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HOW SHOULD DEVELOPING COUNTRIES PROMOTE EXPORT GROWTH? FREE TRADE VS. SELECTIVE INTERNVENTION

Inward-oriented development strategies -- those that seek to limit the role of trade in favor of domestic production for the domestic market -- have lost most of their credibility in recent years. This represents a major shift from the 1950s through the late 1970s, when most development theorists[1] were convinced that trends in international markets would lead to an ongoing drop in the terms of trade for the traditional exports of the developing countries, and simply ignored or assumed away any significant potential for manufactured exports from the LDCs. Partly influenced by such "export pessimism," many developing countries adopted policies intended to foster domestic industrial production to serve the domestic market, and thereby progressively reduce the need to import manufactured goods. These policies reduced both the incentives and the capacity to produce for export. Consequently they discouraged trade in both directions.

Several developments have helped undermine the once widespread faith in this import-substituting industrialization (ISI) strategy; these have led to a snowballing conviction that outward orientation -- one that encourages rather than discourages trade -- holds the key to improved growth. These developments include:

- the widespread stagnation in productivity and growth experienced by countries that push import substitution beyond light manufactures and begin to protect industries where their comparative disadvantage is more pronounced;

- the clear refutation of "export pessimist" predictions by the rapid and sustained growth in manufactured exports (of increasing sophistication and unit value) by outward-oriented developing countries such as Taiwan, South Korea, Hong Kong, and Singapore;

- the evidence, provided by the export success of converts to outward oriented policies (e.g., Chile and Turkey) and by the steady though less spectacular success of other countries with longstanding attachment to policies conducive to exports (e.g., Thailand and Malaysia); and

- last but not least, the evidence from countries like Turkey and Mexico that sustained and credible application of outward oriented policies provides the clearest -- and perhaps the only -- way out of crisis for highly indebted developing countries, now that the climate of easy international lending seen in the 1970s seems unlikely to resume any time soon.

In the face of the mounting conviction that outward orientation holds the key to improved growth, policy makers in many developing countries have shifted to the many difficult problems involved in dismantling entrenched structures of protection and restriction; these range from broad questions of the sequence of liberalization, to nitty

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[1]Among the most influential proponents of such thinking was Raul Prebisch of the U.N. Economic Commission for Latin America (1959).

gritty problems of reform implementation, to political problems of defusing domestic opposition to reform. Many A.I.D. missions, along with specialists from the World Bank and the IMF, have played an important role in helping governments confront these difficult issues, not least by using the experience of earlier reforming countries to draw lessons for prospective policy reformers.

Even as the general notion that outward-oriented policies are conducive to growth has been increasingly accepted, a vigorous and continuing debate has arisen as to *what constitutes an effective outward-oriented policy*. On one side stand those who argue that "getting the prices right" -- by removing distortions in trade policies, exchange rates, macro policies, etc. -- is sufficient to stimulate export growth; to these "neoclassicals" or "free traders," export-promoting policies are largely identical to good policies in general. In contrast, "strategists" or "interventionists" advocate the adoption of highly targeted policy interventions, designed to stimulate exports of a coherent sequence of products, of increasing sophistication, skill- and technology intensity.

Much of the "free trade vs. intervention" debate has focused on the experience of South Korea, which has achieved exceptionally rapid growth in manufactured exports and in real income since the early 1960s. Korea's policies have been both highly outward oriented and highly interventionist. Interventionists generally attribute Korea's export success to its interventionist policies, and advocate the use of similar policies by other developing countries. Free traders tend to argue that Korea achieved its success <u>in spite of</u> its interventionist policies, emphasizing other aspects of the policy environment and of Korea's historical background that have contributed to export success. Without attempting to settle this debate, the following briefly summarizes the two positions. It then cites evidence that interventionist policies, while arguably helpful to Korea, have proved much less useful -- and usually destructive -- when applied to developing countries without Korea's single-minded focus on export growth and/or Korea's extraordinary level of bureaucratic competence. The paper briefly highlights some of the similarities and differences between Korea's policies and those of Taiwan, which has also pursued an interventionist strategy, but one quite different from that of Korea.

<u>Korean policies in a nutshell</u>

Soon after the overthrow of the Syngman Rhee regime in 1961, the government of Park Chung-hee concentrated economic decision-making in a set of newly created bureaus closely linked to the President's office. Rock (1992) argues that the first few years of the new government were marked by a lack of clear development strategy; in particular, massive U.S. assistance, equal to nearly half of Korea's import bill during 1961-65, reduced the ROKG's need to achieve macroeconomic balance or to adopt policies consistent with export growth. Korea seems to have made the initial shift toward export-oriented policies not by choice, but in response to U.S. pressure to undertake a major stabilization program -- pressure backed by a threatened cutoff in U.S. aid (Rock, 1992; Cheng, 1990). However, once pushed into adopting a limited set of export-supporting policy reforms, the ROKG took matters to their logical conclusion: by 1964-65, it had embraced a comprehensive new economic strategy, with export growth as its central goal.

To this end, the ROKG adopted policies which allowed exporters to operate under a (simulated) free trade regime, while heavily protecting the domestic market.

Some major aspects of the new policy regime facilitated exports by *all* potential exporters, including:

- macroeconomic stability, with manageable current account and fiscal deficits and modest inflation;
- a competitive exchange rate, maintained by active management;
- a sophisticated duty drawback scheme, to allow both direct and indirect exporters duty-free access to imported raw and intermediate inputs and capital equipment;
- a guarantee system giving exporters automatic access to bank loans for working capital;
- numerous tax advantages, subsidized utility rates, and other microeconomic incentives to exporters;
- a set of export service organizations, including an export promotion agency, a technical assistance organization for exporters, and others; and
- ongoing, vigorous efforts to identify and eliminate policy and procedural obstacles to export growth[2].

However, alongside these non-discriminatory, free-trade policies, Korea enforced a set of highly selective industrial and trade policies aimed at promoting export success by *particular firms* in particular product lines. Through these mechanisms, the ROKG economic bureaucracy very consciously "picked winners." The primary mechanisms of selection were the **direct allocation of highly subsidized credit**, together with **firm- and commodity-specific export targets.** A selected firm that achieved its assigned export target would receive valuable credit subsidies; conversely, a firm that failed to meet its targets faced the threat of having its access to credit cut off completely, effectively a corporate death sentence in the highly leveraged conditions under which most firms operated. Business and bureaucratic careers hinged on the outcome of monthly export promotion meetings, where top business and government leaders reviewed which firms or

[2]Although this list focuses on specifically export-related policies, the industrial growth achieved by Korea (as well as by the other East Asian NICs) would have been impossible without massive investment in an educational system emphasizing applied science, engineering, and technical skills. In addition, Korea and Taiwan both invested heavily in infrastructure, and maintained a supportive policy environment for the agricultural sector.

sectors were meeting their export targets. Presidential chairmanship of many such meetings left little doubt about the priority placed upon export success.

In addition to credit allocation, the Korean bureaucracy used an array of policies to build up production and export capabilities and to reward successful exporters, and to punish laggards. The ROKG would identify products it saw as offering promising export prospects in the medium term, and would impose strong protection of the domestic market to build up domestic production capabilities. It would then assign a particular firm the opportunity *cum* responsibility of pioneering the new export market. Typically, such a firm would be given a temporary monopoly position in the protected domestic market to help build its capacities; soon after the initial investment appeared successful, the government would open the domestic market to entry by additional domestic firms. Meanwhile, once established in the domestic market, firms would be assigned ambitious and detailed export targets. In new or risky product lines, the pioneering export firm might be given temporarily exclusive rights among Korean firms in particular export markets. In addition, successful exporters received favorable consideration in competition for government contracts and permission to expand into additional product lines. At the other extreme, firms that failed in their duty to export or were perceived as abusing their export-related incentives tended to find themselves subject to exceptionally thorough tax audits. The economic bureaus that made these decisions to reward or punish seem to have operated in an atmosphere of considerable autonomy and substantial insulation from political pressures from the firms affected.

In practice, Korea's selective export policies contributed strongly to the formation and growth of the country's small number of giant trading companies, the *chaebol*. Once picked as a "winner," a firm that continued to meet the ROKG's export growth targets could use the generous credit subsidies and other favors that flowed thereby to finance rapid growth in capacity and employment; these practices imparted a strong tendency toward concentration. From the ROKG's perspective, dealing with a limited number of conglomerates kept the decision-making burden shouldered by the economic bureaucracy manageable. This tendency toward concentration intensified in the 1970s, when the ROKG mounted a "big push" to stimulate the growth of heavy and chemical industries, including steel, shipbuilding, cars, and heavy machinery, and used the *chaebol* as its instruments to achieve this goal[3]. By the 1980s, the largest of the *chaebol* -- Samsung, Lucky-Goldstar, Daewoo, and Hyundai -- had become household words throughout the world.

Was Intervention the Key to Korea's Export Success?

Arguments that intervention was incidental to export growth. Many neoclassical economists have downplayed the importance of interventionist policies to its export

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[3]It should be noted that the move into heavy and chemical industries met with mixed results, achieving low *average* returns despite some notable successes, and provoking a major financial crisis. See page 9.

success. In this view, the key to Korea's export growth lay in the *nondiscriminatory* policies listed on page 3, which ensured that exporters purchased their inputs and sold their outputs at world prices (most importantly, the duty-drawback scheme), and that they faced roughly equal incentives between exporting and producing for the domestic market (the duty-drawback system, together with maintenance of a stable real exchange rate). Thus, a recent World Bank study characterizes Korea's policies as providing "broadly neutral incentives for manufactured goods." (Thomas and Nash, 1991). The same study emphasizes the fact that the ROKG promoted entry and competition among exporting firms in the domestic market, once the first Korean exporter had gained a foothold in foreign markets, rather than highlighting its restriction of domestic competition before that firm began exporting.

Skeptics about the centrality of intervention in the Korean experience make several points. First, some have noted that several of Korea's most important early manufactured exports, such as wigs and plywood, were never targeted as priority export items, and did not receive discretionary export incentives. The same point can actually be adapted to the purposes of the strategists: it demonstrates that discretionary policies focused upon a few targeted industries could co-exist with non-discretionary incentives conducive to the growth of non-targeted exports.

Second, a number of neoclassical writers have emphasized that, *on average*, the incentives to export and those to produce for the domestic market were roughly similar in Korea (as well as in Taiwan, Hong Kong, and Singapore) during the 1960s and 1970s (Krueger, 1978). However, strategists have responded by demonstrating that those averages concealed large differences in the incentive structure of particular industries, and point to these differences as reflections of the selective subsidies to targeted export industries.

Most recently, Rock (1992) has examined the results of studies conducted during the mid 1970s, in which successful Korean exporters were asked to assess the difficulties they faced in perceiving new export market opportunities and in other steps involved in producing and exporting. Most respondents rated these problems as quite insignificant. Although Rock is properly cautious about interpreting these findings, it is possible to view them as indicating that, in the early 1960s, when few developing countries even thought about producing manufactures for export, and when American multinational retailers were actively searching for low-cost offshore sources of supply, export opportunities were lying around waiting to be seized, and the (Korean) private sector was capable of responding on its own. Under these circumstances, government intervention may have occurred *alongside* rapid export growth, rather than having *caused* it.

Arguments that intervention was the key. In contrast to the neoclassical view, strategists tend to give much of the credit for Korea's export and income growth to its discretionary, strategic export promotion policies. However, interpretations of how intervention contributed to export growth differ. Pack and Westphal (1986) focus on externalities and economies of scale in technology; they argue that the ROKG's coordination of investment decisions allowed it to stimulate the mutually reinforcing establishment and growth of linked firms and/or industries, which would not be profitable in isolation. For example, if policies are used to stimulate the establishment of a "critical mass" of textile firms, and furthermore succeed in encouraging all such firms to invest in on-the-job training and in adaptive process technology improvements, each individual firm can benefit from investments made by all the others, as workers move to new jobs and as technologies diffuse among firms. In the absence of such a critical mass, firms could not capture as large a share of the gains from such investments; in this situation, no firm may be willing to make the investment necessary to attain international competitiveness, which in turn may inhibit firms from entering that market at all.

In contrast, Biggs and Levy[4] (1988) and Amsden (1988) find little evidence of gains through coordination, emphasizing instead the ROKG's use of export targets to push firms to invest in technological effort so as to attain continuously growing world market share. In this view, the key technological externalities are not horizontal externalities among firms producing similar outputs, but vertical externalities between different stages of the production process, whether between different firms or within the same firm. In this view, the government's job is to identify critical input-output linkages, and then to use policy carrots and sticks to force needed productivity improvements, to the benefits of downstream producers and of the competitiveness of final outputs. Wade's (1990a) account of Korean policy overlaps that of Biggs and Levy, while emphasizing the use of cross-subsidization from protected domestic markets to allow aggressive pricing in export markets to boost market share. In addition, Wade argues that the timing of the ROKG's targeting of new export industries cannot be explained as a response to changing factor prices; emphasis shifted toward more capital intensive industries before industrial growth began to pull up real wages. Wade interprets this as evidence that the ROKG was effectively forcing the pace of industrial deepening and export growth, rather than merely reinforcing market signals.

Conclusion: Intervention (probably) worked for Korea, but may not travel well.

Space limitations preclude examining the detailed evidence behind the conflicting claims over the effectiveness of targeted export incentives in Korea. To this author, it appears that an increasing number of neoclassicals have grudgingly conceded that discretionary policies probably made a positive difference *for Korea*. Nevertheless, most would agree with Dornbusch's (1992) recent conclusion that "[i]t remains to discern exactly what makes the difference between an Argentine experience where protection was a disaster and these very positive cases [Korea and Brazil]." Likewise, many strategists would agree that many of the policies that worked in Korea and Taiwan cannot be easily transferred to developing countries with different initial conditions. This question of the transferability of discretionary policies to the "average" developing country is examined below.

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[4]Although Biggs and Levy argue that Korea's interventionist policies were right for Korea, they do not advocate the use of such policies by more "typical" developing countries.

The Case of Taiwan, or, Another Way to Skin the Cat

Before turning to the question of transferability, it is useful to contrast the Korean experience with that of Taiwan. Although Korea and Taiwan are often referred to in one breath, their industrial and export strategies were in fact markedly different.

Generally speaking, industrial policy in Taiwan focused on stimulating the growth of selected *industries* rather than of particular *firms*, as in Korea. Taiwan used most of the non-discriminatory instruments used in Korea, including (1) a competitive exchange rate; (2) a well-developed duty drawback system; (3) guaranteed access to working capital for direct and indirect exporters; (4) a similar range of export service organizations; and (5) careful attention to eliminating procedural obstacles to exporting. Taiwan also used subsidized credit to reward exporters, although much less generously and much less selectively than Korea (Biggs and Levy, 1988).

On the other hand, Taiwan seems not to have used any form of export targeting system to push performance by particular firms. Instead, Biggs and Levy argue that the major instrument spurring export growth was **government establishment of basic industries** --in petrochemicals, plastics, artificial fiber, textiles, and other industries -- often as joint ventures with foreign multinationals. These upstream industries then served as the basis for the growth of highly competitive and export-oriented downstream industries established by private entrepreneurs. Biggs and Levy present this experience as an illustration of an "unbalanced growth" strategy in action.[5]

Finally, a wide range of policies in Taiwan directly and indirectly encouraged subcontracting and entry of new firms, rather than vertical integration as in Korea. As a result, Taiwan has developed an industrial structure completely different from Korea's, with huge numbers of small family-owned firms and relatively few large private firms. Thus, the largest Korean *chaebol*, Samsung, had total sales of $21 billion in 1987, 40 percent more than the largest *10* Taiwanese firms, four of which are state-owned (Geneffi, 1990). Similar contrasts exist in export sales: the five largest Korean conglomerates accounted for 23 percent of the nation's manufactured exports in 1982, compared with less than 5 percent for the five largest Taiwan firms (Biggs and Levy, 1988). Despite these differences in strategy and structure, Taiwan and Korea have achieved roughly similar rates of export and income growth and of industrial deepening since the early 1960s.

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[5]Why an industrial strategy based on state control of heavy industry should work well in Taiwan, when it has proved so disastrous in other countries, is to this author quite mysterious.

It should be noted that Korea also established some state enterprises, though much less reliant on this approach than Taiwan. By far the most important Korean state enterprise is Pohang Iron and Steel Company, one of the ten largest firms in the country. The World Bank identified Pohang as the *most efficient steel producer in the world* in 1987.

Were Korea and Taiwan "Typical" Developing Countries?

One point on which neoclassicals and strategists agree is that Korea and Taiwan were by no means "typical" developing countries. In each case, decades of Japanese colonialism had supported education, a substantial infrastructure base, and significant development of light industry supplying the Japanese market. In each case, the political power of rural elites was limited following the departure of large Japanese landlords, and was further reduced by U.S.-sponsored land reform programs. In each case, an unusually wide gap existed between the government and the business community: in Korea, because of public reaction against business involvement in the corruption of the Rhee government, and in Taiwan because of the initial mistrust between the mainland Chinese who monopolized political power, and the many ethnic Taiwanese with entrepreneurial experience.

These and other historical factors may help account for the ability of the governments of Korea and Taiwan to implement discretionary policies, including significant reliance on public enterprises, that have failed in other settings. The relative separation of the bureaucracy from the business class may have helped restrain collusion and rent-seeking; high educational levels (given the level of real income) probably helped the government formulate and implement discretionary policies effectively, while a shared Confucian heritage created a predisposition to educational achievement throughout the population. Finally, the presence of significant numbers of entrepreneurs with prior experience producing and exporting textiles and other light manufactures during the colonial period seems to have provided a nucleus around which many of the early enterprises grew (Rock 1992). Although these background factors help account for the subsequent growth of Taiwan and Korea, they by no means detract from the significance of their achievement; other countries, including India and Argentina, entered the 1950s with similar advantages, and threw them away through bad policy choices.

Would Export-Promoting Intervention Help the "Typical" Developing Country?

The debate over the contribution of interventionist policies to the growth of Korea and Taiwan shows no sign of abating. Nevertheless, there appears to be broad agreement -- including among most "strategists" -- that **political and administrative constraints typical of most other developing countries make the adoption of such policies risky at best, and potentially disastrous.**

For LDC policy makers to use interventionist policies productively, they have to be able to carry out two major tasks, each of which poses a daunting challenge. First, they have to identify industries with export potential, and do so more effectively than the market. In effect, they must be able to anticipate where domestic and world market conditions will be several years in advance, and do so more accurately, more reliably, and more flexibly than the thousands of domestic and foreign entrepreneurs scouting the horizon for profit opportunities. Doing so was not easy in the 1960s, but would almost certainly be much more difficult in the 1990s, given the much wider and more rapid dissemination of market information and the much greater number of LDC and NIC players in world markets.

Under several variants of the strategic vision, success requires that policy makers factor into their decisions a wide range of externalities, learning effects, mutually reinforcing economies of scale, and other subtle processes. Moreover, they must accurately foresee the timing and quantitative dimensions of future market developments: it is not enough to conclude that, say, light aircraft or industrial robots will someday offer high returns, and that working on developing such products will enhance local labor skills and technology. Taken too early in the process of industrial development, such an investment will tie up resources that could have earned a higher average return in more pedestrian, near-term investments closer to the country's current comparative advantage. The temptation to proceed directly to high-tech ventures has probably been reinforced by the recent move by Taiwan and Korea into high-tech areas. For most developing countries, the relevant lesson is that Korea and Taiwan arrived at their high-tech capabilities only after trudging through decades of concentration on traditional labor intensive manufactures, accumulating process technology and international market experience along the way. In this regard, one should note that Korea fell victim to this "great leap forward" psychology in the early 1970s, when it invested massively in heavy and chemical industries, including automobiles, steel, petrochemicals, shipbuilding, and machinery. Some of these industries were successful (automobiles and steel), while others were expensive failures (petrochemicals). On average, these investments are reported to have earned low returns, and imposed a fiscal burden on the ROKG that led to an economic crisis in 1980 (Thomas and Nash, 1991). This experience played a major role in the ROKG's decision to begin shifting toward more liberal policies in the 1980s.

The second major challenge posed by the use of discretionary policies is that of knowing when to remove special incentives from an industry, and being willing do so. The ROKG exhibited extraordinary independence from pressure from the industries it had cultivated, to continue the protection from domestic and import competition, the credit subsidies, and other benefits just a bit longer. Unlike the usual LDC situation where infant industries tend never to grow up, the ROKG would routinely throw its infants into the water and let them sink or swim.

In the "typical" developing country, where the technical capabilities of the bureaucracy are limited, where rent seeking and cozy relations between government and the historically protected business community are well entrenched, and where export growth is only one among several competing government objectives, adoption of Korean-style discretionary industrial and trade policies (or Taiwan-style reliance on state enterprises and sectoral protection) is an invitation to disaster. The discretionary instruments used by the ROKG to "pick winners" and push them into vigorous export growth will expose the economy to the same kinds of abuse common to import-substituting regimes. **On the one hand, bureaucrats will be subject to political pressures that inhibit them from engaging in the "creative destruction" needed to redirect resources from entrenched industries to those with greater export potential. At the same time, the ability to select "winners" correctly will be limited, and will be subject to political pressures to promote**

industries associated with national pride as well as the pet projects of government ministers. The same instruments that helped create Korea's fiercely competitive *chaebol* will more generally reinforce that monopolistic tendencies seen in most LDC economies. All of these tendencies were visible in the Philippines during the Marcos regime, and in Indonesia between the mid-1970s and the mid-1980s, when high oil prices allowed the "economic nationalists" to dominated economic policy making. In sum, the weight of the evidence, and of expert opinion, suggests that the costs of adopting discretionary industrial and trade policies will outweigh the benefits for most developing countries. **Under these circumstances, A.I.D. policy advisors should refrain from advocating the adoption of export strategies relying on discretionary industrial and trade policies. Exceptions to this rule of thumb might be justified in cases where the host country demonstrated a similar combination of strong administrative capabilities, bureaucratic insulation from rent-seeking and collusion with the business community, and single-minded emphasis on export growth shown by Korea and Taiwan. Nevertheless, the burden of proof that the host country is capable of using such a strategy productively should rest with the advocate.**

What Lessons can the "Typical" Developing Country Learn from Korea and Taiwan?

If the great majority of developing countries should eschew discretionary industrial and trade policies, what useful lessons can they draw from the experience of Korea and Taiwan?

One crucial ingredient of the success of the East Asian NICs, recognized by essentially all observers, was their careful attention to **keeping their exchange rate competitive.** For example, Korea kept the real exchange rate[6] nearly constant from the early 1960s through the mid 1980s, through periodic devaluations and through macroeconomic policies that kept inflation moderate (Thomas and Nash, 1991). Taiwan maintained a similar degree of stability in the real exchange rate from the mid 1950s through the mid 1980s (Wade, 1990b). Further, **conservative monetary and fiscal policies** have helped maintain a stable macroeconomic climate, thus encouraging domestic and foreign investors to make long-term investments. Adoption of these orthodox macroeconomic principles would yield major benefits to the great majority of developing countries, although making the necessary adjustments to get there has often proved painful.

For many developing countries, particularly those with limited administrative capabilities, it may be hard to improve on the standard formula for trade policy reform: replacement of quantitative restrictions by a more or less uniform tariff schedule, followed by the steady reduction of tariff rates over a period of a few years. Such a system is relatively easy to administer, will yield immediate benefits to the government budget as tariffs replace quotas, and will help reduce corruption by eliminating the discretionary powers of the import licensing bureaucracy.

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[6]The real exchange rate is the nominal exchange rate adjusted for relative rates of inflation at home and in trading partners' economies.

Countries with moderate or better administrative capacity should be able to improve upon this approach by adopting some of the non-discretionary policies pioneered by Taiwan and Korea. The most important of these is some form of **duty drawback** or **duty exemption** scheme, to give exporters access to imported inputs at world prices. Under a duty drawback scheme, importers receive rebates on duties paid for imported inputs (and usually for indirect taxes as well), upon submitting proof that they have exported the resulting output. Under duty exemption, the exporter submits evidence of his export order, and is thereupon exempted from paying duties on the required imported inputs. Variants of such schemes have been successfully adopted by a number of developing countries, including Indonesia, Thailand, Mexico, Turkey, and India. Some cheating may occur, the more so the more restrictive the overall trade regime. Nevertheless, the paper trail created under these arrangements helps limit the degree of abuse. It should be noted that duty drawback and exemption schemes do not neutralize the distortions created by quotas and other quantitative import restrictions, providing yet another reason for replacing these measures with tariffs.

The greatest administrative challenge posed by the duty drawback/exemption schemes used in Taiwan and Korea is to extend coverage to *indirect* exporters, i.e., domestic firms producing inputs for direct exporters. Such coverage may be of limited importance in the initial stages of export growth, but is important to stimulating backward linkages from direct export production. Taiwan and Korea have developed sophisticated systems for measuring and updating technical production coefficients, which are then used to ensure that direct and indirect exporters receive the proper level of tariff rebates (for details, see Wade 1991). Thailand uses an arrangement of this type, which has also been adopted by Bangladesh, India, and Pakistan with World Bank assistance (Thomas and Nash, 1991). Few, if any, countries outside Asia have extended duty rebates or exemptions to indirect exporters.

More controversially, some experts suggest that developing countries should take steps to improve the access of exporters to pre-shipment credit, usually through central bank re-discounting and a guarantee scheme administered through the commercial banking system. In principle, the benefits can be extended to indirect exporters through the use of domestic letters of credit, as pioneered by Taiwan and used in Korea (Bhattacharya and Linn, 1988). Advocates emphasize that *access* to credit is the critical issue here; the use of credit subsidies to reduce the *cost* of export credit is less helpful and introduces distortions that defray the benefits. In addition, export credit subsidies will now be subject to countervailing duties in industrial country markets, particularly the United States. However, even unsubsidized export finance guarantee schemes have proved difficult to implement in developing countries outside of East Asia. A recent World Bank study grouped these mechanisms among those that "... have yet to work well outside Korea." (Thomas and Nash, 1991).

More generally, even most of the nondiscretionary subsidies and incentives used to stimulate exports in Korea and Taiwan have met with disappointing results elsewhere. These include income tax rebates, technical assistance to exporters through official R&D institutions, and official export promotion agencies intended to link potential buyers and

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sellers (Thomas and Nash, 1991; Keesing and Singer, 1992). Much effort has gone into discovering why these mechanisms have not traveled well outside East Asia. In time, this research may identify transferable incentive systems that could make them work elsewhere. In the meantime, **the lesson for A.I.D. policy advice would appear to be that the great majority of developing countries should concentrate on "getting the prices right" through appropriate macro policies and trade reform, and getting the policies right in supporting areas of human capital development, infrastructure, and other structural policy areas[7].**

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[7]Barrow (1992) has recently lent further support to this point, contrasting the growth experience of *laissez faire* Hong Kong with that of activist Singapore. Singapore has used its tax and pension system to raise its savings rate to the highest in the world, and has used subsidies to induce foreign investment and domestic entry into targeted industries. Despite Singapore's much higher savings rate, its growth rate has only marginally exceeded that of Hong Kong, and *because of* its higher savings rate Singapore's living standards are much lower than Hong Kong's at virtually identical levels of per capita income. Barro attributes the low returns to Singapore's forced savings to its industrial policy, particularly the frequent shifts in industry and sectoral targets.

Bibliography

Amsden, Alice (1988). *Backwardness in Contemporary Perspective: South Korea's Industrialization Through Learning*. Oxford University Press.

Barrow, Robert (1992). "Industrial Policy, a Tale of Two Cities," in *The Wall Street Journal,* April 1, 1992.

Bhattacharya, Amarendra, and Johannes F. Linn (1988). "Trade and Industrial Policies in the Developing Countries of East Asia," World Bank Discussion Paper No. 27.

Biggs, Tyler and Brian Levy (1988). "Strategic Interventions and the Political Economy of Industrial Policy in Developing Countries," E.E.P.A. Discussion Paper No. 23, produced for A.I.D./S&T.

Cheng, Tun-jen. "Political Regimes and Development Strategies: South Korea and Taiwan." In G. Gereffi and D. Wyman (eds.), *Manufacturing Miracles: Patterns of Industrialization in Latin America and East Asia*, Princeton University Press.

Dornbusch, Rudiger (1992). "The Case for Trade Liberalization in Developing Countries," *Journal of Economic Perspectives*, Winter 1992, *6*, 69-86.

Gereffi, Gary (1990). "Big Business and the State," in G. Gereffi and D. Wyman (eds.), *op. cit.*

Keesing, Donald B. and Andrew Singer (1992). "Why Official Export Promotion Fails," *Finance and Development*, March 1992, 52-53.

Krueger, Ann (1978). *Liberalization Attempts and Consequences,* volume 10, *Foreign Trade Regimes and Economic Development.* National Bureau of Economic Research.

Pack, Howard and Larry Westphal (1986). "Industrial Strategy and Technological Change: Theory vs. Reality," *Journal of Development Economics*, *22*, 87-128.

Prebisch, Raul (1959). "Commercial Policy in the Underdeveloped Countries," *American Economic Review*, (Papers and Proceedings), May 1959, *40*, 251-264.

Rock, Michael (1992). "Can Export Services Assistance Make a Difference?: The Korean Experience." Report for POL/CDIE.

Thomas, Vinod, John Nash, and Associates (1991). *Best Practices in Trade Policy Reform*. Oxford University Press for the World Bank.

Wade, Robert (1990a). "Industrial Policy in East Asia -- Does It Lead or Follow the Market?" In G. Gereffi and D. Wyman (eds.), *op. cit.*

Wade, Robert (1990b). *Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization*. Princeton University Press.

Wade, Robert (1991). "How to Protect Exports from Protection: Taiwan's Duty Drawback Scheme," *The World Economy*, December 1991, 299-309.