# A REVIEW OF INVESTMENT INCENTIVES IN ASEAN COUNTRIES

by

Rosario G. Manasan

**WORKING PAPER SERIES NO. 88-27** 

December 1988

Philippine Institute for Development Studies

## **TABLE OF CONTENTS**

| 1.  | Introduction   | 1  |
|-----|--|----|
| 2.  | Nature of Investment Incentives in ASEAN Countries   | 4  |
| 3.  | Impact of the Investment Incentives on the Internal Rate of Return                                       | 8  |
| 4.  | Impact of the Investment Incentives on the User Cost of Capital  | 16 |
| 5.  | Conclusions  | 18 |
| Not | tes  | 21 |
| Bik | oliography   | 22 |
| Ann | nex Tables   | 23 |
| App | pendix   | 42 |
|     |  |    |
|     | LIST OF TABLES   |    |
|     |  |    |
|     |  |    |
| 1.  | Internal Rate of Return of a Hypothetical Firm Under Selected Incentive Schemes in ASEAN Countries, 1988 | 12 |
| 2.  | Percentage in User Cost of Capital Due to Selected Incentives in ASEAN Countries                         | 19 |
| Ann | nex 1. Regulations and Guarantees Governing Foreign Investment in ASEAN Countries                        | 23 |
| Änr | nex 2. Investment Incentives in ASEAN Countries  | 32 |

# A REVIEW OF INVESTMENT INCENTIVES IN ASEAN COUNTRIES

by

Robario G. Manasan\*

### 1. INTRODUCTION

-----

Most developing countries offer tax concessions to promote investments, in general, and to direct resources into selected activities and/or locations, in particular. The ASEAN countries are no exception to this "rule".

Investment incentives, per se, in ASEAN countries are usually designed to provide equal inducements to qualified foreign and domestic investors. Moreover, all countries in the aggrupation with the exception of Singapore impose certain limitations on foreign equity participation in domestic activities. These regulations are further modified by performance requirements and saturation laws.

Research Fellow, Philippine Institute for Development Studies.

The views expressed in this study are those of the author and do not necessarily reflect those of the Institute.

However, it is apparent that there is a conscious effort on the part of most developing countries, the ASEAN countries included, to attract foreign direct investment. Thus, ASEAN countries supplement their tax incentives with various quar an tee's covering expropriation, loššeš due to nationalization, war, and inconvertibility of currency, remittances of profits, dividends and interest payments, and repatriation of capital (see Annex Table 1). It has observed that countries, particularly those in geographical area, engage in some form of competition foreign capital by trying to outbid each other in terms providing more generous investment incentives than neighbors (Shah and Toye, 1978). Recent reforms in the area investment incentives undertaken by some ASEAN member countries and the concomitant policy discussions attest to this.

Given this perspective, there appears to be a need to review the investment incentives of the ASEAN countries for the purpose of assessing their competitiveness from the point of view of individual investors. To achieve this, this paper will attempt to quantify the impact of the investment incentives on the profitability of prospective projects. Specifically, this study will quantify the effect of the incentive provisions of the different countries on the interi ate of return of hypothetical projects. This approach, in effect, finesses the largely unsettled issue of

whether tax incentives are effective or not in increasing the overall level of investment, or, at the very least, in influencing the composition of total investment (Shah and Toye, 1978; Galenson, 1984).

On another vein, optimum tax theory suggests that investmen't incentives should be neutral with regards to both production and consumption choices. In this light, a number of scholars have expressed concern over the unintended distortion introduced by tax incentives and the resulting reduction in the overall level of economic efficiency (Williamson, 1971; ILO, 1974; Power and Bautista, 1979). They have pointed that a number of investment incentives are non-neutral in their treatment of capital and labor. In particular, these incentives directly bear on the user cost of capital. By altering relative factor prices faced by promoted enterprises, these incentives may adversely affect relative factor intensities in preferred activities. This study will also assess the impact of the investment incentives of ASEAN countries on the user cost of capital.

To summarize, this paper will (1) provide a broad overview of the investment incentive schemes made available by ASEAN countries in the context of their overall tax systems; (2) appraise the impact of these tax incentives on the profitability of prospective investments; and (3) quantify the changes induced by the investment incentives on the user cost of capital.

### 2. NATURE OF INVESTMENT INCENTIVES IN ASEAN COUNTRIES

Various writers have experimented with different classification schemes in analyzing investment incentives. have grouped incentives according to (1) whether not their subsidy equivalent is some function of the scale of the capital outlay; and (2) whether or not their subsidy equivalent is some function of the level of the enterprise's Others have focused on whether the benefits obtainable from the incentives are made available up front at the start of the project or are spread out over extended period. These distinctions are helpful in deciphering both the usefulness of the incentives from point of view of the individual investors and the biases inherent in particular forms of incentives.

Annex Table 2 presents the tax concessions offered by the ASEAN countries. All countries in the group grant promoted enterprises exemption from duties and taxes on imported capital equipment. It has been noted that this incentive is valuable to the firm because it is an up front incentive whose benefits accrue to the project regardless of the enterprise's level of profits. This incentive also provides relief from the cash flow difficulties common in the initial year that are usually perceived to be a stumbling block to the investment decision. On the other hand, the amount of benefit arising from this incentive

hinges on the size of the investment outlay and is, therefore, biased in favor of capital use.

Another capital-related incentive, the investment allowance, is available in three of the countries under Malaysia provides for the additional deduction from taxable income of up to 100 percent of the value of qualified capital expenditures of promoted activities that do not enjoy pioneer status while expansion projects are a 25 percent investment allowance. Singapore offers an investment allowance equal to a maximum of 50 percent of the value of approved capital expenses of promoted activities that are not enjoying the concessions granted to pioneer firms. The Philippines permits 100 percent of the cost of infrastructure expenditures of registered enterprises locating in promoted areas to be deductible from taxable income in the year they are incurred. It should be pointed out the investment allowance is of value to the registered firms only if they have profits against which charge it. This problem may be alleviated but is not totally eliminated by the presence of loss carry forward provisions.

Accelerated depreciation is granted by Malaysia (for investments incurred before December 31, 1988) and Singapore to promoted firms. Both countries permit approved capital expenditures to be written off in three years from date of purchase. On the other hand, accelerated

depreciation is a regular feature of the tax systems of Indonesia and Thailand. This incentive shares the shortcomings of the investment allowance as discussed above.

all the ASEAN countries, only Indonesia does  $\mathbf{Of}$ grant an income tax holiday. The duration of the holiday offered in the other four countries ranges from three to ten years at the maximum. All countries allows for the extension of the basic tax relief period i f the registered enterprise meets a minimum level of net exchange earnings, a prescribed capital-labor ratio, a predetermined rate of indigenous raw material utilization or locational requirements. At the same time, Thailand varies duration of its tax holiday provision according to the size of the investment or the number of jobs created by the promoted activity. The income tax holiday has been described as a "perverse" type of incentive in that it provides little or no assistance when it is needed most. i.e., in the initial years of operation when (especially infant industries) are likely to suffer or to make little profits. On the other hand, firms which highly profitable in the early years of its life would benefit the most from this provision. Fur thermore, benefits of the income tax holiday do not accrue the foreign investor from a capital exporting country that taxes i ts citizens and corporations incorporated within borderb on a global income basis unless tax sparing

arrangements exist between the home and the host countries. Tax sparing agreements allow the foreign investor to credit income taxes not paid to the host country because of the income tax holiday against income taxes due in the home country.

Like other incentives whose benefits are contigent on the target enterprises' profitability, the income tax holiday becomes more meaningful in the presence of a loss carry forward provision. All ASEAN countries except the Philippines have included this as a regular feature of their general . tax structures. The loss carry forward provision also minimizes the other incentives' bias against long-term and high risk projects.

Both Malaysia (to all promoted investments, in general) and Singapore (to a more limited degree) permit depreciation allowances to be deferred to the post income tax holiday period. This feature of their incentive systems increases the value of their tax holidays to the prospective investors.

The Philippines is the only country in the association that offers an employment-based incentive. It is in the form of an additional deduction from taxable income, available in the first 5 years from the date of registration, of an amount equal to 50 percent of the incremental labor expense. However, the income tax holiday

provision renders this incentive redundant to a large extent.

Aside from the exemption from or tax credit for duties and taxes on raw materials used in export production that is generally made available in all ASEAN countries. Malaysia, Singapore and Thailand grant other incentives that are specifically geared to the promotion of exports. Thailand permits exporter to deduct from taxable income an amount equal to 5 percent of incremental income from exports. Both Malaysia and Singapore allow the double deduction of promotional expenses for exports. In addition to Malaysia provides for the additional deduction of an equal to some proportion x of taxable income (where x is computed as the ratio of 50 percent of export sales total sales) and 5 percent of the value of indigenous raw materials used for export production.

Finally, all countries with the exception of Indonesia offer incentives to enterprises locating in preferred geographical areas.

## 3. IMPACT OF THE INVESTMENT INCENTIVES ON THE INTERNAL RATE OF RETURN

The effect of the different incentives on the direction of investments may be evaluated by quantifying the impact of these incentives on some measure of the registered enterprise's profitability. Implicit in this approach are the following assumptions: (1) entrepreneurs base their

investment decisions on some measure of profitability;

(2) they perceive additional profits attributable to the incentives as such; and (3) they react to the incentive-induced increments in after-tax profits in the same manner that they would respond to changes in the level of profitability arising from variations in other economic variables, other things being equal. This procedure also abstracts from other factors that are not explicitly included in the profitability measure used.

Using survey data, Allen (1979) and Lindsey (1980), found that political and economic stability, size and growth potential of the domestic market, availability of raw materials, etc. are the major consideration in the investment decision of foreign investors. In the analysis undertaken, it is also assumed that these important factors are equal in the countries under study.

In this paper, the concept of the internal rate of return (IRR) is used to trace the impact of the various incentives on the profitability of promoted enterprises. The pre-tax internal rate of return is defined by the following relationship:

where q is the initial outlay or the acquisition cost of capital; x is the annual pre-tax profit stream; r is the

IRR before taxes; and, n is the life span of the capital asset.

On the other hand, the after-tax internal rate of return may be obtained from:

where u is the income tax rate; r is the after-tax IRR; tm  $_{\rm T}$  is the tariff rate on capital; and d is the amount of depreciation charges that may be deducted from gross income for tax purposes in year j. With an income tax holiday of n years, (2) becomes:

where r is the IRR with the tax holiday.

The exemption of capital from tariff charges reduces (2) into:

where r is the IRR with the duty exemption of capital.

TM

Taking the investment allowance into account, the IRR formula can be rewritten as:

where r is the IRR with the investment allowance; and,
IA
k is the proportion of the acquisition cost of capital that
is allowed to be deducted immediately from taxable income in
addition to normal depreciation.

Other additional deductions can be considered by using the following variant:

where r is the IRR with the additional allowable deduction;

D

and a is the amount of additional deduction permitted in year j.

Our procedure is to solve for the "with incentives" IRR, using the different IRR formulas outlined above, given the value of the pre-tax profit stream (expressed as a proportion of the acquisition of capital) that will result in a before-tax IRR of 20 percent. Table 1 summarizes the impact of selected investment incentives on the internal

Table 1

Internal Rate of Return of a Hypothetical Pirm

Under Selected Incentive Schemes in ASBAH Countries, 1986

|                |  |  |   | aysia  | Philip   | pines   | Sia   | lgapore      | Tha       | iland     |
|----------------|--|--|---|--------|--|---|---|--------------|-----------|-----------|
|                | <b>n=10</b>  | n=20   | n=10  | n=20   | n=10   |   | R=10  | <b>n=</b> 20 | n=10      | n=20      |
| Regular Taxes  | 11.0   | 13.0   |   |        | 10.25  | 11.5  | 15.0  | 16.5         | 11.25     | 13.25     |
| (no incentive) | 10.0   | 12.5   | 10.25   | ,11.1, | -  |   |   |              |           |           |
|                | 9.0  | 12.0   |   |        |  |   |   |              |           |           |
| Tax Holiday    | ٠٠ ا   | <b>M</b> .   | 16.5  | 15.0   | 12.5   | 13.5  | 17.0  | 17.25        | 12.0      | 13.5      |
| (min. no. of   |  |  |   |        |  |   | 19.0  | 18.75        |           |           |
| years allowed) | -  |  |   |        |  |   |   |              |           |           |
| Tax Heliday    | R.   | A ,  | 16.75   | 17.0   | 14.1   | 15.0  | 20.0  | 19.0         | 14.0      | 15.0      |
| (max. mo. of   |  | -  |   |        |  |   | 20.0  | . 19.75      |           |           |
| years allowed) |  |  |   |        |  |   |   | • • •        | • •       |           |
| Buty Exemption | 15.0   | 16.5   | 12.25   | 12.25  | 13.75  | 14.0  |   | ĒΑ           | 15.0      | 16.5      |
| on Capital     | 14.25  | 15:75  |   | •      |  |   | •   |              | •         |           |
|                | 13.5   | 15,25  |   |        |  |   |   |              |           |           |
| (2 + 4)        | 15   | 16.5   | 19.35   | 17.35  | 17.5   | 17.0  | 17.0  | 17.25        | 16.5      | 17.0      |
|                | 14.25  | 15.75  |   | •      |  |   | 19.0  | =18.75       |           |           |
|                | 13.5   | 15.25  |   |        |  |   |   |              |           |           |
| (3 + 4)        | 15   | 16.5   | 20.0  | 19.25  | 19.25  | 18.4  | 20.0  | 19.0         | 19.0      | 18.5      |
|                | 14.25  | 15.75  |   |        |  |   | 20.0  | 19.75        |           |           |
|                |  |  |   |        |  |   | • •   |              |           |           |
| Investment     | PA.  |  | 16.0  | 15.1   | A  |   | 18.0  | 18.25        | AA        |           |
| Allowance      |  |  |   |        |  |   |   |              |           |           |
| Omly           |  |  |   |        |  |   |   |              |           |           |
| (max. allowed) |  |  |   |        |  |   |   |              |           |           |
|                | Tax Holiday (min. no. of years allowed) Tax Holiday (max. no. of years allowed) Duty Exemption | n=10  Regnlar Taxes 11.0  (no incentive) 10.0  9.0  Tax Holiday (min. no. of years allowed)  Tax Holiday R.  (max. no. of years allowed)  Buty Exemption 15.0  on Gapital 14.25  13.5  (2 + 4) 15  14.25  13.5  (3 + 4) 15  14.25  13.5  Investment RA  Allowance Only | Regular Taxes 11.0 13.0 (no incentive) 10.0 12.5 9.0 12.0    Tax Holiday HA (min. no. of years allowed)    Puty Exemption 15.0 16.5 | n=10   | Regniar Taxes 11.0 13.0  (no incentive) 10.0 12.5 10.25 11.1 9.0 12.0  Tax Holiday HA 16.5 15.0  (min. no. of years allowed)  Duty Exemption 15.0 16.5 12.25 12.25  on Gapital 14.25 15.75  13.5 15.25  (2 + 4) 15 16.5 19.35 17.35  14.25 15.75  13.5 15.25  (3 + 4) 15 16.5 20.0 19.25  14.25 15.75  13.5 15.25  Investment HA 16.0 15.1  Allowance Only | Regular Taxes 11.0 13.0 10.25  (no incentive) 10.0 12.5 10.25 11.1 9.0 12.0  Tax Buliday BA 16.5 15.0 12.5  (min. no. of years allowed)  Tax Holiday BA 16.75 17.0 14.1  (max. no. of years allowed)  Duty Exemption 15.0 16.5 12.25 12.25 13.75  on Capital 14.25 15.75  13.5 15.25  (2 + 4) 15 16.5 19.35 17.35 17.5  14.29 15.75  13.5 15.25  (3 + 4) 15 16.5 20.0 19.25 19.25  14.25 15.75  13.5 15.25  Investment BA 16.0 15.1 BA  Allowance  Only | Regnlar Taxes 11.0 13.0 10.25 11.5 (no incentive) 10.0 12.5 18.25 11.1 9.0 12.0  Tax Boliday BA 16.5 15.0 12.5 13.5 (min. no. of years allowed)  Tax Boliday BA 16.75 17.0 14.1 15.0 (max. no. of years allowed)  Duty Exemption 15.0 16.5 12.25 12.25 13.75 14.0 on Gapital 14.25 15.75 13.5 15.25 (2 + 4) 15 16.5 19.35 17.35 17.5 17.0 14.25 15.75 13.5 15.25 (3 + 4) 15 16.5 20.0 19.25 19.25 18.4 14.25 15.75 13.5 15.25  Investment BA 16.0 15.1 BA Allowance | Indonesia    | Indonesia | Tadonesia |

|           |               | Indonesía   | Halay     | /818         | Philipp | ines   | Sin  | rapore      | Tha    | iland |
|-----------|---------------|-------------|-----------|--------------|---------|--------|------|-------------|--------|-------|
|           |               | n=10 n=20   | n=10      | n=2 <b>0</b> | n=10    | n=20   | n=10 | <b>m=20</b> | n=10   | n=20  |
| 8. (7     | 7 + 4)        |             | 17.7      | 17.0         | , MA    |        | 18.0 | 18, 25      | .c. 14 |       |
| 9. EI     | <b>rpo</b> rt |             | 16.5      | 16.0         |         |        |      |             | 11.5   | 13.5  |
| lA ,      | llovance      |             |           |              |         |        |      |             |        |       |
| Qn<br>::: | ı <u>l</u> y  | . ,         |           |              |         |        |      |             |        |       |
| 10. (2    |               | BA          | 20.0      | 19.5         | ÄÄ      | :      |      |             | 17.0   | 17.5  |
|           |               | NA          | 20.0      | 20.0         | NA      | ·<br>· |      |             | 19.5   | 19.0  |
| Memo i    | items:        |             |           |              | ·       |        |      |             |        |       |
| tm        |               | .25         | . 12      |              | .2      |        | Û    |             | .2     |       |
| u         |               | .15/.25/.35 | .40 + .05 | 3            | .35     |        | .33  |             | .35    |       |

The assumed income stream used in these calculations is that which yields before tar IRR of .20. a/
for u = 15, 25, 35%, respectively.
b/
special allowance for degreciation in tax holiday period.
c/
for 100% export.

rate of return of a hypothetical enterprise in ASEAN countries.

Singapore is the most attractive location tax-wise if no investment incentives were made available in all countries. The before-incentives but after-taxes internal rate of return in Singapore is 3.5 percentage points higher than the ASEAN average. This is largely due to the zero tariff on capital in Singapore since its corporate income tax rate is not much lower than those of the other countries.

The tax systems of the other 4 countries are competitive with each other. While Malaysia has a very high income tax rate relative to the others, its low tariff on capital equipment and its accelerated depreciation allowance available to all investments, in general, compensates for the former disadvantage. Although the Philippines and Thailand have equal income tax rates and tariff rates on capital, the tax system in Thailand yields a slightly higher after-tax internal rate of return because of the more liberal treatment of depreciation there.

After incentives are taken into account, Indonesia appears to be the least generous. The impact of the totality of the major incentive provisions in the other four countries averaging an increment of 9 percentage points in the IRR, are not negligible. However, the incentives do not

add much to the relative competitiveness of these countries except Singapore which lost some of its edge. Malaysia, the Philippines, Singapore and Thailand offer roughly equal inducements in terms of the impact of their incentives on the internal rate of return.

This finding suggests, that the widespread practice of many countries of using investment incentives as a bidding to attract more foreign capital may be selfinstrument The analysis suggests that the ASEAN countries are generally equally competitive before incentives as incentives. as after The implication that these is countries are throwing away precious government revenues exchange for an edge that is largely illusory. Some form of cooperation amongst the ASEAN countries in this regard thus, indicated.

It is apparent that the income tax holiday yields significant additions to the IRR (up to 6 percentage points) in Malaysia, Singapore, the Philippines, and Thailand. The tax holiday is the single most important provision in terms of its effect on the internal rate of return in the first three of the above mentioned countries. In Thailand, it is the second most important incentive, next to the duty-free importation of capital. Note, however, two points that bear on the efficacy of the income tax holiday. First, for firms that incur losses in the early years of their operations, the income tax holiday may not be as useful an

incentive as our computations indicate since our hypothetical firm is assumed to be uniformly profitable over its life span. Second, the absence of tax sparing arrangements between the ASEAN and the major capital exporting countries like the United States, Japan and most of the OECD also negates the potential value of this incentive to foreign investors. The global income concept used by these countries in calculating income taxes imply that the benefits of the tax holiday go to the home countries' Treasuries rather than to the individual foreign investors.

Malaysia's export allowance provision has a significant impact on the internal rate of return of prospective projects when taken by itself. However, when it is combined with the other incentives, specifically the income tax holiday it becomes redundant.

The investment allowance which Malaysia and Singapore grant to promoted activities in lieu of the tax holiday has approximately the same impact as the latter on the IRR,

# 4. IMPACT OF THE INVESTMENT INCENTIVES ON THE USER COST OF CAPITAL

It has been observed that many incentives are capitaluse related and as such effectively diminishes capital cost. To evaluate the impact of investment incentives on capital cost the concept of the user cost of capital is used. The user cost of capital and its relationship with tax policy parameters is well defined within the neoclassical theory of capital accumulation which assumes that firms maximize the net present value of net revenue after tax (Hall and Jorgenson, 1967). The user cost of capital or the implicit rental of one unit of capital service per unit of time is defined by:

$$c = \frac{q(i+D) (1-uk-uz)}{(1-u)}$$
(7)

where i is the rate of interest; D is the rate of replacement of capital stock; k is the proportion investment expenditures permitted as additional deduction from taxable income; z is the discounted value of the stream of depreciation charges generated by a peac of investment; q is the price of the capital good; and u is the corporate income tax rate.

To trace the effect of any given incentive on c, we first determine which of the variables on the right-hand side of (7) is affected by the said incentive and then we differentiate (7) with respect to the explanatory variable in question (see Appendix 1). Next, the proportional change in the user cost of capital is computed numerically given the assumed values of the different variables.

Table 2 presents the estimates of the impact of selected major incentives on the user cost of capital. The

investment allowance, followed by the income tax holiday introduce duty-free importation of capital and the marked reductions in the user cost of capital. The negative increments in the user cost of capital due to incentives vary from 1 to 64 percent. Furthermore, we note of employment-based incentives that will absence effectively counteract the implied capital bias of the other theory that **buggebt** Neoclassical incentives. additional distortion in relative factor prices in the ASEAN likely to result in increased is countries Unless these countries can show that such a policy-originating bias compensates for other biases in the economic system, tax theory dictates that these countries should search for more factor-neutral incentives.

### 5. CONCLUSIONS

The analysis of the impact of the investment incentives on the internal rate of return indicate that ASEAN countries are to a large extent as competitive with each other before incentives as after incentives. At the same time, the income tax holiday is the single most important incentive offered by most ASEAN countries. These findings suggest the following recommendations. First, ASEAN countries should not try to outbid each other in attracting foreign capital to their shores by attempting to provide more generous incentives than their neighbors.

Annex Table ?

Investment Incentives in ASBAN Countries

1.

|                | Philippines  | Indonesia | Malaysia .  | Singapore   | Thailand<br>  |
|----------------|--|-----------|---|---|---|
| Tax Exemptions |  |           |   |   | •   |
|                | income tax for 6 years from commercial operation for pioneer firms and 4 years for non-pioneer firms, extendible for another year (but not to exceed   |           | income tax of 40%, development tax of 5% and excess profit tax of 3% for 5 years from production                        | profits for a period of 5-10 years for pioneer status firms. This also applies to | or 40% corporate income tax for a period of 3 to 8 years depending on size, type of industry & number of employees. Por     |
|                | 8 years) in each of the following cases: (a) project meets prescribed capital-labor ratio; (b) utilization of indigenous raw materials; (c) net foreign exchange earnings of at labor USESON 000 000 |           | date extendible for another 5 years for pioneer status firms. Dividend paid from exempt income are also exempt from tax |   | firms in the investment promotion zone, reduction of 50% of corp. income tax for 5 years after the normal tax holiday given |
|                | of at least US\$500,000.00 annually during the first three years of operation. Por expanding firms, the exemption shall be pro-  |           | in the hands of stockholders.   |   | above.  |

portionate to their expansions for a period of 3 years from commercial

operations.

They do not stand to gain much by following this strategy. In fact, it is likely that they will end up as net losers. Second, it will benefit the ASEAN group if they cooperate with each other for the purpose of harmonizing their investment incentives. Third, the benefits of the tax holiday do not accrue to the individual investors unless tax sparing arrangements between the host country and the capital exporting countries are in place. This implies that the ASEAN countries should initiate, individually or as a group, negotiations with the capital exporting countries to remedy the anomalous situation of the ASEAN countries transfering revenues to the Treasuries of the more developed economies. Otherwise, the ASEAN countries should seriously reconsider providing the tax holiday to foreign investors.

Estimates of the impact of the investment incentives of the ASEAN countries on the user cost capital suggest that the more important incentives offered by these countries are non-neutral with respect to relative factor prices. Unless this distortion is introduced into the system by design, i.e., for the purpose of compensating for genuine market failures and/or policy originating distortions that work in the opposite direction, and not by accident, then the incentives currently granted by the ASEAN countries is likely to result in a worsening of the resource allocation in these economies. What is implied is the need to formulate more neutral incentives.

#### NOTES:

- For instance, while it is common for investment legislations to limit foreign ownership in most activities to x percent it is also widespread practice to relax these regulations for foreign entrepreneurs proposing to engage in "pioneer" projects and/or export production. Furthermore, some countries allow foreigners to own more than x percent of the equity in the first so many years of operation provided they agree to divest the difference within a specified period of time.
- 2/ Brunei is not included in this study because of the inavailability of complete data.
- $\frac{3}{2}$  dj is usually a function of q. For example, if straightline depreciation is followed then dj=  $q(1+t\pi)/n$ .

#### BIBLIOGRAPHY

- Allen Thomas, Direct Investment of United States Enterprises in Southeast Asia, ECOCEN Study No. 2. Bangkok, ECOCEN, 1973.
- Bautista, Romeo, John Power and Associates, Industrial Promotion Policies in the Philippines, Quezon City: Philippine Institute for Development Studies.
- Coen, R., "Effects of Tax Policy on Investment in Manufacturing", American Economic Review, LVII (May 1968).
- Galenson, Alice, "Investment Incentives for Industry". World Bank Staff Working Papers No. 669, 1980.
- Gregorio, R. G. "An Economic Analysis of the Effects of Philippine Fiscal Incentives in the Philippines", in Romeo Bautista, John Power and Associates, Industrial Promotion Policies in the Philippines, Quezon City: Philippine Institute for Development Studies, 1979.
- Hall, R. and D. Jorgenson, "Tax Policy and Investment Behavior", American Economic Review, LVII (June 1967).
- ILO, Sharing in Development: A Program of Employment, Equity and Growth for the Philippines, Geneva: ILO, 1974.
- Lindsey, Charles, "The Development Contribution of Multinational Firms in the Philippines", <u>Discussion Paper</u> 81-06, Quezon City: UPSE, 1981.
- SGV, 1988 Comparative Investment Incentives, Manila: SGV & Co., 1988.
- Shah, S. M. S. and J. F. J. Toye, "Fiscal Incentives for Firms in Some Developing Countries: Survey and Critique", in J. F. J. Toye, (ed.), Taxation and Economic Development, Great Britain: Billing & Sons Limited, Guildford, London & Worcester, 1978.
- Williamson, J. G. "Capital Accumulation, Labor-Saving and Labor Absorption Once More, Quarterly Journal of Economics. LXXXV (February 1971).

koner Table 1

Regulations and Onstantees Governing Poreign Investment in ASBAN Countries

| Phailead<br> | With the enactment of the Alien Business Law on Bovenber 26, 1972 (BEC 281), alieus are granted permission to engage in certain business enterprises in Thailand only if more than 50% of the capital is owned by Thais. For certain industries, foreign control of the business may be allowed on certain conditions prescribed by the Director-General of Trade Registration. Poreign control is also possible for promoted companies engaged in priority activities, as approved by the BOI.  |
|--------------|--|
| Singapare    | Generally, there is no restriction on foreign participation in equity, except for certain industries like banking, newspapers, and companies owning residential properties. In the construction industry, a 3% preferential margin is given to companies with majority local equity participation for certain government projects.   |
| Philippines  | In most economic activities, foreign investment should account for not more than 40% of the total equity.  Poreign-equity participation in excess of 40% is allowed if:  (i) the enterprise proposes to engage in a ploneer" project;  (ii) at least 70% of its production is for exports; or exports; or exports; or exports; or exports; or fiii) the enterprise is located in an export processing zone.  In these cases, the foreign investor is required to direct their shares to attain 40% limit within 30 years.  |
| Malaysia     | tantially dependent on foreign investment shoul the domestic market may account for not more than require majority Malay— of the total equity.  Sian equire majority Malay— of the total equity.  Sian equity.  Porcign—equity participal domestic resources should (i) the enterprise prohave at least 70% Malay— poses to engage it sian equity, including production is for are allowed foreign major city ownership. Mere it is justified, 100% foreign (iii) the enterprise is equity may be considered.  Under redefined guidelines.  Greeign company exports 50% of its investor is required to company exports 50% of its investor is required to production or employs 350 full— limit within 10 years. |
| Intonesia    | The initial minimum shareholding required of the Indonesian participant is generally set at 20%.  The initial shareholding of the Indonesian partuer may be as low as 5%, which has to be increased to 20% within 5 years from the date of commercial production and further to 51% within 10 years.  Provided, these investments fulfill one of the following requirements:  (i) The intended investment least \$10 million;  (ii) The project is to be located in a remote area; or  |
|              | f. Regulations regarding ownership of enterprise and foreign equity participation  |

Thailand

| Singapore   |   |   |                                 |                                |                              |
|-------------|---|---|---------------------------------|--------------------------------|------------------------------|
| Philippines | )<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |   | Purthermore, foreign            | equity participation in        | excess of 60% is permissible |
| Malaysia    |   | At least 85% of time Malaysian workers. These | new rules apply only to invest- | ments made from October1, 1986 | to December 31, 1990.        |
| Indonesia   |   | (iii) At least 85% of                         | production is intended          | for exports.                   |                              |

excess of 40% is permissible provided the following are established.

(1) the investment is made in an area of economic activity that contributes to the sound and balanced development of the national economy on a self-sustaining basis;

(2) the area is not yet adequately exploited by Pilipinos;

(3) the activity will not conflict with the Constitution or laws of the Philippines;

(4) the operations of the enterprise are not

|  | Indonesia   | Kalaysia  | Philippines   | Singapore  | Thailand  |
|--|---|---|---|--|---|
|  |   |   | incognistent with the Investment Priorities Plan; and (5) the enterprise will not pose a clear and present danger of promoting monopolies in restraint of trade.  |  |   |
| arantees<br>Baarantee against<br>Expropriation | Precton from nationali- sation or revocation of ownership rights or restric- tion of rights of control and nanagement of foreign- capital enterprises is stanted. A revocation of these rights requires an Act of Parliament andertaken in the interest of the State. | Malaysia has signed foreign investment guarantee agreements against expropriation with Canada, the U.S.A., the Betherlands, the Pederal Republic of Germany, Prance, Switzerland, Smeden, Belgo-Luzembourg, the United Kingdon, Sri Lanka, Romania, Borway, Austria, and Pinland. The government is prepared to sign similar agreements with ather countries. | The Philippines guarantees foreign investments against expropriation except for public use or in the interest of national relfare and defense and spon payment of just compensation. In such cases, foreign investors or enterprises shall have the right to remit sums received as compensation for the expropriated property in the currency in which the | Investors from the U.S.A., the United Kingdon, Ganada, the Retherlands, Switzerland, Beigo-Luxenbourg, the Pederal Republic of Germany, Prance, Sri Lanks, and the People's provided for in bilateral treaties between their respective governments and the Government of and the Government of the Contraction of | All industries are guaran-<br>teed against expropria-<br>tion without just compen-<br>sation. |

| Thet land   |  | Gnarantee is provided<br>against losses due to<br>nationalization.  |
|-------------|--|---|
| Singapore   | contain guarantees against expropriation. Specific protection schemes are also available to US and UR investors through the Overseas Private Isvestment Corporation (UPIC) in the U.S.A. and the Crown Agents in the U.R. Investors bear the cost of the | The foreign investment guarantee agreements also contain provisions gnaranteeing against losses due to nationalization and war.   |
| Philippines | made and at the exchange rate at the time of remit-tance.  | None  |
| Kalaysia    |  | The foreign investment guarantee Hone agreements also contain provisions guaranteeing against losses due to nationalization.  |
| Indonesta   | Canada, Denmark, the Pederal<br>Republic of Germany, Prance,<br>the Republic of Korea, the<br>Retherlands, Norway,<br>Switzerland, the United<br>Kingdom, and the U.S.A. cover<br>compensation guarantees for<br>expropriation.                          | The foreign investment guarantee agreements also contain provisions covering compensation gnatantees for nationalization, losses due to war and inconvertibility of currency.   |
|             |  | <ul> <li>b. Guacantee against</li> <li>losses due to:</li> <li>Bationalization</li> <li>Danage caused by</li> <li>var</li> <li>Inconvertibility</li> <li>of cursency</li> </ul> |

| Thailand    | Remittance of earnings profits is permitted but may be temporarily restricted by the Bank of Phailand if required by the balance-of-payments situation. However, in case of such restrictive arnings corresponding to at least 15% of paint peapital brought in can still be remitted annually.   |                                    |  |
|-------------|---|------------------------------------|--|
| Singapore   | No restrictions are imposed on the remittance of earnings, profits, and dividends on investments.   |                                    |  |
| Philippines | All earnings and profits accruing to nonresidents and earned on foreign investments daly registered with the Central Bank may be remitted in full, net of taxes, in the currency in which the investment was originally made and at the prevailing exchange rate, subject to emergency restrictions on exchange   |                                    |  |
| Ralaysia    | Except for the completion of the usual exchange control forms for amounts exceeding K\$10,000, no restrictions are placed on remittance of earnings or profits.   |                                    |  |
| Indonesia   | Poreign investors are guaranteed remittance of:  1) Barnings (in proportion to the shareholding of the foreign participants and after deduction of taxes and other financial obligations);  2) Payments of interest and principal on foreign loans (if the loan agreement is approved by Bank Indonesia;  | 3) Repeases for foreign personnel; | 4) Degreciation allowance for capital assets with respect to imported plant, machinery, and equipment, in accordance with the foreign investment scheme; |
|             | c. Repittance of foreign Poreign investors are enchange (i) Barnings, profits, and (i) Barnings (in propudividends (on to the shareboldin investoents) the foreign participal and and after deduction foreign loans) obligations); others).  2) Payments of interesting other files of the configurations of the configurations (if the loan agreement is apprehimately and foreign loans). |                                    |  |

| Phailand    |  |   | Remittance of foreign er-     | change to meet repayment of otincipal and interest             | on foreign loans is         | permitted subject to           | some qualifications.          | Even in extreme cases         | stere Thailand's              | balance-ef-payments     | position is ander | severe strain, the Bank | permits such remittance | at a rate of not lower | than 20% annually after | two years from the date | or diagridat investment. |
|-------------|--|---|-------------------------------|--|-----------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------|-------------------|-------------------------|-------------------------|------------------------|-------------------------|-------------------------|--------------------------|
| Singapore   |  |   |                               |  |                             | •                              |                               |                               |                               |                         |                   |                         |                         |                        |                         |                         |                          |
| Philippines |  |   | The remittance of foreign ex- | change to meet the payments of interest and oringloal          | on duly registered foreign  | icans and obligations arising  | from technological assistance | contracts is allowed, subject | to the emergency restrictions | on exchange operations. |                   |                         |                         |                        |                         |                         |                          |
| Kalaysia    |  |   | Remittances of interest and   | principal payments on foreign<br>loans and foreign obligations | are not restricted if these | are within the repayment terms | previously approved by bank   | Begara of Halaysia,           |                               |                         |                   |                         |                         |                        |                         |                         |                          |
| Indonesia   | 5) Proceeds of the sale of shares by foreign partners to Indonesian partners or to other Indonesian nationals/companies; and | 6) Compensation in case of<br>nationalization |                               |  |                             |                                |                               |                               |                               |                         |                   |                         |                         |                        |                         |                         |                          |
|             |  |   | (ii) Principal and            | interest on<br>foreign loans                                   |                             |                                |                               |                               |                               |                         |                   |                         |                         |                        |                         |                         |                          |

| That I and  | Repatriation of capital is permitted but may be temporarily restricted by the Bank of Thailand if required by the balance-of-payments situation. However, in case of such restriction, investment capital may still be repatriated at the rate of not less than 20% annually after two years from the date of principal investment.                          | Subject to the restrictions imposed by the Alien Occupation Law, which bans aliens from certain types of occupations. Admissions to the country of skilled workers or technicians, including their spouses and children, is allowed for a promoted com-  |
|-------------|--|--|
| Singapore   | Repatriation of capital is not Repatriation of Capital is permitted but may be temporarily restricted the Bank of Thailand if required by the balance of payments situation.  However, in case of succeptration, investment capital may still be repatriated at the rate of not less than 20% annually after two year from the date of principal investment. | d Employment of suitably qualified foreign engineers, technicians, and other professionals as well as skilled workers is allowed, if such personnel are not available in Singapore. Applications for their employment are judged on their merits.  |
| Philippines | The entire amount of foreign investments duly registered with the Central Bank may be repairlated in the currency in which the original investment was made, in accordance with the schedule of printities imposed by the Central Bank, subject to emergency restrictions for exchange operations.   | BOI-registered enterprises and Employment of suitably BPLA-registered enterprises qualified foreign may, for five years from engineers, technicians registration, employ foreign and other professional nationals in supervisory, well as skilled worker technical, or advisory allowed, if such person positions extendable for are not available in periods at the discretion Singapore. Application of the B01. In the case of a for their employment a B01-registered pioneer enter-judged on their merits prise and an BPLA-registered enterprise whose najority stock is owned by foreigners |
| Raiayein    | Repatriation of capital is freely permitted subject to the completion of the usual exchange control forms for amonts exceeding M\$10,000.  | The government allows the employment of foreign technical and skilled personnel in industrial establishments. Bowever, it requires that a training program be drawn up for Kalaysiass to drawn up for Kalaysiass to aquire the neressary skills and erpertise so that within a period of time they will be able to assume positions held initially by expatriate personnel.  |
| Indonesia   | Repatriation of remaining invested capital in the original foreign currency is gnaranteed. However, repatriation is not permitted while any of the tax concessions are still in effect.  | Employment of foreigners for managerial and technical positions for which qualified Indonesians are not yet available is generally allowed, provided (1) the specific positions are included in the investment proposal, and (2) adequate training programs are provided for Indonesian nationals. Certain key expatriates essential to  |
|             | d. Repatriation of capital   | Baploguent of aliens   |

| <b>3</b> U  |  | •   |
|-------------|--|---|
| Thailand    | pany, even in excess of immigrant quotas, for a period to be fixed by the BOI. Poreign nationals are also allowed to undertake investment feasibility studies. | Patent protection is available mon registration with the Trademark and Patent Division of the Ministry of Commerce. A registered patent is protected by Patent Act B.B. 2522 (1979). A patent registered in Thailand is not protected internationally. Registration is required in a particular country where protection is needed. This applies also to foreign patents that require protection in Thailand.   |
| Singapore   |  | Although there is no provision for the grant of original patents in Singapore, registrations obtained in the U.K. will receive protection in Singapore provided that the patent is registered in Singapore and is properly advertised in Singapore newspapers, Trademarks can be protected by registration under the Trade Marks Act.   |
| Philippines | key positions may be filled by foreigners.   | The government grants pro- tection from infringsment on duly registered patents, trademarks, copyrights, trade names, and other proprietary rights where such patents, trade names, and other proprietary rights have been registered with the agencies: Compulsory licensing takes place two years from registration,  |
| Kalaysia    | To attract sew investments into Malaysia, a company with a foreign paid up capital of 45%2 million will be automatically allowed five expatriate posts.        | Patents in Malaysia are protected under the Patents Act of 1983 and the Patents Regulations. Under the Act and the Regulations, a patent can be registered for the whole of Malaysia, as opposed to registration by territory under the old law.  |
| Indonesia   | the safeguarding of the interests of the foreign investors will be permitted for the duration of the investment.   | Indonesia does not yet have a patent law. As a member of the International Convention for the Protection of Industrial Property (Paris Union), Indonesia abides by and houers its terms. In practice, applications for a grant of patents can be provisionally filled with the Department of Justice pending the enactment of the patent law.  The Law on Trademark of 1961 stipulates the procedure for registration of trademarks and the rights of trademarks and the rights |

4. Patent protection

| Thailand    | The promoted company is permitted to own land for industrial activities in excess of the maximum area normally allowed by law.   |   |
|-------------|--|---|
| Singapore   | rty is:  | Applications to purchase residential properties from foreigners who contribute to the economic development of Singapore will be favorably considered by the government subject to certain conditions.   |
| Philippines | The Philippine Gonstitution for restrictions are placed limits the ownership of land on the ownership of industrial the development, trial or compercial land exploration, exploitation, and properties. In the and use of natural resources, case of residential land to citizens of the Philippines narestricted sale is considered as to citizens of the Philippines narestricted sale is considered as the conformation of whose eapital is owned and sell apartments or by Filipino citizens.  By Filipino citizens, approved condominiums in buildings of not less than six stories and are also exempt from the 10% properties. |   |
| Malaysia    | Poreigners are allowed to own land, whether for industrial or agricultural use. A change in the use of land requires, the approval of the government. Land in the industrial estates is for lease for a normal period of 60 to 99 years. Hovever, foreign citizens and foreign companies are not allowed to buy or acquire bailding land without prior approval of the State Authority.  |   |
| Indonesia   | The land laws in Indonesia distinguish among the following rights: freehold, exploitation for agricultural estates, building for industries and other building purposes, and use for purposes other than the above. Of the foregoing rights, only the right of building for industrial, commercial, and residential properties can be obtained by foreign investment companies.  | A foreign investment company engaged in agriculture, fish/shring farming, and cattle ranching may use land, of which the right of exploitation is held by an Indonesian partner, for the duration of the joint venture under the grovisions of the joint venture agreesent. |
|             | S. Beal estate ownecship<br>by alien investors   | PHT 47/06   |

Investment Incentives in ASEAN Countries

| ·                 | Philippines                | Indonesia | Malaysia         | Singapore                  | <b>Tha</b> iland    |
|-------------------|----------------------------|-----------|------------------|----------------------------|---------------------|
|                   |                            | -         |                  |                            |                     |
| f. Tar Bremptions |                            |           |                  | te e                       |                     |
| A. Income Tax     | Exemption from 35%         |           | Sxemption from   | Exemption from             | Exemption from 30%  |
|                   | income tax for 6           |           | income tax of    | 33% tax on                 | or 40% corporate    |
|                   | years from commercial      |           | 40%, develop-    | profits for a              | nacone tax for a    |
|                   | operation for pioneer      |           | ment tax of      | period of 5-10             | period of 3 to 8    |
|                   | firms and 4 years for      |           | 5% and excess    | year's for                 | years depending on  |
|                   | non-pioneer firms,         |           | profit tax of    | pioneer status             | size, type of       |
|                   | extendible for another     |           | 3% for 5 years   | 3% for 5 years firms. This | industry & number   |
|                   | year (but not to exceed    |           | from production  | also applies to            | of employees. Por   |
| •                 | 8 years) in each of the    |           | date extendible  | incremental                | firms in the        |
|                   | following cases:           |           | for another 5    | income of                  | investment          |
|                   | (a) project meets          |           | years for        | expansion                  | promotion some,     |
|                   | prescribed capital-        |           | pioneer status p | projects.                  | reduction of 50% of |
|                   | labor ratio; (b) uti-      |           | firms. Dividend  | , sa                       | corp. income tax    |
|                   | lization of indigenous     |           | paid from exempt |                            | for 5 years after   |
|                   | raw materials; (c) met     |           | income are also  | •                          | the normal tax      |
|                   | foreign exchange earnings  |           | erempt from tar  |                            | holiday given       |
|                   | of at least US\$500,000.00 |           | in the bands of  |                            | above.              |
|                   | angually during the first  |           | -stockholders.   |                            |                     |
|                   | three years of operation.  |           |                  |                            | ·                   |
| •                 | Por expanding firms, the   |           |                  |                            |                     |
|                   | exemption shall be pro-    |           |                  |                            |                     |
| -                 | portionate to their expan- |           |                  |                            |                     |
| £.                | sions for a period of 3    |           |                  |                            |                     |
|                   | years from commercial      |           |                  |                            |                     |
|                   | operations.                |           |                  |                            |                     |

| Thai Land   | 50% to 400% eremption from import duties and business taxes on imported equipment for registered firms.                                | ਦ<br>ਦੁਧ<br>ਦੁਧ  |
|-------------|--|--|
| Singapore   | Zero tariffs<br>are levied on<br>capital<br>equipment, on<br>general.  | • • • • • • • • • • • • • • • • • • •  |
| Nalaysia    | for import duty, surtax b sales tar on imported equip- ment upon   | 90<br>91<br>91   |
| Indonesia   | Exemption or reduction of duties and value added tax (VAT) on sales of imported equipment.   | Exemption from or reduction of duties & VAT on imported spare garts as listed by BKPM.   |
| Philippines | Por new and expanding registered enterprises 100% exemption from taxes and duties on imported capital acquired before August 12, 1992. | took exemption from taxes and duties provided that 70% of production is exported, such spare parts are not locally available at reasonable prices, sufficient quantity and comparable quality add that all importations of spare parts shall be transferred only to the fire's bonded warehouse. |
| •           | far and Buty<br>on Imported<br>Capital<br>Equipment  | far and Duty<br>on Imported<br>Spare Parts   |
|             | ဆ်   | ರ  |

|    |                                     | Philippines   | Iadonesia  | Maiaysia   | Singapore                   | Thailand   |
|----|-------------------------------------|---|--|--|-----------------------------|--|
|    | Tax on<br>Imported<br>Raw Materials | and duties for firms located in export processing sones and firms operating bonded manufacturing warehouses. 100% exemption from breeding stocks and genetic naterials imported within 10 years from the date of registration or commercial operation provided such breeding stocks and genetic naterials are not locally available and/or obtained locally in comparable quality and at reasonably needed in the reasonably needed in the reasonably needed in the registered activity; and approved by the Board. | Exemption or reduction of inport duties for two years. | from customs duties & surtar for export— oriented firms, for firms producing for the domestic market, 100% exemption if it complies with the equity condition, management and employment structure. In other cases, partial exemption in which manu- facturers are required to pay 2% or 3%, | tose not available locally. | up to 90% exemption from import duties and business taxes for 1 year period. Export enterprises are also exempted from taxes and duties on raw materials for an indefinite period. |
| فع | Capital<br>Gains Fax                | Испе  | Capital gains are<br>taxed as ordinary<br>income.      | None   | No capital gains<br>tar.    | Capital gains are<br>tared as ordinary<br>income.  |

| Thailand    |                | Hone                   |                      |                     |                 |                        |                    |                             |                             |            |              |                    |                 |                   |              |                |                 |                 |                 |                |                 |                 |              |                |               |                |               |             |
|-------------|----------------|------------------------|----------------------|---------------------|-----------------|------------------------|--------------------|-----------------------------|-----------------------------|------------|--------------|--------------------|-----------------|-------------------|--------------|----------------|-----------------|-----------------|-----------------|----------------|-----------------|-----------------|--------------|----------------|---------------|----------------|---------------|-------------|
| Singapore   |                | 10-50% of outlays None | on new investments   | in plant machinery  | and factory     |                        | deducted from      | profits for                 | approved manufac-           | turing and | technical    | services, research | and development | (R&D) activities, | construction | operations and | projects for    | reducing        | consumption of  | potable water. | This is valid   | for the year in | which the    | expendíture is | incurred and  | may be carried | forward until | after a tar |
| Kalaysia    |                | 100% of                | qualifying           | capital emper-      | diture incarred | within 5 years         | from date of       | approval of the             | project                     | determined | according to | priorities         | termed as       | promotional       | activities/  | products. This | is granted into | firms not given | pioneer status. | Reinvestneat   | allowance equal | to 25% is       | granted to a | manufacturing  | company which | incers         | qualifying    | capital     |
| Indonesia   |                | None                   |                      |                     |                 |                        |                    |                             |                             |            |              |                    |                 |                   |              |                |                 |                 |                 |                |                 |                 |              |                |               |                |               |             |
| Pailippines |                | 100% of the cast of    | major infrastructure | undertaken in areas | designated as   | secessary for industry | dispersai or areas | deficient in infrastructure | (for less developed areas). |            |              |                    |                 |                   |              |                |                 |                 |                 |                |                 |                 |              |                |               |                |               |             |
|             | far Deductions | A. Investment          | Alicnance            |                     |                 | -                      |                    |                             |                             |            |              |                    |                 |                   |              |                |                 |                 |                 |                |                 |                 |              |                |               |                |               |             |
|             | ij             |                        |                      |                     |                 |                        |                    |                             |                             |            |              |                    |                 |                   |              |                |                 |                 |                 |                |                 |                 |              |                |               |                |               |             |

| Thailand    |   | <b>80</b> E e  |
|-------------|---|--|
| Singapore   | koliday period,   | On a case-by-case situation manu-facturing firms that conduct R&D and R&D institutions are given the following incentives:  (a) one or more years of pioneer status;  (b) investment allowance of SOR of capital |
| Halaysia    | expenditures (plant, wachinery and factory building) for the purpose of approved expansion before 31 Dec. 1988. | Additional allowance of 10% in 1st year and 2% there- after of cost of buildings used for research.  |
| intonesta   |   | Age a  |
| Philippines |   | Sca e  |
|             |   | Deduction of<br>Research &<br>Development<br>Program   |

| Singapore Itailand | (excluding bailding); (c) double deduction of RbD expenses; (d) accelerated depreciation of RbD plant dequipment; and (e) complete exemption from of 20% with-bolding taxes for reyalty, fees, etc. | Plant & machinery Rormal annual annual may be written off rate: 20% for in 3 years; assets not identicomputers and fiable as land or automation merchandise Plant equipment; vehicles and R&D expenses are included in this category. |
|--------------------|---|---|
| Sing               | investment (excluding bailding); (c) double deduction of RAD expenses; (d) accelerati depreciation (e) couplete exemption froi or reduction of 20% with- holding taxes for royalty, fees, etc.      | Plant & machi<br>may be written<br>in 3 years;<br>computers and<br>automation<br>equipment in<br>year.  |
| Mafaysia           |   | Qualified capital incurred before December 31, 1988 may be written off in three years:  |
| Indonesia          |   | Normal rate of 50% if asset life is less than 4 years, 25% if less than 8 years, 10% if nore than 8 years.  |
| Philippines        |   | ਰ<br>ਰ<br>ਰ   |
|                    |   | G. Accelerated Depreciation   |
|                    |   | <b>.</b>  |

|         | •                         | Philippines  | Indonesia  | Kalaysia  | Singapore  | Thai fand   |
|---------|---------------------------|--|--|---|--|---|
| ÷       | Net Loss<br>Carry-Porward | Nobe   | Losses carried forward for neat 5 to 8 years after loss, | Losses carried<br>forward for<br>unlimited<br>period.   | Losses may be carried over provided there is no substantial change in ownership. | Losses incurred during the tar holiday period may be carried over for the next 5 years after the tax holiday. |
| raŝ     | Labor<br>Expenses         | 50% of the incremental labor expense of a registered enterprise for the first 5 years from registration provided it meets the prescribed ratio of capital assets to annual labor; 100% of the incremental labor if located outside Netro Manila. | None   | None<br>e   | Mone.  | 9 .<br>9 .  |
| <b></b> | Bxport<br>Deductions      | Kone   |  | 1. Broatt' producers are allowed to deduct from Y. (a) some prop Y. of Y where X is 50% of X sales total sales plus | double deduction<br>of promotional<br>expense for<br>exports.                    | Sk of increments<br>X income  |

| Thailand    |   |
|-------------|---|
| Singapore   |   |
| Kalaysia    | (b) 5% of vaice indigencus product used for export production. 2.5% of the FOB vaiue of export sales is granted as export allowance to trading companies/ agri-producer for exports. 3, Bouble deduction of export credit insurance premiums and export producer tion expenses, i.e., overseas advertising exhibit par- |
| Indonesia   | total sales plus  |
| Philippines |   |

|   |  | Philippines  | Indonesia   | Halaysia   | Singapore  | Thailand                      |
|---|--|--|---|--|--|-------------------------------|
|   |  |  |   | ticipation,<br>fares, etc.   |  |                               |
| <del>်</del>                            | Others   | ಕ<br>ಕ<br>ಕ  | \$0 ti \$   | 5% of taxable Y for the first 5 years, for firms located in promoted areas, for small scale enterprises and for firms meeting capital participation requirement.                 |  | None                          |
| III. Tax Gredits A. Takes Outles Rax Ma | Gredits<br>Takes &<br>Outles on<br>Raw Materials | Equivalent to the National Internal Revenue taxes and cristons duties paid on the supplies, ray materials and semi-manufactured products used in the manufacture, processing or products and forming part thereof; exported directly or indirectly by the registered enterprise. | For exports, the VAT sell be charged at zero rates meaning that the payment of any taxes for previous purchases will be refunded. | Equivalent to<br>the import daty<br>and surtax on<br>raw materials<br>used as parts<br>or ingredients<br>in the manu-<br>facture of<br>export products<br>excluding<br>packaging | None - Pree port,<br>ac turnover,<br>sales & excise<br>taxes except<br>on petroleum,<br>alcoholic<br>beverages &<br>cigarettes | None. Refer to<br>[[-] above. |

|             | Philippines                                  | Indonesia | Malaysia | Singapore | Thailand   |
|-------------|--|-----------|----------|-----------|------------|
|             |  |           |          |           |            |
|             |  |           |          |           |            |
| rchase of   | For parchase of domestic                     | Pone      | None     | None      | चे छ ० थु. |
| omestic     | capital equipment made<br>before 8-12-92 tax |           |          |           |            |
| quipment &  | credit equivalent to 100%                    |           |          |           |            |
| ccompanying | of the value of tares and                    |           |          |           |            |
| pare Parts  | duties that would have                       | -         |          |           |            |
|             | been waived on the ma-                       |           |          |           |            |
|             | chinery and spare parts                      |           |          |           |            |
|             | had these been imported.                     |           |          |           |            |
|             | Provided, (1) that the                       |           |          |           |            |
|             | said equipment, machinery                    |           |          |           |            |
|             | and spare parts are reason-                  |           |          |           |            |
| -           | ably needed and used ex-                     |           |          |           |            |
|             | clusively by the registered                  |           |          |           |            |
|             | enterprise unless other-                     |           |          |           |            |
|             | wise exempted by the Board;                  |           |          |           |            |
|             | and (2) that the approval                    |           |          |           |            |
|             | of the Board was obtained.                   |           |          |           |            |

Source: Various materials on investment incentives provided by Embassies of ASEAR countries in Manila.

### Appendix

### Investment Incentives and User Cost of Capital

The concept of the user cost of capital and its relationship to tax policy parameters is well defined within the neoclassical theory of capital accumulation originally formulated by Hall and Jorgenson (1967) which assumes that firms maximize the net present value of net revenue after tax. Here, the user cost of capital or the implicit rental of one unit of capital service per unit of time is defined in the following equation:

$$c = \frac{q(i+D) (1-ku-uz)}{(1-u)}$$
(1)

where r is the rate of interest,

- d is the rate of replacement of capital stock,
- k is the proportion of investment expenditures permitted as additional deduction from taxable income,
- z is the discounted value of the stream of depreciation charges generated by a peso of investment,
- q is the price of capital goods, and
- u is the corporate income tax rate.

To trace the effect of any given incentive on c, we first determine which of the variables on the right hand side of (1) is affected by the said incentive and then we differentiate (1) with respect to the explanatory variable in question.

Thus, to evaluate the effect of the accelerated depreciation provision on the user cost of capital, equation (1) is differentiated with respect to z:

$$\Delta c = \frac{-(i+D)qu}{(1-u)}$$
(2)

Without the accelerated depreciation provision z, the present value of the Stream of depreciation charges, would be

$$z = \sum_{j=1}^{n} \frac{(1/n)}{j}$$

$$(1+i)$$

if straight-line depreciation is followed.

If accelerated depreciation is allowed,

$$z = \sum_{j=1}^{n} j$$

$$j=1 -----$$

$$(1+i)$$

where b i3 the amount of depreciation charges allowed in year j for every peso of investment.

Also, in order to study the effect of the tax reduction/exemption on imported capital equipment, we differentiate (1) with respect to q:

$$\Delta c = \frac{(i+D) (1-ku-uz)\Delta q}{(1-u)}$$
(3)

We note that  $\Delta c/c = \Delta q/q$ .

Now, with full exemption from taxes and duties on imported capital,

$$\Delta q$$
 .5 tm (5)  $q$  (1+tm)

Similarly, to trace the effect of the investment allowance on the user cost of capital, we differentiate (1) with respect to k to obtain:

$$\Delta c = \frac{-qu(i+D)}{-----} \Delta k$$

$$(1-u)$$

Without this provision clause,  $k = \emptyset$ ; with this incentive k ranges from zero to 1.0.

Finally, the impact of the income tax holiday on the user cost of capital may be assessed by differentiating (1) with respect to u:

$$\Delta c = \begin{bmatrix} -\frac{q(i+D)(k+z)}{(i-u)} & c \\ -\frac{(i-u)}{(i-u)} & (i-u) \end{bmatrix} \Delta u$$
 (7)

To evaluate  $\Delta u$ , we should first solve for the value of u uniformly applicable to the whole n-year period that will result the same pre-tax profit stream, IRR as that obtaining from a tax holiday situation.



This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see: <a href="http://creativecommons.org/licenses/by-nc-nd/3.0/">http://creativecommons.org/licenses/by-nc-nd/3.0/</a>



**Development Studies**