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THE AERC RESEARCH PROGRAMME: AN EVALUATION

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AFRICAN ECONOMIC RESEARCH CONSORTIUM

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The AERC Research Programme: An Evaluation

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The AERC Research Programme: An Evaluation

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Foreword

An evaluation of the AERC Research Program since inception was commissioned by the Consortium's Advisory Committee at its June 1993 meeting. The objective of this evaluation was to assess and document the effectiveness of the unique AERC research process in enhancing capacity for high quality research and its relevance to economic policy concerns of the region. Particular attention was paid to the efficacy of the labor intensive peer review process in enhancing research quality and facilitating learning by doing research; the responsiveness of supported research to expressed policy and professional needs; and the overall cost-effectiveness of the program in meeting its objectives.

This report was prepared following a very in-depth review of the research process, assessment of the quality of the research output and extensive interviews with a broad range of participants within the AERC network and other professionals outside of it. The report is the single most comprehensive documentation of the Consortium's Research Program to date and serves as an important reference to all other networks using a similar approach to capacity building for policy-relevant research. Clearly, the experiences of a successful research network cannot be adopted as a package, but the details of the research process which Professor Erik Thorbecke documents so well may provide useful insights for other similar initiatives.

Professor Benno Ndulu
Executive Director
African Economic Research Consortium

Executive Summary

At its June 1993 meeting the Advisory Committee of the African Economic Research Consortium recommended that an independent evaluation be commissioned with the specific purpose of assessing the impact and effectiveness of the research process in enhancing research quality, competence and relevance to policy. In the terms of reference for the present evaluation, "enhancing quality and competence" was to include academic quality, policy relevance as well as building and reinforcing professional ethos and *esprit de corps* among African economists.

The evaluation was conducted first in Nairobi from May 19 to June 9. The first and last week were devoted to undertaking desk research at the AERC Secretariat. Subsequently, I continued to work on the evaluation at my home base, Cornell University.

My principal activities consisted in 1) conducting in-depth interviews with key members of the AERC management staff and Secretariat, resource persons, members of the Advisory Committee, and researchers participating in the Workshop; 2) reading and reviewing a sample of research proposals in the four thematic areas; 3) attending the Plenary Session of the May 27-June 2 Workshop and a representative sample of sessions in the four thematic groups where new proposals, work in progress and final reports were presented by researchers and discussed by resource persons and the peer group; 4) attending the meeting of the Advisory Committee of AERC on June 3, 1995; 5) reviewing previous evaluation reports of AERC and other relevant background documents relating to AERC activities and performance; 6) refining the historical database containing all proposals funded by AERC since its inception; 7) reviewing the policy involvement questionnaires and the senior policy questionnaires and subsequent analyses of the responses; 8) reviewing and evaluating the quality of AERC Research Reports; and finally, 9) reviewing a variety of training functions as they related more directly to the synergy between the training and research functions of AERC.

After spending months evaluating the research program of AERC, I am left with the impression that, on the whole, it has been an extraordinarily successful operation. It combines, within one institution and under one roof, some of the best characteristics of such eminent U.S. economic research agencies as the Economic Research Division of the National Science Foundation and the National Bureau of Economic Research. In a sense, it is a hybrid between the above two models. AERC funds research but goes beyond it in actually contributing significant value added to the research output through the biannual workshops and the research done within the Secretariat.

AERC has achieved an amazing *esprit de corps* among researchers and other network participants. It is no exaggeration to claim that the Consortium provides the cement holding African economic researchers together. AERC can be proud of its achievements to date but cannot rest on its laurels. It needs to become even more of a research leader and innovator and resist the urge to be an uncritical follower of trends and paradigms originating in other parts of the world. AERC has an excellent opportunity to encourage research contributing, within the context of Africa, to an improved body of methodology conforming to the underlying African reality and thereby to greater policy relevance. AERC can and should grow to become an innovator within the context of Africa.

Major Findings

Evaluation of the thematic research process, cycle and cost effectiveness

• Between 1988 and mid-1995, 367 proposals were submitted to the AERC Secretariat. These proposals went through a number of sequential evaluation stages. During the first stage, 207 proposals were accepted for presentation at the AERC Thematic Workshop and a total of 164 were ultimately fully funded. Finally, 106 proposals resulted in accepted final reports and the remaining proposals are presently being prepared as final reports in the pipeline.

• Thirty-four AERC Research Papers have been published up to now and it is likely that another 14 of those currently in the pipeline may appear in print. If AERC research projects leading directly to journal articles and books are added to the number of published Research Reports, the total number of publications amounts to 78, which represents 20% of the number initially submitted.

• Two additional measures of success can be highlighted: 1) 97% of the final reports that have been externally reviewed, so far, have received positive reviews; and 2) the ratio of total publications in journals and books (78) out of the total number of final reports (106) amounts to three-fourths. These figures reflect very high success ratios.

• Presumptive evidence was presented that the quality of the research output improved as it went through the different stages and filters of the research process.

• The geographic breakdown of the proposals appears to reveal a relatively sound balance between the different regions, as does the linguistic distribution. The representation of women in the pool of AERC researchers is still very small and not rising relatively. AERC has not been overly successful in attracting policymakers and involving them in joint research projects – if any trend can be perceived, it is a downward one with less than 10% of the present pool of investigators consisting of policymakers.

• The intent of the Secretariat appears to be to limit the elapsed time from initial submission to final report (i.e. the gestation period of the thematic research product) to preferably 15 months or less. A question that needs to be raised is whether the present typical length of the research cycle is appropriate.

• In general, it does appear that the AERC thematic process and other research modalities cater to the heterogeneity of participants.

• The composition of AERC research modalities has become much more diversified in the last two years.

• The available indicators suggest an increasing cost effectiveness of research output throughout the life of AERC.

Evaluation of research methodology and quality over time

• An examination of the list of titles and specific topics addressed by the research grants, chronologically from 1988 to the present, suggests strongly that the scope of research has broadened and become more diversified in the four thematic groups.

• A similar broadening of research scope is observed when comparing the research domain and output of projects completed by the same sets of investigators over time.

• At the most general and subjective level, there is strong consensus among network participants that the overall quality of research has improved over time.

• In the total set of 219 AERC thematic grants extended since 1988, there is only a handful of methodological studies per se, in the sense of being designed to push the methodological frontier forward. The overwhelming majority of studies applies existing techniques and models to issues, either directly or indirectly, related to policy within the context of Africa. In this respect, the typical research proposals adopt an essentially deductive approach.

• In contrast, the set of projects on informal and formal financial markets and interlinkages between them provides an excellent counter example of what can be called inductive-type research. These studies have been widely referred to in the development literature dealing with credit as they represent original contributions to a better understanding of the operation of financial markets in the African context.

• AERC researchers appear to have followed an evolutionary process from reliance on a largely deductive approach, at the outset, to a more inductive approach today.

• There is strong consensus among network participants that the quality of data is unreliable (somewhat less so for monetary data) and that a major effort to improve it is essential.

• Sequential projects by the same (repeat) author(s) tend to rely on somewhat more sophisticated and transparent methodologies. This and other evidence would tend to imply that a "learning by doing" process applies to network investigators.

• Another trend that was observed is the somewhat greater proportion of projects in recent years relying on a general equilibrium rather than a partial equilibrium framework.

• AERC research output appearing in respected journals in the last two years has increased markedly and is a testimony to a rise in research quality.

Policy relevance and choice of thematic areas

• Although not all network participants consider that policy relevance should necessarily be a major objective of research, the majority accepts that it should be a key criterion in the selection of research topics because of the overwhelming need for policy advice in Africa today and the comparative advantage of local African researchers in identifying and describing accurately the stylized facts and structure of their own economic settings.

• Arguing that AERC research should be operationally useful does not, by any means, imply that it should be less technically and methodologically rigorous.

• The assessment of the degree of policy relevance of thematic projects is somewhat mixed. A report commissioned by AERC on policy relevance of the proposals presented at the December 1994 AERC workshop concluded that the majority of proposals did not take adequate account of policy. On the other hand, an analysis of the replies to the policy involvment questionnaire reveal that 70% of the respondents were involved in policy research.

• National Policy Workshops were very strongly endorsed by network participants who felt that this was one of the best marketing vehicles for AERC research output. By all accounts, the Senior Policy Seminar was very successful.

• The inescapable conclusion, on the basis of overwhelming evidence, is that AERC has made an enormous effort, through a variety of modalities, to encourage policy-relevant research. However, policy relevance has to be linked to the themes and issues that are given priority in the research portfolio.

• The titles of the four research themes (and corresponding groups) do not reflect accurately the topics that come under their respective umbrellas.

• There is a widely shared perception by network participants that individual research group cultures prevail.

• The choice of thematic areas that have been in force ever since AERC's inception evolved out of an overwhelming need in sub-Saharan Africa to understand better and become more cognizant of the necessity of implementing stabilization and structural adjustment policies to restore a modicum of macroeconomic balance.

• There appears to be a strong consensus that, while the present four thematic areas were the right ones at the outset, they are somewhat too limiting and narrowly focused and that priority should be given to expanding the research domain to include issues related to poverty alleviation.

Recommendations

• The overall evaluation of the thematic research process, cycle and cost effectiveness argues strongly in favor of retaining the peer review system.

• A major recommendation flowing from this evaluation is to add a new theme and corresponding group within a nexus of interrelated components consisting of "poverty, employment, labor markets, human capital, and the fiscal role of government with reference to human resources". The rationale for adding this nexus to the portfolio of AERC research topics is presented in some detail in section IV of the evaluation.

• There are at least two approaches to poverty alleviation. The first one is the recognition that the key means to a reduction of poverty is through the creation of more productive employment opportunities. The other approach to poverty alleviation is to focus on the role of government in areas directly or indirectly linked with poverty alleviation such as education, health, nutrition, and public investment and infrastructure.

• Investigate this nexus of topics relatively objectively and in a fashion capable of yielding robust policy recommendations. It is also argued that the informational base is sufficient to undertake policy-relevant empirical studies on and in sub-Saharan Africa. There are many surveys presently available that are easily accessible in a very user-friendly form and beg to be analyzed.

• The addition of the above research nexus would go, hand in hand, with another major recommendation reached in the present evaluation for a greater emphasis on inductive type studies by AERC researchers. It is argued that African researchers can make major contributions to both 1) a more accurate methodological specification of the

stylized facts corresponding to the African settings being investigated; and 2) a better understanding of the policy environment based on the results of their studies. This is the type of research approach in which AERC researchers would appear to have a strong comparative advantage, in contrast with nonAfrican researchers.

• On the basis of such inductive and empirical studies (from the ground up), AERC investigators could help modify the prevailing essentially neoclassical toolkit and adapt it to conform more accurately to the underlying structural and institutional reality prevailing in Africa.

• AERC should play a more active role in encouraging efforts at improving the quality of data and statistical information in Africa. It can encourage investigators 1) to scrutinize more critically the underlying data sources they use in their own research; 2) to make greater use of existing and new surveys; and 3) to formulate proposals that are more data intensive.

• It also follows directly from all of the above reasons that it would be desirable – if not necessary – to lengthen the typical 15-month research cycle for at least some of the projects in the proposed new thematic nexus and perhaps other thematic groups as well. A two-tier AERC grant might be appropriate under those circumstances.

• It appears essential, given its intrinsic importance and as a signalling device, that the proposed new nexus be given the status of a separate thematic group rather than being grafted upon one or more of the existing groups. Within the context of AERC, the selection of research topics by investigators is as likely to be supply-driven as demand-driven.

• Prior to the initiation of the new group, the AERC Secretariat should proceed forthwith with its plan to initiate a collaborative (and perhaps comparative, as well) project on poverty with the World Bank and suitable academic institutions. The next step might be to hold a plenary session on the domain of the proposed nexus.

• The apparent lack of transparency regarding the titles, and specific content, of each of the four present thematic groups should be addressed by the Secretariat and the Advisory Committee. This task becomes even more essential in the light of the implications of the potential addition of a new theme and group on poverty-related issues.

• In the light of a perception among many network participants that different cultures and standards may prevail among the existing thematic groups, it would be desirable if AERC were to attempt to establish roughly comparable evaluation criteria for new proposals, work in progress and final reports.

• The Consortium should continue and redouble its efforts to involve more women and policymakers in its various research modalities.

• Although the Secretariat has done an outstanding job of disseminating the research output, AERC could be even more pro-active in encouraging publication in reputable journals. A bonus publication fee could be tagged on automatically to research grants to compensate investigators for the time and effort needed to convert the final reports into the article submission format expected by quality journals.

• It might be desirable to encourage researchers, in all stages of their research process from initial submission to final reports, to abide by a standardized format.

I. Introduction

The present report consists of five major sections: I. an introduction outlining the mission of the African Economic Research Consortium (AERC); the objectives and suggested methodology of the evaluation; and the major activities of the evaluator; II. an assessment of the research process, cycle and cost effectiveness; III. an assessment of research methodology, style and quality over time; IV. an assessment of policy relevance and choice of thematic areas; and, finally, V. summary, conclusions and recommendations.

Objectives and mission of the AERC

The African Economic Research Consortium (AERC) was established in July 1988 with the principal objective of strengthening local capacity for economic policy research in sub-Saharan Africa. Its mission rests on two basic premises. First, development is more likely to occur where there is substained sound management of the economy. Second, such management is more likely to happen where there exists an active, well-informed group of locally-based professional economists to conduct policy-relevant research. AERC's programs are therefore targeted at enhancing the capacity of locally-based researchers to conduct policy-relevant economic inquiry, promote retention of such capacity and encourage its application in the policy context.

Towards the above ends, the research program utilizes a research process that simultaneously endeavors to be sensitive to the needs of capacity building for research, responsive to policy needs and ensure high quality of research output. A balance is struck between the objective of maintaining a reasonable level of professional rigor and that of building indigenous capacity for economic research. Emphasis on the quality and relevance of research to policy aims to enhance the credibility of AERC researchers and encourage utilization of their output.

There are four strategic attributes of the AERC research processes. First, the research program networks individual researchers in the region supported by resource persons to carry out research on a limited number of themes designated by

the AERC's Advisory Committee to be most pertinent to policy needs. This helps alleviate professional isolation, encourage exchange of experiences and create a critical mass of peer pressure for enhancing quality.

Second is the use of small grants to groups of individuals drawn from both academia and policy institutions to conduct research on a limited number of themes. This composition of the group allows for a simultaneous sensitivity to policy concerns while benefiting from the frontier knowledge in the discipline. Furthermore teams of researchers draw together experienced and younger researchers to facilitate learning in the course of doing research.

Third is the establishment of a support system operated by the Secretariat in the forms of technical advice from resource persons, methodological workshops and up-to-date literature. The Consortium has its own library which is accessible to researchers and linked to several other resource centers worldwide. Resource persons are drawn worldwide to enrich the technical base for research advice and utilize their rich variety of research experience. Methodological workshops are organized to sharpen research skills and expose the network to the relevant methodological developments in the discipline.

Fourth is the biannual thematic research workshop which is a key instrument for monitoring implementation and quality of research on a continuous basis, creating effective peer pressure, fostering interactions in the network and enforcing scheduled delivery of reports. The workshops also play an important role in maintaining a sense of ownership of AERC activities by participating researchers and providing an avenue for feedback from them on the design and implementation of the AERC research program.

It should be noted that the Secretariat, in addition to managing the research process, also provides intellectual advice to researchers for improving their research proposals prior to presentation. The Secretariat also screens the proposals received for conformity to designated themes and quality. This stage significantly reduces resources committed to the subsequent stages of the peer review and selection. Small grants are used for sharpening the quality of promising proposals that are deemed not ready for presentation and for pre-testing the viability of some empirical research prior to the commitment of additional resources. The small grants are also aimed at reducing the entry barriers for new researchers who face rising standards within the network.

The Advisory Committee is an important part of this process. In addition to designating themes for research, it oversees the quality and fairness of the process and makes recommendations for research support.

Objectives and methodology of the evaluation

The proposed evaluation was recommended by the Advisory Committee of AERC at its June 1993 meeting. The committee concluded

> "that not enough attention was paid to the impact of the process on the capacity of researchers to conduct rigorous research and on the growth of the quality of research output. The committee felt that the process had scored significant achievements in this area that needed recognition and documentation after six years of operation".

Hence the Advisory Committee recommended that an independent evaluation be commissioned with the specific purpose of assessing the impact and effectiveness of the research process in enhancing research quality, competence and relevance to policy. In the terms of reference for the present evaluation, "enhancing quality and competence" was to include academic quality, policy relevance as well as building and reinforcing professional ethos and esprit de corps among African economists. The main elements of the research process include peer review; supportive services; and networking across countries, academic and policy institutions as well as different levels of research experience.

The terms of reference of the present evaluation also spelled out eight specific objectives which are:

1. To assess the extent of growth in the academic quality of AERC research since its inception and its relevance to the policy concerns in the region.

2. To assess the effectiveness of the labor-intensive research process in
   - improving the quality and relevance of research to policy over the project cycle, i.e. from the proposal stage to the interim and final reports. This should provide an indication of the effectiveness of the peer review process as well as technical support provided by the AERC Secretariat and resource persons in the course of implementing the project.
   - improving the quality of research output through repeated involvement and interaction among individuals and groups of researchers. This will help assess the value of repeated participation in sharpening skills, competence and hence the quality of output over time. In essence this is an assessment of growth in performance by cohorts of researchers.

3. To assess the impact of technical workshops in sharpening the skills of participating researchers and on the academic quality of research. This is to an-

swer the question what difference does the exposure to such workshops make on the quality of research and competence of researchers.

4. To assess the success of the research process in enforcing the timely delivery of research. In this regard, the role of the thematic research workshops needs particular attention.

5. To review the role of the research process in catering for the heterogeneity of participants across levels of research experience, linguistic groups and institutions. More particularly, does the peer review process accommodate differences in research experience, skills and methodological approaches?

6. To assess the policy relevance of AERC supported research. In this regard more specifically evaluate the extent to which AERC research responds to the policy issues of current importance.

7. To identify which parts of the research process most effectively produce the desired results and their cost effectiveness in terms of expenditures and human resources (AERC's and others) as well as the good will of resource persons who receive only a token of appreciation for their valuable time.

8. Are there ways for improving the effectiveness of the research process? Do alternatives to this process exist given the status of the professional environment in the region? Would they achieve the same results at less cost?

The methodology suggested in the terms of reference involved desk research, interviews and observation at the May 27 - June 2, 1995 workshop. The purpose of the desk research was aimed at reviewing the implementation of the research process relative to its objectives; reviewing a sample of supported projects to establish impact on quality over the research cycle and over time; assessing the rate of success of presented proposals as well as their successful and timely completion; establishing the proportion of research amenable to policy application; examining the extent of successful publication of AERC research in international and regional journals as well as the citation of such research within and outside the network; and determining the proportion of reports which received positive external review prior to their publication as research papers.

Major activities of evaluator

I spent the period from May 19 to June 9 in Nairobi. The first and last week were

devoted to undertaking desk research at the AERC Secretariat. Between May 27 and June 2, I attended the AERC workshop as an observer and on June 3, I attended the AERC Advisory Committee meeting. Subsequently I continued to work on the evaluation at my home base Cornell University.

My principal activities while in Nairobi and at Cornell consisted in:

1. Conducting in-depth interviews with key members of the AERC management staff and Secretariat (including daily sessions with the Executive Director and the Research Coordinator), resource persons of the four thematic groups (i.e. A, AT, B, C), members of the Advisory Committee, researchers participating in the workshop, a speaker at the Plenary Session and a former chairman of the Advisory Committee. An attempt was made to come up with a fairly representative selection of individuals across these different groups. In addition, the sample of researchers selected for interviews covers different countries (anglophone as well as francophone) and different levels of professional experience and involvement with the AERC network. A total of 31 individuals were interviewed (the list of these individuals is given in Appendix Table A.1). Table 1 gives the breakdown of characteristics of the individuals interviewed in terms of membership in different AERC-related categories.

Table 1. AERC: Characteristics of individuals with whom in-depth interviews were conducted[a]

a.	Members Advisory Committee AERC	8
b.	Members Resource Group A	4
c.	Members Resource Group AT	4
d.	Members Resource Group B	5
e.	Members Resource Group C	3
f.	Members AERC Secretariat	5
g.	Researchers who Participated in May 27-June 2, 1995 Workshop	11
h.	Speaker at Plenary Session of Workshop	1
i.	Former Chairman Advisory Committee	1

[a]A total of 31 individuals were interviewed. Note that the above categories are not mutually exclusive. For example, the Executive Director of AERC belongs to three of the above categories (i.e. a., d. and f.). The full list of individuals interviewed appears in Table A.1 in Appendix.

2. Reading and reviewing a sample of research proposals in the four thematic areas. The selected set included initial proposals, interim reports, final reports and subsequent publications as AERC Research Papers or as journal articles. Here again, an attempt was made to obtain a fairly diversified sample across age groups, countries, thematic areas and other relevant criteria. This evaluation of proposals tended to be both longitudinal and cross-sectional. Some proposal

files were reviewed over time from initial submission to final reports and in some instances, eventual publication – including comments and evaluations made at every step of the research process (i.e. first by the AERC Secretariat, then by the respective thematic resource groups during workshop presentations of the initial proposal, the interim report and final report, respectively) as well as external reviews prior to publication in the AERC Research Papers Series. Approximately 25 proposal files were reviewed.

3. Attending the Plenary Session of the May 27-June 2 workshop and a representative sample of sessions in the four thematic groups where new proposals, work in progress and final reports were presented by researchers and discussed by resource persons and the peer group. (Appendix Table A.2 gives the breakdown by thematic areas and stages of these proposals.) I also attended some of the technical meetings where resource persons conveyed to the researchers their reactions to the proposals.

4. Attending the meeting of the Advisory Committee of AERC on June 3, 1995. I was asked by the chairman to present some early reactions and tentative recommendations based on my evaluation up to that time. The discussion that followed my presentation was very lively and extremely useful in providing valuable comments and suggestions.

5. Reviewing previous evaluation reports of AERC, past Annual and Executive Directors' Reports and analyses of the funding and cost structure and other relevant background documents relating to AERC activities and performance.

6. Refining the historical data base containing all proposals funded by AERC since its inception. The data base provides a very detailed list of characteristics of each thematic grant funded by AERC since its inception. This data base was used to analyze the dynamics of the research process during the lifetime of AERC (1988-1995).

7. Reviewing i) the policy involvement questionnaires sent to approximately 180 participants who attended the last three workshops in 1993 and 1994, yielding 47 responses; and ii) the senior policy questionnaires and subsequent analyses of the responses in a report commissioned by AERC.

8. Reviewing and evaluating the quality of the AERC Research Papers (of which 34 have come out in printed form so far). In particular, in about eight instances, it was possible to compare for the same set of repeat authors the qual-

ity of their more recent reports to that of earlier reports in that same AERC Research Paper series. Likewise, a sample of other publications (mainly journal articles) resulting from AERC funded research was consulted. I also looked at some recent non-thematic AERC research instruments, i.e. collaborative and comparative research projects.

9. Finally, I reviewed a variety of training functions as they related more directly to the synergy between the training and research functions of AERC, in particular, the technical workshops.

The present evaluation is undertaken under three major headings (sections) distinguishing among three different, yet highly interrelated, dimensions of the AERC's research program: i) an assessment of the research process, cycle and cost effectiveness – more particularly in their relationship to thematic projects; ii) an assessment of research methodology, style and quality; and, iii) an assessment of the policy relevance of AERC's research output including the appropriateness of the present set of thematic areas. In each instance the major trends from 1988 to the present are analyzed and highlighted.

II. Assessment of the research process, cycle and cost effectiveness

Analysis and evaluation of the thematic research process and cycle, 1988-1995

The thematic research process has been ongoing since 1988. After seven years of continuous operation, it is important to take stock of the achievements and characteristics of this process. In particular, it is useful to determine the rate of success of proposals as they go through the whole product cycle from initial submission to eventual publication as AERC Research Papers or journal articles. The dynamics of the AERC product and evaluation cycle is represented in Figure 1 as a flow diagram. The starting point of the flow diagram is the cumulative number of proposals submitted to the AERC Secretariat during the seven-year period (1988 to mid-1995), i.e. 367. These proposals went through a number of sequential evaluation stages. The first stage (filter) is the screening of the initial submissions by the AERC Secretariat (with some help recently from resource persons acting as referees). It can be seen from Figure 1 that 104 out of 367 proposals were rejected outright (i.e. a 28% rejection rate through this first filter as can be seen in Figure 2 which presents the same flow diagram as Figure 1 except in percentages); 56 proposals were returned to their authors recommending revisions with no further follow-up by researchers (15%) while 207 proposals were accepted for presentation at AERC Biannual Research Workshops (56%).

Out of these 207 proposals, presented at the Biannual Research Workshops and screened by the Advisory Committee, a total of 164 were ultimately fully funded; 38 were rejected for funding (a rejection rate of 18%) and 55 proposals received small grants for resubmission (27%) out of which only 5 were subsequently turned down after AERC workshop peer review. Thus, in summary, throughout this second evaluation stage, an impressive 79% (164 ÷ 207) success rate can be observed – considering the high professional standing and standards of the resource persons.

Figure 1. AERC: A Flow Diagram of the Thematic Research Process (cumulative totals, 1988-mid 1995)

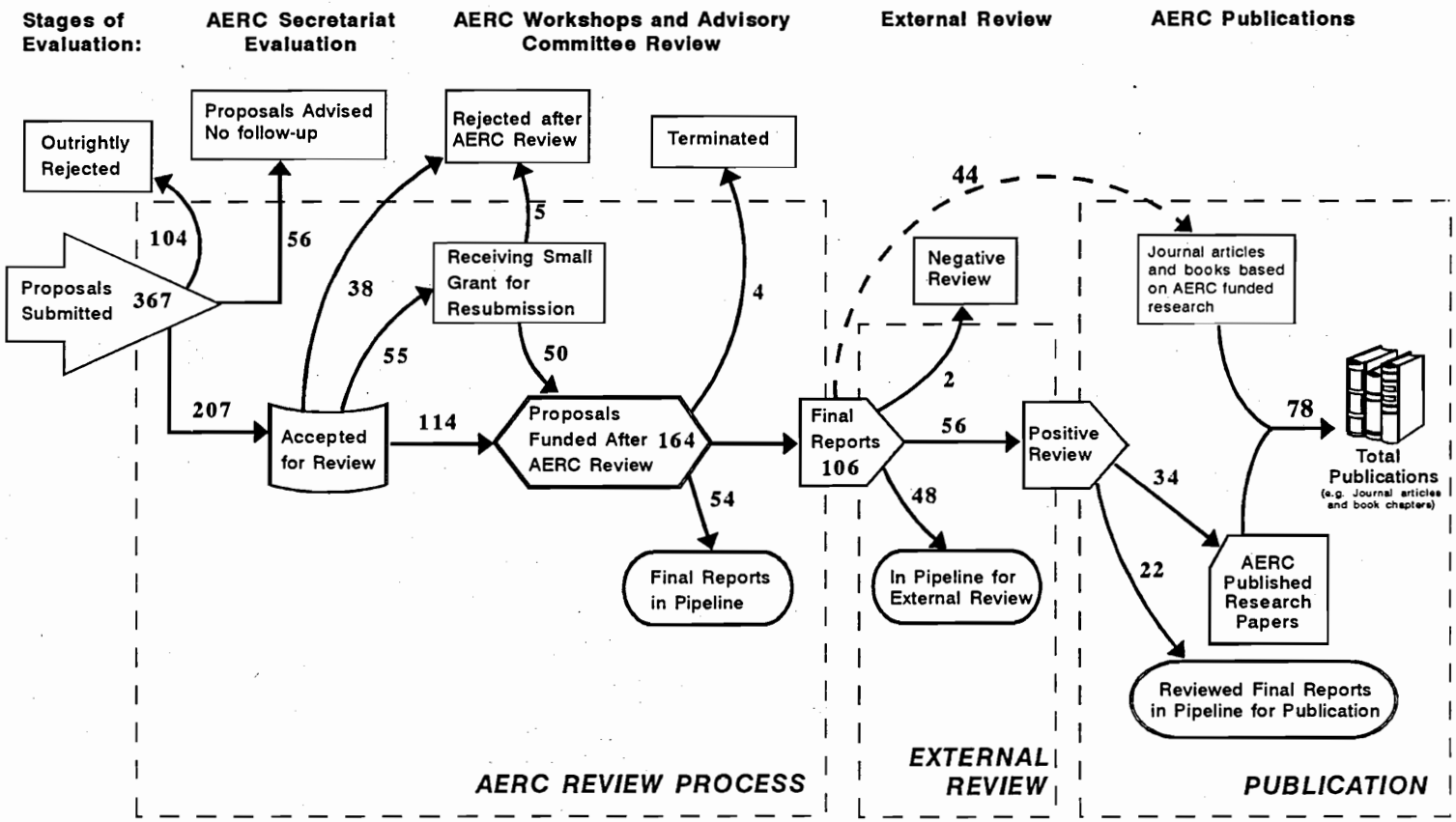
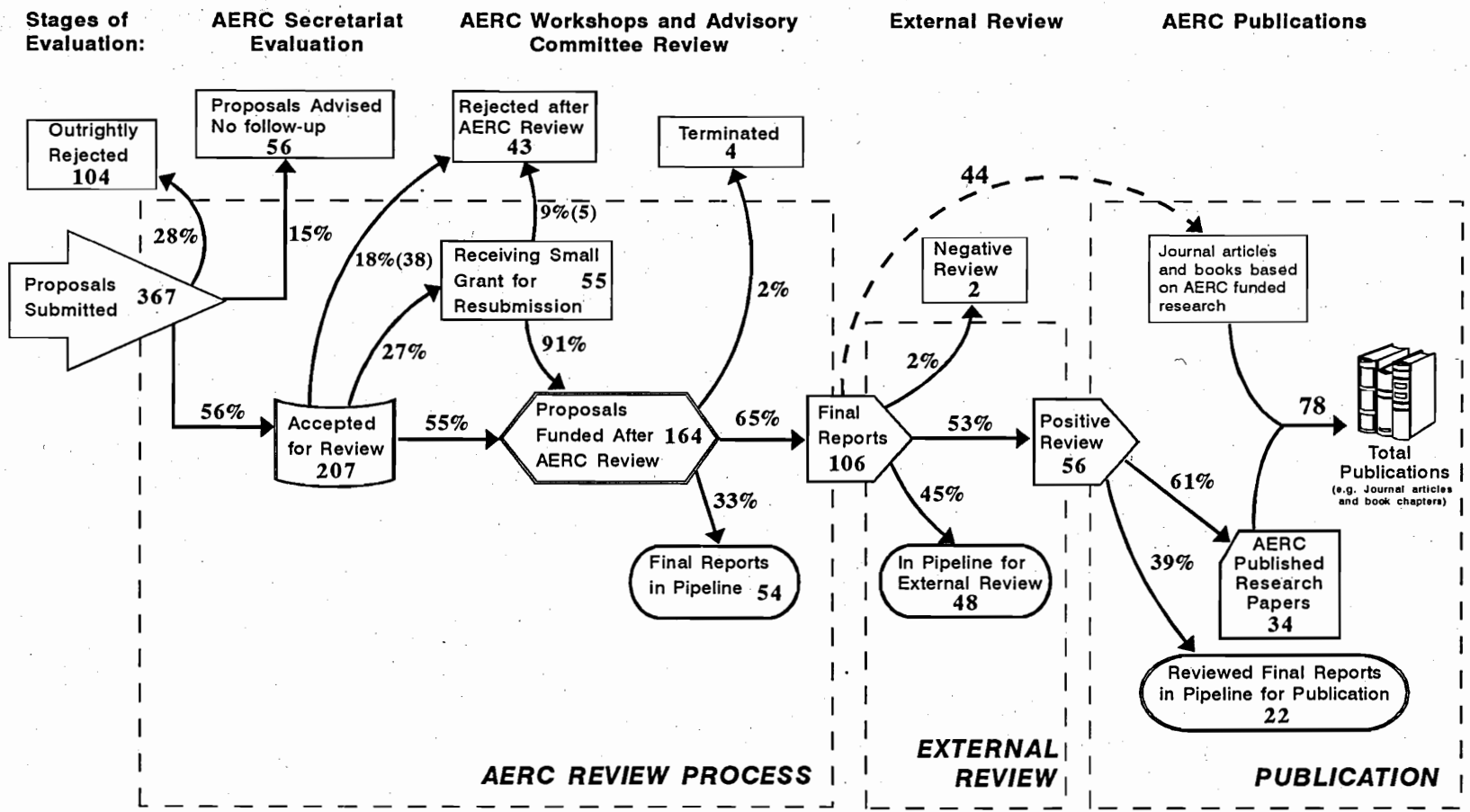


Figure 2. AERC: A Flow Diagram of the Thematic Research Process (cumulative totals, 1988-mid 1995 and percentages of prior stage)



The next cycle of the research process includes the presentation of work-in-progress (interim reports) followed by final reports or revised final reports. Out of the 164 funded projects, 106 resulted in accepted final reports with 54 proposals presently being prepared as final reports in the pipeline. The failure rate during this stage was negligible with only 4 proposals being terminated.

The final step in the thematic research process consists of external reviews and in-house editing of final reports for possible publication in the AERC Research Paper series. Out of the 106 final reports completed as of mid-1995, 56 yielded positive external reviews (with 48 still in the pipeline being subjected to external reviews and editing) and only 2 proposals, so far, having been turned down by external referees. One measure of success is that out of the 58 final reports that have been externally reviewed so far, 56 received positive reviews (an amazing 97% success rate). Thirty-four AERC Research Papers have been published, up to now, and it is likely that out of the remaining 22 final reports in the pipeline, another 14 will appear in print.

The bottom line is that approximately 13% of the proposals initially submitted to the AERC Secretariat will ultimately be published as research papers (48 out of 367), i.e. a ratio of 1 out of 7.6 submitted. In fact, if AERC research projects leading directly to journal articles and books (circumventing the Research Paper stage) are added to the published Research Papers, the total number of publications amounts to 78 (44 journal articles and books and 34 Research Papers). This represents 21% of the initial submissions or a ratio of about 1 out of 5. Ratios of 1 out of 5, or 1 out of 7.6 are more or less comparable to the acceptance rates of many professional economic journals and reviews.

It can be argued that the average inherent quality of the initial proposals (particularly in earlier years) appears significantly lower than that of papers submitted to journals (such as *World Development*, *Economic Development and Cultural Change*, *The Journal of Development Economics*, and the *Journal of African Economies*, while the quality of the published Research Papers and other publications are more or less on par with articles appearing in *World Development* and specialized journals focusing on Africa. This improvement in the quality of the research output throughout the various stages of the research process is a strong testimony of the effectiveness (and the value added) of what has been described internally as nurturing or "hand holding", i.e. i) the assistance of the Secretariat (through the office of the Research and Deputy Research Coordinators) relating to literature search, relevant references and comments; ii) critical contributions by the resource persons and the peer group during the workshops; and, finally, iii) external referees' evaluations and suggestions prior to AERC publication.

In addition to the preceding cumulative analysis of the dynamics of the research cycle, it is instructive to undertake a review of the disposition of proposals as well as their key characteristics and those of researchers, year by year, in order to highlight possible trends. The first observation is that the number of proposals submitted to the AERC Secretariat increased from a range of 24-37, annually, in 1988-90, to 60-76 in 1991-1994/95[1]. Table 2 shows the disposition of proposals submitted to and evaluated by the Secretariat over the life of AERC. One noticeable trend (if one excludes 1988 which was the first year of operation and therefore somewhat unusual) is that the proportion of proposals accepted for workshop presentation rose from about 41-46%, annually, in 1989 and 1990 to a high of 70% in 1994/95. Conversely, the proportion that was rejected outright declined from 35-41% in 1989 and 1990 to 16% in 1994/95. Since it can be taken for granted that the selection criteria and standards of the Research Coordinator's office and resource persons, acting as referees have not become looser the above trend would seem to reveal an improvement in the quality of the proposals submitted.

Table 2. AERC: Disposition of proposals submitted to and evaluated by AERC Secretariat (number and percent ages by year, 1988 to 1994/95)

	1988	1989	1990	1991	1992	1993/94	1994/95	Total
Rejected outright	7 (29)	13 (35)	15 (41)	18 (28)	21 (35)	19 (25)	11 (16)	104 (28)
Never returned	3 (13)	7 (19)	7 (19)	9 (14))	10 (17)	10 (13)	10 (14)	56 (15)
Accepted for workshop presentation[a]	14 (58)	17 (46)	15 (41)	37 (58)	29 (48)	47 (62)	48 (70)	207 (56)
Total[b]	24 (100)	37 (100)	37 (100)	64 (100)	60 (100)	76 (100)	69 (100)	367(100)

[a]exclusive of revised proposals.
[b]column sums may not add up to 100 because of rounding off.

Table 3 shows the characteristics of AERC funded proposals by theme, geographical areas, linguistic distribution and grant size. It can be seen that in the early period, theme A (External Balance and Macroeconomic Management) and theme C (Financial Management and Domestic Resource Mobilization) were dominant. Subsequently from 1990 on, theme B (External and Internal Debt Management) has become relatively the most popular field. Finally, a new research theme AT (Trade, Trade Policy and Regional Integration) was added in 1991 and has grown since then.

Table 3. AERC: Characteristics of AERC funded proposals by themes, geographical areas, linguistic distribution and grant size (number and percentages per year, 1988-1994/95)

	1988	1989	1990	1991	1992	1993/94[a]	1994/95	Total
Thematic Breakdown								
Theme A	4 (40)	6 (46)	6 (33)	9 (23)	13 (32)	15 (25)	11 (28)	64 (29)
Theme B	—	1 (8)	6 (33)	19 (49)	12 (29)	14 (24)	16 (41)	68 (31)
Theme C	6 (60)	6 (46)	6 (33)	7 (18)	11 (27)	21 (36)	5 (13)	62 (28)
Theme AT	—	—	—	4 (10)	5 (12)	9 (15)	7 (18)	25 (11)
Total[b]	10 (100)	13 (100)	18 (100)	39 (100)	41 (100)	59 (100)	39 (100)	219 (100)
Geographic Breakdown								
Anglophone outside Nigeria	10 (100)	10 (77)	10 (56)	18 (46)	22 (54)	28 (47)	19 (49)	117 (53)
Nigeria	—	1(8)	7 (39)	15 (38)	11 (27)	22 (37)	14 (36)	70 (32)
Francophone	—	2 (15)	1 (6)	6 (15)	8 (20)	9 (15)	6 (15)	32 (15)
Total[b]	10 (100)	13 (100)	18 (100)	39 (100)	41 (100)	59 (100)	39 (100)	219 (100)
Linguistic Distribution								
Anglophone	10 (100)	10 (77)	17 (94)	33 (85)	32 (78)	50 (85)	33 (85)	185 (84)
Francophone	—	2 (15)	1 (6)	6 (15)	8 (20)	9 (15)	6 (15)	32 (15)
Lusophone	—	1 (8)	—	—	1 (2)	—	—	2 (1)
Total	10 (100)	13 (100)	18 (100)	39 (100)	41 (100)	59 (100)	39 (100)	219 (100)
Grant Size								
Small	1 (10)	2 (15)	2 (11)	12 (31)	11 (27)	19 (32)	8 (21)	55 (25)
Full	9 (90)	11 (85)	16 (89)	27 (69)	30 (73)	40 (68)	31 (79)	164 (75)
Total	10 (100)	13 (100)	18 (100)	39 (100)	41 (100)	59 (100)	39 (100)	219 (100)

[a]Grants offered January to March 1993 were coded under 1993 although they were issued in the fiscal year 1992/93. The number of grants appearing under 1993/94 arise from presentations at three research workshops over a period of fifteen months. This change reflected a switch from calendar year to fiscal year.
[b]Column sums may not add up to 100 because of rounding off.

It should be noted that these trends reflect only imperfectly the changing interests of researchers for different thematic areas since the total number of proposals accepted for presentation at the biannual workshops has recently been capped at 60 with an attempt to have about 15 in each group. Since in any given year and group, a stock of interim and final reports is ready for presentation based on past funding, it means that the number of slots available for presentation of new proposals is obtained as a residual. Of course, over time, this will average out and

future ratios will reflect the "effective demand" by researchers for each of the four fields. Table 3 also shows the geographic breakdown of the proposals. It appears to reveal a relatively sound linguistic balance between proposals focused on anglophone countries outside Nigeria, Nigeria, and francophone countries. The share of grants extended to francophone researchers appears to have reached a steady state of about 15%. Finally, the relative share of small grants has increased over time from about 10% in 1988 to a high of about one-third in 1993/94.

Table 4. AERC: Some characteristics of researchers by Year 1988-1994 (actual number and percentages per year 1988-1994)

	1988	1989	1990	1991	1992	1993	1994	Cumulative Totals 1988-94
1. Qualifications:								
PhD	11 (55)	12 (57)	21 (66)	42 (67)	37 (66)	57 (64)	32 (57)	212 (63)
MA	9 (45)	9 (43)	11 (34)	21 (33)	19 (34)	32 (36)	24 (43)	125 (37)
Total researchers	20 (100)	21 (100)	32 (100)	63 (100)	56 (100)	89 (100)	56 (100)	337 (100)
2. Gender:								
Male	17 (85)	20 (95)	30 (94)	57 (90)	55 (98)	78 (88)	53 (95)	310 (92)
Female	3 (15)	1 (5)	2 (6)	6 (10)	1 (2)	11 (12)	3 (5)	27 (8)
Total researchers	20 (100)	21 (100)	32 (100)	63 (100)	56 (100)	89 (100)	56 (100)	337 (100)
3. Policymakers/Academics								
Policymakers	4 (20)	5 (24)	3 (9)	8 (13)	6 (11)	7 (8)	3 (5)	36 (11)
Academics	16 (80)	16 (76)	29 (91)	55 (87)	50 (89)	82 (92)	53 (95)	301 (89)
Total researchers	20 (100)	21 (100)	32 (100)	63 (100)	56 (100)	89 (100)	56 (100)	337 (100)
4. First time or Repeat researchers								
Repeat researchers	-	5 (27)	8 (26)	32 (50)	36 (62)	56 (65)	29 (52)	166 (50)
First time researchers	20 (100)	16 (73)	24 (74)	31 (50)	20 (38)	33 (35)	27 (48)	171 (50)
Total researchers	20 (100)	21 (100)	32 (100)	63 (100)	56 (100)	89 (100)	56 (100)	337 (100)

Table 4 examines some key characteristics of researchers over time. In terms of qualifications, the proportion of investigators with PhD degrees increased gradually from 1988 to 1990-1993, reaching what appears to be a steady state of about two-thirds of the total number of researchers (the slight drop in the proportion of PhD researchers in 1994 is probably not significant of any trend). Conversely the proportion of researchers with MA degrees gradually dropped to around one-third of the total. With regard to gender composition, Table 4 highlights the very weak representation of women in the pool of AERC researchers. Unfortunately there does not appear to be any evidence of an upward trend. The underlying cause appears to be the very low historical supply of African women with MA or PhD degrees in economics. This is an issue that AERC is much aware of and trying to tackle as best it can, for example through a workshop on gender issues, specifically on graduate training in economics for women and women working as professionals economists, held in December of 1994 in Nairobi. In addition, AERC is encouraging women to participate in its Collaborative MA Programme. The total number of students supported through this program (including the Joint Facility of Electives) is 206 out of which 26 are women. Gradually the proportion of women trained in economics has to increase if the gender gap is to be bridged. Clearly the first step is to focus more intensively on the training of women.

One of the objectives of the research program is to directly involve policymakers as much as possible in research projects by teaming up with academics. Table 4 would seem to indicate that AERC has not been overly successful in attracting policymakers and involving them in joint research projects. If any trend can be perceived, it is a downward one with less than 10% of the present pool of investigators consisting of policymakers. Table 4 throws some light on another relevant issue, namely the extent of turnover among researchers and the involvement of first-time researchers. It can be seen that the proportion of first-time investigators has declined from approximately three-fourths in 1989-90 to about half in 1994. The fact that the share of first-time investigators has not fallen further is a good sign since it reveals a capacity to continue to attract new researchers into the network. This capacity to attract new researchers is obviously closely linked with AERC's ancillary training activities (such as the MA training program, the support of PhD candidates and PhD theses, and technical seminars) that keep adding to and replenishing the pool of potential researchers and AERC research applicants. An added reason for allowing AERC to continue to attract and make room for the new researchers was the orderly disengagement of some of the more seasoned investigators from thematic research because of their involvement in other AERC research modalities or other research endeavors made possible by their AERC connections.

Table 5. AERC: Number of individual researchers receiving one or more grants (1988-mid 1995)

No. of grants received	Type of grant	No. of researchers
1	Grant, either small or full	63
2	Grants, small and then full	53
3	Grants, small, and then full, full	28
4	Grants*	14
5	Grants*	2
6	Grants*	3
7	Grants*	1
	Total number of researchers	164

*The grants offered can be any combination of small and full.

Table 5 gives the distribution of researchers by number of grants received. Out of a total of 164 different researchers in the total cumulative pool between 1988 and mid-1995, 63 researchers received only one grant (either small or full); 53 received two grants each; 28 obtained three grants each and 6 individuals obtained between five and seven grants each.

Table 6. AERC: Geographic Distributions of Thematic Research Projects (1988 to 1994/95)[a]

Country	1988	1989	1990	1991	1992	1993/94	1994/95	Total
Ghana	2	1	3	1	9	10	3	29
Malawi	1	0	2	0	1	1	1	6
Tanzania	4	1	0	8	4	5	4	26
Kenya	1	2	1	5	3	2	6	20
Zimbabwe	1	0	1	0	2	0	0	4
Uganda	1	1	0	3	1	4	3	13
Rwanda	0	1	0	0	1	1	0	3
Botswana	0	0	0	0	0	2	0	2
Ethiopia	0	2	3	1	1	1	1	9
Côte d"Ivoire	0	1	1	4	3	6	0	15
Sudan	0	0	0	0	0	3	2	5
Zambia	0	2	0	0	0	0	0	2
Mozambique	0	1	0	0	1	0	0	2
Nigeria	0	1	7	15	11	22	13	69
Congo	0	0	0	0	0	1	0	1
Togo	0	0	0	2	0	0	0	2
Cameroon	0	0	0	0	3	1	2	6
Sierra Leone	0	0	0	0	1	0	0	1
Senegal	0	0	0	0	0	0	3	3
Benin	0	0	0	0	0	0	1	1
Total	10	13	18	39	41	59	39	219

[a]The geographic distribution is according to the countries being studied in the projects. With very few exceptions, the above classification should also correspond to the nationality or country of origin of researchers.

The geographical spread of grants by country of application (and corresponding essentially to the nationality of researchers), shown in Table 6, indicates a relatively balanced pattern. In particular, the rising number of grants extended to francophone researchers in the last three years corrects a previous, almost exclusive, emphasis on anglophone researchers. However, almost exclusive concentration of studies on Côte d'Ivoire, Cameroon and Sénégal within the francophone group needs to be noted.

Issues relating to the timing of the research cycle

A key issue relates to the expected and actual elapsed time for a typical proposal from initial submission to final reports and eventual ultimate publication. This can be considered as the gestation or maturation period of the thematic research product. The intent of the Secretariat appears to be to limit this gestation period to preferably one year and, only under exceptional circumstances, to have it be extended to, or beyond, 18 months. A survey of a sample of project files confirmed that the typical gestation period is less than 15 months from submission of revised proposals (accepted for workshop presentation) to final reports (see Appendix B for details).

A relevant question is whether the present typical length of the research cycle is appropriate. A relatively short cycle could encourage i) the selection of more narrowly focused and specified topics; ii) the use and application of well known techniques and models which may fit only imperfectly and correspond to the initial conditions and stylized facts of the African settings being investigated; and iii) the reliance on available but questionable data sets. In this sense, a short research cycle discourages risk-taking by investigators, in particular, as it relates to undertaking i) methodological innovations and specifications more reflective and representative of the underlying African reality rather than borrowing ready-made specifications and techniques originating in the North and designed to apply and correspond to the underlying conditions and institutions of developed countries; and ii) data-intensive studies relying on surveys, primary data-gathering and comprehensive and multiple data sources (such as the building of Social Accounting Matrices).

The gestation period of research projects intent on exploring new theoretical and methodological specifications and/or using a more inductive approach to generate new hypotheses based on large primary data sets would normally extend significantly beyond the present 15 months research cycle. Clearly, the length of time needed to complete research projects is directly related and linked to the choice of thematic areas determined by the Secretariat and the Advisory Committee. In general, the present four themes lend themselves to the submission of

proposals that can be completed within the recommended 15 months' cycle. Most of the topics that fall under these thematic areas tend to be fairly narrowly focused and amenable to investigation with the help of well-known (ready made) methodologies and techniques. The pool of researchers, as it were, can select recipes (models) from the cookbook (textbook) and apply them to the issues and countries being studied. The chosen thematic areas that have been in force ever since AERC's inception evolved out of an overwhelming need in sub-Saharan Africa to understand better and become more cognizant of the necessity of implementing stabilization and structural adjustment policies to restore a modicum of internal macro balance (through a reduction of the budget deficit) and external equilibrium (through an improvement in the balance of payments). If African policymakers and researchers were to enter into a meaningful dialogue with the Bretton-Woods institutions relating to the design and impact of adjustment measures, they needed to develop a research capability in this area.

Given the dismal underlying macroeconomic conditions prevailing in sub-Saharan Africa throughout the eighties, there is no question that the selected themes were the most essential ones at the time. In addition, as indicated before, by the mid-eighties the economic profession largely agreed on appropriate analytical tools to investigate stabilization and adjustment issues. There was also widespread agreement on the appropriate package (although not necessarily appropriate sequence and timing) of policies to restore equilibrium. Under the guidance – if not leadership – of the IMF, the World Bank and a number of Washington-based think tanks, the so-called "Washington Consensus" evolved and became the dominant paradigm. From the standpoint of African researchers, it meant that in addition to having access to an existing tool kit, they could also rely on a well tested policy orthodoxy that had been relatively successfully implemented in a large number of developing countries and transition economies.

A critical discussion and assessment of thematic areas is undertaken in the evaluation of the policy relevance of AERC research which follows in section IV. It is argued that the time is ripe for extending and broadening the existing themes, in particular by adding a new research nexus consisting of issues related to poverty, income distribution, employment, labor markets and human resources. One implication of taking these topics on board is that it would likely lengthen the average research cycle. We return to these and related issues in section IV of this report.

Issues related to the heterogeneity of the participants

In general, it does appear that the AERC thematic process and other research modalities cater to the heterogeneity of participants. The balance of grants be-

tween geographical and linguistic areas seems reasonable. Some francophone researchers felt that more of an effort could have been made to attract new francophone researchers into the network – particularly from poor countries such as Burundi, Burkina Faso, Niger, and Mali. They recognized the major challenge that this would have entailed. A key obstacle is the typical lack of command of English among many francophone scholars. It was suggested that AERC could be more pro-active in inviting young francophone economists to workshops and conferences as observers. The Consortium could also help provide better quality written translations of proposals (at all stages of the cycle) and encourage the submission of proposals by teams of francophone researchers combining more senior scholars from more advanced countries such as Côte d'Ivoire and Senegal with younger scholars from less advanced countries in the region. I certainly did not get the impression that the francophone workshop participants I talked to felt that they were in any way discriminated against as a group.

Cost effectiveness and changing composition of research modalities

The AERC cost structure is broken down into five functional categories: 1) General Management; 2) Program Management; 3) Research Program; 4) Publication and Dissemination; and, 5) Training Program (including Collaborative MA Program). The major trends to be highlighted between 1988 and 1994/95 are 1) the declining relative share of general management as program activities expand relatively to general support services from 13% of total expenditures in 1989 to 5% in 1994/1995 (see Table D.1 in Appendix D)[2]; 2) the sharply declining share of research program expenditures and concomitant rise in the share of the training program with the launch of the Collaborative MA Program and the increased share of Publication and Dissemination activities as the volume of completed final research papers grew and entered the pipeline for publications. The share of total expenditures of the research program fell from 52% in 1989 to 29% in 1994/95 while that of the training program (including the masters program) rose from 11% to 42% and that of publications and dissemination rose from 4 to 10% over the same period.

It is difficult to compare unit costs of research output over time because the portfolio of projects has changed significantly. Until 1992/93 all projects (except for one) were thematic. In 1993/94 new research modalities made their appearance (11 new non-thematic projects, including 8 individual studies under one collaborative project were launched) and in 1994/95 no less than 34 non-thematic projects were initiated compared to 39 thematic projects. (For detailed information, see Appendix D, top panel of Table D.2.) Likewise, the number of

new researchers involved in non-thematic projects went from zero in 1992/93 to 24 the next year and 42 in 1994/95 – most of them working on collaborative projects. (See Table D.2) Thus, 42 researchers out of a total number of 153 researchers (i.e. 27%) are presently involved in non-thematic projects.

It can be observed from Tables D.2 and D.3 that the cost per active research project has fallen monotonically from 1989 on, from above $34,000 per project to $25,466 in 1994/95 and the cost of peer review per researcher has dropped from $11,500 to just above $6,000 over the same period (see bottom of Table D.2). These trends are largely explainable by a) the larger number and proportion of researchers of non-thematic projects; b) the larger number of researchers per non-thematic project compared to thematic project; and c) the lower cost of peer review per non-thematic project. However, it should also be noted that the unit costs of thematic research per thematic researcher also appears to have fallen over time. Taking the total costs of thematic research including grants and meetings (given in the fourth panel of Table D.3) and dividing it by the number of new thematic researchers (in line 7 of Table D.2) the unit costs of thematic research per thematic researcher drops from 20.4 thousand in 1989, to about 18.5 thousand in 1992, and to 10.7 thousand in 1994/95. Clearly some scale economies, particularly as they apply to overhead, management and other cost items spread over a larger number of projects and researchers and a different composition of projects contributed to the above described downward trends. In short, the available indicators suggest an increasing cost effectiveness of research output throughout the life of AERC.

Assessment of the research process by network participants

As indicated previously, a total of 31 individuals were interviewed embracing members of the AERC management staff and Secretariat, resource persons in the different thematic groups, members of the Advisory Committee, and researchers participating in the workshop. (Table 1 gives the breakdown of characteristics of the individuals interviewed; and Table A.1 lists the names of the 31 individuals interviewed.) In conducting in-depth interviews, an attempt was made to elicit reactions in three different, yet highly interrelated, domains, i.e. a) the research process and cycle; b) research style and methodology and quality of AERC research over time; and c) policy relevance including the choice of thematic area. In the present subsection, we review the reactions of network participants as they relate to the first domain above. Reactions and comments by interviewees relating to the other two domains (research style and methodology; and thematic choice and policy relevance) are subsequently reviewed in Sections III and IV, respec-

tively.

To keep interviews as open ended as possible, the following general questions were raised at the outset: "Are you generally satisfied with the research process? Do you have any suggestions for improving the process without sacrificing the quality of the final reports? In particular, could the process be speeded up?" In what follows we quote from participants' reactions[3]:

Researcher A: "I am presently submitting my second proposal. I found the first experience very useful. I learned much about formulating a proposal and received useful comments at the workshops. Technical sessions could be lengthened to receive more feedbacks. It would also be helpful if one resource person would discuss the proposal with given authors on a one-to-one basis."

Researcher B: "I am presently submitting my second proposal on a completely different topic than the first one. I find the research process very useful. Researchers benefit from discussions and comments with very experienced researchers. This helped me focus my proposal. I have seen the process improve over time. There was more turnover among resource persons in the past than now. With essentially the same resource persons in each group during the research cycle from initial submission to interim and final reports, it ensures more continuity and consistency in the evaluation. I found the technical sessions very useful."

Researcher C: "The AERC Secretariat helped me greatly in providing relevant references and suggestions during the initial review process of my proposal."

Resource Person D: "I can think of three new features characterizing the research process since 1989/90: 1) In earlier years, virtually all inputs and comments during the workshop sessions came from resource persons but now other researchers are very active yielding a much denser structure; 2) there used to be a large number of papers where elementary errors were made; this has become unusual now and the entry level has clearly risen; 3) nonetheless the learning curve is still steep for new researchers from new countries. In general, I am very satisfied with the process. It is mainly in matters of detail such as format of proposals and style of presentation that improvements could be made. For example, we see evidence of tables being presented with no headings or no years. AERC should push its own house style format. This would help the probability of publishing."

Resource Person E: "Some decentralization in the research management would

be desirable. Senior African researchers could be selected in different specializations to act as (sub)research directors for given themes and topics. They could continue to reside in their own countries but would have to visit the AERC Secretariat at regular intervals (say every two months or so). This would help the process of widening the thematic areas and would reduce the load on the Research and Deputy Research Coordinators. It would amount to a delegation of responsibility. Senior researchers could also identify and encourage young researchers to submit proposals in given areas."

Researcher F: "Anglophone colleagues are much more forceful than francophone colleagues. Many of the latter do not yet feel comfortable with the workshop format. One real advantage of the research process is the literature and reference suggestions made by the Secretariat and, in some instances, the actual mailing of articles. Many francophone countries have practically no English references available. To reduce heterogeneity, AERC should try to merge in its training function the francophone and anglophone graduate programs."

Resource Person G: "Researchers should be required to prepare written responses to referees. Previously resource groups were making optional suggestions that have now become a contract with their researchers. All initial proposals should be distributed among all resource persons within each thematic group. This would have two advantages: 1) to reduce the screening load on the Research Coordinator; and 2) to insure higher quality control."

Researchers I and J: "The process has improved over time and works well now. Problems arose, in the past, when resource persons were rotated off and into given groups. It is my impression that it takes longer to review proposals now than it did previously. There are researchers who have not received feedbacks six months after submitting their initial proposals. There can also be a very long delay between a final report and ultimate publication as an AERC Research Paper. We completed our final report in May 1992 and only received comments from external referees in May 1995."

Resource Person K: "The research process works well. Peer review is a democratic process. All proposals should be in by say January for a May-June workshop and brought to the attention of a group of senior researchers for screening. Different thematic groups have different cultures and resource people. Researchers face different conditions and criteria. The quality of proposals may vary from one group to another. Some groups have more mature people than others."[4] One way of helping African capacity building is to identify a number of African insti-

tutions that could serve as centers of excellence. In turn, these centers could be provided with resources in the form of PCs and libraries. AERC could also serve as a clearing house for individuals with sabbaticals. It could help find the right slots for nonAfrican and African academics and thereby enhance capacity building at home."

Resource Person L: "Workshops are too long and could be reduced by one and half days by cutting their "free day" and shortening the organizational meetings."

Researchers M & N: "In general, we are satisfied with the process. One suggestion is that only one resource person (acting as somewhat of a tutor) be in charge particularly at the interim report stage. This person should gather the reactions of other resource people and negotiate in their name and be responsible for drafting the contract with the researchers."

Researcher O: "I have already completed three final reports including one article in the *Journal of African Economies*. I find the process extremely transparent. It is a very good process; researchers face people with lots of experience. It is much harder to get proposals through AERC at the present time than previously. In the past a number of proposals would be accepted without revisions. My first proposals was accepted as a final report during the interim report stage. Every one of my proposals has been in the same group. My group has seen very little turnover over the years. The process has been discouraging to some researchers who have turned to consultancy work and have been lost to the pool of researchers."

Resource Person P: "When the Consortium started, the processing of proposals (including the initial screening) was totally done within the Secretariat. It became clear that the Secretariat could not cope with the increase in submissions and addition of one new thematic area (AT). The Secretariat had to rely on resource persons to act as referees of initial proposals. We have reached a stage now where there may be need for resource persons to be more closely involved with the whole process, including the selection of the workshop agenda. Perhaps we should move towards a kind of NBER system. A new process could be formalized. For instance, the Secretariat could delegate to some senior people the refereeing and screening of proposals including the preparation of the agenda in different topics or eventually groups. These senior people (acting as group leaders) would meet regularly in Nairobi to insure common standards. A real danger at the present time is that groups become too independent and use different stan-

dards. The Secretariat should decide when to move in this "delegation-mode" as the number of proposals submitted increases and as thematic areas are broadened. Some researchers, particularly from new countries previously not well represented within AERC, need more "handholding" (for instance, somebody from Burundi). On the other hand, repeat candidates who have been successful in the past need significantly less handholding. Capacity building in some countries is much more difficult than in others and may require somewhat different modalities than the ones AERC relies on presently. Recently, two new modalities have been added, i.e. comparative and collaborative research projects. Both types need strong academic leadership. Collaborative projects, in particular, could benefit from the interaction between non-African and African researchers."

Resource Person Q: "In certain thematic groups one repeats what has been done previously. In general the process works very well. We often see weak initial proposals and interim reports that after having been initially rejected are subsequently revised and accepted. Many researchers arrive with weak projects and after being subjected to the discipline of workshop presentation and discussion, leave with new ideas, more refined methodologies and a clearer view of what they want to investigate. I would be somewhat fearful of a longer than 15-month research cycle. Although improvements in data are absolutely crucial (such as building SAMs and field surveys), it might be possible to lengthen the research cycle in stages. For example, a project could be designed so as to include more than one phase. The second phase could only be started after the first phase had been completed. AERC would not provide the funding for the second stage until the final report of the first phase was acceptable. Alternatively, one could think of complementary projects to be undertaken sequentially."

Resource Person R: "In general, the process works fairly well. The load on the Secretariat is getting very heavy. Resource people could assist the Secretariat earlier on, i.e. at the screening stage. The Secretariat should make much greater use of resource people during early stages."

Resource Person S: "The process works well except perhaps towards the end of the cycle when I would claim that there is too much handholding between the final report stage and the AERC Research Paper stage. In a more general sense, too much handholding may encourage a state of dependency among researchers. Researchers, in some instances, do not defend their case strongly enough to resource people. Gradually researchers have to become more assertive and independent. It is encouraging to notice the much greater participation in discussion by the peer group. The quality of AERC research has undoubtedly improved.

The Bretton Woods Institutions feel increasingly that something can be learned from AERC papers. They take them seriously."

Resource Person U: "The product cycle is too short for the present themes and papers being produced."

III. Assessment of research methodology, style and quality over time

The evaluation of research methodology and quality is an inherently difficult and somewhat subjective task. The following informational inputs were used in the present evaluation:

1. in-depth interviews with AERC network participants (as previously described);

2. a review of a sample of thematic projects;

3. a somewhat more cursory review of titles and other characteristics of projects from the full data set from 1988 to the present;

4. an analysis of research quality improvement based on AERC research papers by repeat researchers (to answer the question of whether quality improvements can be noticed between the first and subsequent AERC research papers produced by the same authors); and,

5. a summary reading of a sample of publications generated by AERC research appearing in journals and books.

Assessment of research methodology and quality by network participants

While no formal written questionnaires were used in the interviews, a series of related questions were raised selectively during the interviews in an attempt to elicit participants' reactions regarding their perception of different dimensions of research quality, i.e. what is your impression of the quality of AERC's research output over time? Is the research methodology and approach underlying the proposals appropriate? In particular, are the stylized facts characterizing these

studies sufficiently reflective of and consistent with the underlying institutional and structural reality of the countries being investigated? Do research projects pay sufficient attention to the possible weakness and unreliability of the data they rely upon? What additional incentives (including the possibility of the payment of a bonus fee) might you suggest to encourage further dissemination of AERC research output – more particularly in published form (books and journal articles)? In what follows, we quote from participants' reactions.

Researcher A: "The quality of data in Africa is poor. AERC should help improve the statistical capability and become the focal point to organize efforts with the World Bank and other donors to build a statistical capability to generate more reliable information."

Researcher C: "On the whole, I have noticed appreciable improvements in the quality of research over the years. On the issue of data, I tried to exhaust existing sources of data. I know people at the Central Bureau of Statistics as well as in the Customs Office. I discussed with them the sources of data, how they were generated and how reliable they are. As a result of these discussions, I dropped some items (in my proposal). It is essential to look at data more critically. The more critical you are, the more variables you may drop from your intended analysis. Perhaps AERC should look at an organization within the Common Market for Eastern and Southern Africa that tries to harmonize data collection and reporting. This organization is supported by the European Economic Community. In my own country, no trade statistics have been published since 1990 because of lack of funds. These data are available in computer printout form but are not easily accessible."

Resource Person D: "The quality of research has improved markedly over the years. On the issue of data, AERC has taken a small step in looking at data more critically by funding a proposal to look at Nigerian data."

Researcher F: "The weakness and unreliability of African data is a critical issue. A number of policy recommendations flow from analyses based on wrong data. AERC contracted out a study by Ariyo on Nigerian data. This was only one early step but unfortunately AERC stopped there and did not follow up. AERC could go further in its dissemination of research output. For example, AERC reports, special papers and executive summaries should be sent to chief country economists and heads of divisions at the World Bank and the IMF."

Resource Person G: "AERC researchers do not spend enough time looking at data critically. Underlying data are the fundamental building blocks for relevant

analysis and policy recommendations. Ways have to be found to improve the quality of data. Before pushing the policy button, a prior investment in data collection may be required. This may call for a longer research cycle, for example for proposals based on SAMs. On the issue of research output, the weight of publication is much less in the African context than it is in developed countries. AERC might consider adding some incentives for getting the research output into journal publications."

Researchers I and : "Our present proposal is clearly model-driven. We wanted to apply econometric time series techniques that we learned from the Econometric Technical Workshop. The idea of a publication bonus to encourage researchers to distill journal articles out of their final reports is a very good idea. It would provide the necessary incentive and reward researchers for the additional time required to transform their final reports into potential journal articles."

Resource Person K: "Researchers have to know and understand the institutional framework and stylized facts that characterize the issues they are exploring in their own countries. On a personal note, I studied in North America and learned a lot about central banking in the US and Canada but practically nothing about central banking in my own country. I tell my students to look at institutions as they operate in their own country. My basic philosophy is that you start with the underlying institutional framework and stylized facts and then design or choose an appropriate model rather than the other way around. We have had a number of cases where researchers started from an existing model and stylized facts reflecting a very different underlying reality than that of the country they were proposing to study. To some extent, the peer review system eliminates this type of mismatch. Among the AERC research network and workshops, we find two kinds of African researchers, i.e. old hand with maturity and young Africans with solutions. In general, the quality of data is suspicious. The results of empirical research should be carefully interpreted. Monetary data are better than others. Part of the solution is to build a much better set of macroeconomic data perhaps through panel studies. In many cases, we have to start from scratch. AERC shies away from field work because it takes too long and costs too much. Projects that require a prior investment in data collection and generation are probably needed but should be done with the help of very senior people. For those types of projects, the research cycle should be lengthened."

Researcher O: " AERC is concerned with the problem of the poor quality of African data and has commissioned a paper by Ariyo. AERC might encourage more proposals based on either existing surveys or new surveys that are part and

parcel of the proposal. This issue could be raised with donors and, in some instances, researchers could piggy back on, or tailor their research to surveys being undertaken by, for example, the World Bank. In general, monetary data are good enough while national income accounts data are quite suspicious."

Resource Person P: "The Consortium has not confronted directly issues related to research methodology and approach. Many proposals are based on hypotheses and models that do not correspond to the underlying reality and stylized facts of the countries being explored. Each project should attempt to describe the initial conditions and take into account the policy regime including many quantitative restrictions that impede the functioning of markets. On the issue of improving the quality of data, AERC could take a more proactive role. However, when this issue was first raised, time and cost were the foremost obstacles. This appears to be changing now. More survey data are becoming available. The Survey Methodology Workshop should provide the necessary tools to researchers who want to base their research on surveys. The project on Nigerian data commissioned by AERC was not successful."

Resource Person R: "My colleagues and I believe that the economic conditions should be enlightened in the proposals. Researchers should be encouraged to know the underlying realities, institutions and structure of their respective economies better. Some researchers have come through the Econometric Technical Workshop and have learned new techniques that provide the motivation for their research proposals. In other words, they let techniques dominate what they want to do. The underlying economic picture rather than techniques should be paramount."

Resource Person S: "Data are important but there is a real risk that AERC could spread itself too thin among too many different activities. I know of other examples of similar Consortia (as AERC) in other parts of the developing world that tried to do too much and lost their focus. The capacity-building process is a gradual and sequential one. Perhaps in the future, the AERC could consider funding projects that are more data-intensive but not right now."

Resource Person U: "The idea of a bonus to encourage researchers to prepare papers suitable as journal articles is a good one. Researchers respond to carrots."

Evaluation of research methodology and quality over time

There are many dimensions that enter into the evaluation of research quality. In the present evaluation, we combine these dimensions into, and discuss them under three general headings: 1) Scope; 2) Methodology and Approach; 3) Policy Relevance and Choice of Thematic Areas. Clearly, these three areas are highly interrelated and any number of alternative nomenclatures could have been adopted. In the present subsection, we address research scope and methodology, while leaving the evaluation of policy relevance and appropriateness of AERC thematic areas to be discussed in the next major section IV of this report.

Scope of research

At the most general level, it is instructive to review the changes that have occurred in the portfolio of thematic research grants over time. An examination of the list of titles and specific topics addressed by the research grants, chronologically from 1988 to the present, suggests strongly that the scope of research has broadened and become more diversified over time. On the basis of an informal inventory of grants by topics and subtopics and by year that I prepared for each of the four thematic areas, the following trends were observed. In group A (External Balance and Macroeconomic Management), the great bulk of the projects (i.e. about 56% by my count) during the earlier stage (1988-1992)[5], dealt with various aspects of exchange rates including computations of real exchange rates and their impact on trade and the balance of payments. In contrast, since 1993, only about one-third of the projects in group A were specifically focused on exchange rates, while about one-fifth dealt with agricultural supply responsiveness issues. Furthermore, two essentially new topics made their appearance, i.e. studies of the parallel foreign exchange market (3 projects or about 10% of the total), a nexus consisting of employment, labor market, and poverty and income distribution issues (also 3 projects)[6] and one computable general equilibrium (CGE) model of CFA countries.

The creation of a new thematic group (AT) on "Trade, Trade Policy and Regional Integration" flowing out of group A in 1991 is additional evidence of the diversification trend in the portfolio of projects. In particular, some recent projects moved away from a previous focus on intra-national issues to tackle international trade issues, i.e. "Africa's Trade and Growth Prospects in an Interdependent World" and "Empirical Evaluation of Trade Potential in the Economic Community of West African States".[7]

An overwhelming proportion of the projects in group B (External and Internal Debt Management) comes under the broad heading of Fiscal Issues and Policy – about two-thirds during 1989-91 by our count (i.e. 16 out of 24). Although this broad theme remained predominant in the subsequent stage (1992-94) some evidence of diversification is noticeable, i.e. two grants on local government finance; two on debt equity swaps; three on capital flight; a CGE analysis of the macroeconomic effects of the value added tax in Nigeria; and a model looking at the macroeconomic implications of demographic trends in Kenya. Even within the main fiscal set of projects, one can notice a broadening scope to explore the interaction between both fiscal and monetary phenomena (for example the project on "Choice of Optimal Mix of Fiscal and Monetary Policy Rules: Evidence from a Model of Nigeria" and a very recent project on "Government Size and Economic Growth in Africa".)

In group C (Financial Management and Domestic Resource Mobilization), we notice an early concentration during 1988-91 on research dealing with the informal financial market and linkages between the formal and informal financial markets; and money and monetary policy evolving into a much greater diversification towards such themes as investment determination and capital formation (about 10 new grants in this subset during 1992-94), agricultural credit, bank performance, non-bank financial institutions and transaction costs[8]. In many respects, group C probably possesses the most diversified portfolio of any of the groups at the present time.

The next step in the evaluation of the scope of research is to compare the research output of the same researchers over time. This was undertaken in Appendix C where the quality of more recent monographs was compared to that of earlier reports for six sets of authors of multiple (repeat) AERC research reports. The main findings can be summarized as follows: (for specific details, the reader is referred to appendix C). First, a broadening trend in terms of scope can be observed over time. This broadening takes different forms. In some instances it is a broadening over the space of export commodities being analyzed as in the paired comparison between monograph I.A and I.B reveals. The more recent monograph embraces several potential export items rather than just coffee, which is the domain of the first report. In other instances, the geographical scope is expanded as authors move from a country study to a comparative three-country study (i.e. monograph V.B vs. monograph V.A). Still in other instances, the broadening is over the policy space. For example, monograph IV.A focuses on the relationship between real interest rates and savings and between real lending rates and the demand for credit while the subsequent monograph IV.B expands the analysis to embrace fiscal and foreign exchange considerations in addition to factors influencing savings. The second report explores whether it is the savings,

fiscal or foreign exchange gap which is the binding constraint on capacity growth in Kenya. Another example of the widening over the policy space is provided by a comparison of three research reports by the same authors moving gradually from investigating the impact of higher real interest rates on savings and investment in the first monograph (VI.A), then to a more detailed investigation of the impact of financial liberalization and deregulation on the Nigerian banking system in the second report (VI.B), and finally to an analysis in the third study (VI.C) of the determinants of the transmission of savings mobilized by the Nigerian banking system into investment and the potential importance of such channelling on economic growth.

Methodology

A first observation, at the most general and subjective level, is that the overall quality of research has improved over time. This is the strong consensus reached by network participants – as their detailed reactions reported in the preceding subsection testify. This is a judgment I strongly concur with, as much of the evidence that follows should bear out.

A second observation is that very few studies are methodological, per se, in the sense that they address methodological or theoretical issues directly and attempt to make methodological contributions, i.e. push the frontier forward. In the total set of 219 AERC thematic grants extended since 1988, there is at best only a handful of such proposals. The overwhelming majority applies existing techniques and models to issues either directly or indirectly related to policy within the context of Africa. In this respect, the typical research proposal adopts an essentially deductive approach.

Hypotheses are often borrowed from the literature and, in a number of instances, somewhat uncritically tested with the help of available African data sets. This modus operandi is repeatedly highlighted in the responses of interviewees, for example:

> "Our present proposal is clearly model driven. We wanted to apply econometric time series techniques that we learned from the Econometric Technical Workshop." (Researchers I and J); "Researchers have to know and understand the institutional framework and stylized facts that characterize the issues they are exploring in their own countries... My basic philosophy is that you start with the underlying institutional framework and stylized facts and then design or choose an appropriate model rather than the other way around." (Resource Person K); "Many proposals are based on hypotheses and models

> that do not correspond to the underlying reality and stylized facts of the countries being explored." (Resource Person P); and, "My colleagues and I believe that the economic conditions should be enlightened in the proposals. Researchers should be encouraged to know the underlying realities, institutions and structure of their respective economies better. Some researchers...let techniques dominate what they want to do. The underlying economic picture rather than techniques should be paramount." (Resource Person R).

Whereas the above assessment may apply to a significant set of AERC thematic projects, one should be very careful not to infer that this assessment applies universally to the full set of projects. In fact, the fairly large number of projects on informal financial markets and linkages between informal and formal financial markets in different African countries provides an excellent counter-example of what I would call inductive-type research. The typical procedure followed by investigators in this area consisted of deriving an accurate representation of the stylized facts (from the bottom up), largely on the basis of surveys and field studies. In turn, the initial hypotheses generated by these surveys and field work were further refined and (in some cases more formally) tested in follow-up projects. Two sets of AERC Research Reports focused on the functioning of the informal financial market and links between the latter and the formal financial market by repeat researchers were evaluated in some detail in Appendix C (see Monographs II.A and II.B on Ghana; and III.A and III.B on Malawi, respectively) and provide detailed information on the methodology used by these studies. A study by Dejene Aredo describing the performance of "Iddirs" (i.e. savings associations in Ethiopia) is another example of such a study conducted from the ground up.

It is my impression that the above set of studies has been widely referred to in the development literature dealing with credit as they represent original contributions to a better understanding of the operation of financial markets in the African context. An inadequate understanding of local institutions and obstacles to the operation of markets (such as quantitative restrictions, barriers to entry and other causes of fragmentation) can lead to model misspecifications, particularly if the adopted model is largely neoclassical in nature and was designed to fit the case of developed economies. A few such cases were observed, for example models used to determine endogenously interest rates (exchange rates) when, in fact, there were periods in the countries under consideration during which these rates were exogenously set by the government. The new institutional economic literature emphasizing the role of institutions in affecting transaction costs provides an important complementary body of theory to the neoclassical paradigm and deserves to be more fully exploited by African researchers.

The preceding somewhat critical comments regarding an overly deductive approach to research followed in a number of AERC projects need to be qualified and placed in their proper historical perspectives. At the outset, the focus and the first priority of AERC research had to be on the analysis of macroeconomic policies and their impact on stabilization and structural adjustment. During this stage it was essential to generate, within the context of Africa, empirical estimates of the likely effects of these policies and to sensitize researchers and policymakers to the critical importance of these policies if equilibrium was to be restored. It was only natural that researchers would turn to employing standard and generally accepted theoretical models that had wide applicability. As researchers "learned by doing" and as policymakers gained more experience and maturity, they could gradually move towards studying and addressing structural issues such as the more specific characteristics of markets and agents and the political economy of the policy making process in their own countries that are critical to a sustainable long-term growth process.

In other words, a natural evolutionary process of research – under the circumstances facing Africa in the late eighties – entailed shifting gradually from a deductive to a more inductive style of research focussing on describing and capturing better the stylized facts characterizing the African environment. This shift of emphasis has been clearly understood and encouraged by AERC as evidenced, among others, by its attempt to enhance researchers' skills through technical workshops (such as on survey methodology and CGEs) as well as through the delineation of new conceptual issues in plenary sessions. All this is reflected not only by the financial sector policy projects, previously referred to, but also by other projects analyzing in greater institutional detail the operation of foreign exchange markets (such as in Ghana and Nigeria).

Additionally, as previously mentioned, there is a strong consensus among network participants and by anyone who has ever undertaken empirical research on sub-Saharan Africa, that the quality of data is unreliable (somewhat less so for monetary data) and that a major effort to improve it is essential. The specific issue with regard to the AERC Research Program is that there may be a tendency for researchers to accept and use secondary data sets somewhat uncritically, with the possible consequence that the results of the empirical analyses could be flawed (if based on erroneous data) and policy recommendation suspect. The key question from the standpoint of the Consortium is what role – if any – it should play in contributing to an improvement in the quality of statistical information, or at least in raising the awareness of researchers of the importance of critically scrutinizing data used in empirical research.

Clearly, given the costs of data collection and gathering, it is totally unrealistic to suggest that AERC should play more than a marginal role in the actual produc-

tion of statistical information. However, it could encourage investigators a) to look more critically at the underlying (presumably secondary) data sources they use in their own research; b) to make greater use of existing surveys and, in some instances, design and run their own surveys (evidently this is a move that AERC is already anticipating as the recently held workshop on survey methodology would suggest); and c) to formulate proposals that are more data-intensive (such as the building of SAMs). The last two points above (b and c) are directly linked with the choice of the major themes of research and the length of the research cycle. We return to this set of issues in section IV.

Fourth, the evaluation of the quality of research by repeat investigators in Appendix C indicated that, typically, the methodology and content of later monographs is based and built upon that of earlier studies (compare, for example, Monograph III.V and III.A and the pair II.A and II.B). In our evaluation of these last two research reports in Appendix C we concluded that these two studies provide an excellent example of the benefits of a subsequent project based on and building upon earlier work. The second study is a direct continuation of the preceding one and yields extremely relevant policy suggestions that would (could) not have been derived without such a second stage (follow-up) grant.

Sequential projects by the same author(s) also tend to rely on somewhat more sophisticated and transparent methodologies. In short, the above tendencies would suggest that a "learning by doing" process applies to network investigators.

Still another trend that can be observed is the somewhat greater proportion of projects in recent years relying on a general equilibrium rather than a partial equilibrium framework. For example, at the last AERC Workshop, five macroeconomic and/or CGE models were presented (proposals A.9, A.13, B.2, D.11, and B.14). Here, again, the planned Technical Workshop on CGEs signals that the AERC welcomes this development.

Publication in a reputable journal or review is another important and relatively objective indicator of research quality. Acceptance by good journals is based on a strict refereeing process that is often anonymous. The AERC research output appearing in high quality journals in recent years has increased very markedly. One can almost speak of a quantum leap, albeit from an extremely low base of practically no such publications before 1993. Since then there has been the notable publication of the special issue of *World Development* (Vol. 22, No. 8, August 1994) on "Macroeconomic Policy and Growth in Africa: Some Research Supported by the African Economic Research Consortium". This issue contains eleven articles by network participants. The following quote by Anne Gordon Drabek in her preface to the special issue is enlightening:

> "At the request of the participants in the Workshop, the facilitators...agreed that the papers should be considered for a special issue of this journal. The facilitators and participants felt that a special issue representing a selection of research emanating from the AERC research process would provide an excellent challenge for the researchers and an opportunity for the readership of this journal to become familiar with the work of AERC. It was made clear that no concessions would be made in terms of quality standards... The directors and editors of *World Development* hope that this AERC Special Issue will signal the beginning of a new trend – that more African economists working in Africa will succeed in disseminating their research in the most widely read and highly regarded journals in the economics profession." (*World Development*, Vol. 22, No. 8, August 1994, p. 1104)

Other recent publications worth signaling are: Dejene Aredo, "The Iddir: A Study of an Indigenous Informal Financial Institution in Ethiopia", *Savings and Development*, Quarterly Review No. 1, XVII, Milan, Italy; M. S. D. Bagachwa and A. Naho, "Estimating the Second Economy in Tanzania", *World Development*, Vol. 23, No. 8, 1995; and, Eno Inanga and Chichocie Emenuga, "Effects of Capital Gains and Dividend Taxes on Returns on Equities in the Nigerian Capital Market", *World Bank Economic Review* (forthcoming 1995). Finally the first two issues of a new journal, the *African Journal of Economic Policy* (June and December 1994) were exclusively devoted to articles written by network participants. In addition to published journal articles, the AERC Research Paper series (34 reports have been published so far) is growing in stature. Senior IMF and World Bank officials have told me that these reports circulate and are consulted in their institutions and taken increasingly seriously.

The AERC has done an outstanding job of facilitating and promoting the process of publication and dissemination of its research output. One additional suggestion that I floated with researchers was the possibility of a bonus fee tagged on automatically to research grants. The purpose of the fee would be to compensate investigators for the time needed to convert their final reports into the submission format for articles expected by reputable journals. This suggestion was universally endorsed by the sample of participants that were interviewed (for details, see earlier section).

IV. Assessment of policy relevance and choice of thematic areas

In addition to the same inputs as were previously mentioned and used in connection with the evaluation of the research process (in section II) and the assessment of the research methodology (in section III), the present evaluation of policy relevance and the choice of thematic areas in AERC research also relied on a) the policy involvement questionnaires circulated last year to 180 researchers and yielding 47 responses; b) various evaluations prepared following the recent senior policy seminar (including an examination of the questionnaires filled out by 25 participants); and, c) a very recent report on "The AERC: Some Thoughts on the Policy Relevance and Impact of Research" (May 1995) that is based on the previous two sets of questionnaires, in addition to a look at research proposals submitted for consideration at the AERC workshop in December 1994 and informal conversations the author of the above report had over the last several years with network participants.

We start this evaluation with the responses and reactions of network participants.

Assessment of policy relevance and choice of thematic areas by network participants

Here again a series of related questions were raised selectively during the interviews to elicit participants' reactions regarding their perception of the different aspects of policy relevance and the choice of thematic areas. Some (and in a few instances all) of the following questions were raised during the interviews:

Do you feel that the present process goes far enough in insuring that the research leads to operationally-useful policy recommendations? What modifications (improvements) would you suggest to enhance the operational usefulness of proposals and bringing the results of the research to the attention of policymakers? Would it be desirable to enter into a dialogue with policymakers in the process of formulating proposals and/or during any of the stages from

initial submission to final report? Do you think that the present set of thematic areas is the most relevant and important one for AERC for policy-oriented research at the present time? Do you have any suggestions for changes in the portfolio of thematic areas, including new themes?

Researcher B: "The present thematic areas are very appropriate. The Special Paper by T. Ademola Oyejide commissioned by AERC on supply response provided the necessary impetus for my proposal[9]. Other such special papers have provided similar impetus to other researchers."

Researcher C: "Throughout the existence of AERC the emphasis has been on policy relevance. In my own case, I contacted some economists in the Ministry of Agriculture and other agencies in connection with my project. Seminars between researchers and policymakers on ongoing and completed research projects covering all thematic areas by country are extremely useful. This gives the opportunity for researchers and policymakers to interact at the country level. Regarding the themes of research, a topic that needs to be added is an analysis of the causes of poverty. In many of our countries crime is highly correlated with poverty."

Resource Person D: "Different thematic groups have different cultures depending on the composition of the resource persons involved. Some groups function well by being supportive of new research proposals and operate somewhat like a PhD committee in managing these proposals to improve them. Other groups operate differently. This is reflected by the different rates of rejection of new proposals among the different groups. In one group, the atmosphere tended to be confrontational in the past. This may have led to fewer proposals being submitted to that group. Potential researchers are aware of the possibility of differential treatment. On the question as to whether the present set of thematic areas is the most appropriate one, I have a mixed reaction. On the one hand, the present set is somewhat narrow. On the other hand, there is a risk that AERC could move too fast and too widely into new topics. There is a danger that if one gets out of the present core of thematic areas, the quality control of proposals in new additional topics may be difficult to exercise and could lead to shoddy products. However, some extension of thematic areas is probably desirable. There is already an ongoing move towards studying poverty. The ground is being set for such a move as the recent survey methodology and CGE workshops would suggest. There is much confusion about what policy relevance means. A dialogue between policymakers and academics is not necessarily desirable. It would be difficult to document that AERC research, up to now, has had a clear effect and impact on

policy. An important intermediate goal of research is to get a much better understanding of the underlying causes of poverty."

Resource Person E: "I am somewhat skeptical that policy relevance should be a major objective of research. This is rarely an objective of research in the developed countries."

Researcher F: "In the choice of research themes, it is time to move beyond stabilization and structural adjustment per se towards issues related to poverty alleviation, human development and labor markets. Earlier on I had wanted to submit a proposal focused on poverty based on a living standards measurement study. It was not submitted because poverty alleviation was not an ongoing theme. There are other possible topics that could be added on to the present set of themes, such as a study of formal and informal services in a number of African countries; transportation costs are extremely high. My hunch is that the selection of AERC research topics was influenced by the World Bank. My own research on the impact of devaluation has been extensively used by policymakers and has had a direct impact on the actions of the Central Bank. The national policy workshops organized by AERC provide an excellent link between key agencies such as Central Banks and researchers."

Resource Person G: "It is possible that in the choice of thematic areas, AERC might have been too much influenced by the World Bank and the IMF."

Member Advisory Committee H: "At the present time there is a need for new themes, for example employment and poverty."

Researchers I and J: "It is important to broaden the thematic areas to embrace issues related to poverty, employment, labor markets, gender issues and the environment. The national policy workshop held in our country was very useful; policymakers commented on ongoing proposals. It is important for researchers to get reactions from policymakers at an early or intermediate stage in the research process. One should not wait until the research is completed. This is the advantage of the above national workshop."

Resource Person K: "The whole issue of appropriate research themes has to be looked at dynamically. Given the resource constraints that AERC faces, the present set of thematic areas is a good one. Small is beautiful! Essentially the research process is demand-driven. There is nothing to prevent researchers from submitting proposals on for example poverty issues. In the past there might have

been too much concentration on macroeconomic issues. The plenary sessions could be used to open up new topics. The last two plenaries were too theoretical. AERC should begin encouraging more studies on the effects of stabilization and structural adjustment policies on health, poverty, employment and housing. Institutions can have a major impact on development. We should look at success stories elsewhere and see if they can be replicated in sub-Saharan Africa. For example a comparison of institutions in Indonesia and Nigeria might be instructive. We need to identify successful institutional ingredients and explore their potential transferability to our own situations. For this we need senior researchers with wisdom who might team up with younger colleagues. If the results of the research are relevant for policy, this product (i.e. the results) has to get to the consumers, i.e. the policymakers. In this regard, executive summaries and other ways of disseminating the results to government ministries and agencies can play an important role. A number of select libraries should be set up in sub-Saharan Africa where all key references including AERC research output is accessible. Personally, I have not had much success in entering into a dialogue with policymakers."

Resource Person L: "There is a need for new themes but this will require adding new resource people with the necessary competence. When a paper on poverty was presented in our group, there was no resource person particularly competent to evaluate it!"

Researchers M and N: "The thematic domain should be expanded to embrace poverty, labor markets and employments issues."

Researcher O: "Some of my colleagues find the present thematic domain too limited. The present thematic topics are very important and appropriate for the current situation prevailing in our countries. If AERC spreads itself too widely in its research, it may invite problems. However, expanding the domain towards taking on board poverty issues appears called for at the present time. The first step could be a plenary session on poverty and safety nets. The new modality of comparative projects could throw much light on issues such as how the budgetary process is handled in different countries."

Resource Person P: "Given the distortions that prevailed in the eighties, the thematic areas chosen by AERC were probably the right ones. It should not be too difficult to broaden thematic areas in the long run. One should not expand thematic areas too quickly – a focus is needed. New topics can come in through existing channels (presumably the existing groups). More work on poverty is

very desirable. Early on it was decided to use plenary sessions for signaling new directions of research and themes. The next step might be to have a plenary session dealing with poverty issues. To a large extent, the selection of research topics should be demand-driven. An understanding of institutions and norms is important in understanding better the development process. The Consortium has not confronted these issues directly. In group AT, we have had models presented that bore little relationship with the underlying institutional reality and initial conditions. It would be useful to look at existing final reports and see how many recommendations have become incorporated in policy making. At least to some extent the research portfolio of AERC has been influenced by the World Bank and IMF, directly or indirectly, through their representation on the Advisory Committee and among resource persons. Whereas we wouldn't want AERC to be hostage to the Washington consensus, it is very difficult to find competent resource persons reflecting other views and technically competent in new areas such as poverty alleviation. In short, some diversification of the research portfolio appears to make sense at the present time."

Resource Person Q: "There is some evidence of different thematic group cultures. In some groups, there is a tendency to repeat what has been done previously. Some groups do more "handholding" than others. In general, some of the past problems that existed in some of the groups appear to have been resolved. It is time to broaden the field of inquiry. It is dangerous to limit ourselves exclusively to studies based on the Washington consensus. Among the topics that AERC should take on board are labor markets, income distribution, poverty, and household behavior. These topics could form a strong interrelated nexus. Perhaps an intermediate step, before adding a new thematic area, would be to add a subgroup to one of the existing thematic areas. Of course, this would require adding competent resource persons in this new nexus."

Resource Person R: "The thematic areas selected by AERC were the appropriate ones given the conditions that prevailed at the time. Neither the government nor the public in many African countries were convinced of the need for adjustment policies and a body of research was needed to throw light on these issues and educate the public and government. Now may be the time to put more emphasis and focus on poverty issues. Eventually I think that AERC should consider adding a new group (like AT). Researchers should be encouraged to submit proposals related to income distribution and poverty issues. This will require a strengthening of the capacity of the Secretariat and resource persons to referee and evaluate these proposals. In any case, new resource persons will have to be added. I would suggest organizing a plenary session on poverty. AERC

could also encourage more research dealing with political economy issues. In general, we need more comparative studies."

Resource Person S: "The present thematic areas are the right ones. There is much flexibility in the system. Almost any proposal dealing with macroeconomic issues can be incorporated into one of the four thematic groups. I would not be in favor of moving away from an emphasis on macroeconomic research. It is not clear that there is a strong enough methodological base for studying poverty issues."

Resource Person U: " I have the impression that the policy impact of AERC research is very limited. At the level of the AERC Secretariat and Advisory Committee, there ought to be more thought given to how research could be better focused to make it more policy relevant. If the objective is to have a policy impact, one should start by asking the relevant policy questions. If different researchers in different countries started with essentially the same set of policy issues, it might be possible *ex post* to distill an AERC view out of the resulting analyses. The titles of the four thematic areas bear little relation to the specific topics being investigated under their umbrella. The titles are not representative of the research content of the given groups. More transparency is needed. It may be a good idea to phase out some existing themes such as exchange rates and stabilization and phase in new themes such as a nexus on human resources that would include poverty."

Member Advisory Committee V: "I am concerned about the large number of proposals that were deemed unsatisfactory in some groups at this AERC Workshop. Previously we had run into similar problems in group C. (In group AT, only one proposal was accepted outright out of seven at the May-June 1995 Workshop.) Group AT has not developed a constituency yet. There may not be enough mentoring and nurturing going on. Resource persons in the group are not very homogenous and this may lead to insufficient handholding. There is a risk that different standards are applied in different groups. It would be unfortunate if the playing field was not level in some groups."

Member Advisory Committee X: "I participated in the recent Senior Policy Seminar and found it enormously successful. Previously I had participated in similar World Bank senior policy seminars. The difference was that in the AERC Senior Policy Seminar, we listened to our own researchers. More Central Bank governors and permanent secretaries should participate in such seminars. This is our window on the real world."

Evaluation of policy relevance and choice of thematic areas

Policy relevance

Before evaluating the policy relevance of AERC research output, it should be stressed, at the outset, that there is no unanimous agreement among network participants (and the profession at large) that policy relevance should necessarily be a major objective of research. At least a few participants – as reported in the preceding subsection – take the position that economic research should address important theoretical issues and be technically and methodologically sound, first and foremost. Policy relevance, rather than being the prime motivation for undertaking research projects, should be a byproduct of it. Supporters of that position point out that in developed countries most economic research is not directly guided by, nor enlightening to policy issues. At its best, it attempts to push the frontier of knowledge forward and as such may contribute to improved policy formulation but only indirectly and, often, after a long time lag.

In contrast, the majority of participants accepts that policy relevance should be a key criterion in the selection of research topics. My own viewpoint is that the need for policy advice is overwhelming in Africa today and that the comparative advantage of local African researchers lies more in tackling contemporary economic problems facing the sub-continent, and identifying and describing accurately the stylized facts and structure of their own economic settings, than in advancing the theoretical state of the art for the profession as a whole. In fact, I would argue that by successfully capturing the stylized facts prevailing in different African settings and the behavior of the different agents, African economists can contribute to a more accurate specification of models at the macro- and microeconomic levels conforming to the African reality and thereby to a better understanding of the policy environment.

Arguing that AERC research should be operationally useful does not, by any means, imply that it should be less technically and methodologically rigorous. The professional standing, reputation and credibility of researchers ultimately depends on using sound and appropriate methodologies and techniques in their projects. However, the theoretical tool kit available from, and designed for the developed world and taught in the foremost economics departments in North America and Europe, may not necessarily be the most appropriate one given the different initial conditions and settings prevailing in Africa today. In a number of instances, the Western tool kit may have to be somewhat modified and adapted to conform to the different initial conditions prevailing in Africa. Again this rein-

forces the case for more inductive studies (from the ground up) corresponding to and reflecting the underlying African reality better than ready-made models tailored to fit somewhat different settings. In short, within the context of Africa, policy relevant research can go hand in hand with novel methodological specifications conforming better to the African reality. In fact, it can be argued that improved specifications raise the level of policy relevance.

We can next turn to an examination of the evidence. In a study by a consultant retained by AERC, a grading system of proposals presented at the December 1994 AERC Research Workshop was designed in terms of the level of attention given to policy considerations (from 1 = "no treatment of policy issues", to 5 = "policy issue was clearly the driving motivation behind the study and the linkages were clearly addressed throughout the proposal"). This grading system yielded a bimodal distribution with 15 proposals receiving a score of 2, 7 proposals a score of 4 and only 4 a score of 5. The report concluded that

> "The majority of proposals did not take adequate account of policy.... There is little evidence of an understanding of who the key players are in making policy decisions or who else might influence them.... Priority is given by resource persons to overall conceptual and methodological issues.... With only a few exceptions, the research proposals reviewed do not adequately address the policy relevance of the study.... It seems that many researchers fear the policy arena because it has become so politicized in their countries. They feel safer taking an academic approach and building their academic credentials through publications, rather than engaging in sensitive debates.... Researchers believe that their professional credibility will be based entirely upon the "technical merit" of their research, and not on their ability to develop practicable policy solutions."

The latter strategy by researchers of placing priority on technical merit, I would consider a strength rather than a weakness[10].

Although I did not attempt to grade the policy relevance of proposals submitted at the May-June 1995 Workshop, my impression is that they tended to be significantly more policy relevant than in the December 1994 Workshop.

An analysis of the replies to the policy involvement questionnaire meant to assess the extent to which AERC researchers did contribute to African economic policy making revealed that 70% of the respondents were involved in policy research; 43% had provided direct policy advice; 49% had been involved in the enhancement of the analytical capacity of national economic policy-making institutions, (mainly through the training of civil servants); and 17% were holding

formal government positions. To the question as to what factors have been the main impediments to active involvement in economic policy making, about half the respondents indicated that it was because national policy making was too politicized in their countries, and that decisions were not made on the basis of objective analysis. A significant number of respondents and network participants strongly endorsed the use of National Policy Workshops. It was felt that this was one of the best marketing vehicles for AERC research output.

By all accounts the Senior Policy Seminar was very successful. Nine out of ten participants indicated that attending the seminar was a worthwhile experience and that they would attend another one. Practically all of the participants mentioned that, following the seminar, they would be more likely to involve AERC researchers in policy analysis and ensure that they and their staff would regularly review AERC materials. Likewise 88% of the participants mentioned that the research presented at the seminar added to their knowledge or understanding of the policy issues. Finally, eight out of ten respondents stated that the seminar provided them with ideas as to how researchers and policymakers could interact more effectively in their respective countries.

Based on the above evidence coming from a variety of sources and related analysis, I would have to conclude that AERC has made an enormous effort – through a variety of modalities – to encourage policy relevant research. However, policy relevance cannot be evaluated in a vacuum. It has to be linked to the themes of research that are given priority. Hence in the next subsection, the appropriateness of AERC thematic areas is discussed before turning to some concluding remarks relating to policy relevance in general.

Choice of thematic areas

There appears to be a strong consensus among network participants that the present four thematic areas are somewhat too limiting and narrowly focused and that priority should be given to expanding the research domain to include issues related to poverty alleviation. This perception comes through clearly in the interviews I conducted with participants (for detailed and specific reactions, see the earlier subsection on "Assessment of Policy Relevance and Choice of Thematic Areas by Network Participants"). Further evidence of this perception can be found in the analyses of the policy involvement questionnaires and of the Senior Policy Seminar. The following reactions, among many others, were from the participants: "AERC needs to be flexible in terms of its thematic research areas.... It will be desirable if AERC can expand the scope of its thematic focus to embrace studies aimed at poverty alleviation in Africa...."

There are two other issues related to the present set of thematic areas and organization of thematic groups that need to be addressed briefly before returning to a discussion of a possible expansion of the domain of research. First, the titles of the four research themes (and groups) do not reflect accurately the topics that come under their respective umbrellas. (See, in particular, comments of Resource Person U on page 42) For example, during the last workshop (May-June 1995) four proposals dealing with different aspects of agricultural supply response were presented in group A and two on the same topic were presented in group AT. Furthermore, even though it was anticipated that CGE models would properly belong to the domain of group AT, one CGE model was presented in group A[11]. The apparent lack of transparency related to the content of each group can probably be explained in terms of a historical evolution whereby gradual modifications and additions were made in each group leading to the earlier titles no longer being clearly representative of the actual, as opposed to intended, research content. This issue should be revisited and a more rational set of titles and division of labor among the groups carefully considered.

The second issue regards the often heard reaction by network participants (see the interview section previously) that different group cultures prevail. Some groups are said to be more accommodating, nurturing and encouraging than others. There would appear to be some justification (validity) in support of this view judging from the significantly differential rejection rates applying to new proposals and work in progress among the groups during the last workshop[12].

Before any recommendation for expanding the AERC thematic domain can be made, a number of prior questions have to be raised and hopefully resolved first, i.e. "What would be the implications of such an expansion on the capacity of the AERC Secretariat and present set of resource persons to evaluate proposals in this new area?"; "More specifically, what would be the implications on the staffing of the AERC Secretariat and resource persons?"; "What would be the best way to phase in a new theme within the present organizational framework of AERC?"; and the most fundamental set of questions: "What is the rationale for adding new topics, what would be the specific domain (substance) of the new theme and is there a sufficiently strong methodological foundation and framework (i.e. state of the art) within which poverty related issues can be relatively objectively analyzed both from a theoretical and empirical standpoint?".

We start by addressing this last set of questions. The fundamental rationale for encouraging research on poverty is that it is pervasive and worsening in sub-Saharan Africa. Of all the developing regions in the world, the severity of poverty and malnutrition is greatest in that Subcontinent and is also increasing at the fastest rate. Clearly, stabilization and structural adjustment policies (SSAPs) were a necessary condition to the restoration of some degree of external and internal

equilibrium in Africa without which economic and social conditions would likely have become critical. There is some evidence that since the mid 1980s those African countries that actually implemented SSAPs have performed better in terms of growth than the non-adjusting or only marginally adjusting countries. There is also evidence based on a seven-year program of research on the impact of structural adjustment on poverty covering ten sub-Saharan countries that adjustment policies typically have not hurt the poor[13]. In a synthesis of their research, the authors concluded that "While we have found that (adjustment policies) ... usually do not harm the poor (and often benefit them), we are concerned nonetheless about the persistence of adjustment lending and the lack of a broader vision about how to accelerate growth and alleviate poverty." (Sahn, *et al.*, *op.cit.* p. 155) In their analysis, they first point out that SSAPs were not meant at the outset to alleviate poverty per se but were instead designed to mitigate unsustainable macroeconomic imbalances. It is, therefore, in this light that their impact must be assessed. They believe that while a faster and more stable economic growth will eventually contribute to an alleviation of poverty, immediate complementary actions are nonetheless necessary to meet the needs of the poor. I have spelled out elsewhere my own recommendations regarding the components of a long-term development strategy for sub-Saharan Africa which addresses a number of these complementary measures[14]. Adjustment measures have to be supplemented and reinforced with a set of critical complementary policies if sustainable long-term growth with poverty alleviation is to be achieved.

There are at least two approaches to poverty alleviation. The first one is the recognition that the key means to a reduction of poverty is through the creation of more productive employment opportunities. In turn, to understand wage determination (and imputed labor income of the self-employed) and determine the number of prospective jobs in the formal and informal sectors that can be created, labor markets have to be studied. Since labor markets tend to be strongly segmented (by skills and other characteristics) in sub-Saharan Africa, the specific labor supply and demand conditions prevailing in the different segmented markets need to be identified and analyzed. More particularly, on the labor supply side the determinants of labor force participation (particularly for women) have to be better understood. On the labor demand side the key question is what is the best development strategy in terms of contributing to both overall growth and employment (and thereby poverty alleviation). The strategy must be geared to identifying, wherever possible, technologies that are efficient, yet labor-intensive and intra- and inter-sectoral linkages that encourage labor creation. An additional key determinant of earnings is the level of investment in human capital which itself depends on both public and private educational expenditures.

The other approach to poverty alleviation is to focus on the role of government in areas directly or indirectly linked with poverty alleviation such as i) education, health and nutrition – both in the long run and in the short run (i.e. through safety nets); and ii) public investment in infrastructure (transportation and marketing margins are much higher in Africa than in Asia, largely because of the poor state of the transportation system). When these projects are well conceived, they tend to require much unskilled labor in the construction phase.

Fiscal policy has to be scrutinized on both the revenue side (for example tax incidence, tax yields, and impact on resource allocation) and on the expenditure side (who receives which services and benefits; and what are the direct and indirect employment effects). Experience with attempts to stabilize African economies in the 1980s has demonstrated that fiscal policy problems run deeper than just reducing budget deficits. An additional key issue is the impact of public sector retrenchment (and concomitant reduction in the number of government employees) on labor markets.

In summary, poverty alleviation issues might best be researched within a nexus of interrelated components consisting of "poverty, employment, labor markets, human capital and the fiscal role of government with reference to human resources".

The next question relates to whether the state of the art and methodology are sufficiently developed to investigate this nexus of topics relatively objectively and capable of yielding robust policy recommendations. An ancillary question is whether enough information is presently available on these topics to conduct empirical studies within the African Subcontinent.

I claim that the answer to both questions is in the affirmative. In what follows, I sketch very briefly the case in support of the above contention. An analysis of poverty requires that it be measurable. By now researchers have access to a rigorous literature on poverty measures and the derivation of poverty lines.[15] Some of the poverty measures are additively decomposable so that they are well suited for empirical studies attempting to analyze and decompose poverty by region, socioeconomic groups, household characteristics, and other criteria[16]. Employment issues and labor markets have also been extensively studied and analyzed in the developing world[17].

The state-of-the-art regarding human capital theory and the economic and social benefits of education is methodologically very strong, counting among its contributors a number of Nobel Prize laureates. Finally, there is also an emerging literature on fiscal incidence and benefits as they relate to education, health and other services.

Granted that there is a rigorous methodological basis available to investigate issues in the poverty-employment-labor markets-human resources nexus, is the

informational basis sufficient to undertake policy relevant empirical studies on and in sub-Saharan Africa? The answer to this question should be a qualified "yes". By now there are many surveys covering a variety of dimensions of the above nexus and extending to many African settings (countries, regions and cities) that have been completed and only partially exploited by researchers. Most of these studies have been financed and conducted by bilateral and multilateral donors (a number of them under the umbrella of the World Bank Living Standards Measurement Studies). These surveys are easily accessible in a very user-friendly form and beg to be analyzed. In addition, consistent with my earlier plea for a greater emphasis on inductive studies by AERC researchers, there could be a high payoff to investigators designing and running their own surveys specifically tailored to the issues they are investigating. It is symptomatic that, in the last few years, some of the most interesting articles in top journals were devoted to an analysis of characteristics and behavior of African households largely based on existing surveys. The great majority of these studies were undertaken by non-African investigators. Clearly AERC may be foregoing a potential opportunity to explore an area of high potential.

It is important to recall, in this context, that perhaps the most successful AERC projects in terms of the number of references made to them in the professional literature and in the eyes of senior policymakers and many AERC researchers have been in the financial sector. Half the senior policy makers participating in the Senior Policy Seminar indicated that papers in the above area had added most to their knowledge, citing especially the paper on the informal financial sector as having offered particularly new information. Many of the projects on informal and formal financial sectors and interlinkages between them relied on survey information.

For all the reasons presented above, the case for adding a new thematic (poverty) nexus is a strong one. The implications for AERC would be – as a minimum – to have to add a number of competent research persons to referee initially submitted proposals and participate in the group discussions during the workshops. (It might not be necessary to add, say, another deputy research coordinator to the AERC Secretariat to review initial proposals if this task can be farmed out and delegated to resource persons acting as early referees.)

How can this new nexus best be phased into the research program of AERC? At one extreme it could be argued that research proposals falling within the domain of this nexus could be considered and funded under the rubric of non-thematic research. Those who argue along these lines maintain that research is demand-driven and if there is enough effective demand on the part of potential investigators to submit projects within this nexus their proposals would be evaluated in the non-thematic category. I find this argument quite unconvincing. From my

interviews with participants, I gathered the strong impression that a number of potential researchers interested in studying poverty-related topics had been discouraged from submitting proposals, and/or made aware that such topics did not fall within the priority thematic areas of the AERC research portfolio. The "advertised" themes and the cumulative knowledge of the subject matter of proposals that were funded (as opposed to those left unfunded) provide strong signals to applicants of the preference function of the Secretariat and the resource persons belonging to the respective thematic groups. In this sense, "supply factors" (i.e. the thematic preferences of AERC and the predilections of the resource persons) have a major influence on the substance of the submitted proposals. I would also discourage any attempt at phasing in this new nexus through the "back door", as it were, by tacking it on to an existing group. It deserves a separate group in its own right given its fundamental importance.

It is symptomatic of the foresight and wisdom of the Consortium that it has already anticipated and laid the groundwork for a possible addition of a poverty nexus to its research portfolio. In the minutes of the December 9-10, 1994 Advisory Committee meeting, we note the following:

> "The Committee was of the opinion that the issue of poverty is clearly within the comparative advantage of a macroeconomic network like AERC, since AERC's previous and ongoing investment in building capacity in areas of CGE modelling and techniques of survey methodology can usefully be deployed in doing rigorous and policy relevant research on this theme.... The Committee recommended that the Secretariat pursue plans for introducing a broader theme around poverty focusing on poverty, income distribution and labor market issues." (p. 18)

In addition, the Secretariat is in the process of planning a potential collaborative project on the poverty-related nexus including the World Bank and academic researchers. Such a collaborative project could go a long way in providing further guidelines to the Secretariat and the Advisory Committee regarding the specific domain of researchable issues that AERC would like to emphasize within this nexus. The AERC should start immediately planning and implementing this Collaborative Research project. A next, or even simultaneous, logical step would be to organize a Plenary Session at a Biannual Research Workshop around the poverty theme.

V. Summary, conclusions and recommendations

We summarize next the major specific findings of the present evaluation of the research program of AERC. These findings, in turn, lead to a set of recommendations that are formulated in the final subsection of this report.

Major findings

Evaluation of the thematic research process, cycle and cost effectiveness

- The dynamics of the AERC product and evaluation cycle was analyzed on the basis of the flow diagram in Figures 1 and 2 on pages 9 and 10. Between 1988 and mid-1995, 367 proposals were submitted to the AERC Secretariat. These proposals went through a number of sequential evaluation stages. During the first stage, these proposals were screened by the Secretariat and resource persons and 207 proposals were accepted for presentation at the AERC Thematic Workshop (i.e. 56% of the total number of proposals submitted). Out of these 207 proposals a total of 164 were ultimately fully funded. Thus, throughout this second evaluation stage, an impressive 79% success rate can be observed. Only four proposals of the 164 funded projects were rejected following workshop review – a negligible failure rate. One hundred and six proposals resulted in accepted final reports and the remaining proposals are presently being prepared as final reports in the pipeline.
- Thirty-four AERC Research Papers have been published up to mid-1995 and it is likely that another 14 of those currently in the pipeline may appear in print by the end of mid-1996. The bottom line is that approximately 13% of the proposals initially submitted to the AERC Secretariat will ultimately be published as research papers. If AERC research projects leading directly to journal articles and books are added to the number of published Research Reports, the

total number of publications amounts to 78, representing 20% of the number initially submitted. These ratios are more or less comparable to the acceptance rates of economic journals and reviews.

- There are two additional measures of success that can be highlighted: 1) 97% of the final reports that have been externally reviewed, so far, have received positive reviews; and 2) the ratio of total publications in journals and books (78) out of the total number of final reports (106) amounts to three-fourths. These figures reflect very high success ratios.
- Presumptive evidence was presented that the quality of the research output improved as it went through the different stages and filters of the research process. This improvement in quality is a strong testimony of the effectiveness, and the value added, of what has been described internally as nurturing and handholding – in short, the assistance of the Secretariat and the critical contributions made by the resource persons.
- The review of trends in the number and characteristics of proposals and researchers over time led to the following findings: 1) The number of proposals submitted to the AERC Secretariat increased from a range of 24-37 annually in 1988-90 to 60-76 in 1991-1994/95 (with an anticipated steady state of about 60 a year from now on); 2) The proportion of proposals accepted for workshop presentation rose from about 41-46% annually in 1989 and 1990 to a high of 70% in 1994/95. Since it can be taken for granted that the selection criteria have not become looser but rather become stricter over time, the above trend would seem to imply an improvement in the quality of the proposals submitted; 3) The geographic breakdown of the proposals appears to reveal a relatively sound balance between those focused on anglophone countries outside Nigeria, Nigeria, and francophone countries, as does the linguistic distribution; 4) The proportion of investigators with PhD degrees increased gradually over time reaching what appears to be a steady state of about two-thirds of the total number of researchers presently; 5) The representation of women in the pool of AERC researchers is still very small and not rising relatively; 6) AERC has not been overly successful in attracting policymakers and involving them in joint research projects – if any trend can be perceived, it is a downward one with less than 10% of the present pool of investigators consisting of policymakers; 7) The proportion of first time investigators has levelled to about half, revealing a capacity to continue to attract new researchers into the network; 8) The rising number of grants extended to francophone researchers in the last three years corrects a previous, almost exclusive emphasis on anglophone researchers.
- The intent of the Secretariat appears to be to limit the elapsed time from initial submission to final report (i.e. the gestation period of the thematic research product) to preferably 15 months or less. A question that needs to be

raised is whether the present typical length of the research cycle is appropriate. A relatively short cycle could encourage 1) the selection of more narrowly focused research topics; 2) the use and application of well known techniques only imperfectly adapted to the initial conditions and stylized facts of the African settings being investigated; and 3) the reliance on available but questionable data sets. In this sense, a short research cycle discourages risk taking by investigators, in particular, as it relates to 1) designing specifications more reflective of the underlying African reality; and 2) undertaking data-intensive studies involving at least some primary data gathering and relying on multiple data sources. The gestation period of research projects intent on exploring new specifications and/or using a more inductive approach to generate new hypotheses based on comprehensive data sets would normally extend significantly beyond the present 15-month research cycle.

- In general, it does appear that the AERC thematic process and other research modalities cater to the heterogeneity of participants. However, the almost exclusive concentration of studies on Côte d'Ivoire, Cameroon and Senegal within the francophone group should be noted.
- The composition of AERC research modalities has become much more diversified in the last two years. Until 1992/93 all projects (except for one) were thematic. In 1994/95 no less than 34 non-thematic projects (including 16 collaborative and 3 comparative) projects were ongoing compared to 39 thematic projects. Likewise, the number of new researchers involved in non-thematic projects went from zero in 1992/93 to 42 in 1994/95 – most of them working on collaborative projects. Roughly one fourth of the total number of AERC researchers are presently involved in non-thematic projects.
- The available indicators (for example cost per active research project, cost of peer review per researcher, and unit cost of thematic research per thematic researcher) suggest an increasing cost effectiveness of research output throughout the life of AERC.

Evaluation of research methodology and quality over time

1. Scope of research

- An examination of the list of titles and specific topics addressed by the research grants, chronologically from 1988 to the present, suggests strongly that the scope of research has broadened and become more diversified over time in the four thematic groups.
- A similar broadening of research scope is observed when comparing the research domain and output of projects completed by the same sets of investigators over time. In the sample of repeat projects evaluated, this broadening took

different forms, i.e. 1) a broadening over the space of (export) commodities analyzed; 2) an expansion of the geographical scope (by moving from a national to an international focus); and 3) a broadening of the policy space (i.e. by moving from studying the impact of one policy instrument to studying the joint impact of multiple policy measures).

2. Methodology

- At the most general and subjective level there is strong consensus among network participants that the overall quality of research has improved over time.
- In the total set of 219 AERC thematic grants extended since 1988, there is only a handful of methodological studies, per se, in the sense that they were designed to push the methodological frontier forward. The overwhelming majority of studies applies existing techniques and models to issues, either directly or indirectly, related to policy within the context of Africa. In this respect, the typical research proposals adopt an essentially deductive approach. Hypotheses are often borrowed from the literature and, in a number of instances, somewhat uncritically tested with the help of available African data sets.
- Whereas the above characterization may apply to a significant number of AERC projects, it certainly does not apply universally. In fact, the set of projects on informal and formal financial markets and interlinkages between them in different African countries provides an excellent counter example of what can be called inductive-type research. The typical procedure followed by investigators in this area consisted of deriving an accurate representation of the stylized facts largely on the basis of surveys and field studies. In turn, the initial hypotheses generated by these surveys and field work were further refined and often tested in follow-up projects. These studies have been widely referred to in the development literature dealing with credit as they represent original contributions to a better understanding of the operation of financial markets in the African context.
- AERC researchers appear to have followed a natural evolutionary research process from a largely deductive approach, at the outset, to a more inductive approach today. As researchers "learned by doing" and as policy makers gained more experience and maturity dealing with broad macroeconomic stabilization and adjustment issues, both sets could gradually shift towards studying and addressing structural and sectoral issues requiring a much more specific understanding of the stylized facts prevailing in their countries.
- There is a strong consensus among network participants that the quality of data is unreliable (somewhat less so for monetary data) and that a major effort to improve it is essential.
- Sequential projects by the same (repeat) author(s) tend to rely on somewhat more sophisticated and transparent methodologies. This and other evidence would

tend to imply that a "learning by doing" process applies to network investigators.

- Another trend that was observed is the somewhat greater proportion of projects in recent years relying on a general equilibrium rather than a partial equilibrium framework. (For example, at the last AERC workshop, five macroeconomic and/or CGE models were presented.)
- Another important and relatively objective indicator of the quality of research is acceptance (after a strict refereeing process) by, and publication in a reputable professional journal. The fact that the AERC research output appearing in respected journals, in the last two years, has increased markedly is testimony of a rise in research quality.

Evaluation of policy relevance and choice of thematic areas

1. Policy relevance

- Although not all network participants consider that policy relevance should necessarily be a major objective of research, the majority accepts that it should be a key criterion in the selection of research topics. The need for policy advice is overwhelming in Africa today and the comparative advantage of local African researchers lies more in tackling contemporary economic problems facing the sub-continent, and identifying and describing accurately the stylized facts and structure of their own economic settings, than in advancing the state of the art for the profession as a whole. By contributing to a more accurate specification of models conforming to the African reality, African economists can thereby contribute also to a better understanding of the policy environment.
- Arguing that AERC research should be operationally useful does not, by any means, imply that it should be less technically and methodologically rigorous. The professional standing, reputation and credibility of researchers, ultimately depends on using sound and appropriate methodologies and techniques in their projects.
- The assessment of the degree of policy relevance of thematic projects is somewhat mixed. The report evaluating the policy relevance of the proposals presented at the December 1994 AERC Workshop concluded that "The majority of proposals did not take adequate account of policy... There is little evidence of an understanding of who the key players are in making policy decisions or who else might influence them..." On the other hand, an analysis of the replies to the policy involvement questionnaire meant to assess the extent to which AERC researchers contributed to African economic policy making revealed that 70% of the respondents were involved in policy research and that half had been involved in the enhancement of the analytical capacity of national economic policy-making institutions. Half the respondents also indicated that the main impediments to

active involvement in economic policy making were that national policy making was too politicized and that decisions were not made on the basis of objective analysis.

- National Policy Workshops were very strongly endorsed by network participants who felt that this was one of the best marketing vehicles for AERC research output. By all accounts, the Senior Policy Seminar was very successful; nine out of ten participants indicated that attending the seminar was a worthwhile experience and that they would attend another one and that the research presented at the seminar added to their knowledge or understanding of policy issues.
- The inescapable conclusion, on the basis of overwhelming evidence, is that AERC has made an enormous effort, through a variety of modalities, to encourage policy-relevant research. However, policy relevance cannot be scrutinized in a vacuum; it has to be linked to the themes and issues that are given priority in the research portfolio.

2. Choice of thematic areas

- The titles of the four research themes (and corresponding groups) do not reflect accurately the topics that come under their respective umbrellas. The apparent lack of transparency related to the content of each group can probably be explained in terms of an historical evolution whereby gradual modification and additions were made in each group leading to the earlier titles no longer being clearly representative of the actual, as opposed to intended, research content.
- There is a widely shared perception by network participants that different group cultures prevail. Some groups are said to be more accommodating, nurturing and encouraging than others. The significantly differential rejection rates applying to new proposals and work in progress among the groups during the last workshop provides some justification in support of this view.
- The chosen thematic areas that have been in force ever since AERC's inception evolved out of an overwhelming need in sub-Saharan Africa to understand better and become more cognizant of the necessity of implementing stabilization and structural adjustment policies to restore a modicum of internal macro balance (through a reduction of the budget deficit) and external equilibrium (through an improvement in the balance of payments). A cogent justification for the selected themes was that African policymakers and researchers needed to develop a research capability in this area if they were to enter into a meaningful dialogue with the Bretton-Woods institutions relating to the design and impact of adjustment measures. Given the dismal underlying macroeconomic conditions prevailing in sub-Saharan Africa throughout the eighties, there is no question that the selected themes were the most essential ones at that time. There was also

widespread agreement within the economics profession regarding the appropriate tools to investigate stabilization and adjustment issues and on the appropriate package (although not necessarily appropriate sequence in timing) of policies to restore equilibrium. Under the guidance of the IMF, the World Bank and a number of Washington-based Think Tanks, the "Washington Consensus" evolved and became the dominant paradigm.

- There appears to be a strong consensus among network participants that, while the present four thematic areas were the right ones at the outset, they are somewhat too limiting and narrowly focused and that priority should be given to expanding the research domain to include issues related to poverty alleviation. This perception comes through clearly in the responses to the interviews and the analyses of the policy involvement questionnaires and of the Senior Policy Seminar. This is a perception that I strongly share. In the next sub-section, the rationale for adding a new thematic area and corresponding group centered on a nexus of interrelated components consisting of "poverty, employment, labor markets, human capital and the fiscal role of government with reference to human resources" is presented.

Recommendations

- The overall evaluation of the thematic research process, cycle and cost effectiveness argues strongly in favor of retaining the peer review system. This stystem has contributed in a major way to an enhancement of the AERC's research quality and the human capital of the network of researchers.
- A major recommendation, that flows from the evaluation, is to add a new theme and corresponding group within a nexus of interrelated components consisting of "poverty, employment, labor markets, human capital, and the fiscal role of government with reference to human resources". The rationale for adding this nexus to the portfolio of AERC research topics was presented earlier in Section IV. Very briefly the fundamental rationale for encouraging research on poverty is that it is pervasive and worsening in sub-Saharan Africa. Whereas emphasis on stabilization and structural adjustment policies and the "Washington Consensus" made eminent sense, in the late eighties and early nineties, as necessary conditions to the restoration of macroeconomic equilibrium and the resumption of growth, they are not, by themselves, sufficient conditions to a process of sustained poverty alleviation, in the long run. Adjustment measures have to be supplemented and reinforced with a set of critical complementary policies if sustainable long-term growth with poverty alleviation is to be achieved. Incidentally, the "Washington Consensus" is itself undergoing some substantial re-thinking as a recent World Bank document on "A Continent in Transition: SSA in the mid-1990s" testifies.

- There are at least two approaches to poverty alleviation. The first one is the recognition that the key means to a reduction of poverty is through the creation of more productive employment opportunities. In turn, labor markets have to be studied to determine labor income and the number of prospective jobs in the formal and informal sectors that are likely to be created. An additional key determinant of earnings is a level of investment in human capital which itself depends on both public and private educational expenditures. The other approach to poverty alleviation is to focus on the role of government in areas, directly or indirectly, linked with poverty alleviation such as 1) education, health and nutrition; and 2) public investment in infrastructure. Fiscal policy has to be scrutinized on both the revenue and on the expenditure sides.
- It is argued, in section IV, that the state of the art and methodology are sufficiently developed to investigate this nexus of topics relatively objectively and in a fashion capable of yielding robust policy recommendations. By now there is a rigorous body of theoretical and empirical literature on povery measures, the derivation of poverty lines and the decomposition of poverty by region, socioeconomic groups, household characteristics, and other criteria. Likewise, a sound methodological base exists to study 1) employment issues and labor markets; 2) human capital theory, and the economic and social benefits of education; and, 3) the fiscal incidence and benefits as they relate to expenditures on education and other services.
- It has also been argued that the informational basis is sufficient to undertake policy-relevant empirical studies on, and in sub-Saharan Africa. Presently, there are many surveys covering a variety of dimensions of the above nexus and extending to different African settings that have been completed and only partially exploited by researchers. These surveys (such as the Living Standards Measurement Studies of the World Bank) are easily accessible in a very user-friendly form and beg to be analyzed.
- The addition of the above research nexus would go hand in hand with another major recommendation reached in the present evaluation for a greater emphasis on inductive type studies by AERC researchers. By using existing surveys and, in some cases designing and running their own surveys and obtaining additional information from field work activities, African researchers can make major contributions to both 1) a more accurate methodological specification of the stylized facts corresponding to the African settings being investigated; and 2) a better understanding of the policy environment based on the results of these studies. This is the type of research approach in which AERC researchers would appear to have a strong comparative advantage, compared to non-African researchers.
- On the basis of such inductive and empirical studies from the ground up, AERC investigators could help modify the prevailing essentially neoclassical

tool kit and adapt it to conform more accurately to the underlying structural and institutional reality prevailing in Africa. In this context, the new institutional economic literature emphasizing the role of institutions in affecting transaction costs provides an important complementary body of theory to the neoclassical paradigm that deserves to be more fully exploited by African researchers.

- AERC should play a more active role in encouraging efforts at improving the quality of data and statistical information in Africa. Clearly given the costs of data collection and gathering, AERC cannot play more than a marginal role in the actual production of statistical information. However, it can encourage investigators a) to scrutinize more critically the underlying (presumably secondary) data sources they use in their own research; b) to make greater use of existing or new surveys; and c) to formulate proposals that are more data-intensive. Clearly these last two suggestions (b and c above) are directly related with, and follow automatically from, the addition of a new nexus of research on poverty alleviation issues and a recommended greater emphasis on inductive type studies by AERC researchers.
- It also follows directly from all the above reasons that it would be desirable – if not necessary – to lengthen the typical 15-month research cycle for at least some of the projects in the proposed new thematic nexus and perhaps other thematic groups as well. A two-tier AERC grant might be appropriate under those circumstances. For example, a typical proposal could consist of two sequential parts, or phases. The first phase might spell out in detail the issues to be explored, the expected initial hypotheses to be tested, and the data and statistical information to be gathered or constructed through, for example, surveys and multiple data sources to be reconciled (such as the building of an SAM). The second phase would test the initial hypotheses – and in all likelihood revise them – on the basis of the results of a variety of econometric and other techniques applied to the data set generated in the first phase of the project. The funding of phase II of the grant would not occur until the report of phase I had been accepted.
- It appears essential, given its intrinsic importance and as a signaling device, that the proposed new nexus be given the status of a separate thematic group rather than being grafted upon one or more of the existing groups. Within the context of AERC, the selection of research topics by investigators is as likely to be supply-driven as demand-driven. AERC would have to invite a new set of competent resource persons in the domain of the proposed nexus who, in addition, to participating in their group discussions during the workshops would also be available to referee and screen initially submitted proposals.
- Prior to the initiation of the new group, the AERC Secretariat should proceed forthwith with its plan to initiate a collaborative (and perhaps comparative,

as well) project on poverty with the World Bank and suitable academic institutions. The next logical step would be for AERC to hold a Plenary Session on the domain of the proposed nexus. Distinguished authorities could be asked to present papers with the objective of helping to delineate more specifically the content of the proposed new research domain. These steps would facilitate the phasing in of the new research domain and group.

- The apparent lack of transparency regarding the titles, and specific content, of each of the four present thematic groups should be addressed by the Secretariat and the Advisory Committee. This task becomes even more essential in the light of the implications of the potential addition of a new theme and group on poverty related issues. Some of the ongoing research projects dealing with issues related to employment, labor markets, income distribution, and fiscal incidence and benefits of expenditures on education that are now lodged in existing groups might have been (or still are) good candidates for inclusion in the new nexus. In short, the addition of a new group and the lack of transparency of the existing domains of research call for a critical scrutiny leading to a more rational division of labor among the groups.
- In the light of a perception among many network participants that different cultures and standards may prevail among the existing thematic groups, it would be desirable if AERC were to attempt to establish roughly comparable evaluation criteria for new proposals, work in progress and final reports. Some "cultural" differences among the groups are probably unavoidable (and even perhaps desirable) given the different composition of resource persons and researchers, but if the gap in terms of selection and evaluation criteria becomes too wide between groups, it could create problems down the road.
- The Consortium should continue and redouble its efforts to involve more women and policymakers in its various research modalities. Also, to remedy the almost exclusive concentration of francophone researchers from Côte d'Ivoire, Cameroon and Senegal, AERC might promote and encourage the submission of proposals by teams of francophone researchers combining more senior scholars from the above countries with younger scholars from lesser advanced countries in the region. Probably the best vehicles to encourage, promote and disseminate policy relevant research is through the regular planning and holding of National Policy Workshops and Senior Policy Seminars.
- Although the Secretariat has done an outstanding job of disseminating the research output, AERC could be even more proactive in encouraging publication in reputable journals. A bonus publication fee could be tagged on automatically to research grants. The purpose of the fee would be to compensate investigators for the time and effort needed to convert their final reports into the article submission format expected by quality journals. Half of the specified bonus fee

could be paid after submission by the authors of the referees' reports and the other half upon acceptance for publication. Of course, in many instances ultimate publication in these journals may not result in which case the authors would still receive one-half the bonus fee. The advantage of journal publications is that it leads to much greater dissemination of the research output, citations and references in the professional literature than AERC Research Papers and thereby adds to the professional prestige of AERC authors.

- It might be desirable to encourage researchers, in all stages of their research process from initial submission to final reports, to abide by a standardized format requiring that each proposal contain 1) a clear, non-technical statement of the questions to be explored and hypotheses to be tested; 2) a clear description of the stylized facts and rationale underlying the use or defense of the chosen techniques or methodology as being appropriate to the issues investigated; and 3) a section that scrutinizes critically the underlying quality of the data and statistical information used.

Concluding remarks

After spending months evaluating the research program of AERC, I am left with the impression that, on the whole, it has been an extraordinarily successful operation. It combines, within one institution and under one roof, some of the best characteristics of such eminent US economic research agencies as the Economic Research Division of the National Science Foundation and the National Bureau of Economic Research. In a sense, it is a hybrid between the above two models. AERC funds research but goes beyond it in actually contributing significant value added to the research output through the biannual workshops and the research done within the Secretariat.

AERC has achieved an amazing esprit de corps among researchers and other network participants. It is no exaggeration to claim that the Consortium provides the cement holding African economic researchers together. A number of AERC grant recipients revealed to me that they might have abandoned the economics profession had it not been for the financial support and psychic reward of interacting with other African colleagues that, over time, have become their support group. AERC can be proud of its achievements to date but cannot rest on its laurels. It needs to become even more of a research leader and innovator and resist the urge to be an uncritical follower of trends and paradigms originating in other parts of the world. As has been argued in the present evaluation, AERC has an excellent opportunity to encourage research contributing, within the context of Africa, to an improved body of methodology conforming to the underlying African reality and thereby to greater policy relevance. AERC can and should grow to become an innovator within the context of Africa.

Notes

1. Grants offered January to March 1993 were coded under 1993 although they were issued in the fiscal year 1992/93. The number of grants appearing under 1993/94 arise from presentations at three research workshops over a period of 15 months. This change reflected a switch from calendar year to fiscal year. This accounts partially for the high number of proposals submitted in 1993/94.

2. This uses the second scenario of the "Historical Analysis of the Costs Structure of AERC Operations 1989-1994" that distributes all costs of rents, communications, supplies and depreciation to each of the programs on a pro rata basis.

3. I tried to reproduce faithfully the expressions and reactions of the interviewees on the basis of the detailed notes I took during the interviews. I tried—as much as possible—to reproduce their comments verbatim but, in some instances, some editorializing became unavoidable to convey and further clarify my impressions of what the participants were telling me.

4. For other comments on "cultural aspects" of different thematic groups, see also section IV of this evaluation report.

5. Projects are defined as AERC Grants, either small or full grants. This means that a combination of a full grant for a given topic that is preceded by a small grant (for the same topic) is counted as two grants (projects). This introduces a bias in that topics and subtopics with a greater incidence of combinations of small and full grants will tend to be counted more heavily.

6. The titles of these projects are, respectively, "Structural Adjustment and the Labor Market in Ghana", "The Impact of Structural Adjustment Policies on Poverty and Income Distribution in Nigeria", and "Quality Jobs for Mass Employment: A Study of Some Impacts of the Adjustment Program in Ghana".

7. One might also note recent projects in Group AT on "Intra-Industry Trade between Members of the PTA Region", and "Investigating Economic Growth in Kenya: A National Accounting Approach".

8. Representative titles of relatively recent grants in these areas are "An Analysis of the Transaction Costs of Lending in Ghana"; "Non-Bank Financial Institutions in Nigeria: Structure, Growth and Impact"; "Bank Performance, Supervision and Privatization"; and "Institutional and Asset Pricing Characteristics of African Emerging Capital Markets: Nigeria".

9. T. Ademola Oyejide, "Supply Response in the Context of Structural Adjustment in Sub-Saharan Africa", Special Paper No. 1, AERC, February 1990.

10. In fact, the report recognizes that not all AERC research should necessarily have to be policy oriented. It concedes that there should continue to be avenues for researchers mainly interested in theories and methods that can be tested in the African context even if they do not have any direct links to policy.

11. I am not at all sure that it is reasonable to define the domain of groups on the basis of techniques used as opposed to the substance of the issues investigated.

12. During the May-June 1995 Workshop only one new proposal was rated as satisfactory in group AT out of seven presented. The comparable figures in the other groups were two out four in group A, one out of one in group B and four out of eight in group C. Among the interim reports (work in progress) presented, one out of three was rated satisfactory in group AT compared to five out of five in group A, five out of six in group B and two out of two in group C.

13. This program of research by the Cornell Food and Nutrition Policy Program was based on a combination of micro studies based on surveys and analyzing household behavior and characteristics, and macro studies essentially based on macro and CGE models. For a synthesis of the results of this research, see D.E. Sahn (Editor), *Economic Reform and the Poor in Africa*, Oxford University Press, forthcoming; and, D.E. Sahn, P. Dorosh and S. Younger, "Economic Reform in Africa: A Foundation for Poverty Alleviation", CFNPP, Cornell University, Ithaca, NY, July 1994, Working Papers. By now this research program has resulted in about 20 published monographs, six books, 70 working papers and about 40 journal articles and book chapters.

14. See E. Thorbecke and Solomane Kone, "The Impact of Stabilisation and Structural Adjustment Programmes (SSAPs) on Performance in Sub-Saharan Africa", Chapter 1, and E. Thorbecke, "Causes of African Development Stagnation; Policy Diagnosis and Policy Recommendations for a Long-term Development Strategy", Chapter 5, in: Jean-Claude Berthélemy, (Ed.) *Whither African Economies?*, Development Centre Seminars, Organisation for Economic Co-operation and Development, Pairs,1995,

15. A key monograph to be consulted is by Martin Ravallion on *Poverty Comparisons,* Fundamentals of Pure and Applied Economics 56, Harwood Academic Publishers, 1994. This volume deals with concepts and methods of poverty analysis and has a long

section on "putting theory into practice".

16. The best known and most used poverty measure in the literature is the Foster-Greer-Thorbecke (FGT), class of additively decomposable poverty measures (See Foster, J., J. Greer and E. Thorbecke, "A Class of Decomposable Poverty Measures", *Econometrica* 52, 1984). A main advantage of the FGT measure is that the severity of poverty (i.e. the distance from the poverty line) can be weighed differently depending on the government's preference function and the needs of the researchers. The FGT measure includes among its components the headcount ratio, the income gap and the so called P_2 measure. By now there must be at least 100 empirical studies of poverty and its characteristics based on the FGT measure.

17. Two key references, among many others, are David Turham, *Employment and Development, A New Review of Evidence*, OECD, Development Center Studies, 1993; and S. Horton, R. Kanbur and D. Mazumdar, (Eds.) *Labor Markets in an Era of Adjustment,* Vol. 1 and 2, Economic Development Institute of the World Bank, 1994. Volume 1 is essentially methodological looking at such issues as labor market distortions and structural adjustment in developing countries; the poverty effects of adjustment with labor market imperfections and recent developments in the developed country literature on labor markets and the implication for developing countries. Volume 2 consists of case studies, including case studies of Côte d'Ivoire, Ghana and Kenya.

Appendix A

Table A1. AERC: List of individuals with whom in-depth interviews were conducted

Dr. Chris Adam, Resource Person Group C, Oxford University, UK
Prof. Ibi S. Ajayi, Resource Person Group B, Department of Economics, University of Ibadan, Nigeria
Dr. Aloysius Ajab Amin, Assistant Professor of Economics, University of Yaounde II, Cameroon
Dr. David Atse, Business Manager, West African Economic Association, CIRES, Abidjan, Côte d'Ivoire
Mr. David Bevan, Resource Person Group B and Member of Advisory Committee, Oxford University, UK
Prof. Paul Collier, Chairman, Group C, Director, Center for the Study of African Economies, Oxford University, UK
Prof. Angus S. Deaton, Plenary Session Speaker and Resource Person Group C, Princeton University, USA
Prof. Bernard Decaluwe, Resource Person Group AT and Member, Advisory Committee, Université Laval, Quebec, Canada
Dr. Shanta Devarajaran, Resource Person Group B, Division Chief, Public Economics Division, World Bank, Washington, DC, USA
Dr. Cletus K. Dordunoo, Senior Lecturer, GIMPA, Ghana
Dr. David B. Ekpenyong, Senior Lecturer, Department of Economics, University of Ibadan, Nigeria
Dr. Nasredin A. Hag Elamin, Assistant Professor, Department of Rural Economy, University of Khartoum, Sudan
Dr. Ibrahim Elbadawi, Research Coordinator, AERC, Nairobi, Kenya
Mr. B. M. Kagira, Research Officer, Central Bank of Kenya, Nairobi, Kenya
Prof. Brian Kahn, Resource Person Group A, University of Cape Town, South Africa
Dr. Mohsin Khan, Chairman, Resource Person Group B, Deputy Director, Research Department, International Monetary Fund, Washington, DC
Prof. Asmerom Kidane, Addis Ababa University, Ethiopia
Dr. William Lyakurwa, Training Coordinator, AERC, Nairobi, Kenya
Prof. Robert Mabele, Chairman, Resource Person Group A and Member, Advisory Committee, University of Dar es Salaam, Tanzania
Prof. Allechi M'Bet, University of Abidjan, Côte d'Ivoire
Prof. Mathiew Meleu, University of Abidjan, Côte d'Ivoire
Mr. Harris Mule, former Chairman, AERC Advisory Committee, Nairobi, Kenya

Dr. Andrew K. Mullei, Chairman, Advisory Committee, Director, ICEG, Nairobi, Kenya
Dr. Francis Mwega, Deputy Research Coordinator, AERC, Nairobi, Kenya
Prof. Germain Ndjieunde, Resource Person Group A and Member, Advisory Committee, University of Yaounde, Cameroon
Prof. Benno J. Ndulu, Executive Director, AERC, Nairobi, Kenya
Mrs. Gillian E. Ngola, Manager, Publication and Dissemination, AERC, Nairobi, Kenya
Dr. Fidelis O. Ogwumike, Lecturer, University of Ibadan, Nigeria
Dr. Nehemiah E. Osoro, Senior Lecturer, University of Dar es Salaam, Tanzania
Prof. T. Ademola Oyejide, Chairman Group AT, University of Ibadan, Nigeria
Mr. Stephen Yeo, Resource Person Group AT, Deputy Director, CEPR, London, UK

*Table A2. AERC: Thematic areas and stages of proposals presented at May 27-June 2, 1995 Research Workshop and attended by evaluator**

Group A	3
Group AT	2
Group B	3
Group C	2
Total	10
New Proposals	2
Revised Proposals	1
Work in Progress	3
Final Reports	4
Total	10

*The list of proposals and workshop presentations covered by this evaluation covers: A1, A5, A6, AT9, AT11, B7, B11, B12, C7, C12.

Appendix B. Comments on proposals with particular emphasis on timing of research output process

E.Aryeetey and A. Wayo Seini, University of Ghana, "An analysis of the transaction costs of lending in Ghana".

The research proposal was submitted on November 14, 1991. The proposal was submitted at the May 1991 AERC Research Workshop. Comments on the research proposals were sent to the author. The final report was presented at the workshop in Nairobi in December 1992 and deemed "a satisfactory report". (Elapsed time: 13 months)

M. Kwanashie, I. Ajilima, and A. Garba, "Policy modelling and agriculture: testing response of agriculture to adjustment policies in Nigeria".

Proposal was discussed at the May 1991 AERC Research Workshop and it was suggested that it would be best to stay with one block of the proposed economy-wide model (i.e. the demand block). The first draft of the report was presented at the AERC Research Network Nairobi workshop in December 1991 and the final report was dated May 1992. The final version added significantly to the previous version. On the whole, I could not understand how a completely demand driven model could provide any significant information. Can one really say anything about consumption and import demand without, simultaneously, trying to project output growth? (Elapsed time: 13 months)

E. Aryeetey and F. Gockel, "Mobilizing domestic resources for capital formation in Ghana: the role of informal financial markets".

The research proposal was submitted in April 1989 and evidently was asked to be resubmitted. In June 1989 the proposal was accepted by AERC. The paper was presented at a workshop in December 1989 and detailed comments and suggestions resulted from the workshop. The final report was presented at the research workshop in May 1990. (Elapsed time: 13 months)

N.A. Hag Elamin and El Mak, "Stabilization and structural adjustment and agriculture in Sudan: a comparative study."

The initial research proposal was submitted in May 1993 and was reviewed by the research coordinator of AERC who replied in August 1993 asking for modifications in the proposal. It was resubmitted in October 1993 and presented at the December 1994 research workshop. A grant of about $14,000 was made and comments sent to the authors in January 1994. Progress report was presented at the Research Workshop in May-June 1994 and again, comments were sent to the authors. The final report was prepared and available for the May-June 1995 workshop. The conclusions and policy implications appear sound and the paper is well written. (Elapsed time: 24 months)

T. S. Nyoni, "The Dutch disease economics of foreign aid in Tanzania".

In the file it starts with a revised proposal presented at the May-June 1994 workshop. This led to a grant accompanied by comments and suggestions in June 1994. An interim report (not in the file) must have been presented at the December 1994 research workshop because comments and suggestions are included in the file following that meeting. The final report is to be presented at the May-June 1995 workshop. From what I could see of the revised proposal, foreign aid in Tanzania, especially after 1985, did not lead to an appreciation in the real exchange rate which is inconsistent with the Dutch disease theory. In particular, capital flight appears to have taken place in the late 80's. The proposal seemed to have real policy relevance. (Elapsed time from revised proposal: 12 months)

F. Ogwumike and D. Ekpenyong, "Impact of structural adjustment policies on poverty and income distribution in Nigeria"

An initial proposal with a different title was submitted sometime in 1993 and AERC responded in September 1993 suggesting changes. In November 1993 a revised version was submitted and again was reviewed internally and suggestions made for appropriate modifications. Interestingly the following quote is made in El Badawi's letter "Studies of poverty and income distribution per se have not been included among designated research areas except to the extent that they are significant feedbacks to the designated research areas." The proposal was presented at the May 1994 workshop and comments sent to the authors. In June 1994 a grant was offered to the authors. It is not clear that an interim report was presented at the December 1994 meeting. In any case a final report is to be presented in the May-June 1995 workshop. Note that the proposal uses the FGT index. (Elapsed time from revised proposal: 12 months)

Ouattara, and M. Mathieu, "Endogenous growth and structural adjustment policies in Cote d'Ivoire." (in French)

This is an example of a project that had a long maturation process. The initial proposal

appears to have been submitted in April 1993. AERC reacted with comments in April 1993. However, previously in July 1992, AERC wrote to the authors that the AERC Advisory Committee had recommended that the proposal be revised, so evidentally an earlier version must have been presented in 1992. A reviewed proposal was submitted in August 1993 at which time a grant was offered with comments.

N.E. Osoro, "Government growth in Africa, government size and economic growth: a quantitative explanation"

The research proposal was submitted in October 1994 and was reviewed at the workshop in December 1994. In January 1995, the proposal was funded and extremely summary comments were sent to the author. The final report is to be submitted to the May-June 1995 workshop. The methodology used is a simple production function where GDP is a function of respectively, 1) the investment ratio, labor, the share of government in GDP and total government expenditures, 2) the investment ratio, labor, and government expenditures and 3) the investment ratio, labor, and some function of government consumption and the share of government in GDP. The results are startling, i.e. "the main result is that it is difficult not to conclude the government's size has a positive effect on economic performance and growth, and the conclusion appears to apply to all the cases considered. Even more interesting seems to be virtually equally pervasive indication of positive externality effects of government size on the rest of the economy. It is also possible to infer from the cross section evidence that relative factor productivity was higher in government sector than in the rest of the economy during the last two decades." (Elapsed time: 8 months)

D. Atse and G. Achiepeo, "Capital formation in period of macroeconomic adjustment in the Franc zone: the case of Côte d'Ivoire"

The initial proposal was submitted in April 1993 and comments were sent to the author the same month by AERC. It was presented to the AERC workshop in 1993 and a small grant offered in July 1993. There is nothing further in the file except that the final report is to be presented at the May-June 1995 workshop. This is an interesting proposal conducted at the macroeconomic level. The authors know the literature well and propose to regress the share of private investment in GDP on the percentage change of real GDP, real public investment as percentage of real GDP, the ratio of foreign dept to GDP, the real interest rate, a coefficient of variation of the real exchange rate, credit to the private sector as percentage of GDP and a dummy variable that captures possible impacts of political and/or institutional factors. The idea is to see to what extent a crowding in or crowding out effect took place in Cote d'Ivoire.

In fact, because the previous grant was a small grant, another file was prepared for the actual grant. The revised proposal was dated November 1993 and presented at the workshop in December 1993. Comments were sent to the author after the workshop and a grant was extended in January 1994. The interim report was presented at the May 1994 workshop. Some very detailed comments were sent following the May 1994 workshop.

The final report is to be presented in the May-June 1995 workshop. On the whole, this is a good study. Public investment appears positively correlated with private investment. Credit availability also influences private investment positively as does the interest rate. The marginal product of capital also enters with a positive sign while two measures of instability carry a negative sign (variation of real GDP and the ratio of debt to export earnings). Two conclusions reached by the authors are that stabilization programs directed to reduce internal and external deficit must be accompanied by well-targeted social programs aiming at stimulating the private sector's response to stabilization measures." And "second, foreign debt burden adds an additional source of uncertainty. Therefore, it is necessary to reduce this debt burden in order to create a macroeconomic conditions to stimulating private sector's investment." (Elapsed time from revised proposal: 18 months)

M'Bet and Beda and Hubert, "Financial structure, financial reforms, and economic recovery in the CFA countries: the case of Côte d'Ivoire"

This is a new proposal presented at the May 1995 workshop. The specific objectives of the proposals are to answer the following questions: "How did credit allocation change with financial deregulation? What are the main institutional reforms that were implemented to strengthen the banking system so as to recover defaulted loans? How did the reforms affect the low interest rate policy experienced by sFA zone countries?" The methodology will rely on a survey of 14 banks and 39 insurance companies. This appears to be a sound proposal that could provide useful policy recommendations. For instance, the questionnaire will test whether the new liberalized interest rate policy has contributed to mobilized new funds or has reduced credit volume into the economy as a result of high credit costs. The authors examine whether the new rules that give easier access to more firms to use the stock market has had a positive impact on savings mobilization without having to go through the banking system. Also some of the new institutions will be analyzed.

A. Adegbidi and V. Houndekon, "Agricultural performance and macroeconomic policy in Benin: the case of cotton".

The initial research proposal was submitted in April 1993. AERC sent comments back to the authors in April 1993. It was resubmitted in December 1993 and Jean Paul Azam reviewed it favorably and it was presented at the May 1994 workshop. It led to a grant in July 1994. The interim report was presented at the December 1994 workshop and again comments following the workshop were sent to the authors. The final report is to be presented at the June 1995 workshop. Although the topic seems to be very relevant, no clear policy conclusions are made explicit in the paper. It is disappointing from that standpoint. (Elapsed time from revised proposal: 18 months)

A. B. Ayako, "Determinants of investment rate and productivity in Kenya: an econometric investigation".

The initial proposal was submitted in December 1991. In January 1992, a grant was offered and comments sent to the author. An interim report was presented at the May 1992 workshop and it was suggested that a revised proposal be submitted. In January 1994, the AERC research subcommittee recommended that the author withdraw the work in progress that was presented at the December 1993 workshop. "The report was substantially unsatisfactory to justify a decision to allow you to proceed to the final report, especially taking into account that this was a revised work in progress and the project has been in the pipeline for the last two years." This is one of the few proposals that did not lead to a final report, I believe.

Appendix C. Evaluation of published AERC research papers by repeat researchers: A sample of six sets

Monograph I.A: **G. N. Ssemogerere, "Structural adjustment programmes and the coffee sector in Uganda, 1981-1987" AERC Research Paper 1, November 1990**

Monograph I.B: **G.N. Ssemogerere and L.A. Kasekende, "Constraints to the development and diversification of non-traditional exports in Uganda, 1981-1990", AERC Research Paper 28, November 1994**

1. Scope

The purpose of I.A is to investigate the effects of exchange rate adjustment on coffee exports of Uganda in the light of the exchange rate depreciation after June 1991. Given that the International Coffee Organization quota collapsed and the international price of coffee declined dramatically, the second monograph investigates the possibility of export diversification in Uganda. The research intends to identify the constraints to export diversification in some detail. Since the more recent monograph embraces several potential export items rather than just concentrating on coffee, its scope is significantly broader than that of the earlier investigation.

2. Methodology

Because of the limited availability of reliable data, both projects utilize literature search and qualitative judgement methods. The second monograph shows an improvement since it conducts "semi-structured interviews" of exporters.

3. Policy relevance

Both Reports conclude that the improvement of efficiency in the marketing system is a necessary condition for promoting exports, and the depreciation of the exchange rate alone cannot lead to export promotion. Also, both studies investigate several marketing inefficiencies (transportation, storage, packaging, among others) in some detail and

point out some policy implications. There is no noticeable difference between these studies in terms of policy relevance.

Monograph II.A: **E. Aryeetey and F. Gockel, "Mobilizing domestic resources for capital formation in Ghana", AERC Research Paper 3, August 1991**

Monograph II.B: **E. Aryeetey, "The relationship between the formal and informal sectors of the financial market in Ghana", AERC Research Paper 10, October 1992**

1. Scope

The objective of II.A is to improve the informational base of the informal financial sector in Ghana. The research also intends to ascertain the procedure and channels through which informal financial intermediation occurs, and to analyze credit demand and supply conditions in the informal market. The study clearly states that the investigation of the relationship between the formal and informal financial sectors is the next important step for improving the effectiveness of the financial sector.

This question is addressed in the follow-up study that focuses on the relationship between formal and informal financial sectors in Ghana. The research investigates how significant these linkages are for the development of the entire financial sector of the economy, and therefore the extent to which action taken in one part of the sector may have repercussions in another.

The scope of the second project is more specifically focused and policy oriented than the earlier study while building on it.

2. Methodology

Both investigators conduct surveys and analyze the survey results to draw information, inferences, and conclusions. The employed methodology is essentially similar in both studies.

3. Policy relevance

The first study provides useful information relating to the functioning of the informal financial sector in Ghana (saving mechanism, saving behavior, urban and rural informal lending facilities). Because of its nature, the research contains few explicit policy implications.

Having spelled out several kinds of linkages between the formal and informal financial sectors, Monograph II.B suggests policies to ensure that such linkages provide positive benefits to borrowers and savers, and to the Ghanian economy as a whole. The policies include:

(a) Policies for improving the ability of formal institutions to lend to entrepreneurs (in particular, small scale entrepreneurs); and,

(b) For the formal financial sectors to rely on and utilize local information networks possessed by moneylenders (an informal sector).

These two studies provide an excellent example of the benefits of a subsequent project – based on and building upon earlier work. The second study is a direct continuation of the preceding one and yields extremely relevant policy suggestions that would (could) not have been derived without such a second stage (follow-up) grant.

Monograph III.A: **C. Chipeta and M.L.C. Mkandawire, "The informal financial sector and macroeconomic adjustment in Malawi", AERC Research Paper 4, May 1991.**

Monograph III.B: **C. Chipeta and M.L.C. Mkandawire "Links between the informal and formal/semi-formal financial sectors in Malawi", AERC Research Paper 14, November 1992.**

1. Scope and Methodology

The main objective of the first monograph was to improve the understanding of the functioning of the informal financial sector in Malawi. The research attempts to find whether the informal financial sector plays a significant role in mobilizing financial resources and extending credit to priority sectors. It also attempts to derive real rates of interest and estimate the size of the informal financial sector.

Based on the result of the first study, the next Report investigates deposit and credit links between informal and formal/semi-formal financial sectors in Malawi. Study on such links is crucial to derive policy implications for the financial sector, since the financial sector can improve its effectiveness by strengthening these links. The second monograph builds on the first one and is significantly more interesting from a methodological viewpoint. Some of the methodological findings relating to the links between the formal and the informal sector are potentially applicable to other countries – at least as starting hypotheses to be tested.

2. Policy Relevance

The first study concludes that the informal financial sector in Malawi plays a crucial role in the economy. Its size is larger than the formal/semi-informal financial sector, and it contributes significantly in alleviating economic hardship among low income groups by enabling them to mobilize resources, to use those resources to earn income, and to obtain loans. Having recognized some of the limitations of the informal financial sector's activity (for example, the main constraint faced by co-operative savings associations is the small size of these associations), the research points out that one approach to overcome such limitations is to establish new and strengthen existing links between the formal and informal financial sectors. This point is further extended in the follow-up Report.

Having examined several types of deposit and credit links between the informal financial sectors (IFS) and formal/semi-formal financial sectors (FFS), the second Report

suggests two possible ways to strengthen these links. One is to transmit FFS funds to small-medium scale enterprises through IFS (Small Enterprise Development Organizations would act as IFS), and the other is to channel idle cash balances of savings and credit associations to FFS. Based on the results of the earlier study, the second Report focuses on the links between IFS and FFS to draw some important policy implications. (Because of the lack of reliable official data, the first study conducted a random sample survey of 1,611 households that was subsequently also used in the follow-up project.)

Monograph IV.A: **F.M. Mwega, S.M. Ngola and N. Mwangi, "Real interest rates and the mobilization of private savings in Africa", AERC Research Paper 2, November 1990**

Monograph IV.B: **F.M. Mwega, N. Mwangi and F. Olewe-Ochilo, "Macroeconomic constraints and medium-term growth in Kenya: A three-gap analysis", AERC Research Paper 23, May 1994**

1. Scope

The geographical focus of both monographs is on Kenya. However, the second study has a much broader macroeconomic scope than the earlier one. The first monograph focuses on the relationship between real interest rates and savings and between real lending rates and the demand for credit. Other important macroeconomic issues such as fiscal policy and international linkages are not within its scope.

On the other hand, the second Report takes such issues into account to explore whether it is the savings, fiscal or foreign exchange gap which is the binding constraint on capacity growth in Kenya. This broader scope is supported by greater methodological sophistication (the three-gap framework) and leads to much deeper policy implications.

2. Methodology

The first study utilizes a relatively simple linear regression model to test the hypothesis that real interest rates (real lending rates) have a significant positive (negative) impact on savings and the demand for credit by the private sector. The methodology is appropriate for the purpose of this research.

The subsequent study utilizes the three-gap framework. It focuses on the relationship between intermediate imports and capacity growth through three gaps, a fiscal gap, a savings gap and a foreign exchange gap. In terms of the fiscal gap and the savings gap, a positive relationship between intermediate imports and capacity growth is found and is explained in terms of the shortages of intermediate imports reducing capacity utilization leading, in turn, to the reduction of private and public savings. In terms of the foreign exchange gap, the relationship is negative because of the trade-off between intermediate imports and capital imports. The analysis of the interaction of the three gaps concludes that foreign exchange is the binding constraint on the capacity growth in Kenya. Because of its broader scope, (based on macroeconomic theory and regression equations

derived from the theoretical model) the second Report shows significant methodological improvement compared to the first monograph.

3. Policy Relevance

The first study concludes that saving rates are not significantly responsive to real interest rates on the supply side, and that the major impact of the high interest rate policy is in reducing the private sector's demand for credit and hence its aggregate spending. Its policy relevance is limited because of the partial equilibrium scope of the underlying framework.

The second monograph concludes that foreign exchange is the binding resource constraint in Kenya. This conclusion leads to an important policy implication, namely,

> "Increased availability of foreign exchange through exports promotion and more concessionary capital inflows and the associated reduction of import compression would alleviate the saving, fiscal, and external gaps that undermine good macroeconomic performance."

The study also analyses the 1989-93 Development Plan to find that it is inadequate or inconsistent with a reduction in macroeconomic imbalances in Kenya. Its is apparent that the policy relevance of the latter Report is much more significant and deep than the earlier Report.

Monograph V.A: **A. Kidane, "A Macroeconomic-demographic model for Ethiopia", AERC Research Paper 7, October 1991**

Monograph V.B: **A. Kidane, "Indices of effective exchange rates: A comparative study of Ethiopia, Kenya and the Sudan", AERC Research Paper 29, November 1994**

1. Scope

The objective of the first monograph was to develop a detailed economic-demographic model of Ethiopia to study the interaction between population growth and economic growth. The second monograph investigates the adequacy and consistency of exchange rate indices for Ethiopia, Kenya and the Sudan. Clearly the scope and content of the two projects are significantly different. The geographical scope of the second project is broader than that of the first one.

2. Methodology

The first monograph undertakes regression analysis to specify parameters of key variables in the macroeconomic model and the demographic submodel, and investigates the interaction between the two by changing coefficients of the demographic sub-model and studying their effects on various macroeconomic variables. In the second project, several types of effective exchange rates are computed and interpreted. Because the two

topics are so different, it is hard to infer any methodological improvements.

3. Policy relevance

The first study concludes that a lower fertility rate yields higher per capita GDP in Ethiopia, but it does not indicate any policy suggestions concerning how to go about reducing the current high population growth rate. The second monograph concludes that the nominal effective exchange rate indices give some indication of the extent of overvaluation of the currency in the three countries. In the research, this does not lead to any policy implication. Hence, neither project yields explicit policy recommendations.

Monograph VI.A: **A. Soyibo and F. Adekanye, "Financial system regulation, deregulation and savings mobilization in Nigeria" AERC Research Paper 11, November 1992**

Monograph VI.B: **A. Soyibo and F. Adekanye, "The Nigerian banking system in the context of policies of financial regulation and deregulation", AERC Research Paper 17, December 1992**

Monograph VI.C: **A. Soyibo, "The savings-investment process in Nigeria: An empirical study of the supply side", AERC Research Paper 12, March 1994**

1. Scope

Monograph VI.A tests the validity of the hypothesis that higher real interest rates encourage savings, for the purpose of estimating the impact of financial system regulation and deregulation and financial liberalization. The research also investigates whether savings encouraged by higher interest rates lead to an increase in investment or not.

The next study (VI.B) investigates in detail how the Nigerian banking system has been changed by financial deregulation. The research also takes other macroeconomic policy reforms (not directly related to financial sector) into account.

The third study (VI.C) focuses on analyzing determinants of the transmission of savings mobilized by the Nigerian banking system into investment, in view of the potential importance of such channelling on economic growth.

The scope of VI.B is broader and more comprehensive than that of VI.A. In turn, the scope of the last monograph is more policy oriented than the earlier two. So, the scope of each research paper shows an improvement over its predecessor(s). From that standpoint each consecutive monograph reveals some improvements over the preceding one(s).

2. Methodology

Report VI.A utilizes relatively simple linear regression methods, while VI.B and VI.C C are based on surveys and literature reviews. Each study employs an appropriate method given its objectives.

3. Policy relevance

The first Report shows that ex post the real interest rate is a determinant of savings in Nigeria, and concludes that there is support for the proposition that financial deregulation in Nigeria is a possible way of promoting savings. The research also shows that a large flow of aggregate savings encouraged by higher interest rates leads to an increase in investment. Although these findings are important, few policy implications are explicitly derived.

Report VI.B provides additional information regarding the effect of financial deregulation. By analyzing the factors affecting portfolio management decisions of suppliers of credit, the research indicates some important policy recommendations, which include:

(a) Financial deregulation, although effective in mobilizing savings, needs other complementary policies to reduce its negative effects on investment; and,

(b) It is important to provide adequate information about available investment opportunities.

The third monograph is more policy relevant than the earlier ones.

Appendix D. Program costs, unit costs of research and breakdown of grant and meeting costs for various research modalities (1989 - 1994/95)

Table D1. AERC: Programme costs with overhead costs re-distributed.

	1989 $		1990 $		1991 $		1992/93 $		1993/94 $		1994/95* $	
General Management	143,568	14%	186,807	12%	137,361	7%	298,636	9%	394,775	8%	369,278	5%
Programme Management	127,380	13%	212,406	14%	202,552	10%	232,612	7%	171,300	4%	192,900	2%
Research Programme	570,580	56%	841,922	54%	1,148,590	57%	1,569,120	47%	1,939,230	40%	2,237,107	29%
Publications & Disseminations	43,551	4%	99,552	6%	126,499	6%	174,079	5%	396,175	8%	760,213	10%
Training Programme	125,746	12%	220,643	14%	402,254	20%	394,172	12%	473,075	10%	739,895	9%
Masters Programme	–		–				648,698	20%	1,487,517	31%	2,607,007	33%
	1,010,825	100%	1,561,330	100%	2,017,256	100%	3,317,317	100%	4,862,072	100%	6,906,400	
Capital Budget	95,074		26,700		69,300		270,000		220,149		142,700	
Reserve Fund	–		–		–		–		750,000		750,000	
TOTALS	1,105,899		1,588,030		2,086,556		3,587,317		5,832,221		7,799,100	

* Projected Actual

Table D2. AERC: Unit costs - research

Research Projects	1989	1990	1991	1992	1993	1994
New Projects						
Thematic Grants	13	18	39	47	48	39
Thematic Papers & Plenary Papers	–	4	3	1	2	8
Non–Thematic Research	–	–	–	–	–	7
Comparative Research Grants	–	–	–	–	1	3
Collaborative Research	–	–	–	–	8	16
Total No. of New Projects	13	22	42	48	59	73
Number of New Researchers (new projects)						
Thematic Research	20	37	66	61	92	111
Comparative	–	–	–	–	8	5
Collaborative	–	–	–	–	16	37
Total Number of Researchers	20	37	66	61	116	153
No. of Active Research Projects (thematic)	23	36	47	71	73	72
Total No. of Active Research Projects (during the year)	23	40	50	72	84	106

Total Costs ($)	1989	1990	1991	1992	1993	1994
Program Design	50,372	59,766	69,744	91,988	105,081	114,987
Program Management	58,977	73,327	94,684	140,265	191,611	171,564
Total Program Management	109,349	133,093	164,428	232,253	296,692	286,551
Peer Review	230,689	443,626	485,106	633,753	924,026	947,254
Direct Research Expenses	177,716	203,302	407,345	418,025	532,561	804,417
Skills Enhancement	35,019	146,344	116,987	217,873	107,338	161,400
Allocated Overheads	234,911	317,207	302,146	515,576	377,511	321,511
Total Costs	787,684	1,243,572	1,476,012	2,017,480	2,238,128	2,521,133

Avg. Cost per Active Research Project	1989	1990	1991	1992	1993	1994
Total No. of Active Research Projects	23	40	50	72	84	99
Avg. Cost of Program Design	2,190	1,494	1,395	1,278	1,251	1,161
Avg. Cost of Program Oversight & Mgmt.	2,564	1,833	1,894	1,948	2,281	1,733
Avg. Cost of Program Management	4,754	3,327	3,289	3,226	3,532	2,894
Avg. Cost of Peer Review	10,030	11,091	9,702	8,802	11,000	9,568
Avg. Cost of Direct Research Expenses	7,727	5,083	8,147	5,806	6,340	8,125
Avg. Cost of Skills Enhancement	1,523	3,659	2,340	3,026	1,278	1,630
Avg. Cost of Allocated Overheads	10,214	7,930	6,043	7,161	4,494	3,248
Avg. Cost per Active Research Project	34,247	31,089	29,520	28,021	26,644	25,466

Cost of Peer Review per Researcher	1989	1990	1991	1992	1993	1994
Total Cost of Peer Review	230,689	443,626	485,106	633,753	924,026	947,254
Total Number of Researchers	20	37	66	61	116	153
Cost of Peer Review per Researcher	11,534	11,990	7,350	10,389	7,966	6,191

Table D3. AERC: A breakdown of grant and meeting costs for various research modalities

	1989	1990	1991	1992	1993	1994
PROJECT COSTS (GRANTS)						
Thematic Research	174,578	197,933	385,781	573,668	582,200	409,158
Non-Thematic	–	–	–	314	–	34,200
Comparative	–	–	–	–	6,000	28,240
Collaborative	–	–	–	7,084	39,500	297,960
Thematic Papers	–	–	4,935	8,000	12,000	29,000
Total	174,578	197,933	390,716	589,066	639,700	798,558
AVG. UNIT COSTS (GRANTS)						
Thematic Research	13,429	10,996	9,892	12,206	12,129	10,491
Non-Thematic Research	–	–	–	–	–	4,886
Comparative	–	–	–	–	6,000	9,413
Collaborative *	–	–	–	–	4,938	18,623
Thematic Papers	–	–	1,645	8,000	6,000	3,625
COST OF MEETINGS **						
Thematic Research	233,879	400,113	427,749	556,535	723,200	773,381
Non-Thematic Research	–	–	–	–	–	–
Comparative	–	–	–	–	–	4,456
Collaborative	–	–	–	–	99,300	164,815
Thematic Papers	–	–	–	–	–	–
Total	233,879	400,113	427,749	556,535	822,500	942,652
TOTAL COSTS (GRANTS & MEETINGS)						
Thematic Research	408,457	598,046	813,530	1,130,203	1,305,400	1,182,539
Non-Thematic	–	–	–	314	–	34,200
Comparative	–	–	–	–	6,000	32,696
Collaborative	–	–	–	7,084	138,800	462,775
Thematic Papers	–	–	4,935	8,000	12,000	29,000
Total	408,457	598,046	818,465	1,145,601	1,462,200	1,741,210
NUMBER OF PROJECTS						
Thematic Research	13	18	39	47	48	39
Non-Thematic	–	–	–	–	–	7
Comparative	–	–	–	–	1	3
Collaborative	–	–	–	–	8	16
Thematic Papers	–	4	3	1	2	8
Total	13	22	42	48	59	73
COST PER PROJECT (GRANTS & MEETINGS)	31,420	27,184	19,487	23,867	24,783	23,852

* Amount for 1994/95 includes the cost of the Survey Component of the study.

** Cost of meetings related to Thematic Research cannot be attributed entirely to Thematic Research due to piggy-backing which makes I separate costs.

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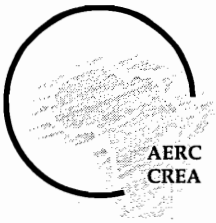

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