THE BANK'S APPROACH TO SUBSIDIES

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Abstract

This paper on the Bank’s approach to subsidies is written primarily as an explanation for policy practitioners and as a contribution to the discussions of policy issues in the Bank’s dialogue with its borrowers. It does not present taxonomies of either the types of subsidies or the vehicles useful for delivering them. Rather, the paper sets out, with illustrations, how the Bank evaluates existing or proposed subsidy programs. It suggests that six questions ought to be answered in any analysis of subsidy programs and that the Bank’s approach to subsidies is a pragmatic one, formulated in the context of specific country circumstances.
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I. INTRODUCTION

1. This paper on the Bank's approach to subsidies is written primarily as an explanation for policy practitioners and as a contribution to the discussions of policy issues in the Bank's dialogue with its borrowers.¹ It does not present taxonomies of either the types of subsidies or the vehicles useful for delivering them. Rather, the paper sets out, with illustrations, how the Bank evaluates existing or proposed subsidy programs. It suggests that six questions ought to be answered in any analysis of subsidy programs and that the Bank's approach to subsidies is a pragmatic one, formulated in the context of specific country circumstances.

2. Both explicit and implicit subsidies are considered. Each transfers resources and drives a wedge (forces a difference) between the price paid/received by the parties to a transaction. The wedge is such that the recipient of the subsidy receives more or pays less than the market clearing price. Explicit subsidies are conveyed via the budget, usually by way of expenditure policies. In most cases, the size of the financing requirements of such subsidies can be easily seen. Implicit subsidies are implemented via the price system, usually by means of government price or quantity directives which, in turn, result in price wedges. A transfer of resources from one group to another occurs, but since this does not pass through the budget, its size is often difficult to measure.

¹/ Treatment of subsidies in two recent documents, the Food Security Paper and the 1986 World Development Report, has been particularly important in stimulating renewed interest in the subject.
3. Subsidies are the exact mirror image of taxes and, like taxes, they inevitably exist in every country in the world. From the economic viewpoint, subsidies affect both income distribution and economic efficiency. A subsidy with a positive impact on income distribution would redistribute income from richer to poorer income groups. Subsidies with a positive impact on economic efficiency and resource allocation would improve the price incentive system over what it would have been without the subsidy.

4. Subsidies, like the tax structure, have an important political dimension because they affect income distribution. As a result, they are a significant element in the relationship between governments and their citizens. Governments can derive political benefits from effectively administered subsidy programs. Ineffective programs, on the other hand, may be economically costly as well as causing a loss of political or economic credibility. Subsidy programs can also lead to the formation of political coalitions which reduce the government's freedom to implement change.

5. Given the prevalence and importance of subsidies, the Bank devotes a considerable amount of resources to analyzing subsidy programs and to discussing, with member countries, their relevance, effectiveness and costs. In many countries subsidies are one element in the dialogue on a broader set of sector or economy-wide economic issues. In heavily indebted countries, in particular, the adjustment process involves an intensive scrutiny of subsidy programs. In all cases, it has been found useful to address six questions in order to complete the analysis of subsidy programs and subsequent policy discussions. How these questions are posed and answered constitutes a major element of the Bank's approach to subsidies.
6. **The objectives of a subsidy.** This first question is the obvious point of departure for the analysis. Two general objectives are to improve economic equity through redistribution of income in general or for specific target groups, and to improve economic incentives in order to increase efficiency. It is important to establish the objectives clearly because it is against the objectives that the effectiveness, appropriateness and affordability of the subsidy program is judged.

7. **"Effectiveness" of existing or proposed subsidy programs.** Considerable analytical effort is devoted to answering the extent to which the equity or efficiency objectives of the subsidy are being met. The most economically effective subsidy programs concerned with equity are those which do not miss or "spill over" the target group and which achieve an income transfer to the target group with the minimum amount of distortion to the economic incentive system. For programs with an efficiency objective, "effectiveness" means offsetting a certain distortion with the minimum amount of income transfer.

8. **The appropriate duration of a subsidy program.** This query regarding the appropriate duration of any particular subsidy program is heavily influenced by both theoretical and practical support for the notion that any particular subsidy program (although not necessarily the subsidy itself) should exist for a limited period of time only. The analysis begins by making a distinction between the program delivering the subsidy and the rationale for the subsidy itself. Thus, a subsidy to help the poor may be needed but a particular program may have existed for so long that many richer people have gained access to the subsidy. In such a case a new, retargeted program is needed.
9. **Is the amount and source of financing for subsidies "transparent"?** Ideally, the size of the financial requirement, or the budgetary cost, should be transparent so that policymakers, recipients and financiers can all see the extent of the benefits and costs of the programs.

10. **Can the subsidy be financed?** At times it is simply too costly to finance a subsidy. Some costs are macroeconomic in nature, including excessive inflation and/or reductions in saving and investment due to associated budget deficits or redistribution of income. Others are microeconomic and encompass both the administrative cost of raising additional revenue and any undesirable distortions to incentives. Benefits should not be ignored, however. Reducing a particular subsidy in order to decrease a deficit might be costly in terms of the benefits foregone. In such cases, new revenue measures or expenditure cutbacks elsewhere in the budget may be more appropriate from an economic point of view.

11. **Are the policy recommendations pragmatic?** This is the sixth and final concern in the Bank’s analysis of subsidies. Given that subsidy programs are an important element in the relationship between governments and their citizens, any recommendations must be appropriate to a government’s institutional and administrative capabilities and its need to maintain policy credibility.
II. WHAT ARE THE OBJECTIVES OF A SUBSIDY?

12. There are economic reasons for subsidies on either equity or economic efficiency grounds. Determining the objective of a subsidy is, therefore, an important step in the analysis of subsidies. Greater equity is achieved when a subsidy redistributes income from richer to poorer income groups. Such a subsidy program would be needed, for instance, when the income of a particular group is so low that it cannot sustain itself. In this case, a transfer of income to that group would be vital to reducing poverty.

13. The efficiency goal involves using a subsidy program to improve economic incentives and resource allocation. The subsidy itself will cause a difference between the price paid and price received by the buyers in the market place. The recipient of the subsidy receives a higher price or pays a lower one than would occur under freely determined equilibrium. The efficiency impact is thus to stimulate sales or purchasing behavior of subsidy recipients relative to what would occur naturally in the market place.

14. Theoretical arguments supporting the efficiency goal are usually divided into "first-best" and "second-best" categories. If prices are freely determined but in some sense inappropriate, the rationale for a subsidy is of the "first-best" sort. This might be the case because there are external economies or if the impact of a temporary price shock needs to be offset. Subsidizing the user cost of vaccines to spread their use is an example of a "first-best" argument for a subsidy. Alternatively and importantly in LDCs, subsidies may be used as a "second-best" policy to improve the incentive system by offsetting government induced distortions to the price system which cannot, in the short run, be removed. Adminis-
trative considerations, for instance, may force a government to collect a sales tax uniformly, without exemptions to exporters. In such a case, until the "first-best" policy of exemptions can be implemented, the "second-best" policy of an across-the-board subsidy on the inputs of exporters might be adopted.

15. There are several rationales for achieving greater economic efficiency through subsidies. One reason for altering the incentive system with subsidies is to encourage learning-by-doing, infant industries, and the adoption of new technologies. A second is to offset adverse behavioral reactions to temporary price shocks. Yet a third rationale is to encourage behavior which has significant externalities. These are particularly prevalent in certain educational and health endeavors where groups external to recipients of the services also derive some benefits.

16. Two other somewhat different reasons for subsidies are often advanced. One arises in the provision of a public good when user fees are a more expensive way to collect revenue than taxation. Thus, metering water for a myriad of small users is much more expensive than simply collecting a per capita water cess. A second, derived from the theory of second-best, is to use them to offset policy induced distortions to market signals which cannot be removed by other means. However, in most developing countries, where market imperfections and sub-optimal government tax policies abound, such offsetting subsidy programs are likely to be useful only in the short term. For the longer run, removing the distortions is better.

17. There are times when the objective of a subsidy may be inappropriate. It may be found that the price (incentive) system is better without a subsidy program. This would be the case if the supposed external social benefits of increasing the use of something via a subsidy did not,
in fact, exist. Alternatively, an apparent inequity may not exist to the extent supposed. For example, income distribution data, which is poor in most countries, may indicate a widespread problem which may, in fact, be much more modest in scope when the groups' expenditures and real purchasing power are scrutinized.

18. Subsidy programs aimed at fighting inflation are also suspect. A subsidy program may change relative prices in such a way as to reduce the increment in the general price index in the short run. This would occur, for instance, if the subsidized item(s) are heavily weighted in the price index. In the longer run, however, the inflationary pressure will spill over to other items, causing their prices to rise much faster. In addition, financing a subsidy program may exacerbate inflationary pressures if, as is quite usual, fiscal deficits rise in order to finance the subsidy. A subsidy is simply the wrong tool to deal with inflation.
III. THE EFFECTIVENESS OF SUBSIDY PROGRAMS

19. When applied to subsidies, the term "effective" means transferring the income required to achieve the equity goal, without missing some or all of the target group, and while causing a minimum of distortion to the incentive system. Alternatively, effectiveness can mean offsetting a certain distortion with the minimum of income transfer. The analysis of the effectiveness has to indicate both the transfer and distortionary impacts of a program. These frequently go in opposite directions with one conveying a benefit and the other leading to a cost. For example, keeping food prices low may benefit the urban poor but the accompanying low prices to farmers reduce incentives for production.

20. Analysis to determine the effectiveness of the subsidy program is difficult and time consuming. In the realm of economic theory, measuring the success of reaching, but not over-reaching, the equity aim requires both quantitatively precise goals and the measurement of income distribution patterns and changes in these patterns. A subsidy program's impact on the efficiency of resource allocation, or the extent to which it improves or worsens the incentive system also requires, in theory, quantitative knowledge of the existing and the equilibrium pattern of relative prices.

21. Generally, the analysis is not available for these theoretical constructs, and the Bank Staff must therefore employ considerable ingenuity in attempting to gain insights into the effectiveness of various subsidy programs. The initial step in analyzing the effectiveness of most subsidy programs is to use partial equilibrium analysis to calculate the primary equity and efficiency impacts of the program. Thereafter the analysis becomes (or should become) more general in nature so that the size of any secondary effects can be estimated and used to calculate the "net" impact.
of the program. Thus, the primary impact of a food subsidy program on income distribution could be indicated by multiplying the per unit subsidy by the quantities of food purchased by the various income groups. The net impact of such a program could be very different, however, given the incidence across income groups of the new taxes needed to finance the subsidy. These, too, must be considered, however. Also, the costs (productivity losses) incurred, for instance, by standing in queues to gain access to subsidized food may fall unevenly on the income groups.

22. The approach is similar in assessing the efficiency impact of subsidies. A partial equilibrium analysis of a producer price subsidy is used initially. This may suggest, for example, that the subsidy causes a significant supply response and appreciably higher GDP, thus making the program look warranted from an efficiency point of view. Generalizing the analysis to consider the distortionary impact of the taxes needed to finance the subsidy may show, however, that the taxes suppress incentives to produce a higher value product elsewhere, thus lowering GDP overall.

23. Though the analysis of the effectiveness of subsidy programs is difficult, knowledge of the various programs accumulates over time. Most frequently the outcome of the analysis is recommendations for improving effectiveness by revising, reforming and retargeting the programs rather than removing the subsidy altogether.

24. The three examples which follow illustrate the often difficult choice involved in matching programs with stated objectives. They also indicate the complexity of the issues which must be analyzed and the efforts the Bank makes to insure that assistance to the disadvantaged target group is cost effective.
Improving Government Assistance to Infants in India

25. An example of a subsidy which was warranted but ineffective and in need of retargeting is food assistance for malnourished children in Tamil Nadu, South India. A survey conducted by the State government in the early 1970s established the need for the subsidy. Approximately half of the children in the area between one and four years of age were reported as malnourished; three-fourths of child deaths were a direct consequence of malnutrition. In response to this, the government established publicly subsidized feeding programs. By 1980, the unit costs of nutrition programs had grown far out of line with comparable programs elsewhere. Take-home food was often shared among other family members and prolonged on-site feeding tended to substitute for food that otherwise would have been consumed at home. In 1980, the Bank financed a project aimed at increasing the effectiveness of the government's nutrition efforts. The program was tightened by improving the State's capacity to limit eligibility to children under three years of age who were at high nutritional risk. Each child's participation was limited to the period of time required to achieve adequate nutritional recovery. After three years, the program had expanded to cover 95 percent of eligible children in the area and disease and child mortality had fallen. In addition, although a thorough financial evaluation awaits completion, there is clear evidence that both the total real cost and cost per child have declined.

Reducing Secondary Effects of Agricultural Subsidies in Thailand

26. The Bank’s concern for the effectiveness of subsidy programs is evident in its handling of rural credit in Thailand. Since 1975, the government has been providing credit to the agricultural sector at below market interest rates to compensate for high levels of taxation and to help alleviate rural poverty. The program has become less effective over time, even though the need for subsidies to assist the approximately two million families living in absolute poverty is recognized. Unfortunately, the policy objective, helping the rural poor, has been undermined by the indirect effects of subsidized credit. Big farmers have obtained a disproportionately large share of the subsidized credit and have used it to amass rural assets, including land, aggravating an already severely skewed distribution of assets. Moreover, the injection of subsidized credit into agriculture has encouraged excessive mechanization of agriculture. The Bank and the government both have come to realize that the existing, generalized interest rate subsidies are not an effective vehicle for improving the lives of the rural poor. Therefore, the Bank has supported Thailand’s program of liberalizing most rural credit markets, thereby raising interest rates. However, the Agricultural Bank is required to lend a certain volume of credit to the poorest farmers in the North and East thus granting them a subsidy. Initially, the subsidy is to be financed via concessional credits from abroad.

Improving the Effectiveness of Food Subsidies in Sri Lanka

27. Over the past several years, Sri Lanka has acquired considerable experience in managing consumer food subsidy programs. The objectives of the programs have been to alleviate poverty and malnutrition. Food subsidies have been used to provide income transfers to help alleviate these problems. Initially, the food subsidy program was very expensive largely because of its broad coverage. Nearly half of the country's total rice consumption was supplied by ration shops, accounting for 25 percent of the government's budget. In 1979, the government attempted to improve the effectiveness of these programs by introducing a means-tested coupon system. These coupons can be spent on nine major food commodities or can be deposited as savings. The program has lowered malnutrition and child mortality. Its improved targeting has reduced the number of participants by half and more than halved the costs of the government's previous food rationing scheme. The passage of time has again reduced effectiveness, however. Now, additional retargeting is needed in order to remove those participants not intended to be part of the target groups. Also, reform of the programs is desirable to offset the impact of inflation on the value of the food coupons.
IV. THE APPROPRIATE DURATION OF SUBSIDY PROGRAMS

28. All subsidy programs should be reviewed at regular intervals in order to determine whether they should be revised, retargeted or phased out. Thus, even when the reason for a subsidy remains valid (e.g., to reduce malnutrition among the poor) the subsidy program will, over time, need to be revised and retargeted in order to ensure continued effectiveness. Sometimes the justification for the subsidy disappears, in which case the program should be discontinued. For instance, subsidies to encourage infant industries and learning, or to prevent undesirable behavioral consequences of a temporary price shock, should be temporary. Subsidies to offset a market imperfection should disappear when the impetus for the subsidy, that is, the original distortion, is removed. At other times, even though the rationale for the subsidy remains, the form and essence of the program conveying it should be changed.

29. The concern for the duration of any particular subsidy program arises because people change their behavior in order to be included in subsidy programs. They also resist exclusion even when their circumstances change. It is this behavior which over time makes the programs conveying the subsidies ineffective. They will "spill over" the target group thus becoming too expensive. Also, their distortionary impact on economic incentives will increase over time. In light of this, effective implementation of a subsidy over a period of time involves periodic reassessment of the rationale and, if needed, revision and retargeting of the program.
Limiting the Duration of Agricultural Subsidies in the Peoples Democratic Republic of Yemen

30. The importance that the Bank attaches to limiting the period of time that a subsidy remains in effect is demonstrated by a recent loan to Yemen's agricultural sector. During the discussions of the Bank's agricultural sector memorandum with the government, it was agreed that the subsidies on irrigation and tractor services be gradually reduced. The high demand for these services by farmers was an indication that the existing subsidy program had fulfilled its objective of demonstrating the cost effectiveness of these formerly underutilized inputs. The resulting cost savings are to be used to subsidize fertilizer, an input which offers significant potential benefit but is currently being underutilized. As in the case of irrigation and tractor subsidies, fertilizer subsidies are to be phased out as farmers recognize the cost effectiveness of using fertilizer.

Switching Food Subsidy Programs in Morocco

31. A study of food subsidies in Morocco shows how the scope and size of subsidy programs, even warranted ones, will inevitably expand, leading to Bank recommendations to discontinue one program in favor of another. In Morocco, the prices of wheat, sugar and edible oils were subsidized through the budget in order to benefit the poorest segments of society. The program expanded markedly with the passing of time, however, and eventually came to account for over 10 percent of the government's current budget. This increase was brought about, in large part, by people changing their

eating habits in favour of the subsidized foodstuffs. By 1984, only 16 percent of the subsidies reached the lowest 30 percent income group. The rationale for the subsidy -- to help the poor -- still remains, however. The study recommends a new program of in-kind transfers, of a somewhat different basket of foodstuffs, directly to the poor. The move could cut the costs of the subsidies to one-fifth of their former levels by 1990 while increasing the total value of subsidies available to the poorest groups.
V. THE TRANSPARENCY OF A SUBSIDY PROGRAM

32. The Bank frequently recommends that the transparency of a subsidy program be improved so that the costs and benefits are clear both to those making budget decisions and to the recipients. Transparency refers to the ease with which the size or financing requirements of a subsidy program can be identified and quantified. From an incentive point of view, transparency relates to the extent to which prices can be perceived to have been lowered or raised as a result of the subsidy and of the taxes needed to finance it. Given that the latter is difficult to convey accurately, the primary focus of the transparency concern is with budgetary clarity.

33. Transparency is desirable both from social and private perspectives. As part of the budgetary process, the public at large should be able to see the financing requirements of subsidies the benefits of which, after all, accrue to special interest groups. In addition, it is desirable, wherever practical, to inform consumers and producers of the impact of subsidy programs on prices so that they can appreciate the extent to which they are benefiting from a subsidy. It is for this reason that it is generally suggested that notional values be printed on subsidy vouchers so that recipients may appreciate the value of the subsidy they receive.

Better knowledge of the costs and benefits also provides greater scope for choices and gives policymakers greater freedom. It is, for instance, not uncommon for members of a target group to have a quite different preference on how they might best be assisted or how this could be done more cheaply. For example, farmers often express a preference for timely delivery of inputs or better access to credit over subsidies.
34. Usually, subsidy programs financed through the budget are the most transparent. Those implemented via the financial or tax systems (e.g., tax preferences or credit subsidies) are considered the most opaque. Because of their opaqueness it is usually recommended that administratively mandated credit ceilings and directed credit programs be discontinued and that any subsidization of the interest rate be implemented through explicit provision in the budget. 5

Increasing Transparency in Chile

35. Chile's experience with subsidized housing programs demonstrates some of the reasons for the concern for transparency. 6 Prior to 1973, the subsidy was provided indirectly in the form of subsidized interest rates. This disguised the amount and incidence of the subsidy. The losers under this system were hard to identify because the program was ultimately financed by a combination of government budgetary transfers, higher interest rates in other sectors of the economy, and declining profit margins of financial institutions. Also, the recipients of a subsidized housing loan could not readily recognize the benefits of the program. Since 1973, the Bank has financed programs that involve direct, up-front subsidies. Beneficiaries are given a one-time, lump-sum subsidy that covers a fraction of the housing cost. The balance is financed by a mortgage credit extended to the beneficiary on market terms. The system provides a clear and explicit picture of the amounts involved, both to the government and beneficiary and this, in turn, gives policymakers a clear basis for judging affordability.


VI. CAN THE PROGRAM BE FINANCED?

36. When the costs of subsidy programs become unsustainable it is important to review the programs carefully to assure that those whose rationale remains valid are made more effective and retargeted within the resources available. Financing difficulties occur when subsidy financing requirements become excessive relative to either other public expenditures or public revenues. This can occur because of growth in the subsidy programs or reductions in available public resources. Either way, they give rise to questions concerning the subsidy's impact on macroeconomic stability and on the appropriate allocation of public resources. The point of departure for a reexamination exercise is the recognition that financial difficulties can be removed by one of four methods: (i) lowering financial requirements by improving effectiveness; (ii) raising more public resources; (iii) redistributing public resources from other uses to subsidies; or (iv) reducing the scope of the subsidy programs.

37. The first, improving effectiveness, is "costless" because it reduces financial requirements without decreasing the intended benefits of the subsidy. As a result, this is the preferred first step in dealing with any financing problems. This step must be undertaken to help ensure that programs which can ameliorate the impact of adjustment on low income groups are not eliminated even though they might be affordable.

38. The remaining three approaches assume effectiveness and imply incurring some economic cost. They may have to be utilized, however, particularly in countries undertaking major adjustments. All three require additional analysis before they are to be recommended in any specific case. In theory, choosing between the second, third, and fourth methods involves applying cost-benefit analysis in order to determine, simultaneously, the
desirable division between public and private expenditures and the desirable allocation of public expenditures between consumption and investment on the one hand and subsidies (usually but not always used for private consumption) on the other. In practice, given the difficulty and complexity of such analysis, choosing which of the three approaches to follow depends on judgments regarding the appropriateness of the relative sizes of the various revenue and expenditure categories, frequently compared to the past. If it is felt that the share of resources devoted to subsidies is high, the recommendation will likely be to curtail subsidy programs even if they are effective.

39. Revenue raising measures may be recommended for solving financing difficulties if public expenditures generally and subsidy expenditures in particular appear to be low. Since such difficulties are usually due to administrative inability to raise more revenues, it is frequently suggested that graduated user charges be levied. Such changes enable an expansion of vital services at the same time that the richer cross-subsidize the poorer users of the services. Such recommendations are increasingly being made to relax financing constraints in the social sectors, for instance for health and education. 7

**Financing Problems for Kenya’s Food Subsidies**

40. The Bank’s preference for "costless" increases in effectiveness is demonstrated by its recommendations concerning the mounting cost of a food subsidy program implemented through a government marketing agency in Kenya. 8 Grain was sold to consumers at prices well below unit costs which

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caused losses for the marketing boards. These losses, which were supposed to be covered by the government, became increasingly large. Producer prices, which have been suppressed in an attempt to reduce losses, have dampened incentives to farmers. One reason for the financing problem is that there has been no attempt to limit sales of subsidized grain to lower income groups. As a consequence, sales to nontarget groups have been growing rapidly. The primary problem is not the subsidy but its mode of delivery. Setting appropriate producer prices, restructuring the inefficient marketing boards and targeting the food subsidy on the intended low income groups would make the objective consistent with financial capacity.

Improving Financing of Water Subsidies in Bangladesh

Proposals for improving water subsidy programs in Bangladesh provide a second example of the concern for making a subsidy program affordable. This time, however, raising revenue through the imposition of user charges on an ability-to-pay basis rather than cost cutting was the solution. Over the past two decades, the government made large investments for the control and development of the country's water resources and indirectly subsidized the beneficiaries of these schemes by not charging them for the costs of providing the water. Because of the way the subsidy was conveyed, the program became a very heavy burden on the budget, eventually requiring approximately two percent of the consolidated government budget annually. Furthermore, the program had an adverse effect on the distribution of income; the benefits largely accrued to the relatively better off farmers,
increasing income disparities. The Bank noted that private benefits associated with irrigation were substantial and that the public financing requirements of the program could be reduced considerably by raising current charges to better-off farmers substantially. Since these farmers were familiar with the benefits of irrigation and the importance of well-maintained irrigation systems, increased charges would not affect their demand for irrigation appreciably. For the poorer farmers a sliding scale of charges, based on beneficiaries' abilities to pay, was introduced.

VII. ARE THE POLICY RECOMMENDATIONS PRAGMATIC?

42. The Bank's approach to subsidies is strongly influenced by a concern that all policy recommendations be consistent with the government's institutional and administrative capabilities and its need to maintain credibility with its citizens. Thus, issues of timing, sequencing, institutional and administrative capabilities as well as citizens' expectations and the government's past policy track record are all examined. Generally, it is recommended that shifts in policy occur gradually and that adoption of policies which obviously cannot be implemented or which may be viewed as trial policies be avoided. A period of two to five years is usually seen as being an appropriate time period for adjusting to changes in subsidy programs. Proposals for longer time periods, particularly if the majority of changes are "end loaded", are viewed as representing an inadequate adjustment effort.

Reforming the Railway Subsidy in Mexico

43. The issues of timing and sequencing figured prominently in the Bank's subsidy reduction and retargeting proposals for Mexico's railway sector. The steady growth in Mexico's railway traffic, during a time when railway use in other countries was declining, was due to subsidized tariffs. The cost of the subsidies grew over time and gave rise to an increasing coalition of beneficiaries who see subsidy reform as a politically sensitive issue. Bank and government analysts saw the subsidized tariffs, with the exception of those for second-class passenger services,

as unwarranted. The resulting subsidy reduction and retargeting measures are to be phased over a period of three years. This agreement reflects the influence that political constituencies can impose on the pace of reform and is a good example of the Bank's standard policy to reduce unwarranted subsidies as rapidly as practicable.

Improving Administration of Education Subsidies in Morocco

44. The Bank's education sector reform loan to Morocco \(^{11}\) demonstrates a concern for reforming rather than discontinuing a subsidy and for tailoring the program to suit the country's institutional and administrative capabilities. Large subsidies to university education in Morocco are seen as not warranted on efficiency, equity and financial grounds. Subsidies to primary education, on the other hand, would have beneficial efficiency and equity impacts. The Bank has, therefore, suggested reforms which would have low administrative and political costs. Switching the university subsidy program to a student loan scheme was considered best, but was rejected as being too difficult and expensive to administer. Instead, the subsidy will be removed gradually by introducing user charges which will be increased progressively over the medium term. In addition, some of the savings produced by these measures will be used to expand government expenditures on and, therefore, access to, primary education.

45. Since 1979, reducing subsidies has been a major element in the Bank's policy dialogue in Egypt's energy sector. Egypt's average domestic power prices have been significantly below domestic costs resulting in very significant subsidies. To some extent the financing has been via the country's current budget. To a greater extent, however, the subsidy has been implicit because the average price of petroleum products has been less than one fifth of border prices. In addition to their financing requirements, energy subsidies have caused large inefficiencies in the economy by encouraging the development of a number of energy-intensive industries which would otherwise have been unprofitable. In its recommendations for reforming energy subsidies, the Bank has shown concern for the social and political costs that reforms would entail. It has advocated a gradual phasing of subsidy reductions, concurred with a government decision to maintain the cross subsidization of kerosene by gasoline, and recognized that some subsidies may persist. However, energy subsidies on a very large scale continue. The last Bank loan for an energy-related project in Egypt was approved in 1982.

VIII. CONCLUSIONS

46. A large number of project and adjustment loans, or the supporting economic and sector work, contain analysis and recommendations concerning subsidy programs in particular countries. One reason for so much attention to subsidies is the Bank's recognition of the potential impact, positive or negative, which subsidy programs can have on equity, economic efficiency, stability and growth in LDCs. A second reason for the Bank's careful scrutiny of subsidies is the significant role which such programs play in the relationship between governments and their citizens and, therefore, in the government's domestic credibility.

47. Examinations of nearly all subsidy programs occur over relatively extended periods and involve attempting to answer the six main questions addressed in this paper. Initially, the focus of the Bank's analysis is, or should be, on whether or not particular subsidy programs achieve their objectives effectively. Beyond this is the concern that such programs be revalidated, revised, retargeted or discontinued after a reasonable time. Two other issues covered in the Bank's analysis are whether the subsidy programs are transparent and affordable.

48. Finally, efforts are made in the Bank to ensure that policy recommendations are pragmatic. It is recognized that recommendations must be consistent with the institutional and administrative capabilities of the government in question. It is nearly always suggested that implementation be gradual or phased. This enables enactment of ancillary policies and allows the expectations of the citizens to adjust and helps maintain the government's policy credibility.

49. Bank analysis of a large number of subsidy programs over the years has disclosed a few, more general conclusions about subsidies. One is that implicit or indirect subsidies are usually more difficult to administer
effectively when compared to explicit or direct subsidies. Furthermore, the difficulty with such subsidies grows over time. This applies particularly to interest rate subsidies (controls) administered via the financial system.

50. A second general lesson concerns the importance of establishing administrative mechanisms for specifically targeting subsidies, even though these may result in extra costs of administration. Specifically targeted programs are, in the longer run, less costly to the economy than generalized price subsidies which apply to items presumed to be consumed/produced by the target group. Generalized price subsidy programs inevitably expand as ingenious, "inclusion tactics" circumvent the intent of the subsidy and cause an expansion of its use.

51. Another general conclusion of the Bank's examinations of subsidy concerns the danger of attempting to solve financing problems via non-budgetary instruments. Financing subsidies through government marketing boards and parastatals inevitably decapitalizes these institutions and, frequently, forces reductions in producer prices with adverse effects on producer incentives. In addition, since the subsidies are frequently applied to unit costs which are not held down by competition, they can result in increasing inefficiencies in these organizations.

52. In some cases, where the financial costs of subsidies have become excessive governments have turned to cross subsidies or differential pricing for recipients such that the total cost of providing the output is covered by its users. Bank studies of such programs suggest that caution in the use of cross subsidies is warranted. Effective cross subsidization is difficult to administer especially if the market for the output is widespread and cannot be segmented into higher and lower income groups. In general, such market segmentation is difficult to maintain, in the longer
run, when mechanisms for arbitrage, such as secondary markets, are developed. For example, in Senegal, where fishermen are charged less for diesel than transporters are, the markets have been very difficult to segment. Transporters are increasingly gaining access to cheaper diesel thus perverting the aim of the cross-subsidy program and provoking public ridicule about "fishing boats" on the streets of Dakar. However, for universally desired goods, such as education and primary health care, differential pricing or cross subsidies can function effectively.

A final, general conclusion relates to the tendency of nearly all subsidy programs to engender political constituencies which fight for their continuation. Many subsidy programs, particularly those to improve the incentive framework in an economy, are viewed by economists and legislators as temporary. However, political coalitions inevitably form to try to keep the subsidy for a longer period than warranted. In view of the effectiveness of some of these coalitions, it is clear that the rationale for a subsidy should be very persuasive before such a program is adopted.