Increased attention to poverty reduction as the central goal of development has highlighted the need for an improved understanding of how policies affect the poor. With the advent of the Poverty Reduction Strategies (PRS)—vehicles through which countries articulate their strategic choices on policy and institutional reforms—many low-income countries are struggling over the choice of public actions that will have the greatest impact on poverty. This difficulty stems partly from the lack of sound analysis of the distributional consequences of reform. The call for systematic assessment of poverty and social impacts emerged from the recognition that these elements result in differential impact on different social groups. Analysis of winners and losers of reforms helps to inform the design of policies that promote more equitable access to opportunity, particularly for the poor and disadvantaged groups.

THE CHALLENGES OF POVERTY AND SOCIAL IMPACT ANALYSIS

Poverty and social impact analysis (PSIA) is challenging because of the complex nature of reforms and their consequences. The analysis of distributional impacts depends on many elements—the design of the reform itself, of course, but also the political economy of reform and the capacity...
of implementing and regulatory agencies responsible for the reform program. First, policies affect different groups in very different ways, with some groups losing while others gain. Second, most reforms have distributional impacts that are transmitted to households and individuals through different channels, and these impacts can go in opposite directions for particular groups. Third, impacts may vary over time: some impacts can be expected to occur immediately, while others may take more time to materialize. As the economic impacts and behavioral responses to a policy change evolve, they can lead to alternations of positive and negative impacts over time. Fourth, some impacts derive directly from the reforms, while others take more indirect routes to reach households.

In addition, the interests of stakeholders can have important consequences for the actual implementation of reforms and their success. In particular, stakeholders likely to lose influence, power, or benefits can resist reforms. Resistance from influential stakeholders or elite capture of benefits can undermine reform efforts. Analysis of those interests helps to understand likely reform outcomes.

Finally, the impact of reforms depends on the capacity and willingness of responsible agencies to carry out or oversee reform implementation. Reforms tend to involve a deepening of or change in responsibilities. This change is sometimes linked to the creation of a new organization or the addition of new roles and responsibilities to existing organizations. Internalizing these institutional measures takes time as new staff is hired or existing staff redeployed and retrained, and new systems and procedures introduced. The success of policy reforms thus depends heavily on the related institutional reforms and the political will to support these reform measures unstintingly.

Addressing the Challenge

In January 2001, the Joint Implementation Committee for Poverty Reduction Strategy Papers (PRSP) acknowledged the gaps in the analysis of policy impacts within client countries and asked the Bank to take the technical lead in helping developing countries fill this analytical gap. The analysis of impacts of policy reforms is not entirely new, nor are the analytical instruments for such analysis new inventions. What is new is the application of the tools and techniques of social and economic analysis to analyze impacts of economywide policy reforms before those reforms are carried out (ex ante analysis), and more systematic use of that analysis to inform policy advice and policy design. A quick internal stocktaking in 2001 identified some ongoing analytical work but
revealed considerable analytical gaps within Bank- and International Monetary Fund (IMF)-assisted operations. Consequently, the Bank, along with key donor partners, embarked on a program of systematizing PSIA of the policy reforms supported by its lending.2

Over the past few years, the World Bank has developed a broad array of guidance materials to stimulate and support PSIA. The first of these was A User’s Guide to Poverty and Social Impact Analysis (World Bank 2003), which describes the methodological approach recommended for PSIA. The User’s Guide presents key elements of good practice, highlights the operational principles and existing constraints on PSIA, and summarizes the key tools used by practitioners for PSIA of policy reforms.

The User’s Guide has been supplemented by additional products focusing on tools and techniques. The Impact of Economic Policies on Poverty and Income Distribution: Evaluation Techniques and Tools is a compendium of tools and techniques relevant to PSIA, which range from incidence analysis to tools linking microeconomic distribution to macroeconomic frameworks or models (Bourguignon and da Silva 2003). A second volume (forthcoming), Evaluating the Impact of Macroeconomic Policies on Poverty and Income Distribution Using Micro-Macro Linkages Models, will present five approaches through which macro-counterfactual experiments can be modeled and linked to microeconomic data. The World Bank has also released a sourcebook of Tools for Institutional, Political and Social Analysis (TIPS) in Poverty and Social Impact Analysis, produced in partnership with the U.K. Department for International Development (DFID), which draws on a range of multidisciplinary tools to complement econometric analysis with what is generically called social analysis (DFID and World Bank 2005).

Two additional volumes—Analyzing the Distributional Impact of Reforms: A Practitioner’s Guide to Trade, Monetary and Exchange Rate Policy, Utility Provision, Agricultural Markets, Land Policy and Education and its companion volume Analyzing the Distributional Impact of Reforms: A Practitioner’s Guide to Pension, Health, Labor Market, Public Sector Downsizing, Taxation, Decentralization and Macroeconomic Modeling—present analytical guidance and an overview of the specific issues arising from the analysis of selected categories of policy and institutional reforms.3 These volumes offer guidance on the selection of economic tools and techniques for economic analysis of distributional impacts most appropriate to the reforms under scrutiny as well as examples of applications of these approaches.

The pilot studies financed between 2002 and 2004 helped to stimulate interest in PSIA.4 Subsequently, the Bank earmarked funds for scaling up PSIA, resulting in around 40 PSIA studies being conducted annually during
the next three years. By 2006, over 150 PSIA studies have been completed or are underway. The majority of these have been conducted in low-income countries, but PSIA has also been extended to middle-income countries. Less than three years after the first studies, the PSIA approach has established a firm foothold within the analytical work undertaken by the World Bank and several other development agencies.

Consolidating PSIA in World Bank Operations

In September 2004, the World Bank provided operational guidance to its staff through the approval of the Operational Policy on Development Policy Lending (OP8.60). The Operational Policy was accompanied by a Good Practice Note on PSIA, providing operational guidance for staff and country counterparts on how to integrate PSIA within development policy lending operations. The Bank has also committed itself to place the results of this work in the public information domain through the release of the Program Document for a development policy lending operation after Executive Directors have approved the operation. The Operational Policy describes the obligations of the Bank to undertake due diligence for the policy reforms supported by its operations:

*Poverty and Social Impacts.* The Bank determines whether specific country policies supported by the operation are likely to have significant poverty and social consequences, especially on poor people and vulnerable groups. For country policies with likely significant effects, the Bank summarizes in the Program Document relevant analytic knowledge of these effects and of the borrower’s systems for reducing adverse effects and enhancing positive effects associated with the specific policies being supported. If there are significant gaps in the analysis or shortcomings in the borrower’s systems, the Bank describes in the Program Document how such gaps or shortcomings would be addressed before or during program implementation, as appropriate. (OP8.60, *Development Policy Lending:* paragraph 10, World Bank 2004).

The approval of the policy has helped to consolidate PSIA work by making it routine. One noteworthy feature of this policy commitment is that it has extended the application of PSIA beyond low-income countries that prepare a Poverty Reduction Strategy to middle-income countries, since Development Policy Lending is for both groups of countries. PRSP countries are eligible for Poverty Reduction Support Credits (PRSC) on concessional terms, while middle-income countries typically obtain budget support through loans linked to specific policy reforms.

The enactment of the operational policy is an important step toward providing an institutional base for PSIA. In practice, mainstreaming depends on integrating PSIA in strategy and analytical instruments.
Strategy documents—countries’ PRSPs and Country Assistance Strategies (CAS)—produced in the past did not systematically identify PSIA priorities, but this is slowly changing. The next generation of PRSPs offers an opportunity to identify priority reforms whose poverty and social impacts would need to be analyzed. On the Bank’s side, there is an expectation that this analytical program will be reflected in the forthcoming CASs.

From its inception, PSIA has been identified as an approach, not as a new instrument. To the extent that the PSIA approach within the Bank is well integrated into country analytical work—poverty assessments, public expenditure reviews, country economic memorandum, country social analysis, and Economic and Sector Work—PSIAs do not have to be produced as stand-alone studies. Even when a PSIA is undertaken as a stand-alone piece, operational links and impacts can be achieved by linking it to specific operations. Going forward, PSIAs are being aligned much more closely and integrated within country Economic and Sector Work. This tendency will be strengthened as special funding for PSIA disappears and is replaced by the normal operating budget.

Objective of this Book

Despite the rapid uptake of PSIA, in particular by the World Bank, civil society organizations and bilateral donors point to several areas where they feel PSIA work could be improved. The need for better integration of PSIA into the PRS process, greater stakeholder involvement in the analysis, more systematic disclosure of work carried out by the Bank, and more systematic use of PSIA in informing Bank-supported operations are frequently raised. This collection of case studies provides an opportunity to reflect back on the PSIA work undertaken so far to draw lessons on how the analysis and its operational impact can be improved.

This book contains a selection of examples from the first cohorts of completed PSIAs. The case studies do not cover all the types of reforms analyzed, nor do they provide comprehensive coverage of all the tools and techniques that can be used to analyze policy impacts, but this cross-section of case studies is not atypical. The cases have been selected to illustrate the spectrum of sectors and policy reforms to which PSIA can be applied and to demonstrate the range of analytical tools and techniques that have been used for PSIA. The chapters largely deal with policy reforms in a single sector, such as agriculture (crop marketing boards in Malawi and Tanzania, cotton privatization in Tajikistan), energy (mining sector in Romania, oil subsidies in Ghana), utilities (power sector reform in Ghana, Rwanda and transition economies, water sector reform in Albania), social
sectors (education reform in Mozambique, social welfare reform in Sri Lanka), and taxation reform (Nicaragua), but they also include macroeconomic modeling (Burkina Faso).

FIVE ANALYTICAL LESSONS

In the rest of this chapter, we draw on the case studies included in this volume to discuss the analytical and operational lessons. We then present a short synopsis of each of the chapters presented in this volume before concluding with challenges that lie ahead.

Lesson 1: Negative and Positive Impacts

Generically, distributional analysis means the analysis of the impact of reforms both on groups that benefit from reforms and on groups that are adversely affected by them. Indeed, although part of the imperative for PSIA emerged from a concern for how reforms affect the poor, the proponents of PSIA recognized that focusing exclusively on the assessment of adverse impacts on the poor would be limiting and counterproductive. Besides the analytical necessity of comparing impacts on different groups to assess the overall impact of a policy, one key concern was that focusing PSIA exclusively on negative impacts would reduce PSIA to an instrument for designing mitigation measures and leave out the possibility of drawing on it to include the poor in the benefit stream of the reforms. For example, the analysis of the tax reform in Nicaragua revealed that some elements of the reform were progressive while others were regressive. Overall, it was important to have a clear understanding of both positive and negative impacts on different groups so that some impacts could be mitigated while building consensus for the reform.

In addition, PSIA recognizes that it is critical to understand the likely impact of reforms on non-poor groups, especially those with significant influence, in order to uncover potential support and opposition for the reform. Taking the political economy of reforms into account when designing them is central to their success or failure. Broadening the analytical scope of PSIA has given it a greater ability to consider alternative designs of policy reforms.

Lesson 2: Impacts on Different Social Groups

The analytical work carried out over the past few years has been quite effective in broadening the scope of distributional analysis. Distributional
impacts are often analyzed for different income groups, typically using constructs such as income or consumption quintiles and deciles. For instance, the chapter on Sri Lanka social welfare reform, the two Ghana chapters on electricity tariff reform and oil subsidies, the analysis of Nicaragua’s fiscal reform, and the study of Rwanda’s electricity reform use deciles or quintiles to analyze impacts and derive policy recommendations. The power sector reform studies in the Europe and Central Asia Region also look at welfare across income groups. These categories are very useful to understand the effectiveness of targeting, compare aggregate impacts of policy alternatives, and determine the optimal level of transfers.

However, quintiles and deciles are artificial constructs that do not necessarily identify meaningful groups. In this sense, such analysis does not lend itself to the examination of preferences and behavioral responses to policy change. Behavioral responses are often conditioned by other individual and household characteristics, including location, social or occupational characteristics, perceptions of benefits and risks, and the extent to which stakeholders feel they can influence outcomes. Hence, the majority of the studies in this volume have also used such characteristics to define groups. For example, the studies of Albania’s water sector, Malawi’s agricultural markets, Mozambique’s education sector, Romania’s mining reform, Tanzania’s reform of crop boards, and Tajikistan’s cotton reform analyze the impacts of those reforms on spatially defined groups. The analysis of education reform in Mozambique and mining reforms in Romania explicitly look at impacts across gender. The model developed in Burkina Faso distinguishes groups according to their place of residence, their labor market situation, and their involvement in the production of tradable versus nontradable goods. In Sri Lanka, the analysis focuses on particular groups defined not only in terms of their demography but also in terms of access to land and housing.

By looking at the impacts on, and influence of, different stakeholder groups that have different interests and degrees of influence on the reforms, PSIA is also able to analyze the political economy of reform. This provides insights into the likelihood of the reform being carried out as intended and into the likely responses of various groups, thereby deepening the understanding of reforms and their impacts.

**Lesson 3: Short- and Long-Term Impacts**

In order to present a complete picture of the impacts of reform alternatives, it is also essential to consider both short- and long-term impacts. Most reforms have both direct impacts on selected groups, which often
occur relatively rapidly, and indirect impacts, which can take longer to materialize. Assessing short-term impacts tends to be easier than assessing longer-term ones, in part because of their more direct nature. A same group of stakeholders can be affected positively in the short term and negatively in the longer term, and vice-versa. Providing a full picture of the net effects over time is critical to inform the debate around the reform options.

For instance, the analysis of the effect of petroleum price changes in Ghana takes into account both the direct effects on households in terms of the energy they consume and the indirect effects they will feel as a result of changes in prices or increased expenditure in other areas. Very often, reforms are expected to have large indirect effects through their effect on the fiscal balance or more generally their broader effects on the economy. Taking these indirect effects into account is complex. In the case of the cotton reform in Burkina Faso, for example, these broad indirect effects are taken into account in the analysis of changes in cotton prices and volumes, and more generally changes in agricultural production.

**Lesson 4: Multiple Transmission Channels**

Experience has also shown that it is critical for the analysis to consider multiple transmission channels for impacts, including such channels as prices and wages, employment, access to goods and services, assets, transfers and taxes, and authority. Indeed, selected groups of stakeholders might be affected positively through some channels and negatively through others. Neglecting some of these channels could therefore lead to erroneous conclusions in terms of the net impacts.

The case studies included in this volume typically cover 2 or 3 channels. For example, the studies on Malawi and Tanzania were initially approached primarily through the lens of transfers, but the impact analysis suggested that access to marketing services and changes in authority structures were also significant channels through which additional impacts could be transferred. Similarly, the analysis of utilities in Europe and Central Asia, as well as those in Ghana and Rwanda, suggested that in addition to concern for tariffs, access to utilities was an important consideration. The importance of access implies that the traditional concern for affordability and lifeline tariffs may need to be modified to include the possibility of subsidizing connection costs that, in some instances, may be even more helpful to the poor than recurring price subsidies. The analysis of petroleum price changes in Ghana shows how savings made by reducing the subsidy can be better channeled to the poor through interventions in
other sectors, including removing school fees and investing in transport and rural electrification.

**Lesson 5: Choice of Research Methods and Tools**

The choice of research methods and tools tends to be determined by the nature of the research question, the availability of prior data and secondary information, and the resources and time available for the analysis. By and large, multidisciplinary approaches have proved to be invaluable for PSIA. Preliminary findings from one method are often tested and refined through complementary tools to add robustness through triangulation of results. More than half of the studies in this volume used multidisciplinary approaches. For instance, in the Malawi study, the two quantitative analyses came up with somewhat contrary results that were clarified and interpreted by the qualitative study. Similarly, in the Romania mining study, the analysis of household survey data was compared with the results from the community study and the gender study to arrive at more robust understanding of impacts. On the other hand, the studies on Burkina Faso, Ghana (oil subsidies), Rwanda, and Sri Lanka relied mostly on economic analysis; these studies could benefit from complementary analysis to assess different groups’ responses to opportunities and risks.

A particular challenge of PSIA is the need to measure likely behavioral responses to policy reforms. To address this difficulty, the studies in this volume rely partly on qualitative techniques, including key informant interviews and focus groups (as in the studies of water reform in Albania and agricultural markets reforms in Malawi), semi-structured questionnaires and purposive surveys (electricity in Ghana or crop boards in Tanzania), and qualitative research at the community level (analysis of mining reforms in Romania). PSIA also relies on quantitative methods to simulate behavioral responses, for instance by embedding dynamic demand or supply functions in models with micro-macro linkages (as in the model developed for Burkina Faso); or by capturing the likely behavioral responses of households to changes in price, quantity, quality or choice—for instance, changes in consumption patterns (utility reforms in Europe and Central Asia) or changes in demand for education (education in Mozambique).

Political economy analysis can help to understand the interests of influential stakeholders. Political economy dimensions can be studied through stakeholder analysis (as for Ghana electricity), institutional analysis (Albania water, Tanzania crop boards), or analysis of secondary data (Romania mining, Tajikistan cotton).
FIVE OPERATIONAL LESSONS

The PSIA process, especially the degree of participation by stakeholders, has generated some degree of debate. During the early years of PSIA, when there was a degree of skepticism about its feasibility, more attention was given to its analytical and operational aspects. Now that the tools and methods have been developed and adopted, some bilateral partners and civil society organizations feel that the PSIA process needs more attention.8

Lesson 1: Identification of Priority Reforms for PSIA

The first operational lesson is that the need for PSIA should emerge from the PRS process. The elaboration of the Poverty Reduction Strategy, or similar national development strategies in other countries, has typically been based on extensive participatory processes.9 That is where the participatory process and policy dialogue rightly belong. The case for establishing yet another participatory process for identification of reform priorities for PSIA is rather weak. Instead, integrating consultations on PSIA priorities more systematically within future discussions of PRSs and country strategies is desirable.

Overall, government agencies and other in-country stakeholders have tended to be the primary source for identifying reforms for PSIA, although some have been proposed by donor agencies. In middle-income countries, the reforms have tended to emerge during consultations regarding country assistance strategies or their medium-term expenditure frameworks. To the extent that countries have an inclusive process of strategic planning, other stakeholders are able to feed into that process. All the chapters in this volume analyze reforms identified by the respective governments and, for at least half of them, by civil society as well.

PSIA is most effective when applied to specific and well-defined reforms. Indeed, it cannot address broad strategies—such as the Poverty Reduction Strategies or broad reform packages—whose distributional outcomes cannot be meaningfully assessed. Since PSIA requires significant time and resources, it is important for low-income countries to focus analyses on key reforms that are likely to have significant distributional impact, and to prioritize the need for PSIA with other analytic gaps. The PSIA User’s Guide recommends that four criteria be used to select priority reforms:

- the expected size and direction of the poverty and social impacts,
- the prominence of the issue in the government’s policy agenda,
- the level of national debate surrounding the reform, and
- the timing and urgency of the underlying policy or reform.
The chapters in this book provide examples of how the PSIA process relates to these criteria. All of the chapters deal with policy reforms that have large impacts both in terms of their fiscal importance and in terms of the number of people likely to be affected. With the exception of Romania, which is not a PRSP country, all the reforms emerged from the interim or final PRSPs of their respective countries. Reforms of public utilities, agricultural markets, and mining are high on the governments’ policy agendas, and all of them have generated a good bit of controversy. For instance, the reform of the agricultural markets has been passionately debated for many years in Malawi. In the case of Sri Lanka, PSIA focused on a particular transfer program which was the most critical, both because of its size and because of the political economy surrounding it.

**Lesson 2: Design of the PSIA**

The choice of tools and methods is driven by the availability and quality of data, the existence of technical capacity, and resource and time constraints. In order to be credible and useful, however, the analytical techniques and research methodologies employed should be both transparent and accessible to all stakeholders. Overall, it is important to address the interest of the public by releasing information on the scope of work early during the analytical process and opening a public discussion of the scope and design of PSIA before the analysis is undertaken.

This, however, is quite different from designing the analytical work in a participatory manner with all stakeholders. Research design is left to professionals who, over time, have established norms and standards for analytical work over several decades as their case load has grown. In fact, in some cases—where the policy reforms can affect influential stakeholders—a participatory research design process runs the risk of being undermined by powerful political economy interests.

The research questions for the PSIA presented in this volume were discussed with the government and key stakeholders before the PSIA was designed for the majority of these studies. The research design was prepared by the PSIA teams, partly in collaboration with in-country researchers, adapting economic and social analysis techniques from other contexts to these reforms.

**Lesson 3: Analysis of the Reform**

For the PSIA to be credible, the analytical work has to be technically sound and the basis for arriving at conclusions needs to be transparent and able
to stand up to public scrutiny by peers. This is the same standard that would apply to any other form of scientific research. Rigorous analysis by specialists does not mean that key stakeholders and those affected by the reform are ignored. Their interests, perceptions, and likely behavioral response are indeed essential data for the PSIA. In practice, however, the analytical process has leaned toward a scientific, technocratic one, rather than a participatory one.

This implies that there is no monopoly on who does the analysis as long as the research methodology is transparent. PSIA can be (and frequently is) undertaken by government agencies, universities, research institutes, nongovernmental organizations, development agencies, or even private companies. There are a few instances (as in Malawi), where nongovernmental organizations have been involved directly in PSIA work, undertaking part of the research and analysis. Their contribution, however, was a scientific and rigorous one, rather than the expression of the views of particular stakeholders.

In order to promote the greater use of the PSIA process, in-country capacity for poverty and social analytical work is essential so that this sort of analysis can be carried out routinely within partner countries. In-country capacity remains a constraint in many borrower countries. In the examples provided in this book—with the exception of the Burkina Faso study, where client capacity building was an explicit objective—client capacity building has tended to occur through on-the-job learning by in-country partners directly involved in the PSIA. In Nicaragua, for instance, the PSIA team comprised a mix of local academics, government analysts, and World Bank staff. In the long run, however, mainstreaming PSIA will require more deliberate, and significantly higher, investments in capacity building for poverty and social impact analysis.

In the examples presented in this volume, stakeholder consultation (rather than involvement) during the analytical phase were common and represented an important source of data. For instance, the Romania mining and Tajikistan cotton studies paid a great deal of attention to stakeholder interests through stakeholder consultations and analysis, but they relied on specialized research teams to ensure analytical rigor and objectivity in the face of political economy interests. As exemplified by the analysis of the oil subsidies in Ghana, even when the analysis is conducted in a quick fashion modeling existing household survey data, it is feasible to enrich the analysis by consulting with key stakeholders who are knowledgeable about the reform.

Another lesson learned from experience in numerous countries is that the agencies responsible for implementing a reform, even though they
might not be actually undertaking the analysis themselves, should be kept fully abreast of the analytical process. This permanent involvement is critical to ensure that they understand the analytical findings and are able to both utilize the results and monitor reform impacts effectively. In the case of Nicaragua, the involvement of the tripartite committee (comprised of representatives from the government, civil society, and donors), responsible for the tax reform throughout the PSIA, proved critical to its influence on the policy designs.

**Lesson 4: Policy Dialogue**

A central lesson that emerges from the chapters in this book is that for the PSIA to be effective, it has to be closely aligned with the ongoing policy dialogue. This means that the research design has to be based on the reforms and public actions effectively under consideration, and that results have to be relayed back into the policy dialogue.

In practice, the PSIA is only one of the inputs into the policy dialogue around the reform. Hence another and related lesson is that establishing a parallel dialogue on the PSIA itself is neither practical nor useful. Rather, the key issue is the dissemination of PSIA results into the broader reform dialogue. This allows for the effective utilization of the PSIA results along with other factors such as the economic and financial returns of the reform, competing expenditure priorities, and the presence of political support for reform when debating policy options.

Policy processes often do not have a clear beginning or an end. More often than not, even a discrete action—such as removing the subsidy from the energy sector—is composed of a series of interrelated fiscal, institutional, and political actions. Consequently, most of the reforms analyzed have been on the table for several years; they may take several more to implement. It is therefore better to think of the PSIA as an integral part of the programmatic process of policy reforms in the relevant sector. For instance, welfare reform in Sri Lanka has a broad agenda covering issues of targeting efficiency, but also exploring alternative options to social protection, such as the move from universal to conditional transfers or self-selection. The PSIA presented in this volume feeds into one of the elements of their broad agenda.

In some of the experiences presented in this volume, such as those of Albania, Burkina Faso, Ghana, and Malawi, governments are effectively drawing on PSIA lessons within their ongoing dialogue with local constituencies and donors.
Long policy processes mean that PSIA can be useful before a reform, during the reform, or later in the process. Although the PSIA has usually been conducted ex ante, it also has relevance during reform implementation and after a certain phase is completed. When reforms are already in the process of implementation, the PSIA can inform policy choice, allowing reform proponents to reconsider choice, design, pace, and sequence of policy and institutional reforms and identify or strengthen mitigation measures. Mozambique education and Sri Lanka social welfare PSIAs were conducted to help those governments reconsider their programs. The studies in Ghana and Rwanda have also helped their governments determine optimal modes of subsidy to facilitate energy access by the poor. In Malawi, the study convinced the Bank to modify its policy advice to continue restructuring the economic functions while protecting the social functions of remote agricultural marketing outlets. Similarly, retrospective analysis of reforms already carried out, such as the utilities studies in Europe and Central Asia, offer lessons for the next phase of reforms.

The key lesson is that the dissemination of results from the analysis is critical to ensure it feeds into the broader policy dialogue. This requires a particular effort to ensure that all parties to the reform have access to the same information base. When this was not the case, as in Malawi, even though the final results were made available to the government, other stakeholders were unable to access them and felt left out of the policy process. In practical terms, however, there is a tradeoff between early release of information and ensuring analytical rigor and peer scrutiny prior to dissemination of research results. There is no single solution to this tradeoff. In each case, a judgment needs to be made about the likely impact of disclosing information. Generally, it is good practice to release research results as early as possible to increase their likely impact on the design of reforms.

Many of the studies in this volume have adopted creative solutions to share interim results with stakeholders. For instance, the Burkina Faso PSIA has been carried out directly with the government and local partners, giving them access to information throughout and involving them directly in the analysis. Similarly, the results from the Albania water and the Sri Lanka social welfare PSIAs were shared and discussed with the government while the analytical work was ongoing.

**Lesson 5: Monitoring and Evaluating Reforms**

One of the innovations of PSIA lies in its focus on ex ante analysis of reform impacts. This ex ante analysis means that the best PSIA includes
several assumptions—about the macroeconomy, market trends, global market prices, investor behavior, behavioral responses by affected persons, political support for reform, the pace of parallel reforms, and institutional capacity. Changes in these assumptions are likely to occur, as the context of the reforms changes constantly. These changes affect the expected impacts of reforms, which might in turn call for changes and corrections to the design of some components of the reforms. The need to integrate the critical elements of the PSIA into monitoring and evaluating the reforms is therefore paramount. This is already happening in some of the cases presented in this volume—for instance, in the cases of the Romania mining and Sri Lanka welfare reforms, where governments are using the PSIA findings to refine their monitoring systems.

This integration is best done by integrating the monitoring of elements underlined by the PSIA within existing domestic monitoring systems—either PRS monitoring systems or sectoral monitoring systems. However, the PSIA might lead to a close monitoring of some elements that are not traditionally the focus of national systems. This may necessitate the contribution of other actors to the monitoring efforts, including local civil society organizations.

THE IMPACT OF PSIA ON GOVERNMENT POLICY AND WORLD BANK OPERATIONS: EVIDENCE FROM THE CASE STUDIES

PSIAs are now increasingly being used to inform the design and sequencing of reform policies. For example, the PSIA of utilities (Europe and Central Asia, and Rwanda) has created institutional space for consideration of access to service, and quality of service, besides affordability. Consequently, the standardized solution of lifeline tariffs is being nuanced by reforms that subsidize connection costs to increase access to utility services for the poor, rather than subsidizing recurring charges.

Reforms of agricultural markets (Malawi and Tanzania) tend to be motivated by fiscal imperatives and market failures. However, impact on different groups is conditioned by spatial inequality (primarily access to transportation) and socio-economic characteristics of the households, which determines their ability to manage risks and cope with shocks. Policy recommendations emerging from the studies have led to more location-specific applications of reform alternatives.

Analysis of social sector services (Mozambique and Sri Lanka) revealed that local interpretation of rules prevented achievement of policy objectives. This has resulted in recommendations to eliminate or minimize local discretion for universally provided services in Mozambique, and
objectively determined criteria of eligibility for targeted social assistance benefits in Sri Lanka.

We present below an overview of each of the case studies reviewed in this volume with a particular emphasis on the impact that this work has had on the on country policies and World Bank operations.

**Fiscal Reform in Nicaragua**

Chapter 2 presents the PSIA of fiscal reforms in Nicaragua with particular attention to the development of a new tax system. The PSIA simulates the distributional impact of these reforms, determining the projected revenues from the tax changes included in the Fiscal Equity Law and assessing the distributional impact of projected revenues from value-added tax (VAT), exonerations, excise taxes, and income taxes on household welfare. The analysis finds that using income as the indicator of welfare, the overall tax reform in Nicaragua is slightly regressive. However, when current consumption is used as the indicator, the reform is assessed as slightly progressive. If reform implementation leads to an effective increase in tax revenues, distribution in Nicaragua will become less unequal than it is currently.

The government created a tripartite technical committee comprised of government, civil society, and donors to design the tax reform program and the Fiscal Equity Law. This committee had explicit responsibilities for providing feedback for the Nicaragua PSIA on the tax reform.

The recommendations are (1) to eliminate exonerations and exemptions, thus avoiding loopholes in the reform’s regulations; and (2) to strengthen tax administration to diminish tax evasion. The findings presented in the chapter have already been incorporated into a revised PRS, allowing them to be more widely disseminated to decision makers in the public sector and to representatives of other branches of government, such as the National Assembly, as well as to political parties, the private sector, and the media.

**Cotton Sector Reform in Burkina Faso**

The PSIA in chapter 3 presents the analytical framework of the poverty analysis macro-economic simulator (PAMS) model of cotton sector reform in Burkina Faso. Burkina Faso is a poor landlocked country of about 12 million inhabitants with an extremely narrow natural resource base that is very dependent on cotton fiber exports and therefore vulnerable to external shocks. Analyzing the poverty impact of cotton price fluctuations is therefore a high priority for the country.
The World Bank and the German Technical Cooperation (GTZ) helped the government develop a PAMS model to assess the poverty and distributional impacts of macroeconomic shocks and policies reforms. PAMS modeling provides sets of simulations to inform policy choices. It is now routinely applied to estimate the poverty impact of different macroeconomic scenarios. The fourth and fifth poverty reduction support credits (PRSCs) build on PAMSs work to analyze the poverty impact of cotton price fluctuations and consider development policy choices. PAMS demonstrates the limitations of the cotton sector for quickly reducing poverty across the entire country, so the second PRSP focuses on consolidating achievements in the cotton sector, informing policies that are accompanied by an ongoing effort to raise educational attainment and reduce morbidity and mortality rates.

The Burkina Faso experience has led to the adoption of the PAMS model in other countries of the subregion. The study emphasizes the importance and strong payoffs of building capacity in the government’s forecasting team, of close collaboration with other partners, and of the need to make appropriate allowance for collecting and analyzing poverty data when embarking on this sort of modeling.

**Education Reform in Mozambique**

Chapter 4 presents the results of a PSIA conducted on the effect of school fees and primary school enrollment and retention in Mozambique. The Ministry of Education had been considering policy alternatives for encouraging school attendance and completion. The PSIA was designed to consider demand-side and supply-side constraints as well as contextual factors—school proximity, parental education, and the characteristics of the child. The study finds, perhaps surprisingly, that school fees have little impact on enrollments in primary school but that other expenditures on education are significant.

The PSIA study generated a series of recommendations, the most important of which was to revise the current policy on school fees in order to clarify the type, purpose, frequency, payment mechanisms, and accountability of funds. Other recommendations include expanding the resources channeled directly to schools, deploying teachers better, and building schools closer to their communities.

The PSIA has had an impact at three levels: (1) it provided an initial impact assessment of the government decision to abolish all fees beginning in the 2005 academic year; (2) it has informed the second Education Sector Strategic Plan and the ministry’s gender strategy; and (3) it has sharpened
advice in the context of the PRSC, Joint Partner Initiatives, and Policy Reviews in Mozambique.

**Welfare Reform in Sri Lanka**

The PSIA summarized in chapter 5 was designed to examine the potential gains to be had by transforming the current subjective method of selecting beneficiaries of the Samurdhi welfare program to a system that applies a set of objective criteria. Poverty in Sri Lanka is concentrated in pockets throughout the country. Rising inequality across households is making it important to target government assistance efficiently.

The PSIA uses a proxy means text formula (PMTF), based on household data, for an ex ante simulation exercise. Recommendations can then be made on the cutoff point and appropriate payment schemes to improve targeting. A pilot targeting survey was conducted to validate the results of the simulations. Three models were simulated; PMTF model III, presented in the chapter, was chosen by comparing models in several criteria, including each model’s cutoff point, undercoverage rate, and leakage rate. The PSIA also uses simulations to address issues inherent in the payment scheme for eligible individuals—its feasibility as well as its welfare implications.

This PSIA has informed the design of the reform and implementation plan, and influenced the basic policy decision to adopt the PMTF approach. A pilot and the linking of the country’s statistical systems for monitoring and measuring poverty with the conduct of the proxy means testing exercise proved crucial to its success.

**Reforming the Power Sector in Eastern Europe**

Success in Eastern Europe in the privatization of the power sector has been mixed. The PSIAs described in chapter 6 are designed to find a way to improve the chances for success and make the transition smoother and less difficult for the poor. The chapter considers energy reform in Armenia, Azerbaijan, Georgia, Kyrgyz Republic, and Moldova—countries that all have cold winters and socialist legacies, and that therefore have common specific requirements for successful power sector reform.

This group of PSIAs has led to a softening on the Bank’s position on privatization on the energy sector, affecting overall policy design. It has also influenced the debate over direct income supports versus lifeline tariffs: because the PSIAs found that the existing social protection systems were prone to leakage, there are instances where lifeline tariffs are more useful. Finally, PSIAs have improved the dialogue by bringing policy-
based evidence to the table in order to encourage countries (1) to explicitly link tariff increases to service quality improvement, and to raise tariffs more slowly and focus on raising collections before raising tariffs; (2) to consider the role of the public sector in increasing access to gas as a way to offset the impact of tariff increases; and (3) to give priority to metering. The chapter demonstrates the need to adapt the design of the PSIA to the local political economy, to ensure the availability of adequate time and resources, to involve a broad range of stakeholders, to emphasize rigorous analysis, and to recognize the value of both ex ante and ex post analysis.

**Energy Sector in Rwanda**

In spite of Rwanda’s remarkable economic recovery in the decade since the genocide, its energy sector is in crisis. Chapter 7 documents this crisis, explains the need to increase electricity tariffs, and assesses both the impact of such an increase on the poor and the distributive effects of alternative tariff structures.

The energy sector in Rwanda is very small. All electricity in the country comes from hydroelectric power produced domestically, along with imports from two international utilities. Hydropower sources are experiencing unexpectedly low lake levels, exacerbating the problems. The government has approved an increase of electricity tariffs to nearly double the old tariff. The chapter provides simulations of the distributinal properties of alternative tariff designs, including the interesting Inverted-U Block Tariff Structure (IUBT) that has been proposed by Eleztrogaz, Rwanda’s main energy provider. Their proposal was to provide a reduced price on all consumption below 20 kilowatt hours, along with a price higher than simple cost recovery for all consumption between 20 and 100 kilowatt hours, thus recouping some of the subsidy for the lower bracket.

The analysis attempts to discover which new tariff structure would be appropriate, and whether the new proposals by Electrogaz for an IUBT make sense. The analysis of data shows clearly that connection subsidies can be better targeted than consumption subsidies, although there would still be benefits to providing at least some level of protection, and that volume-differentiated tariff subsidies are better targeted than the others, although the IUBT has some advantages. If such cross-subsidies were to be implemented, it would be relatively straightforward to use the framework presented in the chapter to conduct the necessary assessments with household surveys.
Electricity Tariff Reform in Ghana

The PSIA summarized in chapter 8 was designed as an input into Ghana’s poverty reduction strategy. The overall fiscal drain of the electricity sector had, by 2002, become substantial, and deficits of the three electric utility companies approached 11 percent of government spending.

Fieldwork was carried out in the three major urban areas where most electricity in the country is consumed. The study probed two assumptions: (1) that higher prices have a direct impact on the poor, and (2) that those falling in the lifeline band also fall below the poverty line. The Ghana PSIA also made explicit the importance of looking not only at the subsidy, but also at its sustainability over time. To aid those without access to electricity, the PSIA recommended that policy makers review the factors that affect the availability and pricing of kerosene products in rural areas. The PSIA also recommended indicators to monitor the process of energy reform.

This PSIA led to a change in the World Bank’s own allocation for new investments to include resources to prepare project components for nontraditional and off-grid sources of energy, thus providing a “voice” for those stakeholders least represented on the stakeholder map—poor rural consumers not yet connected to the grid—and a way to take their needs into account in the design of development projects.

Collaboration among stakeholders resulted in showing that the assumption that the best way to reach the poor was to extend subsidies was false: the majority of the poor are not connected to the grid. This realization allowed the World Bank to shift its lending policy rapidly to target these needs better. Local organizations played a leading role in analyzing data.

Water Sector Reform in Albania

Chapter 9 summarizes the PSIA of water sector privatization in Albania. The Government of Albania has set up two models for decentralized water sector reform: (1) public management of water utilities, led by local governments; and (2) private water utility management, supported by the World Bank’s Municipal Water and Wastewater Project (MWWP or the “Project”). The PSIA selected four cities under public utility management and compared them with four Project cities. The study was designed to set baselines in all eight cities. A follow-up study will measure the distributional impacts of the two reform models against these baselines, so that the PSIA compares the reform impacts of two water sector reform models across two points in time. Study findings inform the policy dialogue
Key findings suggest reform adjustments focused mainly on a different sequencing and pacing of the reform. Data from all eight sites suggest that visible improvements in the service quality and in the collection ratio should be made before tariffs are further increased. This sequence is crucial for maintaining consumer satisfaction and to keep consumers paying water charges. Local governments request the Bank to support decentralization reform, as well as to provide technical assistance and capacity building. Study findings illustrate similarities and differences between the two reform models. Reform adjustments could be useful where improvements in service quality and in the collection ratio are made a condition for gradual tariff increases in all eight cities.

The Mining Sector in Romania

The PSIA of the Romania mining sector summarized in chapter 10 was conducted to inform the design of a second Bank loan. Under communism, the mining sector was privileged, with relatively high wages and a politically influential trade union. Sector restructuring was initiated in 1997; however, subsidies and tax exemptions grew to more than US$300 million by 2004, equivalent to 0.5 percent of GDP. In April 2004, the government approved a mining sector strategy to address the fiscal deficit and comply with European Union (EU) requirements to eliminate mining subsidies.

The PSIA examines three sets of distributional impacts of sector reform: impacts on mining and non-mining communities and households; gender impacts; and the distribution of wages and subsidies within the mining sector. The study found (1) considerable diversity among mining towns depending on local infrastructure and economic opportunities, (2) gender bias in impacts and rehabilitation opportunities for women, and (3) inequitable and inefficient use of subsidies caused by political economy interests. Intra-sectoral analysis helped to unpack the cause of the quasi-fiscal deficits.

The study has led to the creation of additional components for community infrastructure, a small grants scheme, especially for women and youth, and the establishment of a subsidy monitoring mechanism to ensure that subsidy management objectives are met. Close collaboration of the PSIA team with the project team enabled the PSIA to have an impact on the reform program even before the report was finalized and led to an agreement that sector reform will require changing institutional arrangements and power relations to manage political economy interests.
The Petroleum Sector in Ghana

The PSIA of the policy and reform of the petroleum sector in Ghana summarized in chapter 11 emphasizes the need to identify the probable impact on the real incomes of the poorest households and alternative approaches to mitigating these effects. The PSIA group collaborated closely with country teams at the IMF and the World Bank before sending a technical assistance mission to Ghana in January 2005.

The PSIA evaluates the distributional implications of petroleum subsidies and first-order income effects of price changes to household real incomes for Ghana and considers a range of alternative approaches to protecting the real incomes of the poor. The analysis simulated different scenarios using the national household survey and assessed the impacts of the different alternatives. The study found that the distribution of the benefits from energy subsidies across households involves substantial leakages of these benefits to higher-income households. The simulations clearly show that targeted subsidies have high returns for protection to the poorest households; maintaining lower kerosene prices is relatively inefficient. Better-targeted programs can help reduce, even eliminate, losses from subsidy leakage.

The results of the PSIA were presented to the government in early February 2005; in mid-February of the same year, the government increased petroleum prices by, on average, 50 percent and emphasized its commitment to continuing sector reforms. It also introduced additional expenditure items in the 2005 budget intended to imitate the adverse effects of the higher petroleum prices on low-income households. These programs included the elimination of school fees as well as investments in transport and an expansion of the rural electrification scheme.

This study is a very useful example of how household survey data and input-output data together can be used to evaluate the likely impact of higher domestic petroleum prices. The study also helps to highlight the tradeoffs that exist in practice: the desire to be ex ante and timely means that the tradeoffs in this instance were relatively high. However, such tradeoffs are expected to become less sharp as the framework and capacity for PSIA is developed.

Reforming the ADMARC in Malawi

Chapter 12 describes the process and findings of the PSIA on the reform of ADMARC in Malawi. ADMARC is a Malawian parastatal organization mandated to market agricultural produce and inputs; it also plays a food
security role in the country’s maize market. ADMARC has recently deviated from its core mandate and its importance in agricultural marketing has declined. Many reforms have progressively liberalized agricultural markets over the last 20 years, a strategy that has been supported under various IMF and World Bank programs. This strategy has been less positive than expected, and donors continued to press the government to improve ADMARC’s financial position through restructuring and cost cutting.

The PSIA was designed to address the controversy surrounding recommendations to reduce ADMARC’s marketing role further and possibly sell off some of its marketing infrastructure. Three background studies were commissioned: two quantitative studies that used econometric techniques to analyze survey data, and one was a qualitative study that used an array of methods to solicit households’ and stakeholders’ reactions. The PSIA confirmed that ADMARC was wasteful and could be substantially downsized in less remote areas without significant social risks. The PSIA did increase awareness of the emphasis placed by the Bank on maintaining social services and the importance of identifying a more efficient alternative to address market failures in remote areas.

Several NGOs have criticized the limited extent of its consultation during the study’s design and the long delay in disseminating its findings. As the process has evolved, the value of wide consultations, inclusiveness, and consensus building has become better understood. The Bank also underestimated the symbolic importance of repealing the ADMARC Act and the politics that became associated with this event.

The findings of this PSIA were incorporated into the new World Bank program. The experience with ADMARC in Malawi shows that policy reforms that have significant social impacts are difficult to implement without an adequate consensus that takes into account the main concerns raised by stakeholders. The combination of quantitative and qualitative methodologies is well worth the trouble. This study has improved the quality of World Bank recommendations by providing a more nuanced stance on ADMARC.

Cotton Farm Land Privatization in Tajikistan

The objective of the PSIA presented in chapter 13 was to analyze the poverty impact of cotton farmland privatization in Tajikistan. The analysis focused primarily on the income implications of cotton farmland privatization, looking at the poverty impact of cotton farmland privatization by different methods deployed in Tajikistan. The two methods were State
Farm Restructuring (SFR) and the World Bank Farm Privatization Support Project (FPSP). The main focus of the study was on access to land, crop choice, and the participation of farmers in the financial affairs of farms.

The study analyzed the cotton production and marketing chains and the distortions that existed within them. A stakeholder analysis was carried out to assess the incentives and relative importance of each stakeholder in the privatization process. The PSIA made an early and important contribution by identifying the main obstacles to improving the welfare of cotton farmers and the main sources of distortion, quantifying the large losses in this sector, estimating their impact on farmers’ incomes, and highlighting the opportunity cost to Tajikistan.

The government’s options are to (1) privatize all cotton farms on the lines of FPSP, leaving other aspects of the cotton production and marketing chains unaltered, or (2) privatize all cotton farms on the lines of the FPSP while liberalizing the production and marketing chains. The PSIA revealed that Option 2 would be most effective in alleviating the problems with the sector while productivity remains low and farmers’ poverty level remains high. The status quo would have significantly negative consequences for the entire economy.

The PSIA helped to understand stakeholder incentives to raising barriers to welfare improvements. Stakeholder analysis structured the multiple factors that led to the observed outcome of high poverty in cotton areas. The analysis was extended to determine the extent of profits (or rents) captured by various groups, which is useful for understanding the degree of resistance to change. The team working on this PSIA benefited from being multidisciplinary and having an in-depth knowledge of the culture, the political players, and the agricultural sector.

**Reform of Coffee and Cotton Crop Boards in Tanzania**

Chapter 14 contains part of a larger PSIA on Tanzania’s coffee, cotton, cashew, and tea industries. The chapter focuses on the first two. Agricultural growth is central to reducing poverty in Tanzania. The institutional structure, which includes the crop boards, for production and marketing affects the competitiveness of export crops. The PSIA was designed to review the sources and use of crop board funds; to assess the existing environment for the cotton and coffee industries; and to analyze the impact of reform options, particularly on smallholder farmers and vulnerable stakeholders. The PSIA used a mixed methods approach with sequenced data collection.
Crop boards perform important public functions but their interventionist stance often handicaps traders. The boards have a mix of public and private activities, including regulation, service provision, and collection of revenue, which can create a conflict of interest. Clearly delineated board functions and accountability structures within the crop industries are crucial. Reform options include (1) boards that are publicly financed and focus on public services; (2) boards that are privately financed; (3) boards that are jointly financed, with associated private services financed by a levy and contracts for public services; and (4) boards that remain as they are. The study team recommends option 1 for the coffee industry, and option 3 for the cotton industry.

The PSIA is expected to inform the future functions of the coffee and cotton boards. The government has already decided to abolish the levy that financed the boards, replacing it with budget financing, and to abolish the crop development funds. The reform affects producers by improving access to market information, increasing competition, and providing greater accountability of service providers. Because policy reforms are ultimately political, working on PSIAs from a purely technical angle is often inadequate, and local capacity building along with good analytical work was essential to this PSIA.

LOOKING AHEAD: CHALLENGES TO MAINSTREAMING THE PSIA

As the collection of chapters in this book illustrates, significant progress has been achieved in a relatively short period of time. However, the glass is only half full and much more needs to be done before PSIA can be considered truly mainstreamed. Having tested the feasibility of this approach and moved from pilots toward mainstreaming within donor agencies, the challenge of embedding PSIA within the Poverty Reduction Strategy processes and policy formulation within client countries remains daunting. Mainstreaming will require greater country capacity in three different dimensions.

First, the regular, systematic use of the analysis of distributional impacts can materialize only if there is strong national demand for analysis. Such demand will be more likely if there is growing interest in evidence-based policy making, a much broader agenda to which PSIA can contribute. This will require greater ability and engagement by policy makers to formulate their analytical needs and guide the analysis.

Second, mainstreaming the analysis of the poverty and social impact of reforms requires greater national capacity to effectively analyze and monitor reforms than is presently available. For this, research and analytical
capabilities among borrower countries and the information base necessary for the analysis need to be strengthened.

Finally, for decision makers to use information on alternative policy options effectively, there is a need for a greater in-country ability to understand the findings and their implications, alongside a need for greater efforts at disseminating results to all stakeholders in adapted formats.

NOTES

1. The Joint Implementation Committee (JIC) was established in 1999 to facilitate communication and coordination between the World Bank and International Monetary Fund (IMF) on PRSPs.

2. The Department for International Development of the U.K. (DFID) was initially the most active partner of this program; it financed six pilots parallel to the Bank’s pilot studies.


4. Financing for the initial PSIA pilots was provided by a Norwegian-Finnish trust fund (TFESSD), which financed six each in 2001–3 (fiscal 2002 and fiscal 2003). Since then, other donors—Belgium, Germany, Italy—have also provided trust funds for PSIA work.

5. The OP 8.60 is available in the World Bank Operational Manual (World Bank 2004).

6. See for example CIDSIE-Caritas Internationalis (2005); EURODAD (2005); Oxfam (2005); GTZ (2005).

7. See the PSIA User’s Guide (World Bank 2003) and the TIPS Sourcebook for PSIA (DFID and World Bank 2005, section 5.1).

8. See, for example, CIDSIE-Caritas Internationalis (2005); EURODAD (2005); Oxfam (2005); GTZ (2005).


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