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Characteristics of QR Regimes

The precise character of the Phase II exchange control regime prior to an alteration in the exchange rate can have important consequences. The effects of a given policy measure can vary depending on the nature of exchange controls preceding it, the details of import license allocation systems, and a variety of other factors. Consider, for example, the impact of an identical increase in the price of foreign exchange for imports under two different circumstances: (1) import licenses are allocated to wholesalers, but the imports are sold by them to industrialists for use in their production processes; or (2) import licenses are granted directly to industrialists, and resale of imports is illegal.

In the first case the premium on import licenses—that is, the implicit scarcity value per dollar of license—accrues to wholesalers. There is no reason to expect the price of intermediate goods that faces industrialists to increase with devaluation unless the increase in the price of foreign exchange exceeds the license premium that existed before devaluation. Indeed, if the flow of imports of intermediate goods is increased, the price confronting industrialists for intermediate goods may decline. The effect of the devaluation on a particular industry will therefore depend on whether the devaluation exceeds or falls short of the import license premium accruing to wholesalers before devaluation, and whether the import licensing authority permits more or fewer imports of intermediate goods after devaluation than it did before.

In the second case, which is where licenses are issued to industrialists without legal resale, there can be additional effects. Even if the quantity of imports is held constant, some former users may find purchase of the imported inputs unprofitable at the higher price, and imports may be reallocated into more productive uses. The economic effects of the devaluation would, then, differ according to the prevailing regime. Thus, analysis of the effects of

devaluation cannot be undertaken in the absence of fairly specific knowledge of the nature of the QRs in effect at the time of the devaluation and of the implicit premium rates accruing to import licenses.

This chapter reviews the salient characteristics of exchange control regimes that may alter the effects of devaluation. It is not the purpose here to provide a complete analysis of Phase II regimes; the intent is rather to summarize those findings of the country studies that may relate the exchange control environment surrounding a devaluation to its ultimate effects.¹

I. PHASE II CONTROLS

The hallmark of Phase II is the variety of instruments employed to regulate foreign trade and payments. The purposes of price interventions are to absorb excess demand for imports and for foreign exchange, to reduce export disincentives, and to direct the flow of payments and receipts through official channels. Quantitative restrictions are complex; different allocation criteria apply to different categories of imports—by origin, by class of user, and by nature of the commodity—and a wide assortment of restrictions is designed to prevent evasion or avoidance of the regime.

This section summarizes the many instruments of control that are used in Phase II regimes. The discussion is concentrated first on measures affecting foreign exchange earnings, and then on price and physical controls on foreign exchange expenditures.

Export Incentives

By its nature, an exchange control regime exists because the supply of foreign exchange at the prevailing price is less than the amount demanded; a decision is made to prevent individuals from satisfying their demand for foreign exchange, rather than to alter its price. Almost by definition such a situation can be regarded as equivalent to a tax on exports and other foreign exchange earnings, and as a subsidy to those who are permitted to purchase foreign exchange at the official price.

As a given QR regime becomes increasingly restrictionist, the profitability of selling abroad generally diminishes and the rate of growth of export earnings often declines and may even become negative. Simultaneously, the "need" for additional foreign exchange becomes increasingly pressing, and governments then introduce varieties of "export incentives." Those incentives can take a number of forms but are, in most instances, really an offset to the disincentives otherwise provided by Phase II regimes. In this way they render the number of units of local currency received per dollar of foreign exchange earnings larger than the official rate, at least for the affected categories of ex-

ports, and thereby reduce the degree of discrimination against foreign exchange earnings that would otherwise exist.

In general, export incentives have been accorded much more extensively to nontraditional than to traditional commodities.² Virtually every Phase II regime studied in this project witnessed some export incentives for manufactured commodities, whereas very few offered incentives—even including tax reduction—covering the entire array of traditional exports.³ Thus Phase II regimes usually sustain a bias against exports as a whole, but the export incentives, while reducing the average degree of discrimination, are generally accompanied by increased variance in the differential between domestic and foreign prices among export categories. The prior existence of differential exchange rates for various categories of exports has an important influence on the response of export earnings to devaluation.

Measures aimed at encouraging foreign exchange earnings and their flow through official channels by and large are pricing measures rather than quantitative controls.⁴ There are, to be sure, a few exceptions.⁵ In India, for example, the government imposed some physical export targets on firms, beginning in the late 1960s. In some instances firms were obliged to undertake future exports of specified fractions of their output in return for "normal treatment" in obtaining their import licenses, and the implied penalty for failing to export was unfavorable import treatment. Usually such targets were set as firms applied for licenses to expand their capacity, and in general such a pattern of physical controls led to a situation where firms were, in effect, paying for their monopoly positions in the sheltered domestic market by exporting at a loss. The pattern of exports that emerged was wildly chaotic. In some instances it could be easily shown that the *direct* import content of exports exceeded the foreign exchange earned by those exports, thereby introducing the term "negative exports" into the language.⁶

Pricing measures were the predominant means of encouraging exports, or at least of offsetting part or all of the disincentives that would otherwise have existed. Allocating import licenses, however, which had great scarcity value in the domestic market, to exporters was also a significant incentive in a number of instances. In India, exporters were given "import entitlements," that could be resold under certain circumstances.⁷ In South Korea, exporters were extended a "wastage allowance" over and above the imports required as physical inputs in the production of exports. Theoretically the allowance was to cover "normal wastage" caused by breakage, inadequate quality, and other factors. In fact, however, it was widely recognized that the allowance covered more than the amount needed for this purpose. Exporters were free to use the excess to produce additional goods to be sold in the domestic market or to sell the excess imports directly. Since firms that did not export could not obtain materials except at higher prices, this enabled exporters to behave as discriminating monopolists, selling at a higher price at home than abroad.

Yet another form of channeling the premium on import licenses to ex-

porters was the granting of free foreign exchange to exporters up to a specified percentage of sales. This was especially valuable where the free foreign exchange could be used to import commodities on a prohibited import list; domestic prices of these goods often exceeded world prices by substantial multiples. Such schemes appeared periodically in a number of countries, including Turkey, India, and Israel during that country's QR period.

In countries where imports of intermediate goods were subject to strict licensing, provisions were generally made for exporters to obtain licenses for "replenishment" of inputs used for export production. This was especially important in countries such as India, where domestic prices were considerably above international prices and, had firms had to divert their output (limited by the availability of imported inputs) from the domestic to the foreign market, the foregone unit price differential would have constituted a major penalty for exporting. This import replenishment provision, however, was not really an export incentive in the sense of equalizing domestic and export profitability. Rather it prevented an increase in the domestic opportunity cost of exporting.

Finally, an almost universal device used to offset export disincentives was some form of rebate on the duties paid on imported inputs for the production of exportables. In some instances the rebate scheme was clearly an offset for any cost disadvantage suffered by exporters as a result of paying higher prices for imported inputs than did competitors in other countries. In other instances rebate schemes were overly generous and were, in effect, a subsidy to exporters. It should be noted that rebates have not generally been extended for the purchase of domestic goods; regimes that were extremely biased toward import substitution often unintentionally discriminated against exporters by requiring them to purchase domestically produced inputs where compensation for the excess of domestic over foreign price could not be granted.⁸

In addition to special treatment accorded to exporters through the foreign trade regime, additional export incentives were sometimes available through other instruments. A frequent form was the granting of credit on favorable terms to finance either export transactions themselves or the purchase of needed capital goods and/or inputs. Often, a firm's export performance was the nebulous criterion employed in granting unrelated rights and benefits; this is widely thought to have been important, if unquantifiable, in South Korea.

Except for those measures that really offset a disincentive (rebates on imports, import replenishment up to the true amount used, and so on), most export incentive schemes can be analyzed in terms of their "effective exchange rate equivalent."⁹ Their value can be measured in the domestic currency equivalent per dollar of exports by estimating the number of local currency units that would have to be paid to a firm to make its profitability from exporting equal to its profit under the export incentive. Adding the subsidy value of each scheme to the official exchange rate can provide estimates of effective exchange rates for different categories of exports. For analytical purposes, this method also provides a best estimate of the exchange rate under which receipts

per dollar of exports in the absence of any incentive schemes would equal the amount actually received in the existing situation.

Quantitative Restrictions on Foreign Exchange Expenditures

Export incentives are generally gradually incorporated into the exchange control regime during Phase II and are usually concentrated on nontraditional exports. Similarly, quantitative restrictions on imports are generally highly differentiated during Phase II. As Bhagwati shows, import licensing processes are specific and detailed. Procedures may differ by category of good—final consumer goods, intermediate goods and capital goods—, by “essentiality” of the import in production or consumption, or by the state of domestic availability. Licensing criteria may vary according to the same considerations, or with the nature of the importer—industrialist or wholesaler—or with the source of the import. Commodities are generally accorded different treatment if they originate with bilateral trading partners, if tied funds are to be employed, or if free foreign exchange is available.

The specific mechanisms can have a variety of resource allocation effects, many of which will affect the outcome of devaluation. As already noted the wholesaler-industrialist distinction has an important influence on the impact of devaluation. The criteria by which licenses are allocated can also have ramifications; for example, rules for license allocation which grant special status to new firms encourage the formation of such firms, many of which close down after devaluation eliminates their source of profit. Almost all of these specific mechanisms can be analyzed by examining the domestic-price/foreign-price differential (in domestic currency units) and partitioning it into three parts: the exchange rate, the taxes on imports, and the premium on import licenses.

The effect of quantitative restrictions is to confer upon import license recipients the value of the premium on the license. That premium can, for some purposes, be regarded as the amount by which a tariff would have to be increased to leave the domestic price of the import unaltered. However, the distribution of the premium does affect resource allocation. An important instance arises when import licenses are accorded in proportion to firms' capacities. In such instances the premium represents part of the rate of return for increasing capacity, and it may well pay firms to construct idle capacity in order to “earn” additional import licenses. Devaluation and abandonment of import licensing may then result in a significant reduction in new investment.

Analysis of the situation before devaluation must therefore take into account not only premiums on import licenses (which will naturally differ from one class of imports to the next), but also the ways in which those premiums

are allocated among competing claimants. Data on premiums on import licenses are extremely hard to obtain, making the empirical analysis of devaluation exceedingly difficult.

Tariffs and Other Charges on Imports

The premium on import licenses is likely to rise early in Phase II, and pressures mount on government officials to alter allocation criteria, consider "special circumstances," and make exceptions to the rules. Partly in an attempt to reduce those pressures and partly because the windfall gains accruing to license recipients appear to be unacceptably large, special charges are generally placed on imports.

Just as the various forms of export incentive can be translated into their exchange rate equivalents, so most charges on foreign exchange purchases can be translated into a tax—or tariff—equivalent. That equivalent, in turn, can be multiplied by the official exchange rate to yield an estimate of the additional charges imposed on imports. The import price (in domestic currency at the official exchange rate) multiplied times one plus the tariff and premium, should equal the domestic price (net of normal distribution charges) of the commodity.¹⁰

Import charges take a variety of forms, which may be compared by calculating the tariff equivalents. First and foremost, tariffs are employed. Although they are often increased during Phase II, the fact that tariffs generally require legislative approval makes them an awkward vehicle for absorbing part of the excess demand for imports. Additional charges which can be varied at administrative discretion are therefore often imposed on top of tariffs. Special port duties, surcharges, or a variety of related taxes may be levied. In addition, "prior deposits" may be required. These compel an importer to place a deposit with an appropriate banking institution for a specified period of time; such deposits earn below-market rates of interest, or no interest, depending on the regulations. In an environment of credit rationing, prior deposits are costly to importers; they must forego interest or profits on other uses of scarce capital for extended periods of time. The costs of guarantee deposits can be translated into a tax equivalent for importers. The equivalent depends, of course, on the percentage of the c.i.f. price that is required, the interest rate, and the length of time for which the deposit is held.

While the deterrent effect of guarantee deposits on imports can be so analyzed, their effect on the outcome of devaluation depends on whether those requirements are eased or whether other charges against imports are altered at the time of devaluation. For example, if guarantee deposit requirements are sharply reduced or abolished, the freeing of previously frozen deposits is equivalent to an increase in the money supply. In some instances the increase

has been sizable and has resulted in significant inflationary pressures. In other instances the authorities have maintained the guarantee deposit requirement after devaluation in order to avoid the inflationary impact of freeing those idle balances.

Both the premium and the tariff equivalent of the charges on foreign exchange purchases increase the implicit protection granted to imports. When the effective exchange rate for exports is below that of imports, the regime is biased toward import substitution; alteration of the exchange rate will alter the bias unless offsetting measures are deliberately adopted. In addition, there is variance in the incentives accorded to different categories of import substitutes and export production by both the quantitative controls and by the pricing measures. Changes in bias and in the variance among economic activities accompanying devaluation provide much of the impetus for altered resource allocation and consumption decisions within the economy.

There can also be special exemptions or subsidies accorded to various categories of imports. Capital goods, for example, are often imported subject to special legislation that waives or postpones the payment of duties. In such instances the tariff equivalent of the actual charges must be substituted for the official tariff in order to estimate the effective exchange rate applicable to the category of goods in question.

II. THE CHANGING NATURE OF CONTROLS

The interaction of the various quantitative restrictions and pricing interventions used during Phase II can lead to highly complex structures that require careful analysis. And the effects of these structures depend upon the domestic policies prevailing while they are in force. In some instances domestic pricing policy partially or completely prevents alterations in effective exchange rates from being reflected in changed incentives for domestic producers. Often the proliferation of quantitative regulations, export incentives, and import surcharges can lead to inconsistencies within the regime, especially when interactions with the domestic economy are taken into account. Unintended side effects and absurdities arise which require correction. Thus the pressures and unintended outcomes resulting from the regime in Phase II are the impetus to further changes in the regime.

Currency Overvaluation¹¹

Devaluation—and the start of a Phase III episode—rarely happens in the context of an initially stationary situation. Usually the months preceding devaluation witness increasingly frequent changes in the QR regime as governments at-

tempt to solve their foreign exchange problems without resort to devaluation. In an important sense the entire Phase II period may be regarded as an interval during which the alternative of devaluation is continuously rejected.

The logic of that interval is not fully understood, but some components of it can be identified. Increased foreign exchange "shortage" leads to ever higher premiums on import licenses, with greater variance in the tariff equivalents of quotas for different commodity classes and increased bias toward import substitution and against export production.¹² In addition, new surcharges and taxes are imposed on various categories of imports in an effort to absorb part of the premium.

Each of those features has implications for the analysis of devaluation from a position of exchange control, as does the nature of the import licensing system and the mechanism for subsidizing exports. Of importance for present purposes is that devaluation, and the start of a Phase III episode, rarely happens in the context of an initially stationary situation. Usually the months preceding devaluation witness increasingly frequent changes in the QR regime as governments attempt to solve their foreign exchange problems without resort to devaluation.

The Turkish situation in the period preceding the 1958 devaluation was perhaps more extreme in this regard than average, but it illustrates well the nature of the process by which devaluation is approached. Turkey had, at least since 1956, been seeking a sizable foreign loan in order to increase the flow of imports. Export subsidies had been granted to a number of export commodities (with the rate of subsidy altered on a commodity-specific basis every few months), starting in 1954 with minor exports, but covering, at different rates, virtually all exports by the time of devaluation. Even so, most goods were exported at prices well below internal Turkish prices of those commodities, and the government was incurring large losses, which were financed by the creation of central bank credit. Import licensing regulations were frequently altered (with prohibition of an increasing number of items). This was partly in response to declining foreign exchange earnings, partly in an effort to restrain faked invoicing and other attempts to evade the regime, and partly to try to meet difficulties arising out of prior licensing mechanisms. Simultaneously, guarantee deposit requirements on imports, which had been initially imposed at a rate of only 4 percent in 1953, were increased in jumps and stood at levels of 100 and even 150 percent by the time of devaluation. Multiple exchange rate categories for imports and invisible transactions proliferated, and by 1957, commodity-specific, currency-specific rates were in effect. On top of those rates a uniform 40 percent across-the-board tax on all imports was imposed to attempt to absorb part of the premium on licenses. In an effort to obtain some additional imports, Turkey increasingly resorted to bilateral payments agreements. By 1956, however, her bilateral trading partners were reducing their exports to Turkey, because, even under those agreements, Turkish balances had been severely negative.

Despite all these actions there was still strong excess demand for imports. At the same time, the central bank was unable to provide importers with foreign exchange to meet their obligations, even when those importers had earlier received valid import licenses. Incentives were established for importers to arrange foreign financing, and import licenses were granted on preferred terms to those able to arrange suppliers' credits or other foreign financing. The result was an accumulation of foreign debt that the government and central bank were unable to meet. Importers were able to obtain further credits only at increasingly unfavorable terms—and finally not at all—and the Turkish government negotiated with Western European governments to take part of her export earnings to meet debt arrears.

By the summer of 1958, imports of most commodities had fallen sharply. Contemporary accounts point to such vivid indicators as a lack of petroleum with which to run the tractors and trucks needed to harvest and transport crops for export; and coffee disappeared in a country noted for its coffee. It became apparent to Turkish officials that new foreign loans would not materialize without major alterations in their foreign trade regime and that the costs of a continuing shortage of imports would be prohibitively high. In that context a decision was made in favor of devaluation.

Crisis Atmosphere of Devaluation

While the Turkish case is perhaps extreme, it illustrates several points that are important in understanding devaluation and its consequences. Most devaluations have been undertaken in a crisis atmosphere—usually by a government that for years had announced its firm commitment to maintain the value of the currency. There were often strenuous government attempts to avoid devaluation. In Colombia, in 1966, the president went on national radio to announce that he would not devalue despite pressures from donor countries. In Egypt devaluation was induced by international agencies, using the lever of Egypt's need for debt rescheduling and new credits from abroad. In Ghana the 1971 devaluation was, in fact, partly reversed when the prime minister responsible for it was overthrown. Congress Party leaders in India had for years declared their intention not to devalue.

That devaluation almost always represents a reversal of previously announced government positions makes the political atmosphere surrounding Phase III episodes difficult enough; that the decision is usually made during a crisis situation further reduces the likelihood of rational formulation and discussion of policies. On top of all that, decisions to change the exchange rate cannot—by their nature—be subject to much public debate and discussion because they might incite capital flight and speculation.

All of these factors combine to make a decision to devalue politically dif-

ficult, and rational evaluation of alternatives is highly unlikely. In many countries the role of foreign donors in bringing about the decision to devalue has been significant. This has had major consequences for the ability of a government to sustain a set of liberal trade policies following devaluation.

Problems for Economic Analysis

One major difficulty in analyzing the effects of devaluation in the context of a QR regime is that comparative evaluation requires hypothesizing what might have happened under some other alternative. It cannot be assumed that the alternative to devaluation is to maintain the existing set of controls. A QR regime has an inner impetus to change. The fact that devaluations are often precipitated by the necessity to reschedule foreign debt indicates the extent to which sustaining the QR regime in order to avoid devaluation is accomplished by mortgaging the future. The comparisons made in later chapters between QR regimes and liberalized regimes will inevitably ignore these considerations and, consequently, bias the empirical results against liberalized regimes.

A second problem is that the frequency of changes in the regime preceding devaluation implies that the economy is not in a stationary position; in general, reactions to previous policy measures have not been fully felt. Moreover, those reactions may be considerably affected by expectations. A deteriorating foreign exchange reserve position, cutbacks on import licenses, imposition of new surcharges on imports, and a variety of other moves may precede devaluation. Those moves can trigger expectations of devaluation, so that behavior prior to devaluation can be a function of those expectations rather than a direct response to policy actions during the latter part of the Phase II period.

In countries with a history of frequent devaluation, followed shortly by a return to Phase II, expectations both prior to and after devaluation may be an extremely important factor in explaining behavior. In a sense one could argue that rational individuals would have discounted both the extreme policy measures taken at the end of Phase II and the liberalization that might initially accompany the devaluation. Such a situation may well have occurred in Chile, where no phase lasted longer than four years. In the Chilean context, expectations of the course of the regime may well have muted the response to all measures, as the shifts from Phase II through devaluation and temporary liberalization and back to Phase II may have been regarded as a continuously recurring cycle.

Finally, QR regimes are inherently regimes with very high variance in effective exchange rate equivalents of price and quantity measures and with very detailed controls. The amount of data required for an adequate characterization of those regimes is overwhelming, especially when it comes to tracing the

variance of such regimes over time. Time series estimates of the premium on import licenses were not obtained for any of the ten study countries; in fact the empirical difficulties of obtaining premium data even at a point in time precluded any estimates for some countries. Systematic quantitative analysis is often impossible and must be at least partially replaced by application of economic theory to qualitative evaluation of the incentives created by the regime; economic events are then interpreted in light of those incentives.

Such a procedure is admittedly less satisfactory than one in which the data can be readily collected and scrutinized in detail. But the intractability of data problems is an outcome of the phenomenon under study and, in this particular instance, results from the nature of QR regimes. Since each such régime has its own unique features, only very coarse intercountry comparisons can be made. In the chapters that follow, it will be seen that certain differences between QR regimes and liberalized trade regimes emerge when aggregate performance data for the two types of foreign trade systems are compared. Given the individuality of each exchange control regime, it is the similarities—rather than the differences—among regimes which are surprising.

NOTES

1. The reader interested in greater detail should consult the Bhagwati volume and, of course, the individual country studies.

2. Some countries have lowered export taxes on traditional commodity exports. This reduces a negative incentive and may prevent the increases in discrimination against traditional exports that would otherwise occur.

3. Foreign exchange earnings from tourism make up another category that is typically favored under Phase II regimes. It is not clear whether the establishment of a special tourist rate is the result of a desire to maintain receipts from tourism (which is sensitive to relative prices), or whether it is an attempt to keep the flow of tourist funds within official channels since black markets spring up readily when the official rate is highly overvalued. In Turkey it would appear that the desire to divert funds to official channels was the dominant motive for introducing a tourist rate in the 1960s. In contrast the Philippines had a multiple exchange rate system in effect anyway, and the rate accorded to foreign tourists appears to have been intended to attract them.

4. All exchange control regimes must, of course, license exports to attempt to keep foreign exchange receipts flowing through official channels. Those controls, which generally entail checks upon both quantity and price, serve as a disincentive to exports. They are not necessarily more costly for exporters than for importers, however. They therefore do not increase the bias of the regime but simply increase transaction costs for all parties. For an analysis of why export incentives generally must be extended via the creation of greater profitability, rather than via quantitative controls, see Chapter 12.

5. In South Korea, firms were given export "targets," but they were negotiated by those firms with the government and appear to have been more in the nature of indicative planning than of physical allocations. In any event it would appear that firms typically exceeded their export target levels, thus suggesting that factors other than those targets were the determinant of actual export levels.

6. For a discussion of negative exports in the Indian context, see Anne O. Krueger, *The Benefits and Costs of Import Substitution: A Microeconomic Study* (Minneapolis: University of Minnesota Press, 1975).

7. There was an active market in those licenses, so that estimation of the implicit value of the incentive was fairly straightforward.

8. India attempted to sell steel and a few other inputs to would-be exporters at world prices. This was one exception, however, to the almost universal rule that no rebates were given to firms for purchasing high-priced, domestically produced goods whose importation was illegal.

9. For some purposes there may be other aspects to the analysis. For example, an export incentive subsidizing the capital employed by firms may affect the choice of production techniques in export industries, and might even result in a different composition of exports than that under an outright subsidy.

10. See Chapter 5 for the derivation of these relationships.

11. For a discussion of the sense in which "overvaluation" is used in this volume, see Chapters 4 and 5.

12. For a definition of the bias of a foreign trade regime, see Chapter 6.