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The Fiscal Implications of Trade Liberalization

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Abstract

Trade liberalization affects not only the external sector, production, and prices, but also the fiscal balance, through changes in tariff revenue, and through the sensitivity of the budget to induced changes in the exchange rate and in the level and distribution of income and employment. This paper discusses the effects of liberalization on the budget, which may differ in the short- and long-run. The short-run cost of adjustment to open trade could force the government to reverse the liberalization even if longer-term benefits could be realized. Long-run budget gains are more likely when the tax and transfer systems are broad, neutral, and efficiently administered.

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Contents

Summary

Besides its well-known impact on the external sector, production, and prices, trade liberalization also affects the fiscal balance. The balance may change not only because tariff revenue falls, but because liberalization-induced change in the exchange rate and in the level and sectoral distribution of income and employment have macroeconomic effects that feed through to other elements of the budget.

Even if the liberalization produces a clear improvement in the fiscal balance in the long run, short-run effects, as well as the process of adjustment to more open trade, may be costly for the government. A temporary recession as factors shift could reduce revenue bases and could lead to pressure on the government to expand its demand and its support for shrinking sectors. Unless these temporary costs are anticipated, they could force government to reverse the liberalization.

The long-run gain to the budget from the liberalization-induced expansion of income will be realized only if the tax and transfer systems are broad, neutral, and efficiently administered. Otherwise, wide shifts in the sources and concentration of income and expenditure could erode the budget balance even in the long run.

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I. Introduction

There is a substantial literature dealing with the macroeconomic effects of trade liberalization, a literature that has grown further following the interest created by the liberalization attempts of many developing countries as well as the renewed protectionist tendencies in a number of industrial countries. Moreover, some of the trade reforms in developing countries have been reversed or have encountered significant problems, and there is an increasing awareness that many of these problems might be attributable to a failure to anticipate all of the consequences of liberalization and to coordinate them properly with other macroeconomic goals.

At the macroeconomic level, recognition of the impact of trade liberalization has been centered largely on its effects on the external sector, on the level and structure of production, on employment, and on price developments. However, although always in the background, little has been written explicitly about the immediate and long-run implications of trade liberalization on the budget. Comments abound about the budgetary impact of a drop in tariff and on the need to pursue a fiscal policy that supports the liberalization drive, but the overall fiscal consequences of a comprehensive package of liberalization policies have not been systematically analyzed. Yet, the revenue (and, in some cases, the expenditure) aspects of protection can often be an important consideration for governments in deciding whether or not to change their trade policies. Likewise, the consequences of a liberalization for the budget balance, if they have not been anticipated and accommodated by complementary macro-policies, may greatly complicate the process of implementation of the trade reform. This is particularly true in developing countries, where trade taxes contribute a relatively high share of total revenue. 1/

This paper discusses the effects of liberalization on the financial position of the public sector. For this analysis, it must be borne in mind that the government is not only a collector of trade taxes but also a trader, an investor, an employer, and an administrator. Hence, the traditional analysis of the effect of a tariff reduction--as a change in the relative prices of domestic goods and imports, accompanied by an expansionary fiscal policy equivalent to the reduction in tariff revenue following the reform--is shown to omit important elements of the liberalization's consequences for the budget.

A large number of empirical studies have proven the advantages of freer trade, 2/ which emanate largely from increased efficiency in the

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1/ Farhadian-Lorie and Katz (1988).
2/ For a summary of evidence, see, for example, Krueger (1978). The theoretical aspects of trade policies are thoroughly reviewed in Corden (1984).

allocation of resources. Moreover, developing countries that have reduced their tariffs significantly in recent years have tended to be labor-abundant, with relatively high rates of unemployment and a very distorted cost of capital. Hence, a shift in the economy toward outward-looking policies also tends to increase employment as well as overall economic activity. While the strength of these effects obviously cannot be taken for granted, they are the consequences of liberalization most sought after by policymakers and often constitute the raison d'être for undertaking trade reform. Because of this, it would be shortsighted to ignore their potential impact on the budget.

In traditional analyses, the fact has not been stressed enough that it takes time to achieve the goals of a liberalization. The shifts in incentives, in factors, in the consumption basket, and in technology that are required may take several years to work themselves through. The economy, and the budget, immediately after a liberalization has been introduced, may differ substantially from their post-liberalization steady-state positions. The paper discusses the fact that the benefits of a liberalization take longer to become evident than the costs, not only for the economy in general, but particularly for the budget. Moreover, any attempt by the government to speed up the process of adaptation tends to require an increase in the budgetary burden imposed by the liberalization policies.

The speed of the adjustment is, of course, largely dependent on the degree of factor mobility and on the overall elasticity of the system in allowing resources to be redeployed. It will also depend importantly on the nature of the accompanying policies which are adopted in the context of the liberalization strategy and, in particular, on the type of exchange rate policy being followed as part of the liberalization drive. 1/ For this reason, in this paper we analyze cases where the exchange rate is maintained fixed in nominal terms versus those in which the exchange rate is allowed to adjust in response to the trade policy change.

The analysis in this paper stresses the fact that movements in the budget following liberalization mirror the evolution of the macroeconomy after the trade reform, from its announcement through to the new post-liberalization long-run economy-wide equilibrium. The paper discusses the effects on the budget in the short run, which is defined as the post-liberalization period prior to re-equilibrating factor movements (Section II), and then in the long run--when the budget has developed its post-liberalization steady-state characteristics (Section III). The discussion of the post-liberalization budget includes a general outline

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1/ A very extensive study on the character of the transition following trade liberalization has been carried out under the auspices of the World Bank. For a summary of the evidence, see Papageorgiou, Michaely, and Choksi (1988).

of complementary budgetary measures that might usefully accompany trade liberalization. The final section of the paper provides a summary and some general conclusions.

Before these issues can be discussed, it is essential to adopt an operational definition of trade liberalization. In general, a trade regime is considered to be liberalized if the levels and dispersion of protection are reduced, whether explicitly (through changes in tariff rates) or implicitly (by changing the severity of quantitative restrictions). It is also possible to consider a change in the form of protection as a step toward trade liberalization, primarily if it involves a movement away from quantitative restrictions toward equivalent price measures such as tariffs and other trade taxes. This paper will concentrate, however, on the effects of a reduction in tariffs--a change in the relative price of imports.

II. The Short-Run Consequences of Liberalization

1. Changes in the macroeconomy

As noted in the introduction, the sequence of macroeconomic events that is likely to follow the implementation of trade liberalization may take place over an extended period. Usually, a large-scale unilateral trade liberalization will have to be associated with a devaluation of the exchange rate to avoid a deterioration in the balance of payments and to alleviate employment losses in the formerly protected import-substitution industries by facilitating the expansion of export industries. If, however, the exchange rate is maintained fixed in nominal terms, the reduction in tariffs will cause domestic demand to shift from import-competing industries toward imports as their prices start to fall. This shift in demand will result in some reduction in domestic production, as well as in unemployment in the previously protected industries, leading to an overall contraction in economic activity, since labor is not likely to be immediately absorbed in other industries. At the same time, the rise in imports will cause a deterioration in the trade balance. These are, of course, impact effects of the liberalization policy, which will last only until the factors of production are redeployed into export industries (if the appropriate incentives are perceived to be present), or into the nontraded goods sector.

The contraction in the level of economic activity and the deterioration in the balance of payments have potential budgetary implications that go beyond the direct effect of the tariff reduction on government revenue. However, these macroeconomic effects may not occur at the same time since unemployment in import-competing industries may emerge fairly quickly, while the enhanced demand for cheaper imports may require some time before it is translated into delivered foreign goods.

Eventually, to stem the deterioration in the balance of payments, trade liberalization will have to be associated with real devaluation. The appropriate exchange rate adjustment will be hard to judge, but, clearly, the longer-run equilibrium real exchange rate is, to some extent, a function of the intensity of trade protection. If the exchange rate is allowed to depreciate immediately with the inception of the liberalization process, import growth will be slower and the economy-wide efficiency gains from liberalization will emerge faster, implying less transitional unemployment. The two alternative exchange rate scenarios--that is, a fixed rate in nominal terms versus a compensating devaluation--will have different budgetary consequences.

2. Direct budgetary changes

Trade tax revenue will, of course, bear the most direct impact of a liberalization policy. The reduction in tariffs will have an immediate effect on the amount of import taxes collected. However, it is not the case that trade tax revenues will fall by the value of the tariff cut. The response of revenue will depend not only on the change in the tariff rate, but also on the price and income elasticities of the demand for imports, the elasticity of substitution between imports, the market structure of import trade, "announcement effects," and, of course, the degree of exchange rate flexibility.

(a) Price and income elasticities of the demand for imports. If the liberalization takes the form of a reduction, but not a full elimination, of import tariffs, the increased volume of imports is likely to compensate somewhat, in terms of revenue, for the lower tariff rates. The extent of compensation will depend on the degree of liberalization, on the price elasticity of the demand for imports, and on the domestic supply response of import-competing industries. A price elasticity which exceeds unity should generate a net revenue gain, since the increase in imports demanded will raise the tax base to more than compensate for the reduction in the tax rate. In practice, however, the price elasticity will tend to be very low in the short run, implying an immediate revenue drop, which will overshoot the expected long-run reduction in revenue.

There are two income-related effects on imports, both of which tend to have revenue implications. The first is a direct effect: for a given level of activity, the reduction in tariffs raises people's after-tax disposable income and consumption, including, presumably, their consumption of imports. Any rise in import consumption will shift the demand curve outward and will generate some revenue gain, though the revenue impact of this effect taken in isolation may be expected to be very small.

The second effect is related to the response of import-substituting industries. The more elastic is the short-run supply curve of the import-substituting industries, the more imports will increase in response to a given tariff cut. This will bolster trade tax revenues.

On the other hand, the larger the contraction in domestic supply and, therefore, in economic activity, the more likely is aggregate demand to fall and, with it, the demand for imports with its consequent contraction in revenues. The net income effect on trade tax revenue is, therefore, ambiguous.

(b) The elasticity of substitution between imports. Even if total demand for imports rose following a liberalization, post-liberalization tariff revenue could fall if tariff rates were dispersed and if cross-elasticities between imports were significant. Changes in the relative price structure of an import list could incite consumers to switch to cheaper categories of imports, particularly if the tariffs being reduced applied to very specific goods which had close substitutes remaining subject to higher tariffs.

(c) The market structure of import trade. Depending on the competitive structure of the import sector, importers might not pass on the whole of the tariff reduction to domestic consumers, but, instead, could collect windfall profits by maintaining prices and import volumes constant, cashing in on the reductions in the tariff rate. For this to happen, importers should be oligopolistically organized. In such a case, tariff revenue would fall as the rate would be lower but the base would remain little changed. Clearly, importers are likely to take windfall profits only if they perceive the liberalized import to be price inelastic so that the gain in quantity demanded from a price cut would be less than the value of the tariff adjustment applied to total imports of the good.

It should be noted that, unless importers are exceedingly powerfully organized, any excess profits will eventually increase entry to the import sector and gradually erode the excess profits. However, at least in the short run, oligopolistic elements in the import sector may act as an important import suppressor and, hence, as a revenue depressant. A solution for the government would be to impose a windfall profits tax on importers (for example, applied to import prices above a certain ceiling). In theory, this would ensure the government's indifference about the incidence of the tariff reduction--from the revenue point of view, at least.

(d) "Announcement" effects. Any immediate fall in revenue that an inelastic short-run demand for imports would suggest could be offset (or more than offset) by the fact that, if the liberalization was pre-announced, importers would have an incentive to delay imports until tariffs had been reduced. In some countries, a dramatic temporary surge in imports has been observed immediately after the implementation of an expected liberalization, with a consequent abrupt jump in revenues. The increase in post-liberalization revenue from the announcement effect, however, will not translate into a net revenue gain over the fiscal year as a whole, since, had the imports not been delayed but imported according to previous seasonal patterns, their revenue yield would have been higher than their eventual yield, given the new tariff structure.

(e) Exchange rate adjustments. Any short-run increase in revenue caused by a high price elasticity of demand for imports, which generates an increase in import demand as the tariff drops, will be smaller, the larger and the more rapid the nominal exchange rate adjustment implemented in support of the liberalization policy. On the other hand, an exchange-rate induced contraction in the volume demanded will be offset by the valuation effect of the exchange rate change--which will raise the domestic currency value of imports and, hence, of taxes on imports.

An exchange rate adjustment is crucial to the longer-run success of a liberalization program. However, in the short run, it could possibly intensify the revenue losses from trade taxes by containing imports at close to pre-liberalization levels, or below. While, in some countries, the presence of export taxes has been an offsetting factor because traditional exports have been sensitive to exchange rate devaluations and have caused export tax revenues to rise, typically, imports have contributed a greater share of trade tax revenues, and the export response to an exchange rate change has not been the determining element in the movement of trade tax revenue.

In summary, the five types of effects described above indicate that the initial impact of trade liberalization on the volume of trade tax collections cannot be predicted in any simple way. Contrary to common perception, a reduction in tariff rates will not necessarily result in an immediate loss of trade tax revenue, and the evaluation of the net effect will require precise parametric information about the short-run behavioral relationships governing the system.

3. The effect of changes in the macroeconomy on the budget

As described at the beginning of this section, the budgetary consequences of liberalization are not limited to the evolution of trade taxes. Although many budgetary items are likely to be affected only in the longer run, as efficiency rises and the other effects of liberalization work themselves out throughout the economy, there are some short-run implications which should be considered. These arise mainly from the possible initial contraction in activity levels and from the redistributions of income and consumption patterns brought about by the change in relative prices.

(a) Income tax revenue. In the long run, if the liberalization succeeds in achieving its goal of raising national income, direct tax revenue may be expected to increase proportionally. 1/ Indeed, the positive response expected from income tax revenue has typically been the main argument convincing policymakers to bear the short-run budgetary loss from any cuts in trade tax revenue.

1/ There are, however, important caveats to this expectation, which are discussed in detail in the next section.

However, in the short run, with its likely contraction in economic activity and rise in unemployment, income tax proceeds may well fall. But the fall will not be as drastic as the contraction in production might suggest. Although the income of factors related to import substitution tends to fall, that of those engaged in import trade tends to rise, particularly when the exchange rate does not fully adjust to contain imports. Therefore, even when importers are perfectly competitive so that their per-unit profit does not change following the tariff reduction, they may earn a higher (collective/sectoral) income from the increase in the volume of imports--which would contribute to a higher income tax yield, depending, of course, on how those importers are taxed. 1/

There could also be some added effect on the income tax base from the redistributive effects of the tariff reduction. It is sometimes claimed that importers are less able to evade taxes than domestic producers--since, particularly in developing countries, fuller records are kept of the sources of importers' income. In that case, a redistribution of income toward importers could well reduce the evasion rate, and increase effective tax yields for a given amount of tax due.

The effects on the income tax described above would be modified by any exchange rate adjustment compensating for the tariff cut. A devaluation would increase the income share of exporters (particularly traditional exporters in the short run) and would limit the income gains of importers. If importers are rich and concentrated, and exporters are poor and dispersed (e.g., peasant farmers), exchange rate adjustments could lower the income tax base compared with liberalization without devaluation, as small-scale exporters tend to be outside of the tax base.

(b) Domestic consumption tax revenue. Revenues from domestic consumption taxes are also affected by the income, substitution, and redistribution effects of a liberalization as well as by the existing structure of indirect taxation, even in the short run. Clearly, the higher the income elasticity of consumption, the more consumption taxes are likely to fall as economic activity drops in the wake of the reform. But, again, these effects should be qualified. In the first place, if there are indirect taxes (such as VAT or excises) on imports, their revenue should increase if import levels rise. On the other hand, in many countries, imports are not subject to domestic consumption taxes at the same rate as domestic goods, and, hence, the shift from domestic to imported goods as tariffs fall leads to a drop in indirect tax revenues. Moreover, people may shift from unreduced-tariff imports (which tend to be luxuries and other goods deemed less important by the

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1/ As mentioned above, if importers are monopolistic, they will capture part of the tariff reduction in their profits. Although this reduces the import tax base, it is likely to raise the income tax base if the windfall profits are properly taxed.

government) to liberalized imports--depending, again, on the elasticity of substitution between imports. Luxuries typically bear the highest excise tax (or graduated VAT) rates, and so a shift out of them will lower excise/VAT revenue.

A little-explored effect concerns the gain in consumer surplus following a tariff reduction. In general, it could be said that any fall in indirect domestic tax revenue will tend to be offset, to some extent, by the shift in income from producers to consumers. The reduction in the price of imports will have an income effect as well as a substitution effect. Gaining consumer surplus as the price of the imported part of their consumption basket falls, consumers are likely to increase their demand for all goods. The net impact on domestic indirect tax revenue will depend on whether the negative income effect on consumers whose income came from the import-substituting sector is greater or smaller than the positive impact of the fall in import prices on consumers in general.

As a general proposition, it could be postulated that, with competitive importers, total tax revenue after a tariff reduction will tend to be higher, the more taxes are skewed toward consumption taxes, as all previous tax revenue from tariffs will now be part of the consumers' surplus. If importers are oligopolistic (and do not pass on the tariff reduction to consumers), revenue will be higher, the more taxes are skewed toward income and profits taxes, as some (or all) of the previous revenue from tariffs will now be incorporated in importers' profits.

(c) Government expenditures. The short-run budgetary impact of trade liberalization is not likely to be limited to the revenue side. Government expenditure will also be affected in several ways, albeit less than revenues, by the change in the system brought about by the tariff reductions. The main effects are likely to arise in expenditures on goods and services. Unlike the private sector, governments typically do not pay tariffs on their imports. Hence, the tariff cut will not generate any immediate direct relief on the government's bill for goods and services.

However, depending on the speed with which the exchange rate adjusts, there are two possible consequences. If the nominal exchange rate remains fixed, cheaper inputs to private sector production should feed through to cost cuts in the public sector. As soon as the exchange rate begins to move, however, there will be an unambiguous rise in the cost of government imports, in both the current and capital budgets.

There will also be upward pressure on expenditure (probably mainly in the wage bill) from the administrative costs of introducing the reform--even if its long-run effect happens to entail a simplification of customs' administration. Aside from the training of personnel and the rewriting of the tariff, short-run nonnegligible costs include

revisions in tax returns and related forms and software, and the necessary information campaign. 1/

4. Shouldering the economic costs of transition to a liberalized economy

Because the gains from liberalization are earned through a shift to comparative-advantage production, and because they involve the relocation of factors of production from some sectors to others as well as the redistribution of income between sectors and between factors, there is inevitably a transitional period of "dislocation" during which the economy adjusts, perhaps painfully, to the new equilibrium defined by the new relative price structure. The length of the adjustment period, which is usually characterized by the factor unemployment and balance-of-payments deterioration already discussed, is dependent on the degree of factor mobility and the flexibility of the exchange rate policy.

The transition itself imposes special costs on the government budget. The central problem during this period is that, often, the government has to shoulder a substantial portion of the cost of adjustment to a free-trade economy. Adjustment costs borne by the government may be thought of as three kinds:

(1) Some costs are directly built into the budget--such as open-ended commitments to unemployment benefits and income-maintenance schemes, whose burden rises as the economy contracts.

(2) Some costs may be incurred to speed up the transition and minimize the cost of adjustment to the private sector. These costs include government-sponsored redundancy schemes, retraining schemes, incentives for investment in the export sector, and even temporary subsidies to producers of importables now being forced to produce at the world price. These represent a transfer from government to import-substituters, on the theory that the eventual gain from the liberalization will more than compensate for the cost of the transfer.

(3) The adjustment schemes described in (2) above may be considered a special case of the generalized pressure that may emerge on the government to introduce an expansionary fiscal policy, if the transitional unemployment becomes widespread in the economy. The government may feel bound to expand its demand, initiate Keynesian-type projects to generate employment, etc. Unfortunately, this kind of reaction would not only worsen public finances but could well slow the speed of adjustment, as incentives for factors to move into the export sector would be made less pressing by the existence of profitable employment in the public sector.

1/ In theory, the contraction of output and employment should lead to an easing of wage pressures in the public sector. In practice, however, public sector wages tend to be rigid downwards, even in labor-surplus developing countries.

III. The Post-Liberalization Steady-State Budget

The characteristics of the budget in a "liberalized" economy, with low or nonexistent barriers to the entry of imports, differ in several important ways from the structure of the budget in a protected economy. Hence, after the transitional effects of a liberalization have worked themselves out, policymakers will be left with a new steady-state budget with different strengths, costs, and tax capacities than prior to the change in regime. This section discusses the main differences between the pre-liberalization and post-liberalization steady states.

The most important characteristics of the new steady state (readily recognizable from trade textbooks) are the following:

(a) Aggregate national output will be higher, as will national income at world prices.

(b) The share of traded goods in national income will be higher than prior to the liberalization.

(c) The share in national income of the relatively abundant factor will be higher. 1/ In developing countries, typically, labor gains at the expense of capital.

(d) However, while income accruing to the relatively scarce factor will fall relative to the return to the abundant factor, it may not fall in absolute terms, given that total income in the economy has risen.

Well-accepted arguments in favor of liberalization propound that, in the long run, the increase in national income will justify any adjustment costs of liberalization, as the sectors whose income is expanding could compensate shrinking sectors while still remaining better off.

This net increase in national income has straightforward implications for the budget. In the case of both direct and indirect taxes, revenue should rise as the bases of both income and expenditure taxes widen. Given the global improvement in income, there is no reason for the budget balance to worsen compared with the government's financial position in a protected economy. There is, however, a policy challenge: to create the conditions that ensure that the general rise in income is indeed reflected in the budget.

1/ In a trade model, income share rises because the return to the abundant factor rises as it is turned to more productive use; in most countries that liberalize, there is the added effect of increased employment as output expands, because the protected economy typically will not have enjoyed full employment.

It is important to take into consideration that potential tax revenue gains will be realized only if the tax structure possesses certain crucial characteristics: primarily, it should be broad-based and neutral. Several possible shortcomings of the tax structure could prevent the extra revenue potential from being realized.

(a) Not all income may be taxed. In many countries, particularly in the developing world, the government is slow to recognize emerging tax bases. For instance, it may take the government some time to define as taxable the newly emerging export industries stimulated by the liberalization. (This is particularly true in countries where income taxes are schedular.) Or, if past weaknesses of the export sector had been considered grounds for the granting of exemptions and other fiscal incentives to exporters, there is likely to be a time lag before the government can remove these exemptions, even when it recognizes that exporting producers are now capable of bearing a full tax burden. 1/ The problem of taxing the growing income of the expanding industry or sector will be exacerbated if (as is often the case) the lobbying power of the industry is directly correlated with its income. In other words, for the budget to capture the income gains associated with liberalization, it is important that the tax system be as broadly-based as possible. A redefinition of the income tax base could be a strategically important complementary policy to trade liberalization.

(b) As a related problem, income from different sources may be taxed differently. If, perhaps because of administrative or political constraints, owners of capital are more heavily taxed than wage earners, in a relatively labor-abundant country the increase in labor income relative to capital following the liberalization could conceivably lead to a fall in total income tax collected.

In other words, the more neutral is the tax system across income sources, the less income tax revenue will be affected by any redistribution of income that follows a liberalization. (Of course, in a capital-abundant country, the existence of a relatively heavy tax burden on capital would magnify the gains to the budget following liberalization, compared with a neutral tax system.)

(c) Even if income from different sources is taxed equally, progressivity or regressivity in the tax structure could imply that the budget gains a less-than-proportionate share of the liberalization-induced increase in national income. This would occur, for instance, if the tax structure was progressive and liberalization made the distribution of national income more egalitarian--as might well be the case in a labor-abundant economy where capital was concentrated in the hands of relatively few. Thus, in order to assess post-liberalization

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1/ The most obvious case where a time-lag in capturing revenue potential may be inevitable is when a fixed-period tax holiday has been granted.

revenue yield accurately, policymakers may need to be aware of intersectoral differences in income distribution, and may feel it necessary to adjust the progressivity of the tax structure to take these differences into account.

(d) Changes in the distribution of income as a result of liberalization could also affect the yield of expenditure taxes. Expenditure may be expected to rise with the rise in national income; for a given tax structure, then, revenue yield should be higher than prior to the liberalization. 1/ However, while any movement toward a more equal income distribution will tend to increase total consumption, consumption tax yields will rise only if the consumption basket of the relatively less well-off is taxed at the same rate as the tax basket of the relatively rich. In many developing countries, a high share of indirect tax revenue comes from a small number of luxuries that are easily taxable (such as cars). In such a case, any redistribution implied by liberalization could have unforeseen depressing effects on indirect tax revenue unless policymakers take care to widen the base of domestic consumption taxes in the course of the trade reform.

In some countries, the increase in national income will be accompanied by an increase in employment. A higher level of employment could improve the budget balance in several ways beyond the generalized effect of higher income and consumption in the economy. On the revenue side, payroll tax receipts and social security payments would rise, as would other ad hoc taxes often linked to wages (such as health or education levies). There would also be a beneficial effect on expenditure, which should decline inasmuch as unemployment benefits fall. 2/

Notwithstanding the potential revenue gains from the long-run increase in national income (accompanied by an appropriate domestic tax system), there are two inevitable revenue-related costs of liberalization that tend to reduce the budget balance:

(a) Although the share of traded goods in national income is higher in the post-liberalization steady-state economy, so that one could envisage the possibility of trade tax revenue actually rising compared with the protected economy, typically, the opposite happens. After a liberalization, revenue from trade taxes falls. The empirical reason is that exports are almost never taxed at the same level as imports, as the disincentive effect of an export tax is more direct and

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1/ This follows not only because individuals are (on average) better off, but particularly if the sectoral redistribution of income shares the higher national income among a greater number of consumers, and therefore causes the average propensity to consume to rise.

2/ On the other hand, as the expansion of output brings the economy closer to full employment, there could be generalized upward pressure on wages, which could conceivably offset some of the gain through an increase in the government wage bill.

easily perceived. Hence, the shift to production according to comparative advantage usually implies a shift from traded goods in the tax base to traded goods "outside" the tax base.

(b) A further implication of a drop in the share of tax revenue coming from trade is that the administrative costs of tax collection tend to rise in the long run, even when the setting-up costs attached to the liberalization have been discounted. Developing countries have tended to be dependent on trade taxes because exports and imports offer such easy tax handles. The successful collection of revenue from income and domestic consumption taxes, on the other hand, presupposes a relatively sophisticated accounting system, both at the level of the tax department and of taxpayers. Hence, some of the increase in national income may be expected to go to a new generation of tax collectors and auditors, and the gain to the government will be less by that amount.

While the type of qualitative description of the likely budgetary effects of liberalization given above can obviously not pretend to furnish any firm conclusions about the level of the post-liberalization budget balance, it does suggest some policy guidelines for containing a budget deficit. As discussed, the growing importance of the domestic tax base will make it more crucial that the tax system be broad and neutral. Given the aim of liberalization--to open the economy--it would be inadvisable to try to offset declines in tariff revenue from imports with the imposition of taxes on the growing export sector. Rather, policymakers might devote their energies to streamlining the administration of the domestic tax system, in order to contain any upward pressures in the overall administrative costs of the tax system. On the expenditure side, the government might examine its employment policy--if employment is expanding, a government that is overstaffed does not have to compete with private sector wages but could, instead, use the opportunity to shed labor. Finally, the structure of contributions and expenditures of income-maintenance programs could possibly be aligned in such a way as to minimize the impact on the budget balance of the government's support to the sectors which lose during a liberalization.

IV. Conclusion

For most of the developing economies of the world, who have little, if any, effect on the world prices of their traded goods, it is generally accepted that liberalization is a good thing. National income, employment, and welfare should rise, as the country makes full use of its relatively abundant factors and specializes following its comparative advantage. In the post-liberalization steady-state economy, the general increase in welfare should make it possible for the government (if it so desires) to compensate the losers in the liberalization game, and still maintain the budget balance it had prior to the reduction in protection.

However, as this paper shows, the effect of liberalization on the budget cannot be considered simplistically as a drop in tariff revenue with, other things remaining equal, a corresponding expansion in fiscal policy. As described in the previous sections, after liberalization, the budget will look somewhat different to the budget in the protected economy. Income tax revenue will contribute relatively more to total revenue, while trade taxes will be less important. The size of the contribution of income taxes will differ depending on the structure of the income tax system--in particular, the broadness of its base and its general neutrality. If the country is labor-abundant, the government wage bill after the liberalization may rise; otherwise, it could conceivably be lower, in the absence of wage rigidity. Any increase, however, will be countered to some extent at least by lower social expenditures for income maintenance, if unemployment pockets are reduced and the economy moves toward full employment. Also, depending on movements of the exchange rate and interest rate, the cost of government purchases, borrowing, and debt service may also differ from their cost in a protected economy.

The paper has also stressed the fact that, even if long-run gains from liberalization are evident, the decision to liberalize may not be straightforward from the point of view of the policymaker, whose time horizon is often short. As discussed in Section II, despite the promise of a better long-run future, the economy may face a temporary drop in income and a deterioration in the budget balance (as well as in the trade balance) in the short term. Countries tend to be pressured to undertake liberalization programs during a general period of adjustment, when financing is in short supply and the government is trying to reduce its budget deficit, rather than accommodate the added costs of industrial/sectoral adjustment and exacerbated unemployment--however short term these promise to be.

The paper did not draw the conclusion from this that liberalization should be postponed until the macroeconomy is in balance. Indeed, it could be difficult to find a "balance" as long as the economy retains its trade distortions. An important purpose of the paper was, rather, to highlight the short-run costs of liberalization, so that they might be explicitly budgeted for. If the likely size and duration of adjustment costs could be estimated--and, for example, a time-path over which the budget balance should return to "normal" could be plotted--the task of liberalization would be that much easier.

Furthermore, as the paper outlined, there are ways to ensure that the benefits of trade liberalization are captured as fully as possible by the budget, and that its costs are minimized. The policies that accompany liberalization, both on the tax and expenditure sides of the budget, may make the difference between the ultimate success or failure of the tax reform.

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