consumption such as income, interest rates, credit supply conditions, other assets, income growth expectations and indicators of income uncertainty such as the changes in the unemployment rate. For example, when credit supply conditions ease, house price booms usually follow. Failure to control for the direct effect of such easing on consumption can easily result in over-estimates of the housing wealth or collateral effect. This paper studies data for the UK and SA with more complete controls than hitherto used. Both countries experienced substantial credit market liberalisation and substantial rises in consumption to income ratios, but SA's occurred without an asset price boom, thus illuminating the direct role of credit liberalisation. The paper incorporates methodological improvements in the measurement of credit conditions and clarifies the multi-faceted effects of credit liberalisation on consumption.

The African Central Banking Network

The African Central Banking Research Network held two workshops in the last year, both aimed at drawing on the research techniques successfully used for SA to construct data sets and model inflation with single equation or small multi-equation models, throwing light on the monetary transmission process in these countries. The researchers were able to use state of the art econometric packages in Oxford. The focus on forecasting the inflation rates one year ahead, using an equilibrium correction framework, produced interesting and economically coherent results for all the countries participating.

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Finding jobs for young people in Africa

Francis Teal

Background

In many African countries the problem faced by young people of finding jobs has become an increasing focus of policy concern. There is a general trend for many sub-Saharan African countries by which the number of wage jobs in the private and public sector is seen to be increasingly inadequate for those leaving schools and entering the labour force for the first time. The average level of the qualifications of these young people is rising, but the jobs to which they aspire seem to be out of their reach. In the past, a good secondary school qualification would ensure a well-paying wage job. The fact that that is no longer the case is the cause of deep political dissatisfaction. The recent increase in democratic accountability in many African countries means that this is now a major political issue to which their leaders need to respond.

During the course of the last year, researchers at the CSAE have completed a major review of labour markets in Africa with the objective of understanding the factors that underlie the problems for young job seekers. [See 'Patterns of Labor Demand in sub-Saharan Africa A Review Paper' by Geeta Kingdon, Justin Sandefur and Francis Teal which can be found at: http://www.gprg.org/pubs/reports/pdfs/2005-11-kingdon-sandefur-teal.pdf]

The review paper drew attention to some common features across the countries for which comparable data over the 1990s exist. The first is that while the level of wage employment has increased in absolute terms, the growth has been much lower than that of the labour force. The result of this imbalance between wage job growth and the growth of the labour supply has been either a rapid growth in the share of informal employment in total employment (Ghana, Uganda and Tanzania being the examples used in the Review Paper), or high open unemployment (the most prominent example of this being South Africa).

In a project funded in part by DFID and in part by the ESRC – Sources of Rising Lifetime Incomes in Poor Countries – we have been looking at the causes and consequences of this pattern of changing employment opportunities in Africa, focusing on two countries: Ghana and Tanzania. It is clear from the surveys carried out by the Ghanaian and Tanzanian statistical agencies that an increasing number of people, including young people, are finding work in the self-employment sector.

The project is addressing several issues that arise from this shift from wage to self-employment activities:

- How do incomes from self-employment compare with incomes from wage employment?
- What are the implications for the growth of earnings over the life-cycle?
- How do women fare relative to men in earnings between wage and self-employment?

Earnings growth over the life-cycle for wage earners and the self-employed

There are two measures of work experience that may impact on earnings. The first is the time spent in the labour force, usually termed general work experience; the second is the time spent in a job, which is termed tenure or seniority. In the classic statement of the role of human capital in determining earnings by Gary Becker, 'general work experience' is viewed as the gains from general learning, and 'tenure or seniority' as firm- or job-specific learning. It is important to be able to distinguish these sources of human capital acquisition. If the gains from tenure are large relative to the gains from general learning, then job losses will mean that the individual who is made unemployed loses all his or her job-specific capital. Job losses will mean major costs. In contrast, if most learning is general and not specific to the firm or job, then job losses will entail little loss of human capital, and the key issue for earnings growth is not where the person works but simply being in the labour force.

It is well known from earlier work in Africa using data from Kenya and Tanzania, that for wage employees, earnings rise with age and rise more rapidly for the more educated, (for example Knight and Sabot (1990)). There is little work extending this analysis to other groups, primarily the self-employed, because of the problems posed in measuring self-employment incomes. There is also very limited work relating to developing countries seeking to establish the relative importance of general versus job-specific learning and, as far as I am aware, none for the self-employed.

The research in Ghana is proceeding by a comparison of data drawing on the Ghana Living Standards Surveys (GLSS) and newly collected labour force data. In this summary of our work to date, results will be presented using the first three rounds of the GLSS data covering the years in 1987/88, 1988/89 and 1991/92. A fourth round of the GLSS was conducted in 1998/99 but this survey did not collect data on tenure. The results of the newly collected data are currently being studied and we will report on their findings at a later date. In Figure 1 we show the relationships between earnings and age; our measure of general work experience; and tenure, which is the length of time spent in the job. (The regression on which they are based is shown in Table 1).

Before considering the results, it needs to be stressed that there are many reasons why these measures will not be capturing in an unbiased way the effects of learning on earnings. Some people are particularly suited to certain jobs and their higher productivity in those jobs ensures they will stay in them for longer, so the effects of work experience on earnings will be a compound of this 'job-match' quality and learning. It might be thought that a similar problem arises with tenure, namely that tenure and job quality are positively related – those who like a job stay in it longer. However, that argument ignores the potential gains from moving. Workers in the sample with short tenure will be those who have moved, and may well have higher earnings as a result. Further, if there are substantial returns from tenure, this will deter movers. This lack of movement will lead to an underestimate of the true returns to tenure among those with long tenure. Both of these effects – at the short and long end of the tenure – will lead to an underestimate of the true returns from tenure. We can address some of these problems with our new data, which follow workers over time; but for now we see what the cross-section data tell us about how important general work experience and tenure *may* be for earnings.

The first, and rather surprising result of the comparison, is that earnings are higher for the self-employed than for wage earners if we control for levels of education. Without controls for education, the means of the log are virtually identical for wage earners and the self-employed. The second, and even more surprising result, is that the age-earning profile for the self-employed for young workers is steeper than for wage employees. In contrast, the tenure earnings profile for young workers is steeper for the wage employees than for the self-employed.

Both the experience and the tenure effects for both types of workers are very substantial. If we look at the age range from 15 to 35, earnings rise by 31 per cent for the self-employed and by 51 per cent for wage employees. If we look at the tenure range from 1 to 20 years, earnings rise by 63 per cent for the self-employed and by 60 per cent for the wage employees.

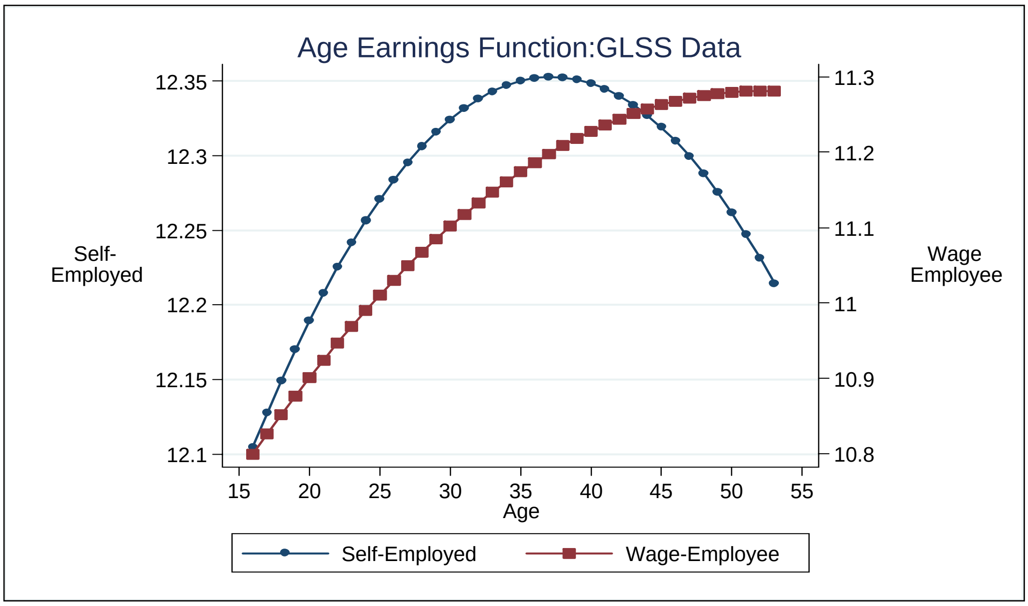
To put these figures in perspective, they are far more important than changes in earnings due to investment in education. For the self-employed, a move from one standard deviation below the mean to one standard deviation above implies a rise in years of education from 0 to 10 which raises earnings by 15 per cent. For wage employees a similar change increases education from 3 to 13 years, which implies a rise in earnings of 44 per cent.

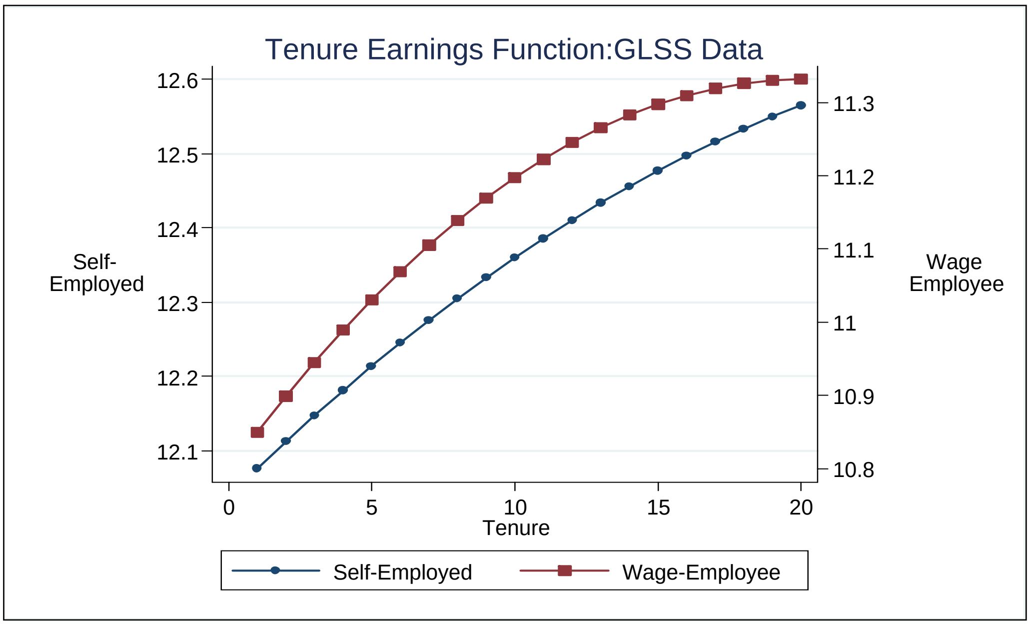
New research questions being posed

The analysis of the cross-section data has shown that an age-earning profile is an important source of income variation for the self-employed. In this project (Sources of Rising Lifetime Incomes in Poor Countries) we are seeking to go beyond this analysis by collecting panel data on individuals. Our objective is to track individuals over time to establish the mechanisms by which their incomes rise. The panel element is the key to this research. While the cross-section tells us that older workers earn more, it cannot tell us why. Is it the value of work experience, access to better job opportunities, relaxation of financial constraints, learning or the acquisition of more assets? All are possible sources of the rising age-earnings profile.

To ensure that over the three years of the project we can create a profile of earnings, we have used recall questions at an initial interview to capture the pattern of earnings and work choices over the last 3-5 years. The survey instrument has three elements. The first and basic observation unit is the individual, to which are linked a household and a job set of questions. We have just completed the first stage of the research. At the next, we will track them over the three years of the project, giving us a working panel over 5-8 years. We are currently carrying out these surveys in Tanzania and Ghana. Our central research objective is to use the surveys to enable us to investigate the process of income change for individuals both in the formal and informal sectors.

Figure 1: Learning and the growth of earnings





Earnings shown in the Figure are Ln (Monthly Earnings in 1998 Cedis)
The data are pooled across the first three waves of the GLSS Data - 1987/88 -1991/92.

Summary of key results from the cross-section

How do incomes from self-employment compare with incomes from wage employment?
There are clearly considerable problems in measuring self-employment incomes. Some of these are addressed in Geeta Kingdon, Justin Sandefur and Francis Teal 'Labor Market Flexibility, Wages and Incomes in sub-Saharan Africa in the 1990s', (GPRG Working Paper 030, see http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-030.pdf, where it is shown that the direct method of measurement used in the figure and regression reported here give very similar results to using a production function. Accepting that we can measure self-employment incomes, then the results of the comparison of the GLSS data suggest that earnings are very similar across wage and self-employment. If we control for the dimensions of human capital that we can – education, experience and tenure – then those in self employment earn 42 per cent more than wage employees.

What are the implications for the growth of earnings over the life-cycle?
As already noted, much work remains to be done to establish how much of the age and tenure effect on earnings is due to learning, and how much due to job matching and other effects. However, it seems clear from the GLSS cross-section data that these effects are potentially very large and a key part in understanding how incomes of individuals change over their life cycles.

How do women fare relative to men in earnings between wage and self-employment?
We can use the regressions reported in Table 1 (see p. 46) to ask how women are affected by any switch from wage to self-employment. Again much remains to be done, but at its simplest level the regressions show that men earn about 20 per cent more than women in wage employment, while in self-employment the differential is over 60 per cent.

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Kingdon, G., J. Sandefur and **F. Teal**, 'Labor market flexibility, wages and incomes in sub-Saharan Africa in the 1990s', GPRG Working Paper 030, [http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-030.pdf], 2005

Table 1. Earnings function: GLSS (1987/88, 1988/89, 1991/92) data

	(1)	(3)	(5)
	Self-Employed	**Wage Employees**	**All**
Male	0.483	0.179	0.397
	(7.95)**	(2.56)*	(8.08)**
Education	-0.042	-0.021	-0.031
	(2.93)**	(1.30)	(2.93)**
Education^2/100	0.567	0.409	0.488
	(5.29)**	(4.53)**	(7.23)**
Age	0.041	0.039	0.042
	(3.04)**	(2.02)*	(3.53)**
Age^2/100	-0.055	-0.037	-0.052
	(3.45)**	(1.61)	(3.65)**
Tenure	0.038	0.053	0.040
	(5.09)**	(5.34)**	(6.39)**
Tenure^2/100	-0.058	-0.133	-0.070
	(2.90)**	(4.21)**	(3.95)**
Waged			-0.354
			(7.61)**
Constant	11.469	10.074	11.409
	(41.22)**	(25.25)**	(48.06)**
Observations	2004	704	2708
R-squared	0.15	0.23	0.15

The dependent variable is Ln (Monthly Earnings in 1998 Cedis)
The data are pooled across the first three waves of the GLSS Data - 1987/88 -1991/92.

Democracy and resource rents

Paul Collier and Anke Hoeffler

The phenomenon of the resource-rich developing country is once again of global importance. Reversing a trend, the number of such countries has sharply increased due to a wave of resource discoveries, the break-up of the USSR, and the rise in commodity prices. It is now conventionally held that resource rents usually reduce growth. The explanation has shifted from the purely economic – Dutch disease – to political economy: rents both undermine governance, and are dysfunctional in the context of poor governance. This shift in the analysis is important because the new resource boom is occurring against a backdrop of democratisation. During the resource boom of the 1970s, the average resource-rich country scored only 0.96 on the Polity IV scale of political rights (the scale ranges 0-10). By the mid-1990s the score had risen to 3.47. American policy following the intervention in Iraq explicitly is to democratise the Middle East, the world's most important resource-rich region. In our ongoing project we investigate, theoretically and empirically, how democracy and natural resource rents are likely to interact.

Our analysis contributes to the active literature on the relationship between geography, institutions, and growth. However, to date, that literature has disputed causal structure only in its broadest terms. One thesis is that geography causes institutions which are long-lived and in turn cause growth. Another is that geography directly causes growth or does so by affecting the distribution of income. A third is that institutions are fluid consequences of political choices that determine growth. Our thesis is that geography and institutions must be analysed together because their effects on growth depend upon their interaction. Conditional upon geography, some institutions matter a lot for growth in the early stages of development. The specific aspect of geography that matters is not disease vectors but resource rents: in the context of resource rents, democracy reduces growth unless electoral competition is bolstered by atypically strong checks and balances such as press freedom. Resource rents not only interact with democratic institutions to determine growth, they also adversely influence those institutions. However, this influence is gradual: democratic institutions are fairly fluid and so can be changed by political choices – for example, press freedom fluctuates. Further, since income also influences these institutions, a phase of good institutional choices can induce a virtuous circle. Geography is not destiny, but it determines which institutional choices matter when.

The present project extends this literature both through a simple model of how resource rents undermine democracy and through econometrics. We develop a model of democracy in which resource rents undermine its normally beneficial effects on the utilisation of public resources. Citizens can potentially discipline governments by voicing their opposition. Since democracy enhances the option of voice, our model focuses on how resource rents might weaken this process. We distinguish between two mechanisms by which voice normally disciplines governments into providing public goods: electoral competition and checks and balances such as press freedom. A key result of the model is that natural resource rents undermine both of these mechanisms and thereby facilitate patronage politics, reducing public goods provision in the process.

In order to test these hypotheses we develop a general-purpose empirical measure of natural resource rents, country-by-country. We use this measure to investigate whether the effect of democracy upon growth is altered by the presence of natural resource rents. We found that in developing countries the combination of resource rents and democracy has been significantly growth-reducing. In the absence of resource rents, democracies outperform autocracies: in the presence of large resource rents, autocracies outperform democracies. Our results indicate that there is a large adverse interaction of natural resource rents and electoral competition and a large positive interaction of natural resource rents and checks and balances. We then investigate the routes by which electoral competition and checks and balances might have these effects. Controlling for a range of intermediating variables, we come down to a few channels by which electoral competition in the context of natural resource rents is damaging, and by which checks and balances offset these effects. We were able to trace this adverse effect of democracy, first through a generalised measure of economic policy, and then to the more specific policy errors of insufficient investment and reduced returns on investment. We found that the antidote to these adverse effects of democracy was intensified checks and balances, including specifically, the freedom of the press. Thus, resource-rich democracies need a distinctive form of democracy, strong on checks and balances with perhaps less emphasis upon electoral competition. This is indeed the form of democracy in the most striking exception to the generally adverse combination of democracy and resource rents, namely Botswana.

We also investigate whether over time, resource rents erode democracy. We find that both electoral competition and checks and balances tend to be eroded if the country has high resource rents.

Thus, distinguishing between two dimensions of democracy – electoral competition and the checks and balances that enforce due process – we suggest that in certain conditions politicians find it more effective to compete by providing private patronage than by providing public goods. In the conditions typical of developing countries, resource rents make such patronage politics more likely by reducing the intensity of public scrutiny, and thereby increasing the resources available for patronage. Further, once the political contest comes to be by means of patronage, resource rents are having perverse effects, actually reducing the provision of public goods.

While countries with large resource rents need checks and balances, this is not how their political economies have developed. Resource rents tend gradually to undermine both checks and balances, and indeed electoral competition itself. The disturbing implication is that in those developing societies where the state has most command over resources, the democratic process has been least effective at controlling them for the public good.

Resource-rich countries have tended to be autocratic and also have tended to use their resource wealth badly. The new democratisation in resource-rich countries might appear to offer the hopeful prospect of a better use of their economic opportunities. Our analysis has questioned such hopes, but at the same time offers suggestions as to how institutions should be designed for resource-rich economies.

Recent publications

Collier, Paul and **Anke Hoeffler**, 'Democracy and natural resource rents', GPRG Working Paper 016, 2005

Paul Collier, 'Is aid oil? An analysis of whether Africa can absorb more aid', CSAE, mimeo, 2005

Paul Collier and **Anke Hoeffler**, 'Oil democracies', CSAE mimeo, 2005

Section 4: Global Poverty Research Group (GPRG)

Introduction

The Global Poverty Research Group (GPRG) was set up in August 2002 as a response to the perceived need for a more multi-disciplinary approach to the problems faced by developing countries, and has now been in operation for two full years. The objective of the Research Group is to bring together a range of researchers diverse both in their disciplinary backgrounds and their range of expertise across countries. At the core of the Research Group is a collaboration between two institutions: the CSAE and the Institute for Development Policy and Management at Manchester University (IDPM).

The collaboration between CSAE and IDPM has enabled the Research Group to link economists, sociologists, political scientists, human geographers and anthropologists who have many research interests in common. The IDPM has a long and respected record of work in the sociology and social anthropology of development and poverty, and recently became part of the University of Manchester's School of Environment and Development. A particular emphasis of the Manchester researchers is their use of qualitative and participatory research methods. They have played a major role in tracking the multiple livelihoods of the poor by means of life histories, and have developed methods that allow concepts of capabilities to be assessed empirically, particularly in relation to the poor.

Objectives

The overall objective of the research programme is both substantive and methodological: to carry out a multi-disciplinary programme of work which will investigate poverty, inequality, and the quality of life. We have established a framework of research themes to allow the presentation and integration of a large range of diverse work on the central research issue: what are the factors determining poverty, inequality and the quality of life in poor countries?

The first two of those themes focus on **objectives**:

- Poverty, intra-household allocation and well-being
- Income opportunities, inequality and the poor

The last three themes focus on **means**:

- Human capital, institutions and well-being
- Social capital, the provision of public services, and social safety nets
- Governance, social norms and social outcomes

Current research

Each of these five themes has a number of different projects associated with it, listed below. In the following section, we have included a brief explanation of several projects currently in progress. The GPRG Research Summary 2005-06 is available from the website at http://www.gprg.org, or in hard copy from the CSAE.

Theme 1: Poverty, intra-household allocation and well-being
Quantitative and qualitative approaches to the measurement of welfare
Anthropological approaches to understanding poverty
Gender bias in the intra-household allocation of educational expenditure

Theme 2: Income opportunities, inequality and the poor
Unemployment, race and poverty in South Africa
Income opportunities and employment in Africa
Impact of remittances on poverty
Inequality in Africa

Theme 3: Human capital, institutions and well-being
Returns to education in low skill economies
Modelling and measuring the impact of educational expenditures
Trajectories of livelihood change

Theme 4: Social capital, the provision of public services, and social safety nets
Social capital and development
Reproductive health and well-being
Social norms and economic man

Theme 5: Governance, social norms and social outcomes
NGOs and development
Governing redistribution: Economic empowerment, informalisation and property regimes
Microfinance and poverty reduction
Conflict, growth and political institutions

Theme 1: Poverty, intra-household allocation and well-being

Anthropological approaches to understanding poverty

Since joining the group in March 2003, Maia Green has taken the lead on the methodological approaches that anthropology can bring to understanding poverty in itself, and as an object of development interventions. This has led to several papers, some dealing with anthropological approaches to 'poverty' as a category in development and others dealing with how anthropology engages with development institutions and policy. She has undertaken two periods of field research in Tanzania examining cultural attitudes towards poverty, wealth and ill-being, and the social construction of well-being in rural agricultural communities.

Recent publications

Green, M., 'Representing poverty and attacking representations: Some anthropological perspectives on poverty in development', GPRG Working Paper 9, 2005. (A revised version of this paper is forthcoming in the *Journal of Development Studies*, 2006)

Green, M. and **D. Hulme**, 'From correlates and characteristics to causes: Thinking about poverty from a chronic poverty perspective', *World Development*, Vol. 33 (6), pp. 867-879, 2005

Green, M. and S. Mesaki, 'The birth of the 'salon'. Poverty, modernization and dealing with witchcraft in southern Tanzania', *American Ethnologist*, 32 (3), pp. 371-388, 2005

Gender bias in the intra-household allocation of educational expenditure

This project began by addressing the issue of gender bias in India. The gender gap in educational expenditure in Indian households was measured using the 1994 NCAER rural survey data from 33,000 households across 16 major states. Kingdon (2005) examines gender bias in educational expenditures both directly, by inspecting individual level expenditures, and also indirectly, using the household consumption based (Engel curve) methodology. The paper investigates whether the indirect method confirms gender differences in educational expenditure in states where the direct method using individual-level data shows significant gender differences in educational expenditure. It does not. The research concludes that to reliably measure the gender gap in education expenditure, there is no substitute for individual-level data on expenditures. The study confirms that lower educational expenditures on girls are a within-household phenomenon.

In the current year this work has been extended to Pakistan, using data from the Pakistan Integrated Household Survey (PIHS, 2001-2002). The results suggest several conclusions. Even using the conventional Engel curve approach, robust evidence of a pro-male bias in educational expenditure is found especially in the 10-14 and 15-19 age-groups. Much of this differential treatment manifests itself in rural areas.

Recent publications

Kingdon, G., 'Where has all the bias gone? Detecting gender bias in the household allocation of educational expenditure in India', *Economic Development and Cultural Change*, 2005

Monazza Aslam and **G. Kingdon**, 'Gender and household education expenditure in Pakistan', GPRG Working Paper 025

Theme 2: Income opportunities, inequality and the poor

Income opportunities and employment in Africa

In many African countries the problem faced by young people of finding jobs has become an increasing focus of policy concern. There is a general trend for many sub-Saharan African countries by which the number of wage jobs in the private and public sector is seen to be increasingly inadequate for those leaving schools and entering the labour force for the first time. The average level of the qualifications of these young people is rising, but the jobs to which they aspire seem to be out of their reach. In the past, a good secondary school qualification would ensure a well paying wage job. The fact that that is no longer the case is the cause of deep political dissatisfaction. The recent increase in democratic accountability in many African countries means that this is now a major political issue to which their leaders need to respond.

During the course of the last year, GPRG researchers have completed a major review of labour markets in Africa with the objective of understanding the factors that underlie the problems for young job seekers. We have been looking at the causes and consequences of changing employment opportunities in Africa focusing on two countries – Ghana and Tanzania. It is clear from the surveys carried out by the Ghanaian and Tanzanian statistical agencies that an increasing number of people, including young people, are finding work in the self-employment sector. The project is addressing several issues that arise from this shift from wage to self-employment activities. How do incomes from self-employment compare with incomes from wage employment? What are the implications for the growth of earnings over the life cycle? How do women fare relative to men in earnings between wage and self-employment?

Recent publications

Söderbom, M., F. Teal and A. Wambugu, 'Unobserved heterogeneity and the relation between earnings and firm size: Evidence from two developing countries', *Economic Letters*, Vol. 87, pp. 153-159, 2005

Teal, F., 'How do the RPED surveys inform the debate on the investment climate', Berlin Workshop Series 2005, the World Bank, 2005

Kingdon, G., J. Sandefur and **F. Teal,** 'Patterns of labor demand in sub-Saharan Africa: A review paper', [http://www.gprg.org/pubs/reports/pdfs/2005-11-kingdon-sandefur-teal.pdf.] 2005

Kingdon, G., J. Sandefur and **F. Teal,** 'Labor market flexibility, wages and incomes in sub-Saharan Africa in the 1990s', GPRG Working paper 030, 2005

Fafchamps, M. and **M. Söderbom**, 'Wages and labor management in African manufacturing', *Journal of Human Resources*, spring 2006

Impact of remittances on poverty

Following on from earlier work on the social-economic effects of international migrant transfers to poverty, Sarah Bracking has developed a household field survey instrument to evaluate the relationship between migrant transfers, poverty reduction and the informalisation of the economy. The limitations of merely measuring household income effects of remittances as an indicator of overall poverty reduction were made clear in earlier work, leaving the research challenge of exploring the wider political, social and developmental effects of incoming finance in the form of remittances. Again researching in Zimbabwe, the survey estimates how much activity in the economy is informalised, which leaves a significant query over the reliability of aggregate economic data, such as the measurability of GDP.

Further work is required in order to address the implications of informalisation in the development policy regime, not least that some areas may be receiving development finance for poverty reduction when their aggregate economy, fuelled by informal migrant remittances, is less deserving by income measures than other areas in receipt of less money. The aim now is to expand the household surveys and spatially 'triangulate' between four research sites – Harare, Bulawayo, Limpopo and Gaberone – to map the regional informal financial network.

Recent publications

Bracking, S., 'Impact of remittances on vulnerability – experiences from Zimbabwe', *Field Exchange*, Issue 21, p. 7, 2004

Bracking, S., 'Sending money home: Are remittances always beneficial to those who stay behind?', *Journal of International Development*, Vol. 15, pp 633-644, 2003

Inequality in Africa

Work on inequality is an important part of the research agenda for the GPRG. Over the last year we have recruited Dr Alexander Moradi, who has undertaken some highly innovative work seeking to measure the extent of changes in inequality in Africa. Reliable information on inequality within countries is extremely scarce, especially for Less Developed Countries (LDCs). Using anthropometric measures, Moradi (2005) extends the inequality database for sub-Saharan Africa to no less than 28 countries over six five-year periods from 1950 to 1980, and to some 200 regions within those countries. In this process, Moradi tests in depth the validity of objections against the derivation of inequality measures from height data. In a second step, he tests the determinants of inequality within and between the 200 regions under study. The set of explanatory variables includes protein supply, cash cropping, industrial structure, mineral resources, distance to the countries' capital, urbanisation, education, population density, and ethnic fractionalisation. It is found that monoculture cash cropping increases inequality, whereas diversified cash cropping has the opposite effect.

Dr Moradi is planning to extend the study of heights into the first half of the 20th century and to work further on the problems posed on inferring inequality from height data

Recent publications

Dercon, Stefan, 'The microeconomics of poverty and inequality: The equity-efficiency trade-off revisited', in AFD, Poverty, Inequality and Growth, Proceedings of the AFD-EUDN Conference, November 2004

Moradi, Alexander and Joerg Baten, 'Inequality in Sub-Saharan Africa: New data and new insights from anthropometric estimates', *World Development*, Vol. 33 (8), pp. 1233-1265, 2005

Theme 3: Human capital, institutions and well-being

Returns to education in low skill economies

There is currently a rapid increase in applied work on the economics of education. This reflects in part the increased analysis of the education sector and its problems in various developing countries, sponsored by country governments and donor agencies. It also reflects the progressively greater availability of data over time to analyse education issues. Within the GPRG we have been working on data that allow comparison across relatively long periods of time for the return to education in both Kenya and Tanzania.

There is now evidence that the wage return to primary schooling has fallen, and is now lower than that to secondary education and higher education in many developing countries. Our work at the GPRG has confirmed this for Kenya and Tanzania. Policies for poverty reduction have generally emphasised the attainment of primary schooling. For instance, the Millennium Development Goals adopt universal primary school completion as the major educational goal in support of the broader aim to halve world poverty by 2015. However, if the pattern of returns to schooling has changed over time, so that economic returns to primary education are now the lowest and to higher education the greatest, this has profound implications for poverty reduction policies. In particular, it means that the poor need to go well beyond primary schooling if they are to obtain high labour-market returns. This project has incorporated DPhil work being undertaken at the CSAE by Godius Kahyarara.

Recent publications

Kahyarara, G., M. Söderbom, **F. Teal** and A. Wambugu, 'The dynamics of returns to education in Kenyan and Tanzanian manufacturing', forthcoming *Oxford Bulletin of Economics and Statistics*

Trajectories of livelihood change

This research examines earnings opportunities for poor people in Indian contexts and includes three main sub-areas. Firstly, secondary data are being used to review agricultural productivity differences across farm types in the context of a growing female contribution to the labour of farming. Secondly, primary data from two villages are being collected to examine strategic choices made at household and individual level regarding strategies for exiting poverty, including tenancy as a strategy. Thirdly, the possibility that trajectories for exiting poverty might include attempts to rent land will be considered using detailed case studies and/or life histories. Some implications for agencies which support agricultural development and which provide inputs, extension, credit and infrastructure will be discussed after the final analysis of the data.

Previous studies show that national data sets understate the extent of tenancy. The literature review conducted in 2003 showed that existing theoretical options for studying tenancy also leave a few gaps. In order to offset these gaps, the research will explore how strategies are negotiated within households; how legal and institutional factors mediate the polarising or other impact of tenancy on the income distribution; and how the meanings and impact of tenancy differ between social classes and individuals.

Recent publications

Olsen, W., 'Globalisation, liberalisation and a paradox of social exclusion in Sri Lanka', in A.H. Carling (ed.), *Globalisation and Identity: Development and Integration in a Changing World*, London: I.B. Tauris, 2005

Olsen, W., 'Pluralism, poverty and sharecropping: Cultivating open-mindedness in development studies', *Journal of Development Studies*, forthcoming

Theme 4: Social capital, the provision of public services, and social safety nets

Social capital and development

Both the meaning of the term social capital and its usefulness to social science research have been hotly disputed subjects and have led to animated debates at GPRG research meetings. This is in part due to the fact that different disciplines have adopted the term, and while in principle it might be thought that it would provide a bridge across disciplines, in practice that has not proved to be the case. The work within the GPRG on this topic reflects the diversity of approach that can be taken. Some of the work approaches the topic from a development studies perspective, in which the use of the term social capital is discussed within the context of how the concept was used as part of the research or policy agenda of actors in the development process. Such an approach stands in marked contrast to how economists have sought to make use of the concept. In their approach, the term is identified with some dimension of the process by which outputs are obtained, and an attempt is made to measure how much this measure affects output. Work within the group has identified areas where this approach has been more or less successful.

Work by Ayalew, Dercon and Gautam (GPRG Working Paper 021) provides evidence from one of the poorest countries of the world that the institutions of property rights matter for efficiency, investment and growth. With all land state-owned, the threat of land redistribution never appears far off the agenda. Land rental and leasing have been made legal, but transfer rights remain restricted and the perception of continuing tenure insecurity remains quite strong. Using a unique panel data set, this study investigates whether transfer rights and tenure insecurity affect household investment decisions, focusing on trees and shrubs. The panel data estimates suggest that limited perceived transfer rights, and the threat of expropriation, negatively affects the long-term investment in Ethiopian agriculture, contributing to the low returns from land and perpetuating low growth and poverty.

Recent publications

Bebbington, A., L. Dharmawan, E. Farmi and S. Guggenheim, 'Local capacity, village governance and the political economy of rural development in Indonesia', *World Development*, 2005

Daniel Ayalew, **Stefan Dercon** and Madhur Gautam, 'Property rights in a very poor country: Tenure insecurity and investment in Ethiopia', GPRG Working Paper 021

Bebbington, A. and **U. Kothari,** 'Network ethnographies: Life, livelihood and politics in transnational development relationships', *Environment and Planning*, 2005

Durlauf, S. and **M. Fafchamps**, 'Empirical studies of social capital: A critical survey', in Steve Durlauf et al. (eds), *Handbook of Economic Growth, Volume 3,* Oxford: Elsevier, 2005

Reproductive health and well-being

Jocelyn DeJong has undertaken research on this issue through desk-based conceptual and empirical reviews. Increasing evidence is available to suggest that globally reproductive health problems account for a heavy burden of ill-health as well as preventable mortality, and therefore represent a significant component of the lack of well-being in developing countries. Yet to date, for a number of reasons, there has been insufficient dialogue between advocates or researchers of reproductive health and those within the wider development domain. Historical focus on reducing population growth has been the main area of interface between these two fields. Only recently has there been international recognition of the importance of maternal mortality as the health indicator with greatest discrepancy between North and South, and a move away from promoting population policies to reduce fertility and instead towards policies which recognise the contribution of reproductive health to development (DeJong 2000). This work has considerable importance in relation to the achievement of the 'maternal mortality' Millennium Development Goal.

Recent publications

DeJong, J., R. Jawad, I. Mortagy and B. Shepard, 'The sexual and reproductive health of young

people in the Arab States and Iran', *Reproductive Health Matters*, Vol. 13 (25), pp. 49-59, 2005
DeJong, J., 'Arab states: Women and sexually transmitted diseases', in the *Encyclopaedia of Women in Islamic Countries*, forthcoming 2006

Social norms and economic man

Abigail Barr, Magnus Lindelow, Jose Garcia-Montalvo and Pieter Serneels have been investigating a range of issues relating to the role of social norms in development. GPRG Working Paper 018 asks a number of important questions: are new recruits to the development frontline intrinsically motivated in a way that may prevent them from becoming unproductive or corrupt? Are they likely to remain thus motivated as their careers progress? The authors seek answers to these questions using both survey and experimental data relating to a sample of Ethiopian nursing and medical students. They find that, according to four, arguably salient measures, the majority of the students are intrinsically motivated. They also find evidence that intrinsic motivations are socially rather than individually determined, may change as individuals' social contexts change and may be eroded by exposure to an environment in which unproductive behaviour is endemic.

Recent publications

Alvard, M., **A. Barr**, S. Bowles, R. Boyd, C. Camerer, J. Ensminger, E. Fehr, F. Gil-White, H. Gintis, M. Gurven, J. Henrich, K. Hill, F. Marlowe, R. McElreath, J. Patton, N. Smith and D. Tracer, "Economic man' in cross-cultural perspective', *Behavioral and Brain Sciences*, 2005
Serneels, Pieter, Magnus Lindelow, Jose Garcia-Montalvo and **A. Barr**, 'For public service or money: Understanding geographical imbalances in the health workforce', GPRG Working Paper 018

Theme 5: Governance, social norms and social outcomes

NGOs and development

A particularly innovative aspect of GPRG work has been the quantitative analysis of NGO activity. The research instruments that have been used to analyse both household and firm data have been developed by GPRG researchers at the CSAE to investigate issues of institutional quality. In Uganda, the NGO sector has been growing in size since the 1980s. As donors and governments try to work more closely with NGOs, there has been a growing need for accurate data on the activities and capacity of the sector. The Ugandan government's motivation for this NGO survey is its desire to upgrade its partnership with the NGO sector. It is the intention of the government to promote this partnership and to enhance and upgrade the capacity of NGOs in order to enable the NGO sector to participate effectively in service delivery, and raise the pace of development in rural areas and in poverty eradication nationwide.

The World Bank is conducting a study of NGOs as service providers in developing countries. The objectives of the study are to describe the work of development NGOs in Bangladesh and Uganda, assess their effectiveness and efficiency, analyse resource flows to and from NGOs and incentives within the organisations, and understand what factors motivate NGOs and their staff. To that end, the World Bank is collaborating with the GPRG to compile, clean, and analyse data from surveys of NGOs in Uganda and Bangladesh, and then to co-author academic papers based on the data.

Recent publications

Barr, A., M. Fafchamps and T. Owens, 'The resources and governance of non-governmental organizations in Uganda,' *World Development*, Vol. 33 (4), pp. 657-679, 2005

Barr, A. and **M. Fafchamps,** 'A client-community assessment of the NGO sector in Uganda', *Journal of Development Studies*, forthcoming 2006

Bebbington, A., 'Donor-NGO relations and representations of livelihood in nongovernmental aid chains', *World Development*, Vol. 33 (6), pp. 937-950, 2005

Woodhouse, **Phil**, 'Local identities of poverty: Poverty narratives in decentralized government and the role of poverty research in Uganda', GPRG Working Paper 013

Conflict, growth and political institutions

Paul Collier and Anke Hoeffler have been working on governance issues, and in particular, one of the most important governance issues in Africa: how resource rents are used. Collier and Hoeffler argue that resource-rich countries have tended to be autocratic and also have tended to use their resource wealth badly (GPRG-WPS-016). The new democratisation in resource-rich countries might appear to offer the hopeful prospect of a better use of their economic opportunities. Their analysis questions such hopes.

They first set out a simple model of democratic politics in which they distinguish between two dimensions of democracy: electoral competition and the checks and balances that enforce due process. Within the model, in certain conditions politicians find it more effective to compete by providing private patronage than by providing public goods. In the conditions typical of developing countries, resource rents make such patronage politics more likely by reducing the intensity of public scrutiny, and thereby increasing the resources available for patronage. Further, once the political contest comes to be by means of patronage, resource rents are predicted to have perverse effects, actually reducing the provision of public goods.

They find that in developing countries the combination of resource rents and democracy has been significantly growth-reducing. In the absence of resource rents, democracies outperform autocracies; in the presence of large resource rents, autocracies outperform democracies. They were able to trace this adverse effect of democracy, first through a generalised measure of economic policy, and then to the more specific policy errors of insufficient investment and reduced returns on investment. They find that the antidote to these adverse effects of democracy is intensified checks and balances, including, specifically, the freedom of the press. Thus, resource-rich democracies need a distinctive form of democracy, strong on checks and balances with perhaps less emphasis upon electoral competition.

Recent publications

Collier, P. and **A. Hoeffler**, 'Democracy and resource rents', GPRG Working Paper 016

Collier, P. and **A. Hoeffler**, 'Military expenditure in post-conflict societies', Economics of Governance, Vol. 7, pp. 89-107, 2005

Collier, P. and **A. Hoeffler**, 'The political economy of secession', in E.F. Babbitt and H. Hannum (eds), Negotiation Self-Determination, 2005

Dissemination highlights

The winners and losers from the rights-based approach to development conference

A conference was held in February 2005 at IDPM at the University of Manchester which offered an opportunity to assess the effectiveness of a rights-based approach to development. The rights-based approach gives greater recognition to political relationships than more standard approaches, and represents a convergence between the mainstream political issues of good governance and social issues of exclusion and participation. The discussions of 'rights' in the development debate reflect a greater confidence in the depth of democratisation in developing countries, supported by the growing interest in international human rights conventions and the establishment and extension of rights-based constitutions in developing countries.

The meeting opened with a presentation by Robert Archer of the International Council on Human Rights Policy, who emphasised the value that human rights bring to the development. Sheela Patel from the Society for the Promotion of Area Resource Centres (SPARC) in India then raised some questions about the implications of a legal and development campaigning orientation, and in respect of some of the realities on the ground. She explained how the National Slum Dwellers Federation (NSDF), a grassroots organisation which works closely with SPARC, was at present struggling to respond to the large-scale demolitions taking place in Mumbai (India). Whilst many other grassroots organisations and NGOs were opposing and protesting, NSDF were continuing with their work with pavement dwellers and other vulnerable groups to identify, elaborate and negotiate for alternatives with the state. Women pavement dwellers were reluctant to challenge the state because their experience suggested that this would not be effective in advancing their development interests. Professor John Gledhill ended the opening session with a consideration of experiences in Latin America. He noted the ways in which rights-based approaches fitted with neo-liberal conceptualisation of the relationship between state and citizen, while also recognising the alternative perception of some groups that the rights-based approach helps to deepen democracy and develop more inclusive forms of citizenship.

Conference sessions followed a number of themes including the relationship of the rights-based approach to other development discourses such as aid policy and religion, the ways in which rights affect the direction and dimensions of social change, and the inclusion of rights within broader issues of political and economic governance.

Reclaiming development? Assessing the contribution of NGOs to development alternatives conference

In June 2005, the GPRG sponsored a conference on NGOs at IDPM in Manchester. If NGOs are seeking development alternatives, they are seeking, for the most part, more inclusive, pro-poor development. The debate about NGOs and their contributions to development has been wide-ranging. As NGOs have become more embedded within the development programmes of the official agencies, and as NGO activities have grown in scale, many have challenged NGOs, arguing that they are no longer able to provide leadership on development alternatives. A full range of papers is available on http://www.sed.manchester.ac.uk/idpm/research/events/ngo2005/index.htm. Particularly strong presentations were offered by plenary speakers: Mary Racelis (a lifetime of work with Philippine NGOs); Rose Molokoane and Sonia Fadrigo (from homeless people's Federations in South Africa and the Philippines); Evelina Dagnino (a university professor working with civic movements in Brazil); Pim Verhallen (from ICCO in the Netherlands); Michael Edwards (Ford Foundation); and Firoze Manji (providing through Fahamu an essential news service for all those following development in Africa).

The conclusions of the final plenary session point to the overwhelming concern of NGOs that they be more effective in addressing poverty. Participants recognised that, whilst service delivery may be important, there is a need to go beyond such programmes to secure structural change. In this closing session, participants also recognised that NGOs have been active in the political arena with diverse and (in some cases) longstanding campaigns. There was recognition that such work needs to continue, but the discussions confirmed a change in approach. Rather than NGOs being the major and/or leading agency in this work, there was an acknowledgement of the need to establish partnerships with local communities and their associations. NGOs, it was suggested, need to be facilitators rather than leaders, adding value to a range of local actions defined by the poor themselves.

Redesigning the state: Political corruption in development policy and practice conference

This conference was held at the University of Manchester on 25 November 2005, and was attended by a wide range of expert and eminent delegates – academic, professional and practice based – from across the world. Institutionally represented were the Commonwealth Secretariat; the Overseas Development Institute; Transparency International (Africa and Latin America); the ESRC; the British Council; DFID; the Buganda Centre – AFRICA WOCPAP; the Big Lottery Fund; the Belgium Directorate General of Development Cooperation; PEPSE - Espace Europe Institute, France; World Vision, UK; the Royal African Society; and Corner House.

The keynote speakers of the first session provided an expansive overview of the magnitude, measurability and policy frame of contemporary corruption which set the tone for a fast-paced and intellectually challenging conference. Paul Collier (University of Oxford) headed off the conference with a robust statement on how corruption retards growth and development, on a continental scale. Deryck Brown (Commonwealth Secretariat), then provided a historical overview of institutional and political change in Africa, providing a refreshing antidote to the Afro-pessimism and ahistoricism of some development publications. It was evident from Deryck's introduction that real progress is being made: a generation of dictators has gone, and institutional anti-corruption bodies are springing up across the continent. The last keynote speaker, Dr John Githongo (Transparency

International), underscored this mixed but progressive picture of a group of 'ex-African leaders enjoying their retirement', and spoke of the varied and contextual work of anti-corruption intervention. A book of conference proceedings is planned, to publish these excellent contributions to a wider audience.

Africa after 2005: From promises to policy seminar

During the early part of 2005, two major reports appeared which had reducing poverty as their central focus. One by the Millennium Project was entitled 'Investing in Development: a practical plan to achieve the Millennium Development Goals'; the second was the publication of the Report of the Commission for Africa – 'Our Common Interest' – setting out policies that need to be implemented if Africa is to meet the goals. Since on present trends Africa will not meet the Millennium Development Goals, there is increasing urgency in understanding how African economic performance can be improved. In December 2005 there was a one-day seminar in London 'Africa after 2005: From promises to policy', organised jointly by the ESRC and the Development Studies Association, reporting on a range of ESRC research focused on Africa.

The papers presented at the seminar came from three of the ESRC's leading research investments on international development – the GPRG; the Centre for the Study of Globalisation and Regionalisation at the University of Warwick; and the Wellbeing in Developing Countries Research Group at the University of Bath. Each Centre offered an insight into why it has been so difficult to reduce poverty throughout the developing world, and what it is that keeps people poor. Francis Teal presented work from the GPRG programme, making the case for a strong association between globalisation, growth and poverty reduction. Africa needs to grow by seven per cent a year if its targets for poverty reduction are to be met. To do this, it will need to foster successful businesses, especially in manufacturing which can thrive in a competitive global market.

GPRG website and publications

The GPRG website redesign which began last year has continued. The GPRG working paper series is now available online and several in-depth project guides have been added. We are also working on developing the data set resources available online.

The Group publishes a newsletter twice a year and Issue Five will be available from May 2006. The GPRG also publishes an annual Research Summary which is available on the website or in hard copy from the CSAE.

All GPRG publications are available on the website at http://www.gprg.org.

Appendix A: CSAE Policy Committee, research and support teams and research associates

Policy Committee

Mr R. A. Annibale, Vice-President, Managing Director, Citigroup, London

Mr C. Badenoch, Chief Executive, World Vision

Professor W. Beinart, Director, Centre for African Studies, St Antony's College

Mr D. L. Bevan, Research Associate, CSAE, and Fellow of St John's College, University of Oxford

Professor P. Collier, Director, CSAE, University of Oxford

Professor S. Dercon, Professor of Development Economics and Fellow of Wolfson College

Dr M. Fafchamps, Deputy Director, CSAE

Mr C. Goodwin, Chair, Global Minerals and Metals Corp

Sir M. Goulding, KCMG, Warden, St Antony's College, University of Oxford

Professor D. Hulme, Professor of Development Studies, IDPM, University of Manchester, Director, CPRC, University of Manchester, Co-Director, GPRG, Leverhulme Research Fellow (2006-2009)

Mr R. Jones, Manager of Corporate Relations and CSR, Premier Oil

Mr J. Kibazo, Director of Communications and Public Affairs Division, Commonwealth Secretariat

Professor J. B. Knight, Department of Economics, University of Oxford

Sir T. Lankester, President, Corpus Christi College, University of Oxford

Sir M. McWilliam, KCMG, Chair, CSAE Policy Committee

Ms R. Stevenson, Head, Africa Policy Department, Department for International Development

Dr F. Teal, Deputy Director, CSAE, University of Oxford, Co-Director, GPRG

Mr T. Thiam, Director, Group Strategy and Development, AVIVA Plc

Dr P. Woodhouse, Institute for Development Policy and Management, University of Manchester

Research team and their areas of specialisation

Dr C. S. Adam, Reader in Development Economics and Official Fellow of St Cross College: macroeconomics and applied macroeconometrics

Dr J. Aron, Research Officer: international economics, monetary economics, applied macroeconometrics on the South African economy

Dr A. Barr, Research Officer: behavioural and experimental economics applied to development issues

Mr D. L. Bevan, Fellow of St John's College: public economics and macroeconomics

Professor P. Collier, Director, CSAE and Fellow of St Antony's College: governance in low-income countries, especially the political economy of democracy, economic growth in Africa, economics of civil war, aid, globalisation and poverty

Professor S. Dercon, Professor of Development Economics and Fellow of Wolfson College: microeconomics, poverty and welfare analysis

Dr M. Fafchamps, Deputy Director, CSAE, Reader in the Department of Economics and Professorial Fellow at Mansfield College: microeconomics

Dr A. Hoeffler, Research Officer: macroeconomics, growth and economics of conflict

Dr G. Kingdon, Research Officer: applied microeconomics of education, labour and gender

Professor J. B. Knight, Professor of Economics and Fellow of St Edmund Hall: labour and human resource economics

Dr A. Malik, Islamic Centre Lecturer in Development Economics, QEH

Dr A. Moradi, Postdoctoral Research Fellow: economics of undernutrition, biological standard of living in LDCs, nutrition and violent conflicts

Dr P. Serneels, Research Officer: labour and behavioural economics

Dr M. Söderbom, Leverhulme Early Career Research Fellow: microeconomics, labour markets, productivity, investment, firm performance

Francis Teal, Oxford Director GPRG and Deputy Director CSAE: microeconomics of firms and labour markets

Professor J. Toye, Senior Research Associate, Queen Elizabeth House: development economics and the political economy of development

Dr P. Vicente, Research Officer: corruption, microeconomics of institutional/political issues in development

Support team

Ms S. George, Publications Officer

Ms R. Page, Administrator

Mr R. Payne, IT Support Officer

Research associates

Professor D. Anderson: environmental economics

Dr M. Antoninis, Oxford Policy Management: education and labour markets

Dr S. Appleton, Nottingham University

Professor J.-P. Azam, University of Toulouse: Senior Associate Member of St Antony's College: francophone and lusophone Africa

Dr S. Bhalotra, Universities of Cambridge and Bristol: applied microeconomics, health, education and gender and the family in low-income countries

Professor A. Bigsten, University of Göteborg: rural development and Kenya

Professor D. Fielding, Leicester University: macroeconomics

Professor P. Guillaumont, CERDI

Professor S. Guillaumont Jeanneney, CERDI

Professor J. W. Gunning, Free University, Amsterdam

Dr K. Hanson, London School of Tropical Hygiene and Medicine: health economics

Dr J. Hoddinott, IFPRI

Dr C. Jenkins: macroeconomics, regional integration, South Africa and Zimbabwe

Dr G. Kambou, ADB

Dr B. Kinsey, Free University of Amsterdam: economic anthropology

Dr P. Krishnan, Fellow of Jesus College, Cambridge: labour economics

Dr N. A. McCulloch, IDS

Professor B. Ndulu, World Bank

Professor S. O'Connell, Swarthmore College: macroeconomics

Dr R. Oostendorp, Free University, Amsterdam

Dr T. Owens, Nottingham University

Professor T. A. Oyejide, University of Ibadan and AERC

Dr C. Pattillo, IMF

Dr R. Reinikka, World Bank: macroeconomics of trade liberalisation

Dr E. Robinson: Tanzania, environment, resource, and agricultural economics

Dr C. Soludo, University of Nigeria, Nsukka: Nigeria

Dr D. Stasavage, London School of Economics: politics of macroeconomic policy, political economy of emerging markets, monetary integration, corruption and development

Appendix B: Visitors

Paivi Lujala, Norwegian University of Science and Technology, January to July 2005

Abla Safir, France, February 2005

Philippe Lemay Boucher, University of Namur, April to July 2005

Marco van der Leij, Erasmus University, Rotterdam, May to June 2005

Cheryl Doss, Yale, June to July 2005

Doug Gollin, Williams College, June to July 2005

Mohammad Muzammil, Lucknow University, September 2005

Rosemary Atieno, University of Nairobi, January to March 2006

Harvard Strand, PRIO, January to May 2006

Ingo Outes, London School of Economics, February to April 2006

J. Atsu Amegashie, University of Guelph, May 2006

Appendix C: Journal of African Economies

Before the advent of the *Journal of African Economies* (JAE) in 1992, high-quality economic research on Africa was scattered over many diverse publications. In the JAE, this important area of research now has its own vehicle to carry rigorous economic analysis, focused entirely on Africa, for Africans and anyone interested in the continent – be they consultants, policy-makers, academics, traders, financiers, development agents or aid workers.

The *Journal of African Economies* is published by Oxford University Press (OUP), and administered at the Centre, and has an international network of Managing and Associate Editors and referees. To speed up the editorial process, the JAE now uses a web-based editorial toolkit from Berkeley Electronic Press. The JAE website is http://www.bepress.com/jae/.

A free sample copy can be read online at the OUP website: http://jae.oupjournals.org/, or alternatively a printed copy can be ordered by emailing jnls.cust.serv@oupjournals.org.

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Ernest Aryeetey, University of Ghana
Christopher Adam, University of Oxford
Michael Bleaney, University of Nottingham
Ibrahim A. Elbadawi, The World Bank
Marcel Fafchamps, University of Oxford (Chief Editor)
Augustin Fosu, AERC

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Jean-Marie Baland, FUNDP
Abigail Barr, University of Oxford
Chris Barrett, Cornell University
Arne Bigsten, University of Göteborg
Shanta Devarajan, World Bank
Johannes Fedderke, University of Witwatersrand
Pramila Krishnan, University of Cambridge
Eliana La Ferrara, Bocconi University
Peter Lanjouw, World Bank
Oliver Morrissey, University of Nottingham
Germano Mwabu, University of Nairobi
Stephen O'Connell, Swarthmore University
Waheed Oshikoya, African Development Bank
Lemma Senbet, University of Maryland
Chris Udry, Yale University

Appendix D: Bibliography

Christopher Adam

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Janine Aron

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Abigail Barr

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