

## Political economy of agricultural policy

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**Abstract.** In this article, I focus on the findings from this study on the political economy of agricultural policy as they inform questions about the political economy of agricultural pricing, primarily but not exclusively in developing countries. To do so, first I provide some background data on the comparative study. I sketch the various stylized facts that were believed at the time, and contrast them with the regularities that emerged from the comparative study. Finally, I indicate some of the systematic empirical regularities and suggest the political economy conclusions which emerge from them.

### 1. Introduction

The political economy of agricultural policy has long been a puzzle. Although there are many aspects, one question epitomizes the problem: why is it that rich countries, in which farmers are a small minority, normally subsidize agriculture so much, while in poor countries, where farmers are in a majority, they are usually heavily taxed?

Until the 1980s, most work on the question had been on developed countries. There was ample evidence that taxation of agriculture diminishes, and subsidization of agriculture eventually takes over, as countries become richer.<sup>1</sup> To complicate the puzzle, the means by which farmers in rich countries are subsidized are seldom “efficient”: they are certainly not least-cost transfers. Worse yet, these transfers certainly do not meet income-distribution objectives: there is no way that schemes based on supporting prices can possibly be aimed at poor farmers, when it is a simple calculation indeed to show that with smaller outputs, small farmers will receive smaller benefits and larger farmers larger benefits.

Until recently, however, little systematic work had been done on the same question from the viewpoint of developing countries. Despite the fact that some policy makers in developing countries argued that taxation of agriculture would be virtually the only resource for financing industrialization,

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the policies subsequently pursued to discriminate against agriculture were certainly not an economically efficient means of transferring resources from agriculture to industry; indeed, they could hardly be described as an economically efficient means of achieving any objective.<sup>2</sup>

By the mid-1980s, some progress had been made in analyzing the policies toward agriculture and their effects in a number of developing countries. Enough data were available, and enough analysis had been undertaken so that it was possible to undertake a more systematic examination of the political economy of agricultural pricing policies in developing countries. That study entailed systematic analysis across a group of eighteen countries, within a comparable framework, under World Bank auspices. That work is now completed, and an enormous amount of additional information and analysis has shed further light on the political economy of agricultural policies in developing countries.

In this article, I focus on the findings from that study as they inform questions about the political economy of agricultural pricing, primarily but not exclusively in developing countries. To do so, however, I must first provide some background data on the comparative study. A next step is to sketch the various “stylized facts” that were believed at the time, and to contrast them with the regularities that emerged from the comparative study. Finally, I indicate some of the systematic empirical regularities and suggest the political economy conclusions which emerge from them.

## **2. The World Bank’s comparative project**

As already indicated, the World Bank Comparative Study was designed so that a common framework of questions and concepts could be used in analyzing a significant number of countries. As the project evolved, 18 countries were finally included. The particular choice of countries was essentially pragmatic: an effort was made to obtain representation of countries with apparently different agricultures and policies toward them. However, within that broad objective, choices were in fact highly constrained by the need for identifying countries with a sufficient data base so that quantification would be possible, and with researchers knowledgeable about the economics of agriculture in those countries so that the project could be undertaken by tapping existing human capital.

The eighteen countries covered in the project were: Argentina, Brazil, Chile, Colombia, Cote d’Ivoire, Dominican Republic, Egypt, Ghana, Malaysia, Morocco, Pakistan, Philippines, Portugal, South Korea, Sri Lanka, Thailand, Turkey, and Zambia. The key results from the individual studies are presented in chapters in three volumes, and syntheses of the key economic and political

economy findings are provided in an additional two volumes, to which the interested reader can refer.<sup>3</sup>

Each country author was asked to identify major agricultural commodities for his country, and then to examine, within a common conceptual framework, the evolution of agricultural policies toward those commodities over time, quantifying the impacts of the major policies on prices received by producers, relative to free trade prices. They then analyzed the impact of those policies on agriculture and agricultural incomes, both directly and indirectly.

The distinction between “direct” and “indirect” policies was central to the project. By direct policies were meant those aimed “directly” at agriculture, such as taxes on exports, subsidies on agricultural inputs, mechanisms for controlling producer prices, and so on. “Indirect” policies were defined as those which, although aimed either at other parts of the economy or at the entire economy, nonetheless impacted significantly on agriculture. Indirect policies were understood to cover any economic policies affecting real incomes of farmers contrasted with the real incomes that would have obtained at free trade at a realistic rate.<sup>4</sup> These included exchange rate policies, other ways in which the trade regime affected the pricing of agricultural commodities, and also the trade regime via its impact on the prices of goods purchased by farmers.<sup>5</sup> Thus, when import prohibitions, restrictive import licensing, and tariffs raised the prices of goods (both farm inputs and items for consumption) farmers purchased above that which they would have paid at free trade, researchers estimated the impact of these measures on farmers.

Within a common conceptual framework and agreed-upon methodology for estimation, researchers undertook an analytical history of agricultural pricing policies in their countries. They were asked to quantify the tax implicit in producer price controls, the value of subsidies, if any, for farm inputs, and the increase in prices farm producers paid for manufactured commodities by virtue of the country’s overall structure of protection, and to provide estimates of the key variables over time. Each researcher was asked to examine the politics and economics of any efforts to reform agricultural pricing policies, and to delve into the stated motivations for those policies and changes in them.

### **3. Key findings and their relationship to stylized facts**

Analysis of the findings across countries yielded several sets of conclusions, as well as a large number of questions which deserve further research. Here, focus is on the conclusions that could be drawn. They are of three types: first, there is a surprising degree of similarity across countries as to the evolution of agricultural pricing policies; second, many of the findings which

recur in country after country are inconsistent with “conventional wisdom” concerning agricultural pricing policies and their effects; and third, some of the results are strongly supportive of generalizations which are significantly different from those previously found in the literature.

As to the evolution of agricultural pricing policies, there appear to have been three dominant factors. In all developing countries, the “ideology” of industrialization as a key to growth was a key factor determining initial policies toward agriculture.<sup>6</sup> It was virtually universally accepted that “modernization” could be achieved through, and only through, “industrialization.”<sup>7</sup> That belief provided a large part of the rationale for discrimination against agriculture. Initial conditions also mattered: in many newly-independent countries, Agricultural Marketing Boards (AMBs) were inherited as part of the ex-colonial legacy. Although these Boards had earlier been designed for other purposes, their functions quickly changed to suit the demands of new governments. The fact that they “were there” made them convenient instruments for politicians. Thirdly, economic realities quickly impinged on politicians’ efforts to shape agricultural pricing policies. One frequently recurring pattern arose with respect to AMBs. These had all sorts of administrative difficulties in achieving timely delivery of inputs and collection of crops. As their costs rose and as politicians attempted to tax agriculture by suppression of producer prices, AMBs were squeezed. Despite mounting losses (arising in part because of swollen politically-appointed workforces and in part from incurring costs associated with efforts to provide timely collection and delivery), prices AMBs could pay to farmers fell below even that which was intended. In Ghana, for example, the real price officially paid to cocoa producers in the early 1980s had fallen to 2 percent of what it had been at the time of independence. Farmers’ supply responses (by smuggling their crops out of the country, by selling in the black market, and by shifting to other, noncontrolled, activities) reduced, or at least resulted in very low rates of increase of, outputs of key exportables. In the Ghanaian case, Ghana lost her preeminence as the world’s largest exporter of cocoa. Although the situation became so extreme that the government began attempting to offset some of the discrimination against cocoa, farmers failed to replant cocoa trees after several years of low prices, so that yields began to fall; finally, by the early 1980s many did not even bother to pick beans from the remaining stock of trees. While the tragic Ghanaian experience is extreme, other countries confronted similar cost increases and pressures to lower farmers’ prices well below the levels initially intended.

The extremely low farm prices, combined with farmers’ supply response to them, in turn contributed to “foreign exchange shortage,” as production of exportable commodities flagged and domestic consumption rose. That led to

ever-larger premia on import licenses, which increased incentives for evasion of the trade regime. Simultaneously, losses of AMBs mounted, and budgetary pressures increased, with further real appreciation of the official exchange rate and incentives for producers still further reduced. Typically, this downward spiral persisted until it was perceived as a “crisis”; at that point, efforts at reform were undertaken.

Interestingly, there were few instances in which reforms were confined to agricultural pricing policy: in general, efforts to reform pricing policies were part of a larger effort to change economic policies. In many countries, reforms were short-lived as politicians reverted to the status quo ante as soon as the initially positive effects of reforms removed the sense of urgency that had impelled them.

Having comparable data from a number of countries also enabled a confrontation between the findings and some of the (then) widely-believed stylized facts about agriculture and agricultural policies in developing countries.<sup>8</sup> One such previously-held view was the notion that taxation of agricultural producers on their outputs was offset by input subsidies and provision of infrastructure (such as roads and irrigation). For each country, researchers carefully estimated the part of government expenditures allocated to agriculture and rural programs (such as schools) of importance to farmers, and contrasted those estimates with the proportions of the government budget derived from taxation of agriculture. In no case did government expenditures come close to equalling the percentage of receipts. Thus, if one estimated a “bias” in government expenditures (defined as the ratio of expenditures to revenue for industrial as contrasted with rural activities), it was significantly against agriculture and, in that sense, added to discrimination against the rural sector.

Likewise, examination of the revenue impact of taxation of agriculture did not suggest that the revenues were essential for industrial development. In most cases, much of the “taxation” of agriculture was dissipated in the form of high costs for AMBs; moreover, much of the taxation of agriculture resulted in transfers to urban consumers (not necessarily the poor – see below) and other groups, rather than in increased resources for investment in industry. Had the true motive for discrimination against agriculture been to “extract resources” for industrial development, policy makers would surely have maintained adequate incentives for production of exportable commodities and would, in addition, not have distorted incentives between exportable and import-competing agricultural commodities.

Yet another widely-stated belief about agricultural pricing policies was that discrimination against producers resulted because governments were attempting to provide cheap food for the poor and could not finance those

efforts through the budget.<sup>9</sup> To ascertain the empirical validity of this belief, researchers analyzed the income distribution effects of agricultural pricing policies in their countries. In fact, in most cases, beneficiaries were in the middle and upper income groups. Moreover, the costs were borne in significant part by landless rural laborers and poor farmers; the result was that, in many countries, the income distributional consequences of suppression of producer prices were to increase income inequality, especially when account was taken of the higher standards of living in urban areas.

Finally, new empirical regularities, not previously recognized in the literature, emerged from analysis of the results across countries. Among these, three warrant mention here. Most important was the relative magnitude of direct and indirect interventions in agricultural pricing policies. In particular, in almost all years in almost all the countries covered, the estimated impact on producer prices of indirect policies exceeded the impact of direct measures. That is, the negative effect on producer prices and on the purchasing power of those prices for farmers was greatly from the exchange rate, tariffs, and other “indirect” measures than was the effect of direct interventions. It is this important fact which leads to many of the political economy insights discussed in Section 3 below.

Separate from, but related to, that finding was the conclusion that across countries, and over time within countries, when there is more direct taxation of agriculture, there is usually also more indirect taxation. That is, those countries that most suppress producer prices through direct controls are also the countries that tend to have the largest ratio of domestic prices of importables to international prices and the largest degree of exchange rate overvaluation.<sup>10</sup> Moreover, and of interest to international trade theorists, the loss of purchasing power by farmers because of high prices for goods they consumed due to protection of manufactured goods was generally as important as the loss associated with exchange rate overvaluation. While we always knew that discrimination in favor of some activities – in this case manufacturing – is discrimination against others – in this case agriculture – the magnitude of the impact on rural real incomes was surprisingly large.

The third significant empirical regularity had to do with the pattern of direct discrimination across agricultural commodities. There was almost always direct discrimination against exportable commodities, but at the same time there was protection (that is discrimination in favor of) for import-competing agricultural commodities. Thus, even the stylized fact that developing countries directly discriminate against agriculture is not true, except in the sense that most of their agriculture consists of exportable commodities! An interesting situation in Colombia well illustrates the point. In that country, rice was for years an import-competing good. As such, there was protection against

rice imports and the domestic producer price of rice was well above that which would have prevailed at free trade (and rice was, initially, imported). In response to this situation, the Colombian government took measures to encourage increased rice cultivation. Over time, Colombia became a net exporter of rice. As that happened, the protection that had previously been accorded to rice vanished, and, indeed, the government began to suppress the producer price of rice. Thus, not only did governments tax exportables and protect import-competing agricultural commodities, but the treatment of a crop even changed within a country when it shifted tradeable status. In the Korean case as well, about which I shall say more below, the switch from discrimination to subsidization of agriculture took place at about the same time as Korea was becoming a large net importer of agricultural commodities.

#### **4. Political economy of agricultural pricing policy**

The findings enumerated above, plus the many more discussed in the volumes resulted from the project, provide a rich source of data and interesting hypotheses for delving further into the political economy of agricultural pricing policies, especially in developing countries. As already mentioned, many of the result are suggestive of hypotheses on which further research is required before definitive conclusions can be reached. Here, focus is on those which appear to be fairly robust, based on the findings of the individual studies.

As a starting point, it should be noted that a full understanding of the political economy of agricultural pricing policies must answer several interrelated questions: 1) what determines the degree of discrimination against agriculture in different countries?; 2) what determined the differences in rates of discrimination across commodities within countries?; and 3) what determines the way discrimination changes over time and across commodities and countries? Attempts to provide answers to these questions must be made against the background of Becker's (1983) theorem, that any transfer in the political market will be made in the lowest-cost way.

These questions may be asked of both direct and indirect discrimination, although indirect measures do not significantly discriminate among commodities.<sup>11</sup> As to the degree of discrimination against agriculture in different countries, the results from the individual country studies can be used provide a number of parts of the answer. It was already mentioned that countries that discriminate heavily against agriculture also had more overvalued exchange rates and higher levels of protection against imports of manufacturers. Stated otherwise, agricultural pricing policies seem to have been driven by the same combination of factors that drove other aspects of economic policy, and in particular, economic intervention in individual economic activ-

ities. This would suggest that part of the driving force behind discrimination against agriculture was the same as that for overall economic policy.

Thus, to the extent that a government's economic policies were interventionist, they were interventionist for agriculture (negatively) and industry (positively) alike. Among the countries covered in the project, Pakistan's experience provided perhaps the best example of this. The government was highly populist and interventionist in the late 1960s, and discrimination against agriculture was high. When a military government took over, it was far less committed to intervention and the degree of discrimination against agriculture (both direct and indirect) dropped fairly sharply. When, still later, another more interventionist government came to power, discrimination once more rose fairly sharply.

Perhaps equally interesting, however, is another general finding: although farmers' groups lobbied for better treatment with respect to prices of their outputs and inputs, they were silent when it came to issues of macroeconomic policy, including protection and the exchange rate, which arguably affected them as much as did decisions with respect to producer prices. In Colombia, for example, coffee growers could be called "the most powerful political group in Colombia," despite the fact that the sum of direct and indirect discrimination against coffee exceeded 30 percent: only about 8 percent was attributable to direct price suppression – the rest came through higher prices of manufactured goods and the exchange rate! Coffee growers in Colombia, like agricultural groups elsewhere, appear to have been silent when it came to macroeconomic policy. Whether this was because they were unaware of its importance or simply felt unable to challenge the overall thrust of the push toward industrialization cannot be judged.

Thus, rates of indirect (implicit) taxation were determined largely by the overall thrust of economic policy. While that thrust affected the extent of direct discrimination in a variety of ways, indirect discrimination was not significantly affected by political pressures from farmers. In countries where discrimination was high, economic forces (usually in the form of a balance of payments crisis, sometimes in the form of high inflation resulting from a fiscal deficit partly associated with AMB deficits, but sometimes also resulting from the inability of the AMB to provide even rudimentary promised transport, storage, and delivery services) could force overall economic policy reform and, with it, reduced discrimination against agriculture. An IMF-supported program in which the official exchange rate was altered to a more realistic level and the restrictiveness of import licensing was diminished often did a great deal to improve real returns to agricultural producers.

However, political factors were also significant in affecting the degree of discrimination against agriculture. While discrimination increased in all



countries when foreign exchange difficulties intensified, the “tolerable” discrimination level in countries where rural producers were politically more influential was certainly less than in countries where their influence was much less important. Countries in which agricultural representatives were in the ruling coalition turned out to discriminate less than countries in which agricultural groups were outside the ruling groups. One contrast, pointed out by Bates (1981) is between Ghana, on one hand, and the Cote d’Ivoire, on the other. In Ghana, agricultural groups were not among the supporters of the ruling party when it came to power after independence; in Cote d’Ivoire, they were. Discrimination against agriculture was much milder in Cote d’Ivoire than in Ghana.<sup>12</sup> Overall discrimination against agriculture was much less in Malaysia and Sri Lanka, where peasants producing staple crops were the major source of political support for the ruling party, than it was in Brazil and Argentina, where urban interests were much more dominant politically.

In that regard, it is noteworthy that subsidization of agricultural inputs was virtually universal, although it was often noted that rich farmers had much greater access to these subsidized inputs than did poor farmers. While as already noted, the overall value of these subsidies was significantly less than the losses incurred by low output prices, rich farmers may have benefitted significantly. It is tempting to conclude that access to subsidized inputs may have been a means of inducing larger landlords to acquiesce in suppressed producer prices for their outputs.

Turning to differentials in rates of direct discrimination among commodities, the most robust finding – that exportable commodities are taxed while import-competing ones are subsidized – was already mentioned. Here, again, agricultural pricing policies are seen as consistent with, and part of, overall economic policy: in countries in which greater “foreign exchange shortage” resulted from greater currency overvaluation, protection of import-competing agricultural commodities (sometimes through tariffs, sometimes through quantitative limits on imports) was greater than in countries with more realistic exchange rate policies.

Among the countries covered in the project, Korea and Portugal were the two without discrimination against agriculture. Interestingly, in Korea’s case, it was already noted that there was discrimination against agriculture in the 1960s when Korea was a net exporter of agricultural goods; by the 1970s, Korea had grown sufficiently so that the country was, on net, an importer. The shift in treatment of agriculture from discrimination to subsidization occurred in the early 1970s!

This regularity may provide a partial answer to the final question. Changes in discrimination against agriculture are partly driven by changes in the structure of the economy (shifting from net exporter to net importer in the

case of Korea), but also partly driven by an inability to continue existing policies. Administrative problems with AMBs have already been mentioned. In many countries, these AMBs were chronically being reorganized in an effort to improve the functioning of basic delivery and other services. When farmers received fertilizer after the harvest, when crops were not picked up from farmgate, and when other breakdowns of the distribution system occurred, piecemeal efforts were made to patch the system up. Often, these efforts entailed the employment of additional resources, and increases in AMB deficits. When deficits became unacceptably large (often as part of an overall loss of fiscal discipline), pressures for reform intensified. Indeed, the power of the budget constraint in influencing policy is strikingly clear from the country studies.

While the factors just mentioned affect changes in the overall level of discrimination against agriculture, there is one additional factor affecting changes for individual agricultural commodities that is noteworthy. That is, in country after country, once agricultural intervention had begun, there was a strong tendency to bring additional commodities under the purview of government control. In Turkey, for example, agricultural pricing policy initially covered only a few major crops, predominantly exportables. Over time, however, governmental determination of prices extended to cover a wide variety of minor crops. Once intervention started, there was a pronounced tendency in Turkey and elsewhere for it to extend to an increasing number of commodities until pressures for reform mounted. Thus, as with many other aspects of political economy, there was a strong tendency for controls to proliferate once they had begun.

## 5. Conclusions

It is hard to think of any economic objective that was well served by the type of policies toward agriculture pursued by most developing countries until the 1980s. They did not improve income distribution, except possibly within the urban sector at the expense of poorer rural residents. They did not increase agricultural productivity. They certainly did not maximize foreign exchange earnings in an era when foreign exchange shortage was thought to be critical.<sup>13</sup> Although they did to some extent reduce price fluctuations for traded commodities, significantly lower-cost ways of achieving those reductions were available.

One cannot but be impressed by the power of (simple) ideas. The desire to modernize through industrialization was powerful in the 1950s and 1960s. The idea that resources could be “transferred” from agriculture to industry

fairly costlessly was widespread and was hardly challenged in academic circles until Schultz' (1964) classic work.

Even if one buys the "power of ideas" explanation of how agricultural pricing policies started, and the economic-political interaction story of how they evolved, important questions remain. Were "ideas" so important because technocrats accepted them? Or, instead, were the "modernizing elite" the beneficiaries of industrialization who used the "ideas" as a basis for advancing their own self interest?

A comparative study on agricultural pricing policies could not have been expected to answer these questions. It did, however, serve to throw considerable light on the economic – and indeed long-term political – irrationality of agricultural pricing policies, and provide some insights into the political motivations for these policies.

Fortunately, that and other evidence, as well as the sheer failure of earlier economic policies, has convinced policy makers in many developing countries to reduce their discrimination against agriculture, and to adopt overall macroeconomic policies that also reduce the indirect discrimination against agriculture. Nonetheless, understanding why developing countries adopted the policies they did, and the economic and political forces that then guided their evolution, remains important for furthering our knowledge of political economy of economic policy making.

## Notes

1. See, for example, Anderson and Hayami (1986). While the conventional wisdom with respect to rich and poor countries' agricultural policies certainly seems correct, there is more question as to whether, historically, the relationship holds. See Lindert (1991) for a discussion and review of the evidence.
2. See World Bank (1986) for an account of the modest taxation of agriculture in Japan during that country's early development contrasted with the very high rates of taxation, with their large costs in terms of economic efficiency, in developing countries in the past quarter century. Some of these inefficiencies are described in greater detail below.
3. The three volumes are Krueger et al. (1991a, 1991b and 1991c). The two summary volumes are Schiff and Valdes (1992) and Krueger (1992). In addition, there are extended country analyses contained in individual country volumes, which provide the most detailed account of each country's situation.
4. One of the major challenges of the project was to find a way to estimate the impact on real producer prices of exchange rate policies under which nominal exchange rates were pegged by the authorities at highly unrealistic rates. While there is no entirely reliable way to estimate the divergence between the actual exchange rate (which often determined the domestic producer price of key exportable agricultural commodities) and the "equilibrium" exchange rate, divergences have been so large in some developing countries that the issue had to be addressed. For the methodology employed to estimate these divergences, see Schiff and Valdes (1992). In this paper, results are presented without a detailed discussion of the underlying methodology for estimation.

5. In addition to examining direct and indirect policies such as those mentioned, authors examined public sector investment, to ascertain the “bias” of public sector investment programs. In particular, authors examined the extent to which agriculture received or fell short of the share of public sector investment which it contributed in taxes. As will be seen below, there was a bias against agriculture in all the countries covered. That is, the share of investment expenditures allocated to increasing agricultural infrastructure (including such diverse items as rural roads, irrigation, storage capacity, and rural education) was far smaller than the share of taxes (explicit plus implicit) that agriculture paid.
6. One part of that “ideology,” not discussed here, had already been overturned by Schultz (1964) and others. That is, it had early been believed that peasants were “irrational” and unresponsive to incentives. That belief enabled policy makers to tax agriculture in the belief that those taxes would not result in any resource misallocation (because, presumably, resource allocation would not be affected). By the 1980s, it was widely recognized that there were significant supply responses in agriculture. See, for example, Mundlak et al. (1992).
7. It was not recognized that agriculture, too, had to modernize, nor that in the absence of increases in agricultural productivity, any process of industrial growth would quickly come to a halt. Modern economic development theorists would agree that industrialization will certainly accompany any satisfactory process of economic growth; but they would also recognize that many other phenomena must accompany sustainable economic growth. Consequently, a push to industrialization may “crowd out” other essential activities and much of the industrialization that will accompany sustainable growth will be the outcome of other policies and not the focal point of government policy.
8. Indeed, of the various stated reasons for suppressing agricultural prices, only one withstood empirical examination. That one was the assertion that governments intervene in agricultural pricing in order to buffer the domestic economy from international fluctuations in their prices. In fact, agricultural pricing policies in the countries covered by the project did result in less variance in producer prices than was estimated would have occurred at free trade. See Schiff and Valdes (Chapter 3) for a discussion. Even then, it should be noted that less variability in prices could have been achieved at smaller economic costs through other interventions; also, the pattern of discrimination *among* agricultural commodities could in no way be explained by concerns about price stability.
9. It should be noted that, if the motive for suppression of producer prices was to make basic foods available for the poor, suppression would be confined to basic foodstuffs, and would almost certainly entail a relatively uniform percentage rate of price suppression, in order not to distort incentives among commodities. In fact, the percentage rate of taxation of different agricultural commodities varied widely, and varied over time in ways that could not conceivably have contributed to lowering the cost of maintaining food availability for the poor.
10. As already noted, an interesting exception was Ghana in the early 1980s. But that time, currency overvaluation was so extreme that subsidies were provided to cocoa producers to offset some of the erosion in real value of receipts. Thus, direct subsidization offset some of the indirect taxation of agriculture in that case.
11. There can be small differences because different agricultural products require different important inputs in different proportions, so that exchange rate overvaluation and other macroeconomic measures impact different commodities differently. The empirical magnitudes of these differences, however, were generally fairly small.
12. The contrast may be broadened to include Zambia (as another high discriminator) and Kenya, where the same representational contrast obtained. Bent Hansen (1992) has also called attention to the contrast between Egypt and Turkey: in Egypt, Nasser broke up agricultural holdings, effectively eliminating the political voice of large farmers. In Turkey, large farmers remained politically active. In consequence, Turkish agricultural policies were significantly kinder to small farmers than were Egyptian. This was because there were large farmers in the major political parties who represented agricultural interests.

13. Indeed, one of the real puzzles of agricultural pricing is why rates of direct discrimination were so different across agricultural commodities. It is inconceivable that anyone thought that the rates of discrimination reflected informed judgments as the relative supply elasticities, especially given the widely recognized strong supply responses to relative prices of alternative crops. Discrimination against agriculture did not provide significant resources to finance industrialization efforts, and, if income distribution considerations had been important, one would surely have found more discrimination against staple commodities – whether exportable or import-competing – than against exports.

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