Market-Oriented Policies for the Development of Hainan

Executive Summary

Charles Wolf, Jr., Donald Putnam Henry, Charles Robert Roll, Jr., K. C. Yeh
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Supported by the National Research Center for Science and Technology for Development, People’s Republic of China

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PREFACE

This report summarizes and integrates four RAND Notes prepared for the National Research Center for Science and Technology for Development (NRCSTD) and the government of Hainan province, in accord with RAND's memorandum of agreement with NRCSTD and China's Ministry of Foreign Economic Relations and Trade. The Notes are Restructuring Hainan's International Trade and Finance: Currency, Foreign Exchange, and Trade, Charles Wolf, Jr., N-3292-NRCSTD, 1991; Restructuring Hainan's Fiscal System, Donald Putnam Henry, N-3293-NRCSTD, 1991; The Lessons of East Asian Development and Alternative Development Strategies for Hainan, K. C. Yeh, N-3294-NRCSTD, 1991; and A Comparison of Hainan with the Other Special Economic Zones, Charles Robert Roll, Jr., N-3295-NRCSTD, 1991. This work is intended to assist NRCSTD and the Hainan government in planning the province's development along market-oriented lines. The discussion and analysis in the four Notes and in this report are based on information and data, although sometimes unreliable, available to the RAND analysts up to the end of 1990.

The research described in this Executive Summary was conducted in the International Economic Studies program of RAND's Domestic Research Division.
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1. INTRODUCTION

This report summarizes RAND research and recommendations for the strategic development planning of Hainan Island. The recommendations are intended to assist the Hainan government in developing the economy along market-oriented lines.

In 1988, the People's Republic of China established Hainan Island, formerly a part of Guangdong Province, as a separate province and as China's largest Special Economic Zone (SEZ). It is one of five SEZs—the others are Xiamen, Shantou, Shenzhen, and Zuhai—all located on the southeastern coast of China. Hainan Province, located off the southern coast of China opposite Vietnam, is the southernmost of the five SEZs. The area has a long history of commercial and industrial contacts outside China, and much of the overseas Chinese population comes from southeastern China, thereby tending to provide linkages between this region of China and the outside world.

The first four SEZs were established from 1979 to 1982 based on policy determinations that China should open up to the outside world. Although Hainan was not in this "group of four," on April 13, 1988, the 7th National People's Congress declared Hainan a province and also officially named it an SEZ.

An SEZ is a defined area within which a regulatory framework established by the central government provides the official rules and policy guidance for regulating economic activities. While operating within the general context of China's administrative environment, the SEZs are subject to different regulations from those governing economic activity in the rest of China.

The SEZs are designed to carry out one part of a mixed development strategy of "import substitution and export-orientation." The strategy has focused on interior localities to carry out a policy of import substitution, while SEZs are intended to pursue export-led economic development. However, it is not intended that the SEZs become enclaves isolated from the rest of China. The zones are intended

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to be "open doors for economic and technical cooperation . . . and bridges . . . [to] . . . the interior regions of China."\(^3\)

The policy focus of the Hainan government accords with this broad-based export-oriented development strategy for the SEZs, focusing on market-oriented reforms consistent with the policy directions of the central government. In addition, emphasis has been placed on pursuing a strategy of "little government—big society": reducing the government's role in the new market-oriented society where market mechanisms will work, while streamlining and enhancing the government's performance in public health, education, and administration. The intent is not only to exercise appropriate public-sector responsibilities more efficiently but also to assist market performance by either removing bottlenecks or providing assistance where market mechanisms are developing slowly.\(^4\)

The RAND analysis and recommendations are intended to assist the Hainan government in carrying out its strategic development planning. Our emphasis is on the broad outlines of macroeconomic policies—in setting the fundamentals of fiscal, monetary, foreign exchange, and trade policies in a sound direction and in drawing on the experience of the newly industrializing economies (NIEs) for relevant lessons. We do not address other important issues and areas, such as alternative methods of privatization, the organization and management of a possible free-customs zone in Hainan, or the development of an internal capital market and its relationship to the international capital market. Nor do we consider the crucial political dimension of development policies, including relationships between the central government and the provinces.

Our recommendations have been based on consideration of current conditions in Hainan and China, previous field research in Hainan, data provided by the government of Hainan, and many discussions with Chinese officials. We begin by discussing our analytic framework, which views economic reform as a systems problem (Sec. 2). We then turn (in Sec. 3) to a consideration of lessons drawn from the other NIEs. Next, we consider various major policy reforms, including currency, foreign exchange, and trade (Sec. 4), and labor and capital market reforms (Sec. 5). Fiscal reform, covering both revenue and expenditure organizations and processes, is discussed in Sec. 6. We then turn to implementation issues, including feasibility, timing, and

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\(^3\)Ji, pp. 14–15.

\(^4\)The government's aims have also included development of Hainan as a showcase for high-technology projects—a goal we touch on briefly above (p. 27).
balance (Sec. 7) and conclude in Sec. 8 with observations on some of the relevant issues that have not been addressed, or have only been briefly alluded to, in the RAND work.
2. ECONOMIC REFORM AS A SYSTEMS PROBLEM

Reforming Hainan's economy to reflect the three explicit leadership objectives—market orientation, both private and public property rights, and an "outward-looking" economy linked with the international economy—is analogous to reforming any large system, whether in education, the military, health, or other domains. Reforming such systems requires that the component parts be restructured as a whole, because of the interactions and complementarities between them.¹

This view of economic reform as a systems problem is illustrated in Fig. 1. The solid lines indicate the contribution of one element to the effectiveness of another element to which the arrow points. (For ex-

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¹The analysis and recommendations in this section are presented in more detail in Charles Wolf, Jr., Restructuring Hainan's International Trade and Finance: Currency, Foreign Exchange, and Trade, RAND, N-3292-NRCSTD, 1991.
ample, monetary and fiscal reform reciprocally contribute to each other, and both monetary and fiscal reform contribute to successful deregulation of prices and wages.) Each of the six elements is less likely to be effective without the reciprocal support provided by the other elements. Hence, efforts to reform nonmarket economies by piecemeal steps are more likely to founder than to succeed.

Consider, for example, the link between the first two elements. Monetary reform is necessary to limit growth of the money supply to a rate that accords with the growth of real output. It is also a necessary means to provide access to credit on the basis of borrowers' economic capabilities and their associated risks, rather than on the basis of their political connections or credentials. Fiscal reform requires a budget process that constrains government expenditures to a level approximating that of revenues and that precludes “off-budget” subsidies and other transactions that would vitiate monetary discipline, as well as budgetary balance.

In turn, the third element—deregulation of prices and wages—requires monetary and fiscal restraint if deregulation is to change relative prices by linking them, as well as wages, to real costs and productivity, while avoiding general inflation.

For deregulation of prices and wages to affect the behavior of management, labor, entrepreneurs, and consumers in ways that promote efficient use of resources and economic growth, contemporaneous implementation of the fourth element—privatization, legal protection of property rights, and the breakup of state monopolies into competing entities—is essential. This requires an appropriate legal code and appropriate procedures for resolving disputes over property transactions and acquisitions. It also requires a choice among several alternative ways of changing from state ownership to private ownership—a subject that is beyond the scope of this study, but that might be examined in work that could be done in the future.

Whichever method or methods of privatization are selected, their success remains synergistically linked to the other elements of the transformation package. Unless rewards are linked to asset ownership, and unless such rewards can be accumulated legally, incentives to innovate and to increase productivity will be impaired. Private ownership and competition are essential for market forces to provide an effective “stick,” as well as a “carrot.” If ownership is in the hands of the state, the discipline imposed by market competition will be attenuated, if not eliminated. When state enterprises are confronted by losses, they typically evade or ignore the threat of bankruptcy that private enterprises would face if confronted by similar losses.
The fifth element in the package—the establishment of a social security system as a "safety net"—is also essential for the process to succeed. Without it, the process as a whole may create a fear of widespread unemployment, as well as social stress, political instability, and a serious impediment to accomplishing the transformation to a market system.

In the past, social protection—against illness, disability, age, and unemployment—has principally been the responsibility of state enterprises. As privatization proceeds, these social welfare functions are likely to become the principal responsibility of government, with financing from taxation and from contributory levies on the insured members themselves.

The final element—currency convertibility—is essential to complete the transformation process by linking internal markets and their prices, wages, productivities, and technologies to those of international markets. This linkage provides the opportunity for comparative costs and comparative advantage to operate for the benefit of the transforming economy of Hainan. Moreover, if the other elements of the package—especially monetary and fiscal discipline, and market-determined prices—are effectively implemented, currency convertibility with a floating exchange rate can be established and sustained, with minimal hard currency reserves.2

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3. LESSONS FOR ECONOMIC REFORM FROM OTHER NIEs

This section draws on the experiences of three NIEs that have developed successfully: South Korea (for convenience, henceforth referred to as Korea), Taiwan, and Hong Kong. A comparison of Hainan today with the NIEs prior to their economic takeoff suggests some strong parallels. Their goals and development problems are basically similar.1

But there are also significant contrasts. These differences are of two types. Some relate to their international settings, over which Hainan has virtually no control. Others relate to their internal conditions, over which Hainan has considerable control.

The new developments in the external environment in the 1980s include the rising protectionism in the developed countries and the trend toward managed trade,2 the emergence of regional trading blocs (the integrated European Market and the North American Free Trade Area), increasing competition in world markets from other developing economies, and the declining significance of U.S. development assistance to the Asia-Pacific economies. These are new challenges for Hainan. However, there are also new opportunities, including new markets in Japan and the NIEs, Europe, other developed countries, and, potentially, Eastern Europe and the former Soviet Union.

There are also major new sources of capital that did not exist in the 1950s. Japan is now replacing the United States as the most important aid donor, particularly in the Asia-Pacific region. International financial organizations have reoriented their focus from reconstruction in the 1950s to development of the low-income countries. More importantly, the movement of private capital along with offshore manufacturing from the NIEs to less-developed countries represents a new trend that benefits developing economies including Hainan. To a considerable extent, the positive and negative effects of changes in the international environment compensate each other.

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2"Managed trade" means that exports and imports are governed by direct government measures of subsidizing exports and/or restricting imports.
The most important difference between Hainan and the NIEs lies in their economic system and the related development policies. The Hainan economy is basically a planned economy, in contrast to the market-oriented system of the NIEs. Until recently, Hainan's development policies were primarily designed to serve the needs of the mainland's development, and Hainan has remained largely isolated from the world economy. By contrast, the NIEs were growth-oriented and closely integrated with the world economy. Most economists attribute the NIEs' economic success to these institutional and policy elements. The RAND work has examined the lessons of policy reform in the NIEs in four areas: industrialization, agricultural growth, financing development, and the role of government.

STRATEGY FOR INDUSTRIALIZATION

In the postwar period, two alternative development strategies have been adopted: an inward-oriented strategy designed to promote industrialization through import substitution and an outward-oriented strategy to promote industrialization through export expansion. The NIEs have adopted the latter approach after a brief episode of import substitutions in Korea and Taiwan.

There are strong reasons to believe that the export promotion strategy contributed significantly to the impressive economic performance of the NIEs. First, this strategy allows a country to exploit its comparative advantages. Exports make it possible to overcome the limitations of small domestic markets in exploiting economies of scale through horizontal specialization within a given product line (e.g., specializing in a smaller number of machine tools with higher quality) or through vertical specialization in several component products (e.g., parts, components, and accessories for Taiwan's supply of car stereo equipment for GM cars).

Furthermore, competition in the world market induces technological change in export industries, which is necessary for these industries to maintain and improve their market positions. Closely related to the first point is the potential for the outward-oriented economy to attract foreign investment, particularly by multinational enterprises that seek to shift some of their operations to the developing countries to take advantage of lower wage costs. In light of the experience of the NIEs, the policy choice for Hainan seems clear.

To implement this strategy, the experiences of Taiwan and Korea are more relevant than that of Hong Kong. Hainan has a complicated system of import and export licensing, tariffs, subsidies, and an over-
valued exchange rate, conditions quite similar to those in Taiwan and Korea prior to their shift to an export-oriented strategy. These conditions were absent in Hong Kong.

Korea and Taiwan slowly liberalized their import controls, while actively promoting exports by introducing incentive mechanisms that increased the profitability of exports. These mechanisms included replacing the multiple exchange rate system with a single exchange rate and lowering the overvalued exchange rates, tax rebates of import duties on imported raw materials used in export production, access by export industries to loans at below-market rates, foreign exchange retention schemes, and government-sponsored market research and information services. The lesson for Hainan is that, if prices in Hainan are distorted by the tariff system or other trade barriers, it is imperative that other policy measures be adopted to offset the price distortions, as in the cases of Korea and Taiwan. A more rational solution is to eliminate the distortions altogether, as in the case of Hong Kong.

In following the export promotion strategy, Hainan will face many new challenges, as noted above. But Hainan does have some distinct comparative advantages in producing labor-intensive and land-intensive products at this stage, rather than attempting to jump to more costly, high-technology products.\(^3\)

Decisions about specific industries to be developed are best left to entrepreneurs to judge which products have a comparative advantage at a given time and therefore have a good chance to compete successfully in domestic and international markets.

**AGRICULTURAL GROWTH**

The emphasis on industrialization in the NIEs' experience should not obscure the fact that, except for Hong Kong, significant agricultural growth had taken place along with industrial development. In Taiwan, agricultural expansion occurred partly as a result of increasing inputs, including land, but more importantly as a result of productivity increases.

The “green revolution” that has taken place in Taiwan is based on new technology and rapid growth in fertilizer use, adequate supply of water, new strains, increased commercialization of agriculture, and a complex set of institutions engaged in research and extension services

\(^3\)cf. discussion below (p. 27) of Hainan's comparative advantages.
by highly trained people. Such technological change is of paramount importance, because, unlike in industry, agricultural production quickly runs into diminishing returns, thereby raising production costs. If prices are fixed, peasants would lose the incentive to produce. Increases in food prices may not be feasible in an open economy because of the ceilings imposed by the prices of imports, or may be socially unacceptable in a closed economy. To maintain incentives, profits from farming must be maintained not by raising prices but by reducing costs through technological changes. As a result of technological changes, the per-hectare yields of major crops in Taiwan increased markedly. A comparison of the yields in Hainan and Taiwan in 1988, shown in Table 1, suggests that there is substantial potential for productivity increase in Hainan. One of the salient lessons of Taiwan’s experience is that agricultural growth has a major role to play in both the initial and subsequent stages of development.  

There is another lesson that may be relevant to Hainan. Taiwan introduced land reform consisting of rent reductions, sale of public land to the peasants, and limiting land ownership of current landlords. The result was that farmers became independent entrepreneurs, mainly focusing on domestic markets. At the same time, the government invested substantially in infrastructure to support agriculture, including transportation, power, communications, input supply systems, farm credit, and marketing institutions. The Joint Commission

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on Rural Reconstruction, which was involved in planning and implementing research and development and extension work, made especially significant contributions to this progress.

The lesson is that rather drastic changes in economic organization may be necessary in the rural economy, along the same lines of rural reform on the mainland in the early 1980s. For Hainan, this suggests the desirability of severing the administrative links between the central government and the state farms and letting the latter operate like any other independent business enterprise.

FINANCING DEVELOPMENT

A high rate of investment is a necessary condition for Hainan's growth to increase capital-labor ratios, raise labor productivity, and contribute to technological change. To finance investment, both Taiwan and Korea initially relied heavily on foreign aid. There is no reason why Hainan should not similarly tap foreign capital supplies, whether from public or private sources, from the mainland or abroad. The NIEs, however, simultaneously emphasized the development of domestic sources of savings. Hainan should pursue a similar process, by developing capital markets, restructuring government finance, and thereby encouraging private savings as the NIEs did.

ROLE OF THE GOVERNMENT

Government had a vital role to play in the development of the NIEs as a catalyst, not as a controller. Government contributed significantly to their economic growth in four specific areas: (1) creation and maintenance of a modern infrastructure both in the sense of the physical ("hard") infrastructure—improving transportation and energy supplies—and in the policy ("soft") infrastructure—establishing a reasonably stable monetary and fiscal policy; (2) institutionalizing a stable incentive system enabling entrepreneurs to operate efficiently with property and accumulation protected from arbitrary confiscation or infringement; (3) maintaining economic stability by controlling inflation; and (4) assisting the economy to adjust to changing world market conditions by establishing convertible currencies. For Hainan, this means substantial efforts in developing the soft infrastructure, policies to neutralize the disincentives caused by trade restrictions and overvalued exchange rates, tight control of fiscal and monetary policies, and necessary investments in research and development. In sum, a small government does not mean that the func-
tions of the state are unimportant. On the contrary, formidable tasks lie ahead for the government, but the orientation of these efforts must be redefined to accord with the three objectives referred to in Sec. 2.
4. CURRENCY, FOREIGN EXCHANGE, AND TRADE REFORMS

As discussed in the previous section, currency convertibility is an essential component of reforming Hainan's economy along market-oriented lines. In examining the issues of convertibility and exchange rates, the RAND work emphasized the following points:\footnote{See Wolf (1991) for a more detailed analysis.}

1. For currency convertibility to be sustainable and to contribute to Hainan's development as a market economy linked to the international economy, it is essential to maintain control of credit and the money supply, as well as fiscal discipline in the management of Hainan's expenditures and revenues. These functions can be exercised, respectively, by a suitably prepared People's Bank–Hainan Branch (PBHB) and a budget office in the central Hainan administration.

2. With monetary and fiscal discipline, currency convertibility with a floating exchange rate can be maintained with minimal hard-currency reserves. Without such discipline, even substantial reserves would be quickly dissipated.

3. One concrete and accessible route to a convertible currency for Hainan is to establish the Ren Min Bi (RMB)–Foreign Exchange Certificate (FEC) as Hainan's currency. The supply of Hainan currency (HC) FEC would be controlled by the PBHB and linked at the outset to the transactions and liquidity balances that Hainan's population and enterprises wish to hold.

In considering the future orientation of Hainan's external trade, RAND's preliminary work examined the present system of both “passive” and “active” export quotas. We concluded that, on economic grounds, all the arguments that have been advanced in support of export quotas are seriously flawed, because quotas restrict exports of products in which Hainan has a comparative advantage while protecting high-cost production elsewhere in China. Apart from political considerations, which the study does not address, the quotas should be removed.

Hainan's prospective currency convertibility will be affected by the various factors that determine the price elasticities of supply for
Hainan's exports and the price elasticities of demand for its imports. Concerning exports, the tentative conclusion in the RAND work is that, if export quotas are removed, prospects would appear to be bright for boosting Hainan's exports and hard currency earnings well above the $354 million reached in 1989.

With respect to import elasticities, it seems probable that Hainan's unfilled demand for several categories of imports, especially consumer durable goods, would be quite high at current prices and at a fixed exchange rate. It is less clear how elastic these demands would be if a floating exchange rate raised domestic prices in HC for these imports. Nevertheless, with a convertible currency and a free market for foreign exchange, these import demands will tend to increase, thereby raising the HC exchange rate above the present fixed RMB/dollar rate.

It is evident that the problem of moving to a convertible currency for China as a whole would be considerably more difficult than doing so for Hainan alone. One reason for the greater difficulty is the existence of an "overhang" of hundreds of billions of RMB, whose currently low velocity of circulation might be drastically accelerated if a convertible currency market were established for China as a whole. Nevertheless, the gap between the official, recently devalued RMB/dollar rate and the open or black market rate is only 30 percent—a disparity that is relatively small compared to the difference between the official and black market rates for such other inconvertible currencies as the Soviet ruble and, earlier, the Polish zloty. In light of these considerations, the RAND work suggests that, providing that monetary and fiscal discipline is maintained, the convertible rate in a floating exchange market for the RMB-FEC would perhaps be between five and six per U.S. dollar.

In considering the question of whether a rapid or gradual path toward convertibility is preferable for Hainan province itself, the RAND work suggests how a fairly rapid process of moving toward convertibility might be accomplished within a period of about one year.\(^2\)

Brief consideration is also given in the RAND analysis to the question of a Free Trade Island (FTI), a Free Trade Zone (FTZ), or Special Customs Zone (SCZ) status for Hainan, and some of the advantages and disadvantages of each are discussed. An FTZ would limit free-trade status to an enclave within the province, while FTI status

\(^2\)It is worth recalling that convertibility of the Polish zloty was also accomplished swiftly.
would adopt free trade for the island as a whole. An SCZ arrangement would allow Hainan province to levy and collect its own customs duties, to apply tariffs to selected "infant" industries, and to adopt the several components of systemic reform referred to earlier while partly insulating the island's economy from that of the mainland. It would appear that the FTI is probably preferable to an FTZ for Hainan, and SCZ status may have distinct practical advantages over either of the other alternatives in the near term.³

Finally, the RAND research considers policies for attracting foreign investment to Hainan. This problem is likely to be a serious one because of several significant changes in the world economy that will probably result in a tightening of world capital supplies due to competing demands in Eastern Europe, the former Soviet Union, and the developing countries. In shaping Hainan's policies to attract foreign investment, currency convertibility should be viewed as one of the most important in the increasingly competitive global capital market of the 1990s.

³For further discussion of these alternatives, see Wolf, 1991, pp. 16–17.
5. FISCAL REFORM

A comprehensive package of reforms for the Hainan economy should include three elements of the government's fiscal system on the island.\(^1\) First, the tax system and pattern of expenditures must be altered to make them compatible with the new economic system introduced to the island. Second, the provincial budget, now severely in deficit, should be balanced. Third, control of fiscal matters should be delegated more completely to the provincial government.

REFORMING TAXATION

The current tax system on Hainan should be supplemented or replaced during the transition to a market economy. A change from the current nonmarket economy to a market economy in Hainan will eliminate much of the revenue raised by the current tax system, because the current system raises revenue from institutions and activities that are likely to disappear or become less important in Hainan's economy. New types of taxes widely found in market economies should be adopted: Income taxes, value-added taxes, sales taxes, and property taxes are some examples.

Taxes should be low and simple. While low taxes are generally better than high taxes, the economic harm caused by higher taxes needs to be balanced against the needs for greater public revenue. Similarly, to the extent that taxes are a tool of social, economic, or development policy, the harm of a more complex tax system needs to be weighed against the perceived value of tax incentives to the economy as a whole.

Taxes deliver money to the government and discourage those activities that are taxed. Revenue is the goal, while the disincentive is (usually) an unwanted side effect.\(^2\) While it is impossible to avoid these side effects entirely, low tax rates will tend to minimize them. For example, taxes on wages may discourage work or shift work into fields that escape taxation, or both; taxes on profits may discourage investment. The disincentives, however, are likely to be small if the

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\(^1\)The recommendations and analysis of this section are presented in more detail in Donald Putnam Henry, *Restructuring Hainan's Fiscal System*, RAND, N-3293-NRCSTD, 1991.

\(^2\)Some taxes are specifically designed to discourage activities. Taxes on alcohol, tobacco, and even motor fuels might fall into this category.
tax rate is low. Low taxes on a broad base will minimize the disincentives and distortions in the economy.

Simplicity is also a virtue. To begin with, it eases the administrative burdens of tax compliance by the taxpayer and enforcement by the tax collector. If most taxpayers understand the system and see that it affects others in the same way it affects them, the system will be seen as fair, and compliance will tend to be higher. Further, simple and low tax rates tend to discourage corruption. When there is ambiguity in the tax code, where discretion is granted to tax collectors, and where revenue received by Beijing from localities is based on negotiated agreements not directly linked to actual tax collection, corruption is almost certain to result and may be very difficult to detect.

REDIRECTING PUBLIC EXPENDITURES

The current pattern of public expenditures is likely to change in a transition to a market economy. Division of labor between the government and enterprises is different in market and nonmarket economies. Governments usually provide social welfare services in market economies, while enterprises are usually tasked with providing such services in nonmarket economies. Conversely, enterprise investments are usually self-financed or privately financed in market economies, while governments often allocate investment funds in nonmarket economies. While some governmental activities will remain in the public sector during a transition to a market economy, others will be discontinued or taken up by the private sector, and still others will be added to the public sector.

Activities performed by the government now that will remain in the public sector after a transition from a planned economy to a market economy include education, public health, public infrastructure investment, civil administration, and law enforcement. Some of these activities can and should be financed through user fees and charges. Yet all are performed to some extent by the public sector throughout the world. Bits and pieces of some of these activities may be transferred to the private sector. Long distance roads might be built privately (perhaps along a publicly determined route) and supported by tolls. Airports might be privately financed and supported through user fees or departure taxes. Private schools or hospitals, financed by user charges, might exist alongside the public system. Nevertheless, these activities will remain largely in the hands of the government before, during, and after a shift to a market-based economy.
Several categories of activities now the responsibility of the Hainan government are by and large the responsibility of the private sector in most market-oriented economies. These include subsidies to enterprises and publicly controlled investment funds. Private decisions governed by market forces should replace these expenditures. Similarly, consumer subsidies should probably be phased out during a transition to a market economy. To the extent that these subsidies provide a form of social welfare for needy members of society, similar benefits can be obtained more efficiently through an explicit social welfare system. Finally, certain costs incurred supporting economic planning bureaucracies can be removed from the budget.

The primary addition to government expenditures during a transition to a market economy is a social-welfare system. While centrally planned economies are often promoted as providing comprehensive economic security, it is quite often the enterprise rather than the state that provides the security. Under such a system, labor mobility is minimal, and the state is loath to allow enterprises to fail. But in a market economy, labor mobility contributes to the allocation of resources to efficient enterprises and industries.

The needs for social services do not disappear in a market economy. Nor are such services provided by the private sector. Market economies provide these services not through enterprise-based welfare systems but rather through governmental or social-welfare systems. The services provided by social-welfare systems vary greatly from one market economy to another, ranging from programs in some Scandinavian nations that provide extremely generous benefits, to those programs in the United States that provide generous benefits to some and negligible benefits to others, and to programs in some of the newly industrialized countries whose benefit levels are often low.

Labor mobility is increased and the economic consequences of job loss are reduced through unemployment insurance programs, especially when such programs are associated with retraining programs. Responsibility for retirement income is often split between government pension programs, enterprise pension plans (which often do not require long-term employment), and individual savings. Other programs benefit the severely disabled and others who may find it difficult to provide for themselves. Most governments provide health care, universally or to restricted subsets of the population, such as the poor and the elderly.

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3Market economies generally do provide higher standards of living to their populations, obviating the needs for some but by no means all social services.
Whatever the scope and scale of social benefits that Hainan decides to provide to its citizens, it will certainly add expenses to the provincial budget. The expenses may be very high, because the government probably needs to assume many of the current obligations of enterprises (for pensions of those retired or near retirement) that may not be offset by any source of revenue. These expenses are in addition to totally new types of benefits, such as unemployment insurance.

BALANCING THE PROVINCIAL BUDGET

Hainan's provincial budget is severely out of balance, and the deficit is now being paid by the central government. There are several possible ways to bring the budget into balance. For example, imposing a monetary tax on agriculture (at one-third the rate of the tax on industry), a 5-percent sales tax, and a 2-percent value-added tax will raise additional revenues. Combined with elimination of enterprise and consumer subsidies and a minor cut in administrative expenses, the provincial budget can be brought into surplus. Further revenues might be gained by assuming control of centrally owned state enterprises and customs duties. Still further revenues might result from land leases, sales of public enterprises, and economic growth. Thus, not only can the budget be brought into balance for the current level of services, it is likely that additional revenues might be available to finance new activities, such as a social welfare system or greater investment in public infrastructure.

OBTAINING FISCAL AUTONOMY

The State Council created Hainan as an SEZ not just to benefit Hainan but to test policies that may be of value to China as a whole. Of necessity, Hainan must do things differently than the rest of China, and this has led to conflicts with the traditional prerogatives of the ministries in Beijing. Hainan cannot easily ignore the ministries in Beijing, especially when these ministries control substantial flows of funds to Hainan.

Hainan needs additional autonomy from the ministries of the central government if it is to successfully implement its reform program. As a general principle, authority should be given to those who can directly observe the results of using that authority. Ministries in Beijing, in part because they are in Beijing, in part because they try to balance competing demands throughout the nation, and in part because they are large and unwieldy bureaucracies, cannot do a good job in making minor decisions about Hainan. Only at a local level can
decisions that cut across the jurisdictions of the various ministries be coordinated. Only at a local level can the success or failure of new initiatives be assessed quickly and relatively accurately.

This autonomy and authority should somehow be matched with greater accountability. The central government has legitimate concerns about delegating such authority to a provincial government. Such authority might lead to abuse of power or corruption. Thus, along with delegation of authority, some system—other than constant oversight and meddling by the ministries—must be devised to hold the provincial authorities accountable for their actions. Several possible systems of accountability can be considered:

- The state council, or other body, could set strict boundaries on what the provincial government could or could not do. Within those boundaries, the provincial government would have wide latitude in making decisions.
- The central government can approve a menu of policy options for choice by the province.
- Authority can be diffused among a small group of provincial—and perhaps central government—officials.
- The province can be required periodically to brief and report events in Hainan to the government in Beijing.
- The state council can devise a set of result-oriented criteria for judging the performance of the province.
- The provincial government can be required to live within a fixed and predetermined budget.

One way of advancing autonomy and accountability is to combine the many disparate and uncoordinated financial transfers between Hainan and Beijing into a single, readily observable block grant. The current system of control and financial flows is depicted in Fig. 2. A block-grant alternative is shown in Fig. 3. A block-grant system would include fundamental changes in the balance of power, as well as accountability, between Beijing and Hainan province. Consequently, its implementation would require decisions and support from the top political leaders to offset the strong influence of the central ministries that would oppose it.4

4For further discussion of the block-grant proposal, see Henry, 1991, pp. 22–27.
Fig. 2—Current Flows Between Beijing and Hainan

Fig. 3—An Alternative Block-Grant Approach
6. OTHER REFORMS

Easy mobility of factors of production and finished products is a critical part of market-oriented reforms. In the previous section, the issues of currency, foreign exchange, and trade reforms were all discussed with this principle in mind. Currency convertibility, free trade, and prices that reflect the costs of production not only provide the information that enables efficient resource allocation decisions to be made but also provide the mobility to implement the decisions. In this section, we briefly consider labor and capital market reforms from this same perspective.¹

In terms of labor-market reform, perhaps the most important requirement is to implement quickly a new system of social insurance to replace the current system, which clearly discourages both labor and capital mobility.

After the revolution, China's first social insurance programs were managed and funded by the central government. This was fundamentally changed during the early 1950s.² All social security (or social insurance) programs, including health, unemployment, welfare, and retirement programs, were decentralized to the enterprise and local-government levels. This meant that the existence of the local enterprise (run by local governments or through the relevant ministry) was vital to the maintenance of health, welfare, and retirement benefits. Indeed, this arrangement has made it virtually impossible for enterprises to go out of business. Social-insurance costs are an integral part of the wage bill of the enterprise. As can be easily imagined, such arrangements have also made it difficult for labor to leave one employer for another because of concern over loss of benefits.

The remedy for this situation is to establish quickly a social-insurance system that is vested and portable. Many different types of plans for health insurance, life insurance, retirement annuities, etc., are possible. Most such plans would be funded by contributions from workers and employers but would be vested in the worker and his family. Ideally, the benefit structure would bridge any period of unemploy-

¹For a more extensive discussion, see Charles Robert Roll, Jr., A Comparison of Hainan with the Other Special Economic Zones, RAND, N-3295-NRCSTD, 1991.
ment and should be combined with retraining programs for labor whose unemployment arises from structural rather than cyclical causes. We defer discussion of implementation to a later section, but an important feature of whatever system is put in place is that it have the confidence of those covered.

Establishing a social insurance system that does not impair labor-market mobility is an important step toward creating the conditions required for a free labor market. Of course, as with price reform, wage reform must also be implemented. Although this subject was included in our study, there is no doubt that the current wage system, which relies on payments of income in kind (like housing) and is attached to the employing enterprise, should transition to a market wage system. This simply means that income in kind should be monetized. This may be easy to accomplish from a mechanical view of pay. The difficulty will lie in creating markets for housing and other nonmarket provision of goods and services, such as dining hall food or local transportation. Probably the most difficult transition to a market orientation will involve housing, because the market for durable capital goods is not well developed in Hainan. Indeed, this raises another issue of reform that merits consideration.

As Hainan transitions to a market-oriented economy, the capital goods market, including enterprises, must be rationalized. Mechanisms have to be put in place to allow the sale or exchange of firms and enterprises. A natural device to accomplish this rationalization would involve the development of a stock market where the sale or exchange of the ownership of assets could be easily accomplished. Such transactions would be visible and easily regulated by the Hainan government. In fact, the Hainan government could participate in the sale or exchange activities just like individuals, enterprises, or corporations. A market for asset ownership creates conditions of capital mobility that make resource allocation more efficient and increase investor confidence.
7. IMPLEMENTATION OF ECONOMIC REFORM IN HAINAN

The RAND studies have not focused on implementation issues. However, summarized below are some of the important features and issues that an implementation plan must face.1

CRITERIA IN ASSESSING AN IMPLEMENTATION PLAN

Shifting from a nonmarket to a market economy in Hainan will fundamentally alter the province’s basic economic relationships. This will create short- and long-term problems.

Not all negative effects of a shift to a market economy can or should be avoided. Those working in inefficient firms or unproductive industries may lose their jobs before finding economically productive work elsewhere. Some prices will rise (while others may fall) if price controls are removed. Mistakes will be made in dealing with market signals in place of command signals. The overall value of production on the island may actually fall temporarily during the disruptions brought on by a change to market incentives. These negative effects must be balanced against longer term benefits from shifting to a market system: higher income levels, higher rates of economic growth, increased choices for consumers in the goods they can purchase, and increased choices for workers in their fields and terms of employment.

Thus, during a transition to a market economy, the Hainan government should be selective in the types of problems it seeks to prevent. It is probably impossible for Hainan to preserve current jobs for every worker or prevent any person’s income from falling. Instead, Hainan might be able to prevent catastrophic loss of income for some individuals through a social-security system. Similarly, Hainan cannot prevent some prices from rising as price controls are removed, but appropriate government policy can confine inflation to manageable levels.

Several criteria emerge for judging an implementation plan: (1) No person’s income should fall below subsistence levels; (2) inflation

1See Henry (1991) and Roll (1991) for a more detailed analysis.
should be kept to a minimum; and (3) some supply and distribution system should be viable throughout the entire transition period.

**FISCAL, PRICE, AND MONETARY REFORMS**

It is important that fiscal, price, and monetary reforms be synchronized. One common problem in developing countries is that a governmental budget deficit is financed through monetization or new currency entering circulation to pay for government expenditures. If Hainan is to have its own currency (or if a group of SEZs will use a common currency different from the RMB), Hainan’s budget (or the group’s budget) should be close to balanced. This would not be a problem if the Hong Kong dollar is used as the currency of Hainan, because Hainan cannot create more HK dollars itself.

Price reform and monetary reform are also closely related. To the extent there is a monetary overhang in Hainan, the excess supply of money will lead to generalized price increases if prices are decontrolled. To avoid or limit this eventuality, the monetary overhang could be eliminated through government action: a budget surplus or an exchange of currency for bonds or other assets. Alternatively, inflation itself can be used as a mechanism to bring the supply of money into line with the supply of goods available. A large increase in prices immediately following decontrol may be a precondition for price stability thereafter. Neither of these options is without cost: The first option imposes costs on taxpayers; the second imposes costs on those who now hold currency.

Postponing currency and price reform does little good for Hainan. It is not inflation that will reduce the currency’s value. Rather, it is the monetary overhang that results from price controls and excessive increases in the money supply that has already made the currency worth less than its apparent value at controlled prices. Inflation just makes this previously incurred cost explicit rather than hidden. Further, flexible prices are essential for converting to a market-based economic system.

Finally, introduction of price and currency reform might have a significant but uncertain impact on the public finance system. Alone among Chinese provinces, Hainan will be collecting taxes in a convertible currency, assuming that the province establishes convertibility, as we have suggested above. This accords some significant ad-

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2 Problems of monetary overhang are apparently less severe in China than in Eastern Europe or the former Soviet Union.
vantages to Hainan. On the other hand, the current budget deficit in
Hainan is calculated and the trade flows with the mainland all are
conducted at artificial prices. Moving to a rational pricing scheme on
Hainan may help or hinder the province's dealings with the main-
land. It would surely change and probably complicate them.
However, as noted earlier, establishing an SEZ for the province would
provide some insulation for Hainan from the more controlled and cen-
tralized mainland economy.

LABOR AND CAPITAL MARKET REFORMS

One extremely important advantage of a market-oriented economy is
enhanced factor mobility, as described in Sec. 6. Labor, capital, and
other factors are both allowed to move from less productive activities
to more productive activities and encouraged by economic incentives
to make such moves. These two characteristics need to be combined.
If factor mobility is allowed but wage and rate of return signals do not
encourage shifts to more productive endeavors, shifts may be random,
perhaps causing more disruption in the economy than they are worth.
On the other hand, allowing market-based signals on wages and rates
of return without allowing factor mobility provides few benefits.
Capital and labor in more valuable endeavors will receive a windfall,
while factors in less valuable sectors will earn less and remain
trapped in their unproductive activities.

To reap the benefits of labor mobility, wage controls must be relaxed
at the same time that controls on labor mobility are relaxed. Further,
the introduction of labor mobility will quickly undermine the enter-
prise-based social welfare system. Consequently, a social-welfare sys-
tem needs to be introduced at the same time or shortly after the con-
trols on the labor market are removed. This will have definite im-
pacts on the fiscal system.

Capital mobility and flexible rates of return on capital should, for
similar reasons, be implemented at the same time. Perhaps more im-
portant is the issue of ownership and control of capital. Private own-
ership of capital has certain advantages in terms of increasing the ef-
ectiveness of market incentives, but its operational effectiveness de-
pends on clear-cut rules governing property rights. In devising an
implementation plan, it is probably more important to simultaneously
allow labor mobility and liberalize wage rates, and simultaneously to
allow capital mobility and flexible rates of return on capital, than it is
to accomplish labor and capital market reforms at the same time.
INFRASTRUCTURE INVESTMENT

Reform on Hainan will probably accelerate economic growth and place greater burdens on much of the economic infrastructure. Over time, additional infrastructure must be improved, including “soft” infrastructure, such as education. Improvements in the infrastructure, while important, are conceptually different from reform of the economic system. However, current deficiencies in physical (“hard”) infrastructure should be considered grounds for delaying reform. A public infrastructure investment program should be considered a normal part of public planning and budgeting after the new economic system is implemented.

To be sure, increases in certain types of economic activity immediately after the change in economic system may swamp certain facilities, such as ports and highways. If this is the case, infrastructure investment provides a long-term solution. Improved allocation of scarce facilities provides a short-term solution. Higher port fees or tolls on major roads may alleviate many of the immediate problems.

THE OTHER SEZs: OPPORTUNITIES AND CONSTRAINTS

Hainan is not the only SEZ in China, and its level of development is at an earlier stage than that of the others (Shenzhen, Zhuhai, Shantou, and Xiamen). It has a larger share of output in agriculture, its per-capita output is lower, and its involvement in foreign trade is lower than are the levels of the corresponding indicators for the other SEZs. Hainan is much larger than the other SEZs, and it is the only one of the group that is a province. Its principal comparative advantage lies in its factor endowments: an elastic supply of labor, implying relatively low labor costs, coupled with low-cost land—suggesting attractive cost incentives for foreign capital in lower or middle technology fields, rather than the high-technology “showcase” fields that have sometimes been advocated by the Chinese government.3

The existence of other SEZs provides both opportunities and constraints for Hainan. For example, if a new currency is to be developed for Hainan, the currency that may find more favor among international traders is the currency that is also circulated in the other SEZs. If they all have similar policies for taxation, foreign ownership, and land use, international investors may find all the SEZs to be better places in which to invest, because the costs of gaining informa-

3For further discussion of Hainan’s position compared with that of the other SEZs, see Roll, 1991, pp. 2-15.
tion about them will be lower. To the extent that they are designed as experiments, however, differences across SEZs may be valuable to the central government. Moreover, practical implementation considerations may justify proceeding more rapidly toward system restructuring in Hainan than in the other SEZs. On the other hand, "policy envy" may make for difficulties in Beijing if one SEZ seeks to implement drastic liberalization that may give it an advantage over the others.
8. CONCLUDING REMARKS

As indicated in the preceding sections of this summary report, the fundamental premise underlying the RAND work is that strategic development planning in Hainan should concentrate on planning appropriate policies, rather than planning specific projects. From this premise, the analysis and recommendations summarized in the report have addressed the macroeconomic and related policies that will contribute to the development of the province as a market economy, with mixed private and public-property ownership and with increased linkages to the international economy.

Within the limits imposed by time and budget constraints, the RAND research deliberately focused on certain broad policy issues and areas. The result is that we have neglected many other issues or treated them in a cursory manner.

For example, we have barely touched on the organization and management of a free customs zone, potential changes in the structure of Hainan’s trade in response to changing comparative advantage, and the precise economic relationships between Hainan and the mainland. Developments in international capital markets, which may intensify competition for foreign direct and portfolio investment in Hainan, have been alluded to rather than carefully analyzed. Nor have we had an opportunity to address alternative methods of privatization of state enterprises or of establishing mechanisms and procedures for developing markets for equities, bonds, and other investment instruments. Our discussions of tax and revenue matters, and of approaches to constructing an adequate social-security system, have focused on broad policy guidelines with only limited attention to operational, implementation, and quantitative aspects of these important matters. Moreover, we have not addressed broad questions relating to the political environment within which these and other economic policies and developments must operate.

These and other issues will require further analytic attention in the near-term future if Hainan is to traverse over the next 10 or 20 years a development path as successful as that of its neighboring NIEs (Taiwan, Hong Kong, and Korea) and, in the process, to provide valuable experience and lessons for the benefit of China’s future economic development.