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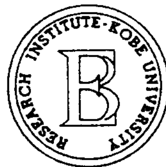

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AND BUSINESS ADMINISTRATION
KOBE UNIVERSITY

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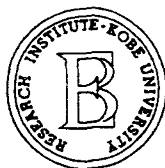

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CONTENTS

Page

Generalized Lower-of-Cost-or-Market Rule for Inventory Valuation for Quasi-rational Managers .... Isao NAKANO 1

Effects of Financial Deregulation on Australian Financial System .... Kenichi ISIGAKI 19

NAFTA and Asis-Pacific Economic Relations .... Seiji NAYA 47

The Asian Development Experience and Its Relavance to African Development Problems .... Seiji NAYA, Robert K. McCLEERY 71

A Qualitative Assessment of the Effects of NAFTA on Japan's Foreign Investment and Trade with East Asia and Mexico: Opportunity or Diversion? .... William E. JAMES 135

Dynamic Effects of Tax Policies in A q Model of Investment .... Takao OHKAWA, Kazuo SHIMOMURA 163

Corporate Governance in Germany, Japan, and the United States: A Comparative Study .... Kenji KOJIMA 171

Economic Issues in International Debt: A Survey .... Hideki IZAWA 245

A Note on the Estimation of Scale Economies and their Use in Modeling Free Trade Agreements .... Robert K. McCLEERY 261

GENERALIZED LOWER-OF-COST-OR-MARKET RULE FOR INVENTORY VALUATION FOR QUASI-RATIONAL MANAGERS

Isao NAKANO

1. Introduction

Conservatism in the sense of recording events or transactions in the way of giving the least favorable effect on assents, income and owners' equity [Cooper and Ijiri, p.113] is an important accounting practice. In this paper I attempt to logically deduce a couple of conservative valuation rules from a set of assumptions on rational managerial behaviors. Although I use the term 'rational', no value judgment or endorsement for conservatism is intended. I wish to propose a purely descriptive statement. This exercise is based on the assumption that even in the pragmatic field of accounting a rigorous deduction of an accounting phenomenon has a scientific value of its own.

Conservative practices considered are: (1) the normality requirement for acquisition cost; (2) the lower of cost or market rule; and (3) the realization principle for revenue recognition. Only inventory assets will be taken up. Fixed assets have complicated 'depreciation' problems which would have to be treated separately.

2. Basic assumptions on 'rational' managerial behaviors and 'rational' cost concept

In order to logically reproduce major conservative financial accounting rules, we will start by making several fundamental assumptions about ideally 'rational' managerial behaviors. We will define the cost incurred by such rational behaviors as 'rational' cost. This rational manager is, in trying to reach a minimum cost as well as a maximum revenue, assumed to make a continuous search (prediction) along the 'time' continuum. Further, we will define a

'quasi-rational' manager whose search is simplified to sample prices at a discrete number of points-in-time for determination of optimal prices. The aquisition cost of a good by such a 'quasi-rational' manager will be called a 'quasi-rational' cost concept. And we will demonstrate that major conservative financial accounting rules can be logically derived from a specific kind of 'quasi-rational' cost concept.

A 'rational' cost or 'rational' carrying value on the balance sheet of a good is defined to be equal to that amount of expenditure which would have been incurred by the following set (A) of assumptions of 'rational' managerial behaviors.

(A) Assumptions on 'rational' (vis-a-vis 'actual') managerial behaviors.

(1) In purchasing a good, a 'rational' manager minimizes the amount of expenditure required for its acquisition.

(2) In selling the good, a 'rational' manager maximizes the amount of revenue from its sale.

(3) A 'rational' manager can accurately predict future phenomena.

(4) A 'rational' manager is assumed to decide buying a good only if the selling revenue is predicted to exceed its acquisition expenditure (in addition to covering the other related expenses).

(5) Suppose that the amount of predicted revenue (the higher of a good's current net realizable value and its future selling price) should lie below its minimum available acquisition price. In this situation, a rational manager tries to bargain the minimum acquisition price to the amount of its benefit value: otherwise he/she is assumed not to purchase the good.

(B) A 'quasi-rational' manager is assumed to share all behavioral characteristics in (A). The only difference is assumed to lie in the scope of price data utilized by the person. That is, he/she is posited to take a price sample from the time continuum and to determine a minimum cost and a maximum selling price from that sample.

(C) A 'quasi-rational' cost or 'quasi-rational' carrying value on the balance sheet is the expenditure incurred by a quasi-rational manager.

In the following section, we will have a 'quasi-rational' manager trace and check the historical path of the 'actual' manager's activities about acquiring, holding and eventual selling of a good. The monetary amount resulting from the manager's 'rational' activities will be treated as the standard carrying value on the conventional balance sheet; any excess resulting from the manager's 'actual' behavior will be treated as

a loss to be charged to current year income.

3. Symbols

Following symbols will be defined.

t_b : the point in time when the inventory asset in question was actually bought.

t_p : current balance sheet date where we are now.

t_f : the terminal point in time, i.e., the end point of our time horizon for consideration.

t_1 : a 'time' variable which indicates when the purchase of the good would have been made by a (quasi-) rational manager. The 'purchase period' is assumed to be $t_b \leqq t_1 \leqq t_p$.

t_2 : a 'time' variable which shows when the selling will be made. This 'sale period' is assumed to be $t_p \leqq t_2 \leqq t_f$.

RV : net realizable value of the good if it is sold at current balance sheet date.

FV (t_2) : the amount of future sale revenue if the good is sold in its normal course of disposal at time t_2. ($t_p \leqq t_2 \leqq t_f$).

MER (t_2) : a maximum expected revenue from selling the good if comparison is made between RV and FV(t_2), normal sale revenue at time t_2.

MER (t_*) : the maximum possible value of MER(t_2) where the future sale is made at time t_* when the selling price is maximized.

HC (t_1) : acquisition price of the good if the purchase would have been made at time t_1.

HC (t_{**}) : the 'rational', i.e., the lowest acquisition price of the good if the lowest was attained at time t_{**}.

RC : replacement price of the good at current balance sheet date t_p, that is, HC (t_p).

HC : Actual acquisition price of the good, that is, HC (t_b).

4. Rational vs. quasi-rational behaviors of a manager

Let us concentrate on an inventory asset. For simplicity but without any loss of generality, we assume an item of inventory asset was bought on January 1, 1993 and is planned to be sold on December 31, 1994. This is the behavioral pattern of our 'actual' manager. A

'rational' manager with a complete predictive ability might possibly act in a different manner. See Figure 1.

Given the wholesale and resale price data in Figure 1, an ideally

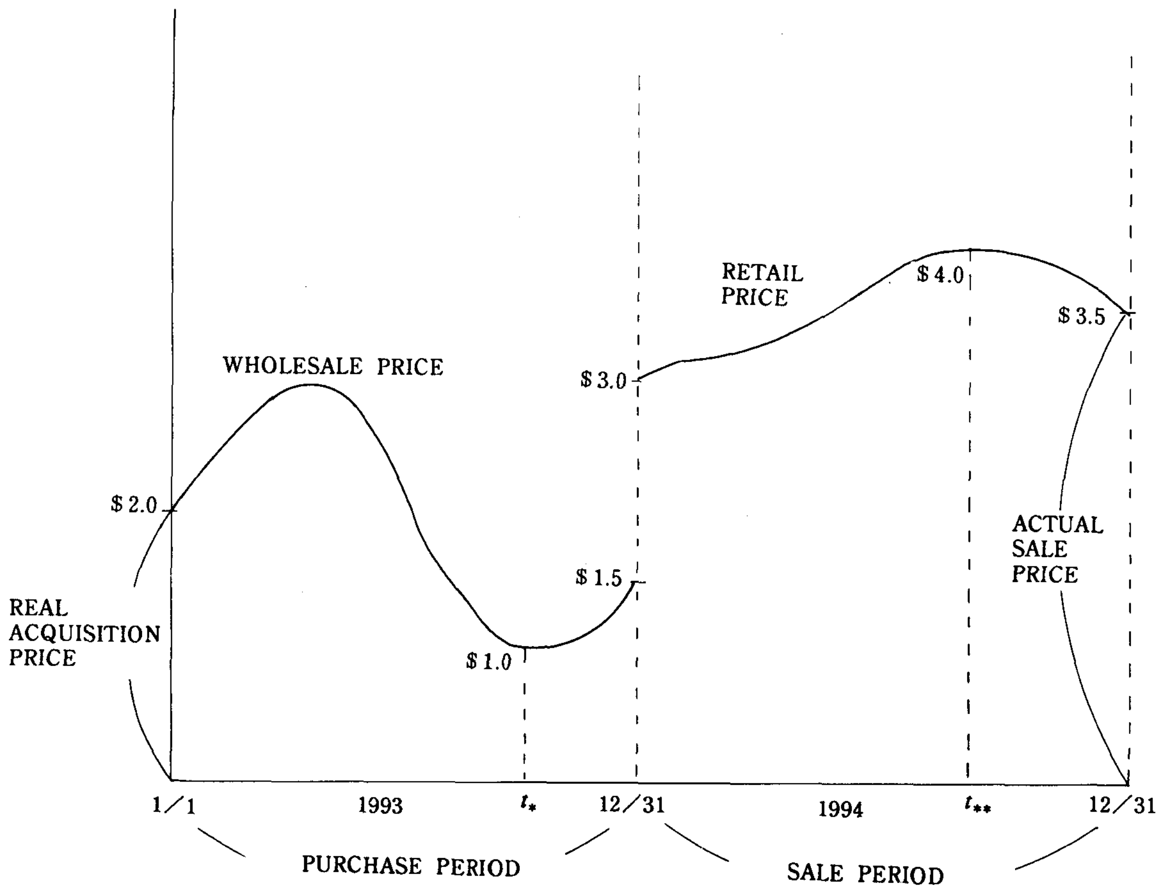

FIGURE 1 : PRICE DATA FOR MANAGERIAL DECISIONS

rational manager would, according to Assumption (A) − (1), have paid the minimum wholesale price of $1 at time t_* to buy the asset and will, according to Assumption (A) − (2), sell it at the highest resale price of $4 at time t_{**}, thus achieving a greatest possible sales margin of $3. But such a continuous search along the time continuum would be too costly for actual implementation. So, we will model him to only pick up the acquisition prices at the beginning and end of the purchase period to approximate the minimum purchase price. That is, in Figure

1, $2 and $1.50 is assumed to be compared and the latter chosen. This is a quasi-rational behavior and a quasi-rational cost according to Assumptions (A) and (B). Hence, our quasi-rational manager would have postponed the purchase until December 31, 1993. Naturally, this policy and this purchase price $1.50 would be suboptimal, as compared with the true minimum of $1.00. We note here that a monotone price tendency would have been required to justify the two point sampling as optimal.

As to the estimation of the highest selling price, too, the same two point sampling is assumed to be made by a quasi-rational manager. Considering two prices $3 and $3.50 at the two terminal dates of the sale period, the higher price $3.50 at the end date is determined to be the maximum, which also will turn out to be suboptimal if compared with the true maximum of $4.00 at time t_{**}.

In conclusion, two kinds of rationality need to be separated. 'True rationality' concerns a continuous search for a really minimum acquisition price as well as for an actually maximum selling price. By contrast, 'quasi-rationality' could be defined as involving a comparison of two price data as of the begin and end points of purchase period or sale period so as to choose the lower or higher one as the minimum or maximum. In both concepts of rationality, a perfectly accurate predictive capability is assumed to exist.

Our hypothesis, then, is that a 'quasi-rational' managerial behaviors about buying and selling a product do underline major conservative financial accounting measurement rules.

A quasi-rational manager is assumed to consider buying an inventory asset at a minimum price possible, i.e., at

$$\min(HC, RC) \quad \cdots\cdots (1)$$

so as to sell it at a maximum selling price of

$$MER = \max(RV, FV(t_f)). \quad \cdots\cdots (2)$$

Accordingly, we will divide the possible situations into two cases.

$$\text{Case 1: } MER > \min(HC, RC) \quad \cdots\cdots (3)$$

$$\text{Case 2: } MER \leqq \min(HC, RC) \quad \cdots\cdots (4)$$

5. The case of maximum sale revenue exceeding minimum acquisition cost

Our quasi-rational manager would, in this case, have bought the

good at the given minimum price according to our Assumption (A)-(4) above. Hence, if HC had been predicted to be smaller than RC, he/she would have bought the product at time t_b by paying HC. Otherwise, the person would have postponed the purchase until the year-end, at which time the smaller cost RC would have been incurred. Hence, the acquisition cost incurred by the quasi-rational action would be

min (HC, RC),

as stated above. By assumption (D), this amount is a quasi-rational cost.

In actual situations, the 'actual' manager have paid a greater price HC, say $2, when the current year-end replacement price has become lower, say $1.50. The difference $0.50 has resulted from his irrational action, i.e., from his prediction error. That, therefore, does not constitute part of the rational cost. It rather is a current year loss under the quasi-rational cost measurement.

Our conclusion hence is that in case MER > min (HC, RC) the quasi-rational manager would have acquired the good by paying the amount min (HC, RC), which qualifies as the quasi-rational cost and the quasi-rational balance sheet value.

Considering the direction of the inequality sign in MER > min (HC, RC),

$$\min(HC, RC) = \min(MER, HC, RC). \quad \cdots\cdots\cdots\cdots \quad (5)$$

The right-hand side of (5) indicates that at least in this case we can characterize the 'quasi-rational' balance sheet value as the 'lowest of cost-market-or-benefit' valuation ……… a logical extension of conventional cost-or-market principle. This is a modified version of the idea already proposed that the generalized 'cost-or-market' principle can explain a great part of conventional accounting practice [Ijiri and Nakano].

6. The case of maximum sale revenue being smaller than minimum acquisition cost

The quasi-rational manager would have beat down the acquisition price either at date t_b or t_p to the level of its expected benefit MER at maximum before making the decision. Otherwise, he would not have bought one. Therefore, the quasi-rational acquisition price in this case is equal to MER. This in turn is less than min (HC, RC) before the

negotiation. So, in conclusion, the quasi-rational balance sheet value will equal

$$\begin{aligned} \text{MER} &= \min(\text{MER}, \min(\text{HC}, \text{RC})) \\ &= \min(\text{MER}, \text{HC}, \text{RC}). \quad \cdots\cdots (6) \end{aligned}$$

The last term in (6) demonstrates the quasi-rational cost is equal to the 'lowest of cost-market-or-benefit' value in this case, too.

By contrast, in this case, the 'actual manager has bought the product at a price HC, say, $2.00, which has turned out to be greater than the benefit value MER, say, $1.50. The difference $0.50 (HC−MER) is a loss to be charged to current year which has arisen from the managers's suboptimal purchasing behavior as a result of his/her prediction error.

Evidently, the value min (MER, HC, RC) as the quasi-rational balance sheet value can be interpreted as a 'minimum purchase cost available'. It is quite natural that a quasi-rational manager with accurate predictive ability would have bought a good only at this least acquisition price possible.

In the following, we will propose a financial accounting model such that an inventory asset has been, and will also be, subjected to the 'lowest of cost-market-or-benefit' valuation all the way through in the firm, beginning at acquisition to the year-end to the date of its sale in the next year. By applying this accounting model, we will show it can approximately reproduce three aspects of accounting practice, i.e., (1) normality requirement for acquisition cost ; (2) the lower of cost-or-market valuation at a year-end ; (3) the realization principle for revenue recognition.

7. Normality of acquisition cost

In retrospect, the requirement that the acquisition cost of an asset be based on a normal, and not necessarily actual, cash outlay has not clearly been stated in authoritative US literature. Cost was defined as the 'bargained price' of the goods etc. and was said to be usually measured by the amount of cash expended to acquire the good [Paton and Littleton], by cash outlay or by the fair market value of property acquired [AAA 1936] [AAA 1941], or by the amount of cash or its equivalent, the amount given up [AAA 1957]. The explicitly stated purpose in such 'price aggregate' or 'cash expended' definition of cost

was said to lie in providing (1) available objective evidence in recording the origin and disposition of the good for accountability purpose [AAA 1948] or (2) the best available evidence of fair market value at the moment of exchange [Paton and Littleton] or a satisfactory quantification of future service expectations at the time of the transaction [AAA 1957]. By defining cost as 'economic sacrifice' in acquiring a good, the AICPA and FASB publications concurred in those dual functions of cost: (i) cost as evidence of its acquisition and (ii) cost as an attribute of it, that is, future benefits from the asset [FASB 1985]. If the latter function of benefit representation is to be stressed, it is obvious that acquisition cost should depart from cash outlay in case the disparity is known.

Thus far, general accounting standards have been reviewed. Normality of acquisition cost has only very indirectly been implied. But investigating asset accounting rules and studies, we find explicit reference to the requirement. On inventory valuation, it is stipulated that the cost of a good acquired are usually defined as 'that expenditure which has been incurred in the normal course of business in bringing the product or service to its present location and condition' [SSAP 9].

Such normality requirement may be said to be in effect for fixed asset valuation, too. 'If cost is in excess of market value this may be the result of defects in judgment, major changes made during construction of plant, excessive delays in completing a building or other adverse factors. In such cases most authorities agree that recorded cost should not exceed that which would have been incurred under normal circumstances' [Davidson, Chaper 17, p.18]. This requirement can be formulated as

acquisition cost = normal replacement cost RC (at the time of acquisition) $\leqq$ historical cost HC. ………… (7)

How about the reverse case of HC $\leqq$ RC ? '[I]t is possible for assets to be acquired at a bargain price, perhaps in a distress sale. In this event, authorities differ as to whether actual cost should be written up to market value. Since accounting practices tend towards conservatism in ambiguous cases, many (if not most) accountants would not favor writing up in this situation, in conformity with the concept of valuation at the lower-of-cost-or-market price' [Davidson, p.18]. This statement could be represented as

$$\text{acquisition cost} = HC \leqq RC. \quad \cdots\cdots\cdots \quad (8)$$

Thus, from (7) and (8), we may conclude that

$$\text{acquisition cost} = \min (HC, RC) \quad \cdots\cdots\cdots \quad (9)$$

where both values are those at the acquisition date.

In addition, it will be self-evident that since the aim of a business enterprise is to earn profit as an excess of cash, 'acquisition cost' is valid only in so far as it lies below its maximum recoverable inflow of cash MER = max (RV, PV). Hence, a comparison must still be made between the cost determined by (9) and the recoverable inflow MER so as to derive the lower of the two, which is the really valid acquisition cost.

We have thus come to the conclusion that as a model of actual asset valuation at its acquisition

$$\text{acquisition cost} = \min (HC, RC, MER), \quad \cdots\cdots\cdots \quad (10)$$

which agrees with our quasi-rational cost (5) if the purchase period converges to 0.

This model will be shown to explain the common practice of eliminating abnormal spoilage and shrinkage from product cost [Davidson, Chapter 38, p.21] [ARB No.43, par.5] as well as the rule of valuing a donated asset at its fair market value rather than at a zero value [AICPA, APB Statement No.4, par.182].

If our manager is assumed to order his factory to reproduce a product, normal spoilages and shrinkages must be expected to recur on average, however rational he might be. In this sense, its replacement cost at the acquisition date should naturally include normal amounts of those losses. But the unexpected abnormal losses could be avoided in a careful production, so that they do not join its replacement cost. Hence,

$$RC \text{ (including only normal losses)} \leqq HC \text{ (including both normal and abnormal losses)}. \cdots \quad (11)$$

And if the product has been judged to be profitable by the quasi-rational manager,

$$HC < MER. \quad \cdots\cdots\cdots \quad (12)$$

Our hypothesis is that conventional accounting is measuring 'quasi-rational' cost. Its appropriate measure in this case, considering (11) and (12), will be

$$\min (HC, RC, MER) = RC \text{ (at the acquisition date)},$$

which conforms to the conventional cost accounting practice of

including only normal losses.

As for a donated asset, how much can we presume would its historical cost be? Historical cost, if logically generalized, may be defined to be that amount which makes it possible to replace the good if the price situation remains unchanged. So, its best estimate at acquisition date will be the then replacement cost, since its payment will enable repurchase. That is,

an estimate of HC = RC at acquisition date. ··············· (13)

If the donated good has been estimated to be a profitable one,

RC $<$ MER. ······························ (14)

Our 'quasi-rational cost' measurement for a donated asset is

min (HC, RC, MER) = RC at acquisition date. ········· (15)

The fair market value is usually defined as '(an estimate of) value determined by bona fide bargaining between well-informed buyers and sellers, usually over a period of time' [Cooper and Ijiri]. In this sense, it may be said to be approximated by the normal replacement cost (15) of the donated asset in case of a profitable good. In consequence, the consistency of this 'fair market value' valuation with our 'quasi-rational cost' has been demonstrated.

8. The lower of cost-or-market valuation

Vigorous criticism and weak, incomplete support have been advanced towards the cost-or market rule. Criticism includes (1) lack in consistency: cost or the year-end market price is applied inconsistently, selecting whichever is lower [Paton, 1922] [Mason] [Paton and Paton, 1952] [Hendriksen]; (2) Violation of realization rule: valuation loss is claimed to be unrealized; if after writing down the book value the market price should rise (but not to the level of original cost), then some unrealized valuation gain will be mixed in the next year's income [Paton, 1922] [Paton and Paton, 1952]; (3) Unconservative profit showing in future periods: arbitrary changes will be made in periodic assignment of income between periods, resulting in disproportionate fluctuation of incomes with sales amounts, [Paton, 1922] [Paton and Paton, 1952] [Husband] [Hendriksen]; (4) Current price fall may be recovered by future price rise; so, current impairment does not necessarily imply permanent impairment in the benefit of the asset [Paton, 1941] [Ijiri and Nakano]; (5) If the extent

of price down should be smaller than the sales margin in the product, the original cost can be recovered in full from future revenue; in this case, no loss has been incurred [Paton, 1941] and (6) Understatement of service value of the total asset [Hendriksen].

It is impossible to overcome these critiques within the current orthodox conceptual framework. But we will show that if our novel 'quasi-rational cost' concept is accepted the cost-or-market rule can logically be deduced.

Turning next to the defenders' side, the supportive arguments have been rather weak. (1) As to the amount of asset cost to be carried forward, the American Accounting Association has expressed 'recoverable cost' [AAA, 1936] or 'residual cost' [AAA, 1948] concept. This means that portion of cost which will be recoverable from future 'estimated amount of sales proceeds less direct expense of completion and disposal' [AAA, 1948]. Writing down asset costs are admitted in case price changes etc. should make it necessary in reflecting 'residual cost'. An obvious difficulty with this concept is that of critique (4) above —— that a future price is hard to estimate. (British cost-or-market rule also dictates using 'current sales price' for market [SSAP No.9]).

(2) The US cost-or-market rule mandated by AICPA differs from the above in requiring current replacement cost, not selling price, for the 'market' so long as this stays within a price interval limited by the net realizable value and this minus a normal profit margin. And if the replacement cost is above or below the interval, then that upper or lower limit value should be adopted as the market [ARB No.43].

The ARB tries to justify the use of current replacement price by referring to 'utility'. No definition of utility is made in the document. One interpretation is that the utility can be measured by the amount of invested cost recoverable with a normal profit. So, the lower limit, 'net realizable value less normal profit margin' is said to be the base for the rule, with the replacement cost determining an allowable profit margin [Ijiri and Nakano].

It is obvious that this sort of utility measurement faces difficulty of estimating future, not current, realizable value. In addition, replacement cost would seem rather superfluous in this interpretation of utility.

Consider our 'quasi-rational cost' concept. Note that our

definition of the cost —— characterized as 'the lowest of cost-market-or-benefit' —— immediately dictates a sort of the lower of cost-or-market valuation where the market may be said to mean the lower of the year-end replacement cost and net realizable value. (The present value may be usually dropped because of a generally short stock turn-over period).

An approximate quasi-rational cost of an inventory item
= min (HC, RC, RV). .... (16)

Interestingly enough, Parker [1966] has excavated this 'lowest' type of cost-or-market in the time-honored statement of Sanders, Hatfield and Moore [1938]. 'The proper showing of current assets requires that the values in general be the lowest of cost, replacement market or realization'. According to Parker's another discovery [1966], Spicer and Pegler also suggested the same lowest value basis for 'floating assets' [1925].

Next, we will consider possible relationships between this 'lowest' principle and the US mandated rule. A casual glance at the latter rule would suggest that

the US cost-or-market value = min (HC, RV, max (RC, RV-NP))
where NP : normal profit margin ; RV : net realizable value.

It seems plausible to assume that the 'net realizable value minus normal profit margin' can be interpreted as a normal lower limit to the replacement cost as this should scarcely become lower than that. So, if we call this greater value max (RC, RV-NP) as a modified replacement cost,

the US lower of cost-or-market value = min (HC, RV, modified RC) .... (17)

We have thus demonstrated by formula (17) that the US type cost-or-market valuation is a sort of normalized 'quasi-rational cost' measurement. It also proves consistency of the rule with normality requirement for acquisition cost above.

9. The sales basis of revenue recognition

As a concrete application of the realization principle, the sales basis has been defended on three grounds ; (1) its objectivity and definiteness ; (2) measurement of disposable income ; (3) its explicit reporting of the critical event.

(1) Objectivity and definiteness. Paton and Littleton [1940] distinguished between the gradual earning of revenue and the valid moment for its recognition. Only when the earning process is completed and the product transferred to the customer, the amount of revenue is said to be objectively determined. Their focal point is sufficient reduction of uncertainty. Then, why is it sufficient at the sale date? 'Sufficiently definite and objective to warrant recognition in the accounts' [AAA, 1957] is an authoritative answer. Definiteness is equated by Windal to 'permanence', i.e., that an item is unlikely to be cancelled, revoked, or lost in the foreseeable future [Windal]. Objectivity is said to be equivalent to 'measurability', i.e., that an item must appear substantially the same to all accountants examining it [Windal]. Ijiri and Jaedicke has appropriately defined it to mean the degree of consensus among observers or measurers and formulated it as (sample) variance of measures by multiple measurers with respect to a single object [Ijiri and Jaedicke].

A difficulty in supporting realization principle by uncertainty reduction is that other recognition bases may also be certain enough. The 1964 Research Study Committee on realization concept has raised the argument that receiving any liquid asset is not essential for revenue recognition [1964 Committee]. If some merchandise is accepted as consideration and its objective valuation is possible, then revenue may be deemed realized, it asserted. Another problem is whether the firm involved must be a party to the sales transaction for revenue recognition. The 1964 Committee did require that. But the 1973-74 Committee on external reporting did not, for the reason that a reliable measurement could be possible without the firm being one party to a market transaction [1973-4 Committee].

In addition, we could also argue that the 'cash basis' recognition of revenue would be far more objective than the sales basis if objectivity per se is the focal problem.

(2) Measurement of disposable income. The standard definition of realization is converting an item into money or into cash or its equivalent (or service) [Cooper and Ijiri] [FASB, SFAC No.6, par.143]. This requirement for liquid asset in turn is frequently grounded on a claim for disposable income. Bowers, in his article in 1941, has stated that realization is an act or condition of placing a value increment into disposable form [Bowers, 1941]. The University of Illinois Study Group

has advanced the thesis that the realization test serves to hinder erosion of the firm's capital through distribution of what has mistakenly been considered profit [A Study Group].

Against the statement that the realization principle results in the measurement of disposable income, it is argued that the liquid asset which has flowed into the firm in the form of revenue will have been invested into fixed assets and/or disappeared by payment, so that current realized income does not necessarily become equal to the amount of distributable fund at the year-end [Paton and Paton, 1955]. But clearly, were it not for current revenue, the disposable fund at the closing date would be that smaller after those various distributions. In this sense, realized net income may be said to be serving as an index for the disposable income.

Our doubt is whether revenue on the cash basis would not give a better measure for the available fund.

(3) Reporting of the critical event. If revenue and net income could represent the most critical event in a transaction cycle, the information may potentially serve, say, evaluating managers' achievements in terms of that important aspect. In proposing the 'critical event' concept, Myers argued that revenue should be reported at the moment when the 'critical event' occurred [Myers, 1959]. The entrepreneur's task lies in directing business, enduring the suffering of risk and receiving rewards from his/her bold decisions. Therefore, income is said to have been earned at the moment the most important decision has been made or when in a complete transaction cycle the most difficult task has been achieved. In most firms, sale is the critical event, at which point income should be recognized.

Horngren's characterization of realization as explicit reporting of the event of exchange may be said to belong to this category [Horngren, 1965].

We have the following objection. Even if sales should be so important, the really 'critical' event is not the delivery of the merchandise which is the exact event for revenue recognition in current practice, but the consummation of the sales contract or the date of order acquisition. Why not report profit on this date? (This view would lead to adopting Ijiri's 'commitment accounting', which proposes to recognize the events at the time contracts are made [Ijiri, 1975], [Ijiri, 1980]).

We propose the realization principle or the sales basis can be explained as a consistent measurement of 'quasi-rational costs'. As stated above, historical cost, replacement cost and the maximum expected revenue (MER) are concerned here, so we must define their measures of cash and accounts receivables. A logical extension of historical cost is the amount of money required to replace the good at the moment of its original acquisition (or assuming no price changes have occurred). To reacquire (replace) some amount of money, $500 cash, we must give the same amount of money. Hence,

An estimate of HC and RC of cash = the quantity of monetary units held. ………………………… (18)

By almost the same reasoning,

An estimate of HC and RC of an account receivable = the net collectible amount of money. ………………………… (19)

Net realizable value of cash is the quantity of monetary units because giving the cash we will get the same amount of cash. Obviously, the net realizable value of an account receivable is the net collectible amount. The present value of future cash inflows from investing the given amount of cash or a receivable certainly will be greater than their current monetary amount. Hence, our conclusion is that

MER of cash > its quantity of monetary units held ……… (20)

MER of an account receivable > its net collectible amount ………………………… (21)

The quasi-rational cost is the least of HC, RC or MER. From (18) and (20) we see the quasi-rational cost of cash is measured by its quantity of monetary units held, while that of an account receivable is its net collectible amount. Deduction of realization principle will follow. Since in case of normal profitable good its selling price is greater than HC or RC, its quasi-rational cost before sale is the smaller of HC and RC, with the recognition of profit prohibited. Upon sale, cash or some account receivable flows in. Its quasi-rational cost is, as stated above, its quantity of monetary units or its net collectible amount. In consequence, if we make a consistent measurement of quasi-rational cost, revenue will appear at the date of sale and the net profit will naturally have to be reported in the amount of aquired cash (or net collectible money) - min (HC, RC).

10. Conclusion

The purpose of this paper has been to logically deduce a set of major conservative financial accounting rules based on a couple of behavioral assumptions of a (quasi-)rational manager. Our conclusion is that those various conservative measures on the balance sheet is the 'lowest of cost-market-or benefit' attainable by a sort of rational manager with a perfect predictive ability.

A practical implication of this analysis is the possibility of extension of current conservative accounting system such that not only the cost side but also the revenue side would be evaluated by the standard of a (quasi-)rational manager. That is, we could imagine that in a period when the good involved has been sold a maximum amount of revenue as attainable by a quasi-rational manager will be shown on the income statement whereas its difference from the actually realized revenue will be recorded on the debit side of the report as a loss after the fact resulting from, say, the predictive error of the 'actual' manager. Returning to the example in Figure 1 above, the income statement in 1994 would have to include the maximum possible revenue $3.5 on the credit side, which would be matched with a prediction loss zero, because, if everything should have come out as planned for 1994 in Figure 1, no errors would have occurred. If, on the contrary, the selling price had been $5.0 on January 1, 1994, which would have dropped to $3.5 at the year-end, when sale would be made, our proposed income statement for 1994 would have to show sale revenue of $5.00, then, contrasted with a loss from sale prediction error of $1.5 on the debit side. This kind of income reporting would approximately reveal the extent to which the 'actual' manager has not been able to attain a maximum revenue because of partly responsible and partly inavoidable price changes about the inventory asset. Since not all of that loss could be attributable to the manager's defects, that amount would have to be interpreted more as the extent of price risk facing the firm. Such information would be potentially useful for the evaluation of the firm's economic value.

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EFFECTS OF FINANCIAL DEREGULATION ON AUSTRALIAN FINANCIAL SYSTEM

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Ⅰ. Introduction

In the 1980s, Australian financial system has changed very drastically after establishment of the Campbell Committee in 1979. Australia now has a virtually fully-deregulated financial system. The deregulation not only changed the extent and nature of links between borrowing and lending but also has been making wide and deep effects on Australian economy as a whole.

The main purpose of this paper is to examine the effects of the deregulation on Australian financial system, efficiencies of financial market, and capital flow or foreign debt. The contents of this paper are as follows: (1) to review the content of the deregulation in Australia (Part Ⅱ); (2) to make clear effects on Australian financial system of the deregulation (Part Ⅲ); (3) to examine how the deregulation contributed to the increases of efficiencies of Australian financial system, which are main purpose of the deregulation (Part Ⅳ - a); to make clear how the deregulation has made effects on capital inflow and outflow - the rises of net foreign debt, which is main economic problem of Australian economy in recent years (Part Ⅴ - b); to make touch on meaning of the deregulation on financial activities in the Asia-Pacific Region (Part Ⅴ).

Ⅱ. Financial Deregulation in Australia

Australian monetary authorities had strictly controlled financial institutions, especially banks up until the end of the 1970s'. On the other hand, regulatory authorities had not so severely restricted activities of non-bank financial institutions such as finance companies, building societies, credit unions and so on. This assymetry of regulation on banks and non-bank financial institutions resulted not

only in the decrease of importance of the former as financial intermediaries and increased the importance of the latter but also decreased the efficiency of resource allocation because of restrictions on competition among financial institutions. Government securities market and the foreign exchange market also were regulated strictly by the authorities. In addition, the circumstances surrounding the Australian financial system had changed very drastically during the preceeding three decades. The Australian economy had enjoyed prosperity during the 60s, however it suffered from high inflation and severe unemployment during 70s. The high inflation rate induced high interest rates. The effects of the development of international financial markets and financial innovation were permeating into the Australian financial markets. Money supply control policy, which was adopted in replacement of a Keynesian type monetary policy in 1976, was not conducted particularly well under the regulated financial system.

Against this background, the conservative government established the Committee of Inquiry into the Australian Financial System (the Campbell Committee) in January 1979. Since then, both the Liberal and Labor government have advanced deregulation of the Australian financial system very rapidly. The deregulation is divided into three main parts; banking sector, government securities market and foreign exchange market.

(1) Deregulation of Banking Activities

The main deregulations on banking activities which have been implemented since 1979 are deregulation of interest rates, maturity of deposits, bank portfolios and entry to banking.

At the beginning of the 1980s, the Australian monetary authorities decided to take steps to liberalise the financial system. The first big step, in Dec.80, was to abolish the ceiling on interest rates on bank deposits except checking accounts. The abolition of the ceiling resulted in narrowing of the margin between market interest rates and interest rates on bank deposit. In August 1984, the prohibition of bearing interest on checking accounts was lifted. Now both trading banks and savings banks can freely set interest rates on all deposits.

The Reserve Bank of Autsralia had controlled interest rates of lending, especially overdrafts, as well as interest rates on deposits although its controls on the former were not as strict as on the latter.

Traditionally, Australian banks provided finance to customers through overdraft, and the Reserve Bank imposed a ceiling on the interest rates. The Reserve Bank gradually eased it on the interest rate of lending, and in April 1985, it advised banks that these remaining ceilings on their lending interest rate other than for housing loans had been removed. Finally in 1986, the ceiling on housing loan were abolished.

For many years the Reserve Bank had controlled maturities of fixed deposits between 3 months and 24 months. However, with the financial deregulation in the 80s, maturity controls on fixed deposits of trading banks and saving banks were eased and finally abolished in August 1984. This deregulation made it possible for banks to raise funds at the market interest rate in the short term money market and manage their liabilities very flexibly and efficiently.

Monetary authorities had controlled bank portfolios in various ways in order to implement monetary policy. Direct controls on portfolios of trading banks and saving banks through the quantitative guidance on lending of trading banks and SRD/LGS control very severely restricted lending activities and portfolio management of both banks. However almost all these controls were eased during the first half of the 1989s. Trading and savings banks have extended financial activities and improved the management of assets and liabilities since the deregulation of financial activities.

The Australian Government had prohibited foreign banks' entry into the Australian banking sector except for the Bank of New Zealand and the National de Paris which had been permitted to enter into banking business before World War II. In addition, there was no bank entry from domestic interests until the 70s. At the end of 1970s, there were only six major trading banks and six small banks. Furthermore, monetary authorities controlled the prices of their products and restricted their activies. Therefore the Australian banking market was a typical conservative oligopolistic market.

However the establishment of the Campbell Committee, together with other factors, made it feasible for foreign banks and domestic interests to enter into the banking market. The Australian Bank was established in February 1981. The process and development of the investigation and discussion at the Committee revealed that the Committee and the monetary authorities had a positive attitude toward foreign bank entry into the banking system. Taking account of

possible invasion of powerful foreign banks, after complicated negotiation, the two big mergers finally occurred in 1981. One was the merger between the Bank of NSW and the Commercial Bank of Australia, and the other was the merger between the National Bank of Australia and the Commercial Banking Company of Sydeney. The former is now named Westpac Banking Corporation, the latter the National Australia Bank. ANZ Bank, who did not succeed in mergering with domestic bank, took over an English bank, the Grindly Bank in 1983 in order to strengthen its international banking business.

On the recommendation of the Campbell Report in 1982 and the Martin Report in 1984, the Treasurer issued a statement in February 1985 that following consideration of 42 applications, the Government had selected 16 new banks including 3 Japanese banks which would be invited to establish local banks rather than branches in Australia. The Australian government had particular regard to the need to secure an appropriate regional distribution taking account of trade and other economic factors, foreign relations and reciprocity consideration. In September 1985, the Chase Manhattan/AMP bank started its banking business as the first new foreign bank entry and was followed by Barclays Bank in the October, the Bank of Tokyo in November, and City Bank in December 1985. Now 16 new foreign banks including the bank of China are doing banking business in Australia.

At the same time, the Australian government temporarily eased regulations on foreign investment of merchant banks and authorized 65 new foreign merchant banking in Australia.

In addition to entries of foreign interests to the banking market, new entries from domestic interests occurred. In February of 1985, the NSW Building Society submitted a plan to become a savings bank (Advance Bank Australian) and was authorized by the Treasurer. In March of 1983, merchant banks, Hill Samuel Australia started its trading banking business as the Macquarie Bank. New entries from both domestic and foreign interests, together with, other deregulations of the financial market, contributed to the change from non-competitive oligopolistic banking market to a competitive one.

(2) Deregulation of Foreign Exchange Market

The second major aspect of the deregulation of the Australian financial system is related to the government intervention into the

foreign exchange rate and transaction in the foreign exchange market. At the beginning of the 70s, major countries adopted a floating exchange rate system in place of a fixed exchange rate system. The Australian exchange rate system also changed during the 70s, but the system was not the same as a floating rate system because the exchange rate was not determined by the supply and demand for foreign exchange in the market but by the monetary authorities. They intervened in both spot and forward market in order to restrict the speculative and disturbing movement of short-term capital flow. Exchange controls on the spot market included 30 days rule, variable deposit requirement, embargo on short-term borrowing, restriction on foreign investment by Australian residents, control on interest bearing investments in Australia by non-residents, and so on. Exchange control on forward markets included 7 days rule, embargo on entry to forward markets by non-residents, prohibition of risk cover with capital transaction in official market.

In the 70s and the early part of the 1980s, however, the need for and effectiveness of exchange controls came to be widely questioned. In addition, monetary authorities had recognized the conflict between the money supply control policy and the foreign exchange policy.

The first big step toward liberalisation of the foreign exchange market was in October 1983. The Reserve Bank phased itself out of direct involvement in forward exchange. The next big step was the Government's decision to float the Australian dollar and to abolish a major part of the existing exchange control in December 1983. The third big step was in June of 1984. Forty companies were authorized to deal in foreign exchange on the same term as bank dealers. Apart from the tax screening provision and foreign investment policy, only controls retained in terms of the Banking (Foreign Exchange) Regulations as at the end of June 1984 relate to investments to Australia by foreign governments, their agencies and foreign banks including central bank, and on the carrying or sending of Australian notes and coins out of Australia.

These three steps toward the liberalisation of the foreign exchange market made the Australian foreign exchange market wider, deeper and more flexible and increased freedom of capital flow in and out of Australia.

(3) Deregulation of Government Securities Market

The third major aspect of deregulation of Australian financial system is related to the government securities market. The Australian Government's intervention was based on its willingness to depress the interest rate below the market rate which would prevail otherwise. This system had some merit if the monetary authorities conducted monetary policy based on interest rate targeting. However, they abandoned the interest rate targeting policy and adopted monetary targeting policy in 1976 because of high inflation and unemployment at the time.

In December 1979, the Treasurer notified the change in the issuing system for Treasury notes from a tap system to a tender system. The next step in April 1980 was the change in the issuing system of Treasury bonds, that is medium and long term government bonds, from a periodical issues system to a tap system. It was followed by the Loan Council's determination in June 1982 to manage the issuing method of Treasury bonds from a tap system to a tender system. The Loan Council approved that the Treasurer would detemine the timing of the tenders and the quantity of the Treasury bonds sold. Prior to this, the Loan Council had determined aggregate annual borrowing programmes of the authorities of the Commonwealth and State Government as well as of those of governments themselves. It prescribed maximum terms and conditions for various categories of public sector borrowing, determined the allocation of programmes between States, regulated the timing of public loans in Australia and approved the term, conditions and timing of overseas borrowing. However, after some easing of those regulations, in June 1983, the Loan Council freed all the larger semi-government borrowers from its control as to the term, conditions and timing of their borrowing. Although the overall annual total would still be set, a former chairman described the changes as 'a de facto dissolution of the Loan Council'.

In addition to the deregulation of the issuing market of government securities, the Treasury liberalised their secondary markets, especially the easing of compulsory or tax induced holding of government securities by financial institutions such as authorised money market dealers, life insurance companies, savings bank. Further, transaction arrangements between the Reserve Bank and financial institutions have changed. Until the end of 1984, the Bank

dealed in government securities with the authorized money market dealers alone. In January 1985, the Bank started to deal in securities beyond one year maturity through a variety of financial institutions selected from amongst the trading banks, merchant banks, life insurance companies and authorised dealers.

The deregulation of government securities transactions together with the introduction of the new arrangement for transactions means that the interest rates of government securities are determined in the market and it stimulates the width, depth and flexibility of the government securities market.

Ⅲ. Effects of Financial Deregulation on Australian Financial System

Financial deregulation in Australia have made wide and deep effects in Australian financial system. The main effects on the systems are as follows.

(1) Effects on Relative Shares among Financial Institutions.

As mentioned above, one of main part of the financial deregulation in Australia is removal of controls on Banking business.

The regulation resulted that banks have been able to compete more freely and equally among themselves and other non-bank financial institutions such as merchant banks, financial companies and building societies. In addition, new entries to banking from both foreign banks and domestic NBFI, especially building societies and merchant banks, resulted in rise of share of banks and fall of share of NBFI.

In the end of 1980, the share of banks in term of assets was 40.8 percent. It increased to 42.3 percent in the end of June of 1988. On the other hand, NBFI as a whole lost its share, while merchant banks and unit trusts have maintained on increased their share.

(2) New entries and Merger-Concentration.

The financial deregulation has promoted both establishment of new banks and mergers between established banks. As mentioned earlier, the monetary authority permitted new entry from foreign and domestic interests as commercial banks and merchant banks. On the other hand, financial deregulation produced mergers between big

commercial banks. The establishment of Westpac Bank and Australian National Bank in 1985 reflected the fact that big Australian banks expected new entries of foreign banks and would defend themselves against strong competitive foreign banks. As a result, the number of banks increased from 12 at the beginning of 1980 to 47 in August of 1990. Financial deregulation promoted mergers and concentration of not only commercial banks but also other financial institutions such as building societies and credit unions. There were 139 building societies in 1980, however, in 1984, the number decreased to 75 and, in 1989, to 54. There were 647 credit unions in 1980. The number also decreased to 530 in 1984, and to 396 in 1989. Financial deregulation generated opposing forces such as new entry and exit of financial institutions, and through the deregulation and stronger severe competition, it would expect to increase efficiencies of financial markets.

(3) Movement of Big Banks toward Universal Banking

Commercial banks and saving banks had been regulated very strictly by banking law and monetary authorities before financial deregulation during 1980's. Especially, commercial banks were prohibited to engage merchant banking activities and broker business of securities.

Merchant banks raised money in the short money market and invested it freely, while commercial banks were regulated to issue time deposits with shorter maturities than 3 months. Merchant banks were able to expand their business in the short money market in the 1970s and 1980s.

In addition, the limit on holding shares of merchant bank by commercial banks had been 33.3%, which the regulation was eased to 60% in May of 1980. Further more, in August of 1984, the regulation was abolished and commercial banks were able to hold 100% merchant bank subsidiaries.

A similar process had occured in the field of broking business of securities. In Australia, security brokers and merchant banks could manage issuing and accepting business of shares, while in the secondary market, share brokers acted as an agent for buyers and sellers of shares. Share broker were generally not stock companies but partnerships, however, since 1984, Australian stockbroker industry has undergone substantial change. These have included the

incorporation of stockbroking firms and the introduction of commercial banks and foreign ownership of firms.

Now Australian commercial banks, especially the big four banks have saving banks, merchant banks, finance companies, and stockbroking firms as their subsidiaries.

In effect, the big four banks are able to do a kind of universal banking.

(4) A Reduction of Demarcation between Financial Institutions

Financial deregulation reduced demarcation between financial institutions. Two factors contributed to the reduction of demarcation; The first is the entries from different financial institutions into other financial sector such as commercial banks establishing new merchant banks and stock broking firms. The second is that the regulation promoted similarity in portfolio composition between different financial institution.

Deposit thrift institutions such as commercial banks, saving banks, building societies and finance companies had specialized in particular financial business, however financial deregulation stimulated financial institutions to invade other financial sector, and it resulted in similarity of business.

Commercial banks had specialized in business finance, however they have been increasing housing loans and consumer finance. Finance companies have been expanding business finance beside traditional consumer finance. Building societies had specialized in housing loans, however they have been increasing consumer finance.

On liabilities side, these deposit taking institutions have been issuing similar liabilities. They are issuing not only time deposits but also demand deposit with checking facilities within a certain limitation. Financial deregulation stimulated the reduction of the demarcation between different financial institutions through the increase of competition. At the same time, reduction of demarcation itself intensifies competition between different institutions.

(5) Abolition of the Demarcation between Public Finance and Private Finance

Australian monetary authorities had regulated the primary and secondary market of government and semi government seurities market

in order to have funds raised at lower cost than the cost which would be determined in a free market and also in order to implemente low interest rate policy. As mentioned previously (section 1), the deregulation of government securities transaction together with the introduction of new arrangement for transaction, means that interest rate on government securities are determined in the market and it stimulated the width, depth and flexibility of the government securities market.

It has also meaned that the interest rates on government securities and private securities are freely determined by market forces. These rates reflect risk and profitability of these securities, therefore artificial demarcation between public finance and private finance vanished.

Table 1 shows the development of average daily turnover of government bonds, bank bill, and equities from 1978 to 1988. Average turnover of government securities increased from $70 million in 1978 to nearly 1.6 billion in 1988, increase of over twentyfold. In the same vein, average daily turnover in futures contracts for government securities rose from nothing - the futures markets did not exist ten years ago to $1 billion in 1988. Both are spectacular increase. The turnover of bank bill is larger than of bonds, and its growth was very fast too. Equities turnover increase at a lesser.

These figures show a period of strong growth of Australian debt and equity in 1980's. Of course, it reflects deregulation of interest rate of government bonds in term of bond tenders, but also deregulation of international movement of capital in Australia and the rest of world. Non residents increased holding of Australian securities since abolition of exchange controls and the floating of Australian dollar.

(6) Development of the Foreign Exchange Market

The deregulation of Australian financial system combined with movement toward the internationalization of finance in advanced western countries promoted the development of foreign exchange market and capital flow in and out of Australia.

The Australian foreign exchange market developed very rapidly since the deregulation of foreign exchange market in December 1983. The average yearly turnover of foreign exchange was $100 million in spot, $10 million forward, $110 million in total in November 1983. It

rose to $43.6 billion, $7 billion, $50.5 billion respectively. It is about 500 times in total.

Table 2 shows the size of foreign exchange markets in the world. The size of Australian market in term of gross and net turnover is 7th place next to the Hongkong market. The size relative to the size of GDP in Australia is very large. Fig.1 gives market share by currency in Australian foreign exchange market. The main type of third currency trading (i.e. not involving the Australian dollar) involve the Deutsche mark (18 percent of total turnover), yen (12 percent) and sterling (10 percent). On the other hand, less than 50 percent of turnover is against local currencies-Australian dollar. This pattern is consistent with Australia's role as a bridge linking the major the foreign exchange markets of New York, Tokyo and London. The openness of Australia's financial markets, a favorable time zone location and capital flow associated with the financing of a substantial current account deficit have continued to underpin the Australian foreign exchange market.

On the other hand, the deregulation of the Australian financial market and expansion of foreign exchange market resulted in severe competition among foreign exchange dealers. Before the deregulation, only 13 commercial banks were authorized to deal foreign exchange. However, after that, not only, new foreign bank and domestic banks but also authorized merchants banks were permitted to enter the dealing. As the result, there were 92 dealer doing business in February 1989. However strong competition pressures led to some rationalization. The total of authorized foreign dealers fell from a peak of 92 to 85; 31 are banks and 54 non-banks in 1990.

(7) Internationalization of Banking Business

The deregulation of Australian financial market and the development of international financial market in the world have promoted Australian banking business to internationalize in the 1980s. It has two aspects: foreign bank entry to Australian financial markets and internationalization of Australian banking business.

As mentioned above, Australian monetary authorities permitted 16 foreign banks to establish their banks as subsidiaries. Generally Speaking, new foreign-owned banks recognized the heavy infrastructure cost of retail banking and have sought to sharpen their focus by

tageting niches in the corporate banking market. Table 3 shows the market shares of the different groups of banks in recent years. The share of the new foreign banks rose from 6.8 percent at the end of September 1986 to 9.6 percent at the end of September 1987, due largely to diversion from non-bank subsidiaries to banks. Since then it has remained fairly steady, but it expanded rapidly in 1990. The expansion of market share of foreign bank as well as new Australian banks resulted in a steady reduction in major banks' share. The new foreign banks are mainly concentrated in commercial and other lending categories, reflecting their extensive wholesale banking nature of their operation.

In addition, the new foreign banks have a substantially higher share of aggregate off-balance sheet business then on-balance sheet asset in Australia. They are particularly active in the market-rate-related area, especially currency swap and interest rate swaps. In part at least, this is a reflection of their corporate banking focus. It seems that new foreign banks have established their base in Australian banking market.

In the 80s, the overseas operations of Australian banks have continued to expand over recent years. Four major banks have undertook and expanded major parts of overseas activities.

Several factors contributed to development in the international operations of Australian banks. Firstly, the financing of international trade was major factor in the earliest offshore operation. The financing of international trade was a major motivation behind Australian banks' earliest offshore operations. Australian companies expanded their activities overseas, banks have followed their clients in order to service their needs and to protect home based banking relationship. Secondary, the deregulation and greater integration of international financial market, facilitated in part by more flexible exchange rate arrangements, have encouraged banks to conduct business across national border. Australian banks have also sought to establish office in major financial centres (see Table 4). Thirdly, the entry of new foreign-owned banks into the Australian banking system has given an additional impetus to Australian banks offshore expansion. For example, the establishment of branches of four major Australian banks Tokyo in 1985 and 86 was based on the reciprocity that the Australian treasury authorized 16 foreign banks including 3

Japanese banks.

Table 4 shows a list of the overseas representations of Australian banks. The form of representation and the type of business undertaken in individual centres may be influenced by local requirements and reciprocity requirement. The main locations of overseas network are world financial centres such as London, New York and Tokyo, and also in the Asia and Pacific area which are Australian main trade partners.

The overseas assets of the major banks were about 31 percent of their total assets at end June 1987, compared with about 24 percent in June 1983. Fig.2 shows the detail of the country exposures of Australian banks. Main country exposures by regime are USA (18.8%), Japan (17.3%), UK (13.6%) and Asia (12.3%). This pattern is similar to overseas network of major banks.

IV. Effects of Financial Deregulation on Efficiencies and Capital Flow

Since the Campbell Committee was established in 1979, financial deregulation advanced very rapidly and it has had wide and deep effects on performances of financial markets and the Australian economy as a whole. The committee's examination focused on existing areas of government intervention which bore significantly on the efficiency of the system. The Committee was confident that if official barriers to entry and participation were removed, the financial system would be strongly competitive and this would ensure that funds were generally allocated in an efficiently neutral fashion to all groups and sectors of the economy.

In addition, the Committee expected that deregulation would, if implemented, have significant effects on not only the competitive structure of financial intermediation but also the income distribution between different groups of lenders and borrowers in the system. In effects, however, the impact of deregulation is more than the Committee expected. The deregulation has had deeper and wide effects on Australian economy as a whole, especially on the foreign debt problem which is one of the most important problems in the late 1980s. Therefore, we examine in this part: (1) whether the deregulation increased efficiencies of financial market; (2) what effects the deregulation made on inflow and outflow of capital in Australia, or the,

foreign debt accumulation problem.

(1) Impact on Efficiencies in the Financial Market

Enhanced competition by financial deregulation would be expected to increase efficiencies in the financial markets in the form of either:

(a) a greater diversity of services for the same cost
(b) reduced fee for existing services
(c) a smaller differential between interest rates paid by banks on deposits and those charged on loans

Table 5 shows a list of new financial products and services developed by banks since 1980, when ceiling of interest rates on deposits was removed. The list confirms us that a greater diversity of services has increased markedly during 10 years. Customers in the retail market can now enjoy new products and services such as variable repayment mortgages, automatic sweep facilities, cash management accounts, and electronic funds transfer at point-of-sale (EFTPOS). In the wholesale area, customers can make use of the gamut of treasury products such as swap, options and futures. While there are some arguments that consumers cannot take full advantage of the new options because where are obstacles to excercising freedom of choice, it is hard to see how anyone could claim to be worse off as a result of the wider choice and diversity in bank products and services.

Financial deregulation had been expected to reduce financial cost and, in result, fees for financial services. Fig.3 shows that for the major Australian banks net interest income as a proportion of average assets fell from around 4 per cent in 1982 to around 3.25 per cent in 1990 and Fig. 4 shows that the ratio of non-interest expense (excluding bad debt provisions cost) to average assets fell from 4.6 per cent to around 3.2 per cent. We also indicate by Fig.5 that fees of foreign exchange transaction in a retail market, the spread by buying and selling, i.e. fee of foreign exchange by Westpac Bank, had reduced since the deregulation of foreign market in Dec. 1983. These figures suggest the deregulation has contributed to increased efficiencies in financial operations through severe competition between financed intermediaries. In addition, we can confirm increase of efficiencies by Table 6, which shows the components of banks profits. The fall in profits occurred despite a substantial increase in the efficincies of banks as indicated by the reduction in their operating costs. Part of the reduction in

operating cost was absorbed by higher bad debt expenses, but more of it was passed onto customers through lower interest margin and fee-suggesting the operation of substantial competitive forces.

(2) Effects of Financial Deregulation on Australian Inflow and Outflow of Capital and Foreign Debt Accumulation.

The removal of various controls on international financial transaction since the early 1980s, especially the floating of Australian dollar in Dec. 1983 allowed Australian entities much greater access to the world capital markets and vastly expanded opportunities to acquire foreign assets. As Table 7 shows, foreign borrowings have risen sharply since early the 1980s, and so too has Australian investment abroad, particularly equity investment. In June 1980, net foreign debt was $7 billion : by Sept. 1989, it has grown to $112 billion. The ratio of debt to GDP has risen from around 5 per cent in the late 1970s to around 32 per cent in the late 1980s.

Table 8 shows level of foreign investment in Australia by source countries for give years ended June 1989. The United Kingdom and the United States are the traditional source countries and they are still most important capital suppliers. However, Japan and other Asian Pacific countries such as Hong Kong, Singapore, New Zealand are becoming more important countries. On the other hand, Fig.6 shows stock of Australian direct equity investment abroad in June 1988. UK is still important direction (34 per cent), however, Asean Pacific countries, USA (20 per cent), and New Zealand (15 per cent) are also important. The share invested in ASEAN countries is small (2 per cent), however, it is expected to increase in near future because ASEAN economy has been growing very fast and economic relation, especially trade interdependence between Australia and the region is very important.

These facts confirme us that deregulation of financial market has increased the Australian inflow and outflow of capital and interdependence between Asia Pacific region. However, it should be recognized that three movements has resulted in heavy accumulation of foreign debt which let to Australian economy difficult in 1980s and 1990s.

What is the reason for the rise in net debt ? How did the deregulation of financial market contribute to it ? The most

fundamental reason is large and persistent deficits on her current account. The average current account deficits in 1960s and 1970s was 2.25 per cent of GDP. It rised to more than 4 per cent in 1980s. Changes in current account deficit are identical to changes in saving-investing balance. In the first half of the 1980s, Australia experienced a combination of expansionary fiscal policy and a rise in the current account deficits. Many economist thought that fiscal deficits contributed to the rise of current account deficits. In the second half of 1980s, fiscal deficits decreased drastically, although it has remained still large and net foreign debt increased very much. Public savings has increased from the bottom and private saving been fairly stable while personal saving ratio decreased considerably, however private investment increase very much so that current account deficits remain so high.

Has the deregulation been a factor in explaining the behavior of the current account and the net foreign debt ? Firstly, the deregulation of exchange controls has increased the mobility of capital and has given domestic residents greater access to foreign savings. As a result, potential investors, who had been previously constrained by funding shortage, were able to finance their investment. Secondly, deregulation has altered the portfolio investment decision of corporation and methods of financing of investments. Between June 1980 and Sep. 1989, Australian equity investment abroad rose by about $44 billion. Part of the large rise was financed by increased foreign borrowing.

Fig.7 shows gross capital flow as a proportion of GDP. Both outflows and inflows of capital have increased relative to GDP in the 1980s. Capital inflows averaged 6.5 per cent of GDP in the 1980s - more than double the average of the 1960s and 1970s. Capital outflows grew steadily during the decade, averaging 2.5 per cent of GDP in the 1980s compared with less than one per cent in both 1960s and 1970s.

The rise of capital mobility induced by the removal of exchange control had significant effects on the degree of a correlation between saving and investment. Easy access of Australian entities to foreign savings has increased and facilitated the widening in the current accounts deficits and resulted in the net foreign debt of Australia.

V. Financial Deregulation in Australia and Its Effects on the Asia-Pacific Region

In this paper we examined financial deregulation in Australia and its effects on financial activities and the Australian macro economy. We can summarize our argument as follows: (1) Australian financial deregulation in the 80s was divided into three main parts, dereguration on Banking Activities, dereguration of foreign exchange market, and dereguration of government securities markets. (2) These dereguration made wide and deep effects on the Australian financial system. The effects included a change of relative shares among financial institutions, new entries, mergers and concentration, a movement toward universal banking, a reduction of demarcation between financial Institutions, a demarcation of public finance and private finance, development of foreign exchange markets, and the internationalization of banking business. (3) However, these changes themselves are not important. What important is whether these changes increased efficiencies in the financial system. We examined this point in terms of diversity of services, reduced fee for existing services and the smaller differential between interest rates paid by bank on deposits and those charged on loans. We have some date suggest the dereguration have contributed to increase efficiencies of financial operation through severe competition between financial intermediations. (4) We also examined what effects the dereguration makes on inflow and outflow of capital in Australia, that is, one of the most economic problems in Australia late of 1980s. We confirmed that the rise of capital mobility induced by the removal of exchange controll had significant effects on the degree of a correlaton between saving and investment. Easy access of Australian entities to foreign saving has increased and facilitated the widening in the current accounts deficits and resulted in net foreign debt.

What meaning do these changes to the Australian financial system and its effects on financial activities and macro economy have for the Asia and Pacific? Firstly, since the floating of the Australian dollar in December 1983, the Australian foreign exchange market has grown considerably in scale and sophistication and it now forms an important link in the trading of foreign around the globe, especial Asia and Pacific. One of main reason of its rapid growth, besides removal of control on foreign exchange market, is time zones.

The Australian market enjoys an advantage over other markets in the Asia-Pacific region as the early and late parts of the trading day overlap with late New York and early European trading respectively. At the same times, there is an increased volume of trading between Australian market and Tokyo market where banks are opening earlier to trade into the first hour or two in Australia. The deregulation and time zone difference have contributed to increased convenience and business chances in the Asia-Pacific region.

Secondly, the entry of foreign banks into the Australian banking market and internationalization of Australian banking during the 1970s would promoted increased economic linkages in the Asia-Pacific region. Interdependence of trade in the Asia-Pacific region has increased very rapidly in the 1960s and 1970s. These development promoted not only increase of direct investments but also financial transaction in this region. Australian banks established new branches and agencies in Asia-Pacific region. On the other hand, Japanese banks and other Asia banks established new local banks in 1980s. These development would promoted increase of trade, direct investment and financial inflow and outflow of capital in this region.

Thirdly, the removal of various regulation promoted Australian entries with much greater access into world capital markets and vastly expanded opportunities to aquire foreign assets. The level of total foreign investment in Australia grew from 70.9 billion in June 1983 to 245.9 billion. While U.K. is still the largest foreign investment country in Australia, the share is declining. Asia-Pacfic countries such as U.S.A., Japan, Hong Kong, Singapore, New Zealand have increased their share and absolute amounts. At the same time, the Australian lending abroad and Australian equity investment abroad have increased very rapidly. For example, the stock of Australian equity investment abroad over the 1980s grew from 23.2 billion in June 1980 to 87.6 billion in September 1989, which have been dominated by direct equity direct investment. U.K. is the largest direction, and USA (20 percent) and New Zealand (15 percent) are important. While the share invested in ASEAN countries is still small, it would be expected that rapid growth of this region and increase of economic interdependence between Australia and other countries in this region promote Australian entities to increase direct investment to Asia and Pacific region.

The Australian economy and Australian financial markets have

been involved in the Asia Pacific economy and became a important link of Asia Pacific economic relationships. However, it should be noted that Australian excess dependence on foreign saving may become a binding constraint on Australia in the future.

TABLE 1 : DAILY TURNOVER OF AUSTRALIAN DEBT AND EQUITY
(*$ million*)

	Commonwealth Government Securities		Bank Bills		Equities	
	Physical (a)	Futures (b)	Physical (c)	Futures	Physical (d)	Futures
Year to June						
1978	70	-	n.a.	-	10	-
1983	100	-	290	340	30	30
1988	1580	1050	3690	5210	270	230

(a) Turnover registered with Reserve Bank.
(b) Estimated turnover in the 10-year bond contract.
(c) Turnover by banks.
(d) National turnover on Australian stock exchanges.

Source : Reserve Bank of Australia, *Bulletin*, Fed. 1989, p.24.

TABLE 2 : Foreign Exchange Market Activity-April 1989
(*in billions of U.S. dollars per day*)

Country	Gross Turnover	Net Turnover(a)	Share of Net Turnover Arranged Through Brokers (%)
United Kingdom	241	187	38
United States	174	129	44
Japan	145	115	35
Switzerland	68	57	19(b)
Singapore	63	55	n.a.
Hong Kong	60	49	35
Australia	37	30	33(b)
France	32	26	42
Canada	18	15	40
Netherlands	16	13	41

Source : Reserve Bank of Australia, *Bulletin*, March, 1990, p.15.

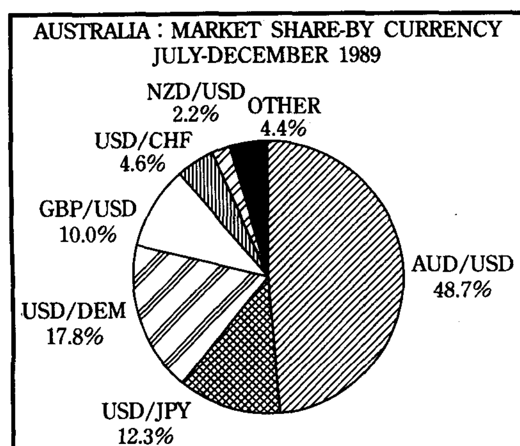

FIGURE 1

Source : Reserve Bank of Australia, *Bullentin*, March, 1990. p.15.

TABLE3: SHARE OF BANKS' AGGREGATE AUSTRALIAN BALANCE SHEET (%)

	End September				
	1986	1987	1988	1989	1990
Major Banks	70.6	68.0	67.8	66.1	64.8
State Banks	17.0	16.0	16.6	17.2	16.8
Other Established Banks	3.0	2.7	2.4	2.3	2.2
New Australian Banks	2.6	3.7	4.1	5.0	5.5
New Foreign Banks	6.8	9.6	9.1	9.4	10.7

Source : Reserve of Australia, *Bulletin*, Jan. 1990, p.9.

TABLE 4 : OVERSEAS REPRESENTATIONS OF AUSTRALIAN BANKS FORM OF REPRESENTATION

September 1987

Country	Full Branch (incl. networks)	Restricted Branch[b]	Subsidiary[c]	Representative Office
Bahrain		1		1
Bangladesh			1	
Brazil				1
Canada			1	
Cayman Islands		7		
Channel Islands	1		4	
China				3
Columbia				1
Fiji	2			
France			1	
Greece				1
Hong Kong	4		6(d)	
India			1	
Indonesia				3
Iran				1
Italy				1
Japan	4			2
Jordan			1	
Kenya			1	
Kiribati			1	
Malaysia				2
Monaco			1	
Nepal			1	
Netherlands Antilles			1	
New Zealand	2		1	
Nigeria			1	
Oman			1	
Pakistan			1	
Papua New Guinea			3	
Qatar	1			
Singapore		4(e)	3	1
omon Islands	2		1	
South Korea	2		1	2
Spain				1
Sri Lanka	1			
Switzerland			1	1
Taiwan	1			3
Thailand				2
Tonga			1	
Tuvalu			1	
Uganda			1	
United Arab Emirates			1	
United Kingdom	8		1	
United States(f)	11	10	6	6
Vanuatu	2	1	1	
West Germany	1			3
Western Samoa			1	
Zaire			1	
Zambia			1	
Zimbabwe			1	

Source : Reserve Bank of Australia, *Bulletin*, Dec. 1987, p.21.

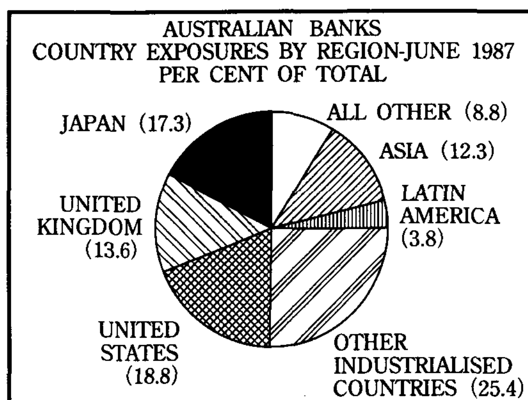

FIGURE 2

Source : Reserve Bank of Australia, *Bulletin*, Dec. 1987.

TABLE5: Indicative List of Major Product Innovations by Banks since Deregulation (showing year of general availability)

1990	Mortgage Offset Account
1989	Payroll System
	Business credit cards
1988	Bankcard debit/credit card
	Enhanced retirement services
1987	Life insurance
	Fixed-rate mortgage lending
	Home banking
1986	Housing bonds
	Equity mortgage loans
1985	EFTPOS
	MasterCard ATM linkage
	ATM netword links
	Packaged statement account
	Specialised agri-business and rural budgeting centres
	Telephone banking
	Cash management accounts
1984	Automatic sweep facilities
	Daily interest cheque account
1983	MasterCard
	Compounding term deposits
1982	Variable-repayment home loans
	Visa card for domestic and international use
	Reduced tems and minimum balances for term deposits
	PIN for credit and debit card access
1981	Monthly income term deposits
	Card (rather than passbook) savings accounts
1980	Automatic teller machines

Source: Australian Bankers'Association (1990)

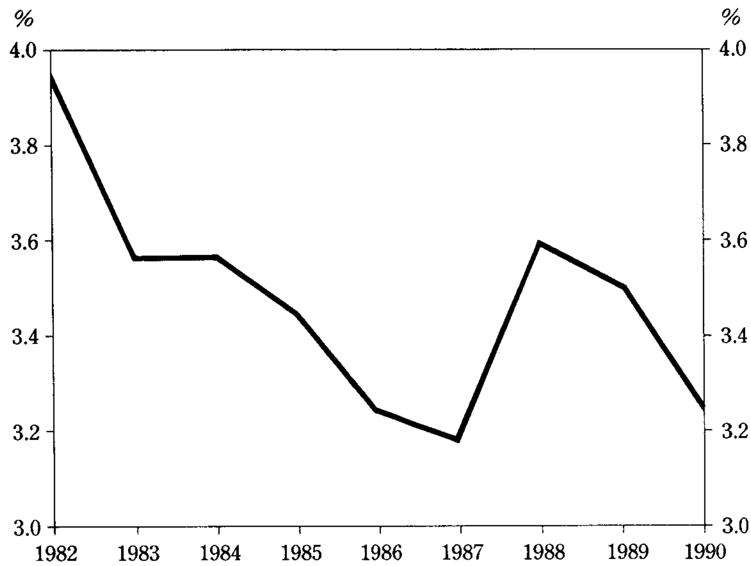

FIGURE 3 : Major Banks' Net Interest Margin

Source : Les Phelps, Competition: Profitability and Margins, p.92.

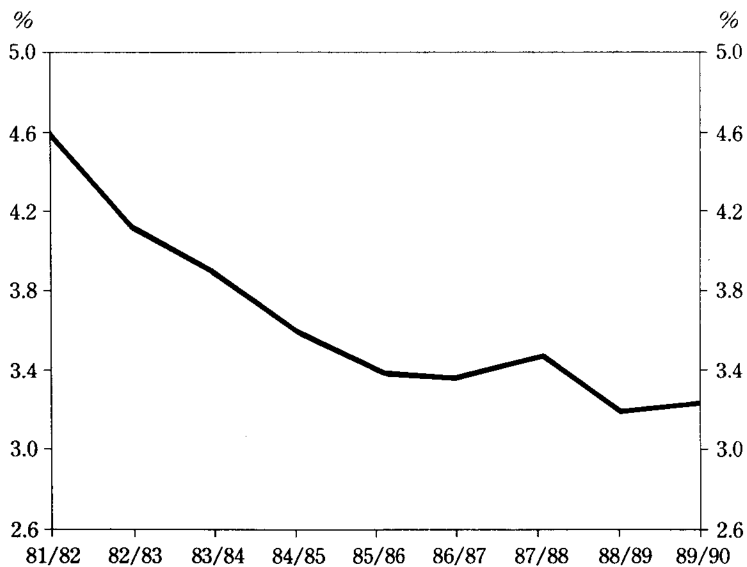

FIGURE 4 : Non-Interst Expenses/Average Total Assets
Four Major Banks

Sourse : Les Phelps, Competition : Profitability and Margins, p.93.

TABLE 6 : Components of Banks' Profits

	% of Average Assets	
	1980/85	1986/90
Net Interest	3.7	3.3
Non-Interest	1.8	1.7
Operating Expenses	3.9	3.2
Bad Debt Expense	0.2	0.5
Tax	0.6	0.6
Profit	0.8	0.7

Source: RBA Submission to the Inquiry into the Australian Banking Industry, January 1991, page 17

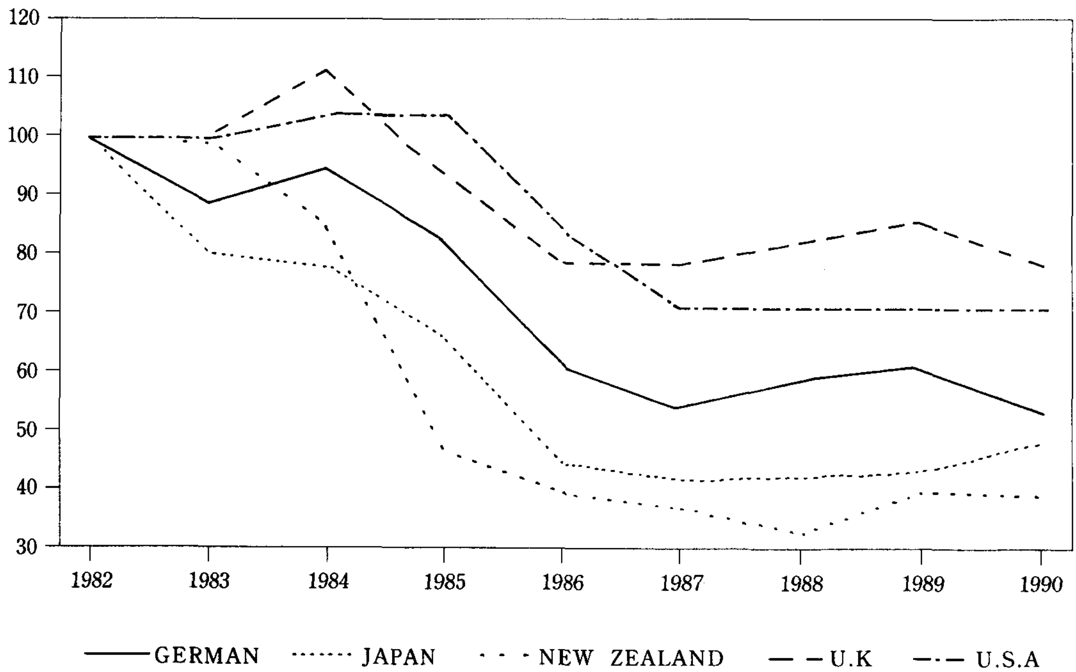

FIGURE 5 : Changes of Spreads in the Retail Foreign Exchange Market (1982=100)

TABLE7: AUSTRALIA'S FOREIGN LIABILITIES AND ASSETS
($ *million*)

At end of	Gross foreign investment in Australia				Gross Australian investment abroad			
	Borrowing	Equity	Other(a)	Total	Lending(b)	Equity	Other(a)	Total
1982 June	24,350	26,389	4,356	55,095	7,803	5,275	3,442	16,520
1983 〃	35,891	30,598	4,446	70,935	12,507	6,478	3,533	22,518
1984 〃	44,101	32,221	5,551	81,873	14,208	8,018	4,480	26,706
1985 〃	67,473	37,562	6,583	111,618	16,265	11,687	5,808	33,760
1986 〃	92,550	41,153	6,884	140,587	17,005	20,253	6,025	43,283
1987 〃	107,416	65,290	7,438	180,144	21,279	33,875	6,853	62,007
1988 〃	122,802	69,175	7,515	199,492	26,951	39,778	6,450	73,179
1989 〃	145,370	84,804	7,254	237,429	29,384	48,302	7,724	85,411
1990 〃	157,317	93,194	6,205	256,716	30,629	51,967	8,391	90,987
1991 〃	166,052	100,398	5,973	272,423	34,712	52,617	7,800	95,129

Source : Reserve Bank of Australia, *Bulletin*

TABLE8: LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA BY CUNTRY, 1984-85 to 1988-89 ($A BILLION)

Country	1984-85	1985-86	1986-87	1987-88	1988-89
United Kingdom	26.1	29.3	37.3	45.7	47.2
United States	26.8	31.9	41.4	40.2	46.8
Japan	16.2	20.8	21.4	26.8	33.3
Germany(FR)	3.6	5.5	7.1	6.4	7.5
Switzerland	4.1	5.9	7.5	7.4	7.0
Hong Kong	3.4	3.0	3.0	4.9	6.8
Singapore	8.9	8.3	9.4	6.8	6.7
New Zealand	1.5	2.1	4.9	5.6	5.1
Netherlands	2.4	3.0	4.1	4.2	4.3
Canada	1.8	1.9	3.4	2.5	3.5
Bel-Lux	2.0	2.6	2.6	4.0	3.5
Central America and Caribbean	2.2	1.8	2.2	2.8	3.4
France	1.6	1.6	2.0	1.5	2.1
Other ASEAN	0.8	0.7	1.1	1.3	0.7
Sweden	0.3	0.3	0.4	0.3	0.5
Italy	0.2	0.3	0.3	0.3	0.3
Other	9.3	20.4	29.3	36.7	50.8
TOTAL	111.3	139.4	177.3	195.6	229.3

Sources: ABS 5305.0 Foreign Investment, Australia, 1988-89
ABS 5352.0 Foreign Investment, Australia, 1988-89: Supplementary Country and Industry Studies

Note: Figures may not add due to rounding.

Source : Foreign Investment Review Board Report, 1989-1990.

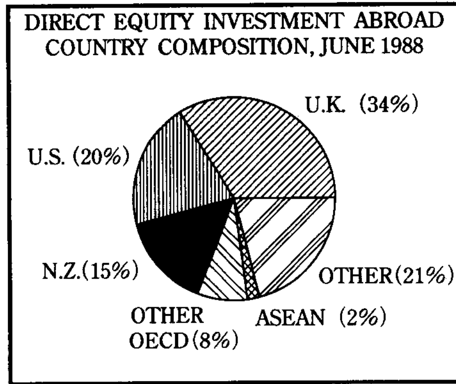

FIGURE 6

Source : Reserve Bank of Australia, *Bulletin*, March, 1990, p.22.

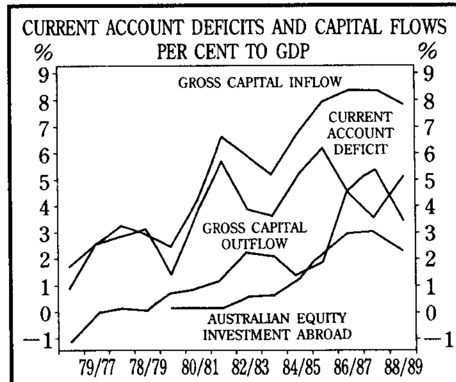

FIGURE 7

Source : Reserve Bank of Australia, *Bulletin*, March, 1990, p.22.

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NAFTA AND ASIA-PACIFIC ECONOMIC RELATIONS[1]

Seiji NAYA[2]

I. Introduction

In the 1980s, many spoke about the dawn of the "Pacific Era," a phenomenon referring in great part to the rapid economic growth of countries in the Asia-Pacific region, fuelled by a remarkable growth in trade and investment. These countries have shared a common pattern of economic growth based on a successful expansion of manufactured exports. The U.S. has played a key role in the dynamism of this region; it has served as Asia's largest single export market and is still a major investor in many countries. Japan, having caught up with the West in the 1970s, not only serves as a model, but has been the locomotive for change through trade, investment, and aid throughout the region.

But the emergence of the Asia-Pacific region is not due to Japan and the U.S. alone; in fact, its dynamism is now being propelled by the rapid growth of the region's developing countries. The so-called newly industrializing economies (NIEs: Hong Kong, Singapore, Taiwan, and South Korea) have been among the fastest-growing countries in the world with average growth rates approaching or even surpassing 10 percent annually in the past three decades. Particularly, South Korea (henceforth Korea) was the star performer in the 1980s; it managed an average annual growth rate of more than 8 percent when most developing regions like Latin America had little or no growth (see Table 1). The four resource-rich members of the Association of Southeast Asian Nations (ASEAN: Indonesia, Malaysia, the Philippines,

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1 I would like to thank Robert McCleery for providing me with published and unpublished NAFTA research and for many helpful conversations and comments on earlier drafts of the paper, and Clarita B. Baretto for her outstanding research assistance. Many of these ideas were first presented in a speech given to the Asia in the 21st Century Conference, Kon-Kuk University, Seoul, Korea, May 10-12, 1993.

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and Thailand) also had strong economic performances, closely paralleling the NIEs in the 1980s and recording nearly the same average annual growth in 1992 (except the Philippines). Malaysia and Thailand are now considered the next tier of NIEs. As growth rates of NIEs and ASEAN countries began to taper off in recent years, the economic growth of China accelerated from 7.1 percent in 1991 to an incredible 12.8 percent in 1992. In fact, certain individual regions such as Guangdong Province (next to Hong Kong) had an estimated growth rate of about 25 percent, an unheard of performance in the annals of economic development.

In the late 1980s an unprecedented globalization and regionalization of economic activity overshadowed the prospect of a "Pacific Era." The global trading environment has been changing significantly, with the integration of a Single Market in Europe on one hand and the prospect of a North American Free Trade Agreement (NAFTA), on the other hand. Instead of the coming of the "Pacific era," there have been apprehensions that Asia would be left to its own to fight an increasingly hostile and polarized world.

For example, economist Lester Thurow of the Massachusetts Institute of Technology (MIT) contends that countries can no longer prosper as in the past by finding niches in the world economy; rather, the future will bring "head to head" competition which means that for every winner there is a corresponding loser.[3] He argues that a new "economic race" will replace the Cold War. In such a world, countries will compete in strategic industries in which the winner will skillfully exploit its position in order to stay ahead. He envisions a tripolar world headed by the United States, Europe, and Japan. Similarly another MIT economist, Paul Krugman, presents economic models indicating that one global free trade bloc is "first best" although a "second best" option is for the world to be divided into three trading blocs.[4] In this context, the desirability of broadly-defined preferential trading arrangements (PTA) such as free trade areas (e.g., NAFTA), customs unions (e.g., pre-1986 European Community), and economic unions (e.g., European Single Market) must be carefully evaluated

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3 Thurow, Lester, *Head to Head: The Coming Economic Battle Among Japan, Europe and America*, (New York, NY: Morrow, 1992).

4 Krugman, Paul, *The Age of Diminished Expectations: U.S. Economic Policy in the 1990s*. (Cambridge, Mass: MIT Press, 1990).

TABLE 1
AVERAGE ANNUAL RATES OF REAL GDP GROWTH

Developing Countries	a/ 1960-69	b/ 1970-79	c/ 1980-90	1990	1991	1992
Asia						
Hong Kong	5.6	9.4	7.1	3.2	4.2	5.0
Korea	7.7	9.4	8.3	9.2	8.4	4.5
Singapore	8.9	9.5	7.4	8.3	6.7	5.8
Taiwan	9.2	10.2	7.7	4.9	7.2	6.6
Indonesia	3.6	7.8	5.8	7.1	6.6	5.9
Malaysia *	na	8.1	6.1	9.7	8.7	8.0
Philippines *	5.3	6.3	2.2	2.7	-0.7	0.0
Thailand	8.3	7.4	7.5	10.0	8.2	7.5
China	6.6	7.9	10.1	3.9	7.5	12.8
Latin America						
Argentina	3.3	2.7	-0.8	0.4	na	na
Brazil	9.2	7.9	2.9	-4.4	0.9	-0.9
Chile	4.7	2.2	3.6	2.1	6.0	9.7
Colombia	na	5.8	3.5	4.2	2.3	3.3
El Salvador	5.8	4.5	-0.7	3.4	3.5	4.6
Mexico	7.2	6.5	1.9	4.4	3.7	2.8
Venezuela	5.6	5.2	0.7	4.4	5.4	na

Notes:
na- Not Available.
* Real GNP for 1960-69, 1970-79, and 1980-90.
a/ 1962-69 for Argentina; 1961-69 for Singapore, Philippines, and Indonesia; 1967-69 for Hong Kong; 1964-69 for Brazil; and 1960-70 for China.
b/ 1971-79 for Malaysia.
c/ 1980-89 for Indonesia, Argentina, and Brazil; 1980-86 for Mexico.

Sources:
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against the relevant alternatives.

The potential effects of NAFTA on global trade and investment patterns are profound and its implications far-reaching. On addressing the possible impact of NAFTA, I will first discuss the changing trading environment in section II, which includes the rapidly liberalizing "new" Mexico and the issue of "what is NAFTA?" In section III, I will discuss

the implications of NAFTA on Asian developing countries, taking into account not only economic aspects but also broader geopolitical considerations. And lastly in section IV, I will discuss the various options available to countries in the Asia-Pacific in the face of NAFTA and the increasing focus towards regionalism and bilateralism in the world today.

II. The Changing Trading Environment

The move to extend the U.S.-Canada Free Trade Area to Mexico, thereby creating NAFTA, would result in the world's largest regional trading bloc, with a combined population of 368 million in a US$6 trillion market.[5] It is a lopsided arrangement, with the U.S. as the dominant partner accounting for 87 percent of total GDP and 69 percent of total population. Although Mexico's GNP is less than 5 percent of the U.S. level, its labor force is one-third the size of the U.S. and growing at a rate 3 times as fast.

In terms of trade, the U.S. accounts for 79 percent of total trade in North America and Mexico only 6 percent in 1991. U.S.-Mexico trade is a small fraction but has been growing very rapidly in recent years. Particularly, there has been a rapid increase in intraindustry trade, including textiles, electronics, and autos and auto parts, at a time when automobile imports from the world have been declining! Mexico today is different from the Mexico of a decade ago, and is evolving into a major trading partner of the U.S., taking advantage of its complementary resource and factor endowments.

The "New" Mexico—A new NIC?

The formation of NAFTA has become possible because a "new" Mexico has evolved as a result of decisive restructuring and overall reform. In the past, Mexico had a statist approach to economic policymaking. This approach led to distorted incentives and, ultimately, to an inefficient and inappropriate industrial structure.[6]

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5 By comparison, the European Community has a total population of about 340 million and a GDP of roughly $5 trillion.

6 One of the strongest supporters of NAFTA, University of Texas Professor Sidney Weintraub, dismissed the possibility of U.S.-Mexico free trade in a 1985 book.

Since the realization in 1985 that the debt crisis was structural, rather than a liquidity problem, Mexico has been liberalizing by reducing tariffs and investment barriers. But unilateral liberalization alone could not have had the same effects as NAFTA – in particular, the sense of policy continuity as Mexico approaches a new presidential election and a locking in of access to the U.S. market in the face of growing protectionist rhetoric. NAFTA could provide a perception in the international community that Mexico's shift to more open, liberal economic policies is indeed a permanent one, rather than just the vision of one man (President Salinas de Gortari), his Yale economics degree, and his technocrat advisors.

The stable environment achieved has been attracting large inflows of capital to Mexico and the return in large part of the "capital flight" that occurred in the early 1980s. Foreign investment inflows and capital repatriation reached a record level in 1991, indicating a high degree of confidence in Mexico's current economic management and future prospects. With these changes, Mexico hopes to be able to bolster income growth and increase external trade. Mexico could be a clear winner in NAFTA in terms of trade and investment, as it could become the U.S.'s principal source for many labor-intensive manufactured imports and a major recipient of U.S. and non-NAFTA investment flows.

What is NAFTA?

NAFTA is quite unique and unmatched in scope compared with other free trade areas. When the U.S.-Canada Free Trade Area was signed in 1989, there was hardly any surprise; it was long expected and was just the formalization of what had already taken place, in the sense that both countries had low average tariffs and special bilateral deals eliminating trading barriers had already been signed for autos and selected other sectors. But, with the proposed inclusion of Mexico in a NAFTA, a great deal of attention and debate has arisen, as NAFTA has potentially greater economic and geopolitical implications. It signals that the U.S. is attempting to simultaneously pursue and balance bilateralism, regionalism and multilateralism. Given the size and relative proximity of Mexico, one can understand why the U.S. is pursuing this agreement. It is appealing politically (strengthening

democracy and stability in Mexico while discouraging emigration) and economically (promoting growth and investment in a country with strong economic ties to the U.S.). Mexico is a natural trading partner, in terms of geography and economic complementarities. There are also distinct benefits to having a more developed Mexican neighbor, such as a growing market for U.S. exports of goods and services and a cheap source of labor. And Mexico's petroleum reserves may lessen dependence on the volatile Middle East.

NAFTA is significant because it is the first major integration between developed and developing countries. It is not just a horizontal integration as in the European Community (EC) but it is a vertical integration. Unlike most members of the EC, which have similar levels of income per capita and are at similar stages of development, NAFTA consists of member countries with great disparities in income per capita, ranging from $2,870 for Mexico to $21,260 for Canada and $22,560 for the U.S. (see Table 2). Mexico's average industrial wage is just one-eighth of the U.S. level, although the real efficiency wage gap is less for some occupations and skill levels. Consequently, these disparities will lead to specialization and a likely shifting of certain production and assembly facilities from the U.S. and Canada to Mexico. This is already taking place. Smith Corona announced its intention to relocate its typewriter factories and Zenith (the only TV maker left in the U.S.) is also moving its factories to Mexico, among others.

NAFTA aims at reducing and ultimately eliminating most, if not all, tariff and non-tariff barriers (NTBs) to trade and investment in the U.S., Canada, and Mexico. But NAFTA is far more than a trade pact. It is a comprehensive agreement covering almost every aspect of economic activities such as government procurement, investment laws, transportation, energy, agriculture, banking and financial services, etc. The agreement covers areas which are far beyond those proposed under GATT.

Despite the controversies, ratification of NAFTA by the legislatures of the three countries is likely, although perhaps not in time for the proposed January 1, 1994 starting date.[7] The inclusion of Mexico may be just the beginning as many more Latin American

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7 NAFTA crossed its last and toughest hurdle when it passed in the U.S. House of Representatives on November 18, 1993.

TABLE 2
MACRO ECONOMIC INDICATORS

	1991			1992		
	GNP ($Bn)	Population (Mn)	Per capita Income ($)	Annual GDP Growth(%)	U.S. Imports ($Bn)	U.S. Exports ($Bn)
U.S.	5,686	253	22,560	2.1	532	447
Canada	569	27	21,260	1.6	98	90
Mexico	252	88	2,870	2.8	35	40
Total NAFTA	6,507	368				
Japan	3,337	124	26,920	1.6	1/ 97	48
NIEs-4	574	73	7,908	5.5	62	49
S.Korea	274	43	6,340	4.5	17	15
ASEAN*	367	322	1,139	5.4	36	24
China	413	1,150	370	12.8	26	8

* ASEAN consists of the four largest member countries, namely Indonesia, Malaysia, Philippines, and Thailand.

1/ Forecast.

Sources: International Monetary Fund, International Financial Statistics, Yearbook 1992.
World Bank, The World Bank Atlas 1992.
The Economist Intelligence Unit, Country Report 1993.
Financial Statistics, Taiwan District, Republic of China, July 1992.
Far Eastern Economic Review, Feburary 18, 1993.

countries wish to be included in the agreement. In fact, countries like Chile and Argentina are closely watching Mexico. Latin American countries have renewed their interest in cooperation among themselves in preparation for NAFTA becoming a hemisphere-wide free trade agreement as espoused by the "Enterprise for the Americas Initiative," proposed by President Bush in 1991.[8] They have embarked on ambitious reforms of their own. Although the outcomes are not certain, some Latin American countries are likely to emerge as challengers to the countries in the Asia-Pacific in the 1990s, with or without hemispheric free trade. The highly literate and skilled labor force in several of these countries should allow them to move rapidly forward.

Most economists argue that NAFTA will expand trade, boost economic growth, and lead to increased employment in all three

8 President Clinton has expressed his support for the initiative, but it is likely to proceed much more slowly under his presidency.

countries. But, the critical question is, by how much? As expected, reflecting the relative size of the U.S. compared with Mexico, all studies indicate that real GDP growth will be small for the U.S., amounting to less than half of 1 percent (with the exception of one study which showed a 2.07 percentage point increase).[9] Mexico would gain the most with real GDP increase ranging from 0.1 to as much as 6.8 percentage points (Tables 3 and 4).[10] These are static effects, however, coming from the reallocation of existing capital and labor between industries and countries using existing technologies. When dynamic effects are introduced, which refer to the expansion of markets and further increases in economic growth and income through savings and investment and productivity responses, there could be greater gains. As income and production levels grow in North America, demand for final and intermediate goods from all sources will rise. McCleery (1992) estimated that dynamic gains from NAFTA could increase real GDP in Mexico by 11.39 percentage points over nine years, due to removal of tariffs and NTBs, increased capital flows, and greater technological innovation and diffusion, an increase of 1.2 percentage points in annual growth (i.e., from 4 to 5.2 percent). The corresponding impact for the U.S. is considerably less, of course, ranging from a 0.22 to 0.51 percentage point change in year 2000 GDP (see Tables 3 and 4), showing gains that are similar in magnitude ($20-30 billion per year) but dwarfed by the size of the U.S. economy. These results show that increases in capital flows would have greater importance for the Mexican economy than liberalization of tariffs and NTBs; on the other hand, increases in capital flows from the U.S. into Mexico would not appreciably affect U.S. real GDP, given the sufficiently large U.S. capital market.[11]

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9 This study, by Roland-Holst, et.al. (1992), assumes that unrealized economies of scale exist in the U.S. economy, which will be reaped with the expansion of the market under NAFTA. It alone of the studies cited in Tables 3 and 4 simultaneously models Canada-U.S. free trade (CAFTA) and NAFTA-the others take CAFTA as given. And 0.77 percentage points of the gain is from the assumption that price competition from Canadian and Mexican suppliers will lower oligopolistically set prices in the U.S.

10 When capital is allowed to flow between countries, as will undoubtedly occur under NAFTA, the gains for Mexico range from 3 to 8 percent.

11 The McCleery model also takes into account linkages in the world capital market; if capital flows from the U.S. to Mexico began to create a capital shortage in the U.S., rasing the rate of return to capital, then foreign investments from Japan, Europe, and elsewhere would flow to the U.S.

TABLE 3
AGGREGATE RESULTS FROM ECONOMY-WIDE MODELS OF A NAFTA: EFFECTS ON MEXICO
(Percent Changes)

Authors of study Model/Policy Scenario	Real GDP	Employment	Trade Balance
Static:			
Bachrach and Mizrahi:			
FTA, no added capital in Mexico	+0.32	+0.85	+1.18
FTA, additional capital in Mexico	+4.64	+6.60	+59.12
Hinojoso and Robinson:			
Tariff removal only	+0.1	-0.1	NC
Tariffs and NTBs liberalized	+0.3	+0.3	NC
Mexican growth (tariffs, NTBs, capital flows)	+6.4	+0.1	NC
Mexican growth and migration	+6.8	+1.4	NC
Robinson et al.:			
Trade liberalization	+0.27	NA	NC
Roland-Holst et al.:			
CRTS, tariffs and NTBs	+2.27	+1.49	NC
IRTS, tariffs and NTBs	+3.38	+2.40	NC
Dynamic:			
Almon:			
Tariff removal only, after 10 years	0.0	-0.01	-2.87
Tariffs and NTBs, after 10 years	-0.35	-0.90	-9.41
McCleery:			
Free Trade (Tariffs and NTBs)	+0.01	NC	NA
" + increased investor confidence	+3.09	NC	NA
" + " + dynamic gains	+11.39	NC	NA

Notation:
NC — the variable is unchanged by assumption; NA — the figure is not available; FTA — Free Trade Area; NTBs — Non-tariff barriers; CRTS — constant returns to scale; IRTS — increasing returns to scale.
Source:
"Economy-wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico," US International Trade Commission Publication 2508, May 1992, Table 2b, pp.9-11.

Over time, NAFTA should spur industrial reorganization along regional lines. U.S. suppliers of intermediate goods, capital goods and high-tech products will benefit by taking advantage of economies of scale and as prime suppliers of the growing Mexican market. The key elements of dynamic effects are the locking in of Mexican reforms (along with NAFTA) and their effects on factor flows, investment, economic growth, and impact on international trade. Most importantly, the real consequence of NAFTA is not the economic effects of the trade agreement per se (i.e., trade and investment diversion) but the changing U.S. geopolitical focus and increasing tendency towards regionalism and bilateralism.

TABLE 4
AGGREGATE RESULTS FROM ECONOMY-WIDE MODELS OF A NAFTA: EFFECTS ON THE UNITED STATES
(Percent Changes)

Authors of study Model/Policy Scenario	Real GDP	Employ-ment	Trade Balance
Static:			
Bachrach and Mizrahi:			
FTA, no added capital in Mexico	+0.02	NC	+0.03
FTA, additional capital in Mexico	+0.04	NC	+0.07
Hinojoso and Robinson:			
Tariff removal only	+0.1	+0.2	NC
Tariffs and NTBs liberalized	0.0	-0.1	NC
Mexican growth (tariffs, NTBs, capital flows)	+0.1	0.0	NC
Mexican growth and migration	+0.1	-0.3	NC
Robinson et al.:			
Trade liberalization	+0.23	NA	NC
Roland-Holst et al.:			
CRTS, tariffs and NTBs	+1.34	+1.88	NC
IRTS, tariffs and NTBs	+2.07	+2.47	NC
Dynamic:			
Almon:			
Tariff removal only, after 10 years	+0.11	+0.03	+12.3
Tariffs and NTBs, after 10 years	+0.17	+0.05	+18.4
McCleery:			
Free Trade (Tariffs and NTBs)	+0.22	NC	NA
" + increased investor confidence	+0.32	NC	NA
" + " + dynamic gains	+0.51	NC	NA

Notation:
NC – the variable is unchanged by assumption; NA – the figure is not available; FTA – Free Trade Area; NTBs – Non-tariff barriers; CRTS – constant returns to scale; IRTS – increasing returns to scale.

Source:
"Economy-wide Modeling of the Economic Implications of a FTA with Mexico and a NAFTA with Canada and Mexico," US International Trade Commission Publication 2508, May 1992, Table 2c, pp.12-13.

III. Implications Of NAFTA On The Asia-Pacific Region

The Asia-Pacific region cannot afford to have a wait-and-see attitude as NAFTA unfolds; it should prepare itself for the challenges and opportunities that are presenting themselves. What does NAFTA mean to the continued dynamism of the Asian countries? Will NAFTA make the U.S. inwardly focused? These are the questions that will be addressed in this section.

The bottom line question is: How will the Asia-Pacific countries

be affected by NAFTA? There are three primary avenues of impact on the Asia-Pacific region – trade diversion, investment diversion, and geopolitical considerations – and each is discussed in turn below.

Trade Diversion

NAFTA will give Mexico and Canada free access to the U.S. market or free access than they had enjoyed before. By eliminating internal tariff and trade barriers among partner countries but keeping external tariffs against the rest of the world the same, NAFTA implicitly discriminates against non-NAFTA countries. This has the effect of generating more intra-NAFTA trade and less trade with countries outside of the union. A negative impact of NAFTA is trade diversion, which results if less efficient producers from NAFTA replace more efficient producers from outside the union, leading to a loss in world welfare.

There are several factors that will neutralize some of the potential trade diversion, however. First, tariff reductions under NAFTA will be modest, as tariffs in all three countries are already relatively low. The U.S. and Canada have average tariffs of about 4 percent and Mexico's are now at 10 percent. In addition, if the Uruguay Round of GATT negotiations succeeds, there will be further reduction of tariffs (in all member countries) by about one-third. These existing tariffs may not pose too large barriers for non-partners, like Japan, in competing with products from member countries.

Second, the U.S. and Mexico already have close economic ties. Mexico's exports to the U.S. account for about 70 percent of its total exports while two-thirds of Mexican imports come from the U.S. Some apologists in the U.S. government have cited the high trade ratios of Mexico and Canada as evidence that the potential for trade diversion is minimal. This is not true, however, as the U.S. produces a wide range of commodities that might capture increasing market shares, especially in rapidly growing economies. A change in Mexico's import mix toward capital goods and middle-class consumption items, away from luxury goods, could also affect the direction of trade. Sectors in which modest margins of preference might yield large increases in U.S. exports to Mexico include some highly competitive capital goods and homogeneous commodities, such as cereal grains. Yet the bulk of the

anticipated increases in trade will come from increases in the growth rates and trade shares of GDP in the member countries.

In general, trade diversion would be greater in products where NAFTA-members and Asian developing countries are in direct competition and are substantial exporters to the country in question. A rough proxy for the level of trade competition is the relative factor endowments of the countries involved. By that measure, ASEAN countries would be heavily impacted as they would be competing with Canada in many resource-intensive products and with Mexico in labor-intensive manufactures. In the short run, Korean exports to the U.S. will not be hurt as much because Mexican industries are 5 to 10 years behind their Korean counterparts in terms of overall industrial competitiveness. But if, as expected, U.S. capital and technology move to Mexico and when Mexican industries catch up by improving their productivity, Korean exports to the U.S. will face greater competition. Kreinin and Plummer[12] estimate that trade diversion from NAFTA on Korea and ASEAN-4 countries would yield losses of 4-5 percent of pre-agreement NAFTA exports. But inclusion of non-tariff barrier effects could double or triple the estimates.[13] Korean exports to the U.S. compete with other NAFTA countries in the following relatively highly protected areas: organic chemicals, leather manufactures, textiles and garments, iron and steel, metal manufactures, railway vehicles, travel goods, furs, footwear, instruments, and fish (Kreinin and Plummer, 1992). Tariff-free access to the U.S. market by Mexico and Canada could reduce revenues of Korean exporters by some $800 million dollars. Trade diversion from Canada and Mexico could cost Korean exporters $180 million and $15 million, respectively. Note that most of Korea's loss results from access to the U.S. market by Canada and Mexico, but the effect of partner preference into the Canadian and Mexican markets is likely to increase as Korea moves out of resource- and labor-intensive exports into subcontracting-dependent and

12 Kreinin, M. and M. Plummer, "Effects of Economic Integration in Industrial Countries on ASEAN and the Asian NIEs," *World Development*, Vol.20, 1992.

13 On the other hand, the Kreinin-Plummer figures have been called overestimates of the likely trade diversion, as they measure the difference between most favored nation (MFN) tariffs and no tariffs, while in actuality, U.S.-Mexico trade often takes place at significantly lower than MFN rates (see the later section on the maquiladoras), and all tariffs will not be eliminated under NAFTA.

Is this "resource-and-labor-intensive" or "resource-and labor--intensive ? nether. It is a contraption of "resource-indensive and labor-indensive

technology-based manufactures. As this restructuring continues, Korea will compete less with Canadian and Mexican suppliers to the U.S. and more with U.S. suppliers to Mexico and Canada.[14]

The effects of tariff reduction on specific sectors may be affected more due to content requirements and the phasing out of the *maquiladoras* in NAFTA.[15] The following subsection explores these issues in more detail.

1. Content Requirements

Rules of origin and content requirement can discriminate against goods produced from non-NAFTA counties or penalize firms controlled by capital from non-NAFTA countries. U.S. producers, particularly in textiles, automobiles, and semiconductors, rely on rules of origin as a way to increase domestic production and to gain an advantage against Japan and other Asian competitors. The North American content requirement will be set at 62.5 percent on passenger cars, light trucks, engines, and transmissions, significantly higher than the present levels, i.e., 50 percent in the U.S.-Canada Free Trade Area and 30 percent in Mexico. With a higher content requirement percent, trade and investment diversions are likely to be larger, even with the inclusion of Mexico. Obviously, the provision has been designed to protect regional producers from foreign auto parts, such as those from Japan and Korea.[16]

Asian textile exporters will be negatively affected with the adoption of stricter rules of origin that all textiles be produced with yarns (in some cases, such as cotton, all fibers) produced in North America. Given the new incentives under NAFTA there would be a shift in U.S. purchases of fabrics and apparel, as well as foreign

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14 Ozawa, Terutomo, "The Dynamics of Pacific Rim Industrialization: How Mexico Can Join the Asian Flock of Flying Geese," in *Mexico's External Relations in the 1990s*, Riordan Roett, ed. (Boulder, Co.: Lynne Rienner, 1991), pp.129-47.

15 Maquiladoras are factories and assembly plants operating along the border just inside Mexico, primarily under American ownership. A special provision of U.S. customs laws allows products produced in maquila plants in Mexico to enter the U.S., paying tariffs only on the value added in Mexico and without being subjected to quantitative restrictions.

16 To give a simple numerical example, an auto assembler who had previously used 52 percent Canadian and American parts, 5 percent Mexican, and 43 percent Asian would need to decrease imports from Asia. But a similar firm, using the same percentage of U.S. and Canadian parts, 30 percent Mexican, and 18 percent Asian might reduce its usage of North American parts and increase imports from Asia after the NAFTA agreement.

investment in those industries, from Asia and the Caribbean to Mexico. The three Chinas (Hong Kong, Taiwan, and China) have reasons to be concerned as their major exports (such as textiles and clothing, footwear, consumer electronics, and chemicals) would be affected. Although the Chinese economies are more competitive than Mexico in products like toys, metal manufactures, leather products, and processed food, there could also be trade diversion effects in these sectors.

2. The Phasing Out of Maquiladoras

The maquiladoras generate about 30 percent of Mexican trade. They have been a back door to the U.S. market, bringing electronic goods like television tubes produced by Asian countries through Mexico into the U.S. Under NAFTA, the maquiladoras will be phased out. This means that access to the U.S. market would be subjected to double taxation. For example, a 15 percent duty on tubes would be required coming into Mexico from non-NAFTA countries, and an additional 5 percent on television sets being shipped to the U.S. (in this example the U.S. tariff is relevant, as rules of origin are based on the place of manufacture of the picture tube, regardless of other content). This would result in less favorable market conditions for third countries and perhaps an erosion of Asian goods' competitiveness relative to U.S. goods in the North American market.

Overall, trade diversion is not an insurmountable obstacle to continued export expansion into the North American market and it should not be a cause of alarm for Asian developing countries, assuming that NAFTA does not become inward-looking. The dynamic effects of an increase in income can somewhat offset trade diversion. At the same time, one should not forget the opportunities that will be created by NAFTA. The aggregate employment and real wages are expected to rise in North America. The more rapid the growth of Mexico, the greater the trade opportunities for Asian countries, particularly for the machinery and equipment exporters of East Asia. In addition, Korea and other NIEs have a more than 20-year track record of export diversification and growth, demonstrating the flexibility of their economies to adapt to changing world trading conditions.[17]

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17 For Japan, and to some extent some NIEs, vulnerability to trade and investment

Investment Diversion

The anxiety of Asian developing countries about NAFTA relates more to the possibility of investment diversion in favor of the "new" Mexico, given its enhanced competitive position. The flow of foreign direct investment (FDI) into a country tends to increase production for exports. Thus, an increase in U.S. FDI into Mexico could reduce FDI in Asian developing countries and subsequently decreases their export growth. These investment diversion and FDI-related export loss are the key areas of concern. McCleery (1992) estimated that the increase in investment flows to Mexico (from all sources) brought about by NAFTA could be as high as $50 billion over 9 years. McCleery (1993) simulates the effect on ASEAN countries if approximately $1 billion in FDI is diverted away from their economies. The loss in foreign exchange and industrial capacity could reduce GDP growth rates by almost one percent, on average.

Investment diversion is potentially the most important effect of NAFTA especially because there is evidence that it is related to technology transfer and productivity growth. Many estimates indicate that investment diversion is likely to outweigh trade diversion.[18] FDI has been a significant source of capital for manufacturing investment, which is a major factor in the continuing dynamism of the ASEAN-4, the NIEs, and China.[19] A decline in FDI is cause for concern because of its potential negative effects on the future growth of trade,

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diversion from NAFTA can be mitigated since it produces more specialized and technologically sophisticated, and thus less substitutable products. In fact, many Japanese goods are necessary inputs for the U.S. manufacturing sectors and there has been a rapid increase in American brand-name products imported from Japan.

18 According to one econometric study which examines the effect of the U.S. and Canada shifting their combined investment of US$ 1 billion from ASEAN countries to Mexico for eight years, GDP and trade balance of ASEAN countries would decline annually by US$ 2 billion and US$ 437 million, respectively. (MITI, White Paper on Trade, Overall Report, June 1992, p.280. The latter result is at odds with McCleery 1993, which illustrates the more conventional argument; in four of the five ASEAN countries modeled, the reduction in capital inflows necessitates a cut back in imports that is greater than the reduction in exports, and the trade balance improves, at the expense of capital and intermediate goods needed for growth.

19 See Naya S., and E. Ramstetter, 1992, "Foreign Direct Investment in Asia's Developing Economies and Trade in the Asian and Pacific Region," Development Papers No.10, ESCAP, United Nations, Bangkok.

productivity, and employment.[20]

Investment diversion refers to U.S., Canadian, Australian, and EC-based firms which may shift FDI flows to Mexico away from East Asia and Indonesia. In addition, it can also refer to Japanese, Korean, and Chinese investors in Hong Kong, Taipei, and Singapore who may, on the margin, reallocate investment from Southeast Asia or Mainland China to Mexico. Already, massive increases of foreign investment are going into Mexico, not only from the U.S., but also from Japan, Korea and other Asian countries. Foreign capital inflows allowed Mexico to run a $12 billion balance of trade deficit in 1992 and preliminary figures indicate an even larger deficit in 1993. Indeed, NAFTA has made Mexico an attractive investment destination and manufacturing base for products destined for Central and South America as well as North America.

Geopolitical Considerations

Many in Asia see NAFTA as a symptom of broader economic and geopolitical initiatives in the U.S., namely a growing disenchantment with the Europeans and Japanese in the GATT and a lessening of interest in Asia in the post Cold War world order.

Clearly, NAFTA marks a turning point. The U.S., the cornerstone and driving force behind the GATT trade system which has been so effective in reducing tariffs on manufactured goods, is now embracing regionalism and bilateralism. In the 1960s, when it dominated the world economy and accounted for fully half of the world's GNP, the U.S. pushed for "open" markets and multilateralism in the world trading system. Today, however, the U.S. position in the world economy has dramatically changed as its relative economic strength has declined. The combination of a weakening economic position and the collapse of the Communist threat makes the U.S. less willing to make further concessions for the benefit of the world trading system, particularly those it views as having been "free riders" in the past.

Yet it is important that the U.S. maintain or increase its economic

20 See Ramstetter and W. James, 1992. Also The Economist (7-13) Nov.1992, p.85, which asserts that because profit margins are higher and labor costs lower in Asia than in Europe or North America, Japanese FDI will increase more in developing Asia than elsewhere, once investment levels recover in the mid-1990s.

presence in the Asian region. Asia's dynamism is propelled by high investment rates, extensive trade and investment linkages, a commitment to research and development, the rapid spread of technology, a strong base of infrastructure and human resource development, and public sector and private sector specialization and cooperation. It would be a mistake to think that the dynamism of Asia can be re-created overnight in Latin America even if the same policy prescriptions were fully adopted. The first priority in the American agenda now is to restore U.S. domestic economic health; it is therefore in the economic interest of the U.S. to be fully engaged in the Asia-Pacific region, which accounts for one-third of world trade.

The effects of NAFTA on U.S. interests in Asia cannot be determined with any degree of certainty, as many questions remain concerning what NAFTA will be and how it will be perceived in Asia, the U.S., and the rest of the Americas. How NAFTA affects the U.S. economy will to some extent determine how tough the U.S. will be on trading partner perceived as not playing on a level field. A positive view of NAFTA is one that serves as a complement to GATT rather than as a substitute. NAFTA should not be seen as a threat to the GATT talks but rather as a challenge that could promote trade and investment, particularly with the dynamic Asian economies. Its implication should be far beyond increased trade flows, as a step toward private sector-led, market-based dynamism and global integration.

IV. Options For Asia-Pacific Economic Cooperation

The future growth of the Asia-Pacific region depends on how Asian countries respond to challenges and take advantage of emerging opportunities in the face of NAFTA and other changes in the trading environment. It is important to *upgrade domestic supply conditions* in Asian countries for greater efficiency in response to increased competition from "new" Mexico and other new NICs, such as Spain in the EC. *Specialization* within the region, fostered by openness to trade and investment, *is crucial to continued growth.* And *consultation and communication* in fora like GATT and APEC *can help to prevent NAFTA and the EC from becoming defensive trading blocs along regional lines.* These three points, competitiveness, specialization, and

preservation of the open world trading system, are discussed in turn below. A specific proposal for linking APEC and NAFTA is then given.

The growth pattern of the NICs shows that comparative advantage is a dynamic process. And the ability to pursue one's comparative advantage as it evolves will depend on how open developed country markets are. To stay competitive, countries will need to keep on moving up the ladder of industrialization and allowing other countries on the lower rungs to likewise move up. But this pattern of development is not automatic. Countries will need to compete with others in international markets and transform themselves despite economic and political forces that resist change.

For Korea, as the country moves into the 1990s, widespread restructuring should be undertaken. Production in the manufacturing sector has to shift further from labor-intensive processes to automation and more sophisticated technologies. Only in this way can rapidly rising wages be matched by productivity growth, and thus international competitiveness be maintained. The agricultural sector must adjust to meet greater international competition. The financial sector needs to be deregulated; excessive credit rationing should be reduced by enhancing the role of markets to efficiently allocate resources. Special attention should be given to the problem of increasing R&D in order to upgrade the industrial structures.

In the coming decade, Korea will need to make the next transformation, from NIE to OECD status.[21] The challenge for Korea is to be able to join the ranks of the industrialized countries; in GNP per capita and other measures of development, it is still a little behind countries like Spain and Italy.[22] The task is not just to outcompete the newly emerging NIEs or near NIEs, including the "new" Mexico, but more importantly how to move up the ladder of industrialization and "catch up" with developed countries.

Secondly, the Asia-Pacific countries should push for greater

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21 Naya, S. and Pearl Imada, "NIEs to OECD: Prospects for Korea and Taiwan," presented at Allied Social Sciences Association Meeting, January 5-7, 1993, Anaheim, California. Based on statistical analysis, they conclude that Korea's economic structure has it poised to leap into the rank of developed countries in the next ten to twenty years.

22 According to the World Bank, World Development Report 1992, a high income country has GNP per capita of more than US$9,000 (in 1990 dollars). Korea's GNP per capita was around $6,500.

complementarity of economic structures within the region through cooperation in trade and investment leading to de facto integration. In the 1980s, direct foreign investment from Japan exceeded that of the U.S. in the region. In the 1990s, the NIEs are increasing their direct foreign investment in ASEAN and China at a rapid rate, even exceeding that of Japan in several key markets. These new investments will be followed by higher levels of trade flows. The Asia-Pacific region has become truly interdependent, with the increasing reliance on the international marketplace occurring naturally as an outcome of outward-oriented policies and increasing regionalization of production. Yet their reliance on the U.S. and Europe as markets for final products still makes them vulnerable to the formation of trading blocs.

The opening-up process in China focused on so-called open cities or special economic zones in coastal areas. Korean exports to China amounted to $44 million during the first half of 1991, which sharply increased by a factor of 11, reaching $493 million for the same period in 1992. The extraordinary growth in Guangdong Province, alluded to earlier, has not only benefitted from Hong Kong capital and entrepreneurship, but has also resulted in a restructuring of the Hong Kong economy (more than one-third of Hong Kong's industry has now moved across the border into the Pearl River Delta). The province of Fujian, across the straits from Taiwan, has seen a large infusion of trade, industry, and capital, channeled indirectly through Hong Kong. A similar pattern of development has occurred in Southeast Asia as manifested by the growth triangle in Malaysia, Singapore, and Indonesia. Increased trade within the region coincided with this new pattern of investment, making Asia more self-sustaining as far as economic growth is concerned. Some would argue that the region is practicing de facto integration.

Third, the open world trading system can be preserved by using the Asia-Pacific Economic Cooperation (APEC) process to work closely with NAFTA countries, particularly the U.S. In view of rising economic interdependence in trade, investment, and services, and also in response to the trend towards regionalism in the rest of the world, there is a need for an Asia-Pacific organization that can foster economic cooperation, reduce bilateral disputes, and facilitate the exchange of information. There is an East-Asian Economic Caucus which was initially proposed as a sort of trade bloc to counter the blocs in North

America and Europe, but the group has since been modified to be a consultative body (within the GATT) due to lack of consensus support for excluding the U.S. from the group.

It is difficult to see the development of an Asian trading bloc without the participation of the U.S. It is true that the reliance of East Asian exporters in the U.S. market has been declining and that economic interdependence among Asian countries has been rising. But still, exports of Japan and the NIEs to the U.S. comprised as much as 25 percent of their total exports while the NIEs' exports to Japan were only about 10 percent in 1991. American reliance on East Asia has risen to 25 percent in 1991 from 20 percent in 1980 — a five percentage point increase over a decade. Also there is a question of leadership in such an effort. Obviously, Asia needs the U.S., and vice versa.

The major organization currently the best candidate to take on these tasks is the Asia- Pacific Economic Cooperation (APEC). It is a process consisting of inter-governmental meetings. The 15 APEC members are the U.S., Japan, Korea, Taiwan, Hong Kong, China, ASEAN countries, Canada, Australia, and New Zealand. It has a considerable potential for linking Asia with NAFTA. Since Canada and U.S. are both members of APEC and NAFTA, APEC has the capacity to influence the U.S. not to make NAFTA an inwardly-looking trading bloc. Mexico has a strong interest in joining APEC, which would further strengthen the link.[23]

Korea has been a central catalyst in APEC. It was a real coup for Korea to succeed at the APEC meeting in Seoul in November 1991 in bringing the "Three Chinas" into the membership. The three Chinas' membership in APEC represents an important political event since this is only regional setting in which these countries can interact with each other and with other countries in the region. Korea was also active participant in the Fourth Conference held in Bangkok in September 1992, which upgraded APEC to an organization of economic cooperation with a standing secretariat in Singapore. Korea should continue to push APEC forward to become an active, vital organization of economic cooperation, at least on par with the OECD.

Just recently, President Clinton cited APEC as a vital regional

23 Mexico is now the 16th APEC member, as of November, 1993.

24 See Far Eastern Economic Review, "Group Therapy," April 15, 1993, pp.10-11.

arrangement for the U.S. Also, Assistant Secretary of State for East Asian and Pacific Affairs Winston Lord announced the administration's support and intention to lead the APEC process to be more "relevant and action-oriented".[24] The announcement implies that the U.S. will remain engaged in Asia. The U.S. seems to be signalling that the new administration's tactic for trade negotiations is no longer the "hub-and-spoke" approach as in the past—a series of bilateral arrangements between the U.S. and APEC members. It is in the interest of the U.S. to consider cooperative arrangements based on the concept of "open regionalism." The coming APEC ministerial conference in Seattle in November 1993, with the U.S. as chair, holds a lot of promise.

APEC is an organization in search of a meaningful identity. It is a collaborative and consultative arrangement, but it does not aim to create a trading bloc. It is an open-ended process. APEC's *raison d'etre* is to promote an open and free multilateral trading system. APEC would proceed in the spirit of "open regionalism" implying that APEC agreements would not result in discriminatory measures in trade and investment against non-member countries.

APEC's goal is broadly defined and the means will have to be found to mitigate conflicts and tensions in the region. What is needed is a mechanism which can formalize "open regionalism." In this connection, APEC should be viewed as a "GATT-Plus" agreement based on most favored nation (MFN) treatment that would promote and expedite region-wide liberalization, reducing trade and trade-related issues and disputes.

APEC and NAFTA should be linked through a revised GATT Article XXIV.

Promotion of APEC by itself does not resolve the potential of NAFTA becoming inward-looking. NAFTA is GATT consistent, as rules and their interpretation now stand.[25] Article XXIV of the GATT

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25 Perhaps it would be more correct to say that NAFTA is not inconsistent with the rule of GATT. Of the more than 70 regional trade agreements that have been notified to the GATT under article XXIV, *none* has been rejected, although few were formally approved. Indeed, the U.S.-Canada pact, widely heralded as the most comprehensive FTA agreement ever notified to the GATT, was not formally approved, due to concerns about dispute settlement procedures and exclusions in agriculture. See Gary Hufbauer and Jeffrey Schott, "Regionalism in North

allows for the creation of free trade areas, under conditions imposed to ensure that the agreement will not lead to "fortress building," principally that the agreement cover "substantially all" trade, and that external tariffs not be raised. Yet not only are these conditions very weak, but they are often not met. For example, the content requirement of NAFTA is a disguised from of protectionism. By requiring higher regional content, regional producers receive protection against imports. Interestingly, such a matter is rarely brought up in GATT but it is normally assumed that is GATT consistent.

What is needed from the standpoint of APEC members is the guarantee that the spirit of Article XXIV is indeed adhered to by all. If GATT is to permit regional free trade areas, it seems that the best solution is to revise Article XXIV such that there is an assurance to the world that external protection will actually fall, rather than effectively rise through margins of preference to partners and disguised protection through rules of origin.[26] This is a clear way of linking APEC and NAFTA, while making sure that regionalism will be open.

The remaining question is whether sufficient leadership can be mustered in GATT to formulate this amendment, which will take considerable political will and diplomacy. If the U.S. abdicates its leadership role, it is unlikely that reform will be forthcoming. Perhaps a show of leadership in the GATT is one way President Clinton can leave his mark, clearly reconciling his beliefs in both multilateralism and regionalism.

America," in Koichi Ohno, ed., *Regional Integration and its Impact on Developing Countries*, (Tokyo, Japan: Institute for Developing Economies, 1993) pp.281-302.

26 There have been suggestions in De Melo, Jaime and Arvind Pangariya, "The New Regionalism in Trade Policy," World Bank, 1992, arguing that customs union leads to positive welfare if all external tariffs come down to the lowest level prevailing at the time of the union formation. This condition is stricter than the proposed open regionalism amendment. Others have sought conditions on the volume of trade with the rest of the world to ensure that it does not fall as a result of regional free trade. The problem with this latter approach, of course, is agreeing on the relevant counterfactual—i.e., what the pattern of trade would have been if not for the FTA. See John McMillian, "Does Regional Integration Foster Open Trade? Economic Theory and GATT's Article XXIV," University of California at San Diego, Draft Manuscript, 1993, cited in Hufbauer and Schott, 1993, op.cit.

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THE ASIAN DEVELOPMENT EXPERIENCE AND ITS RELEVANCE TO AFRICAN DEVELOPMENT PROBLEMS

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I. Introduction to Asian Development: Myths and Realities

The enviable growth patterns of several Asian countries are well known. East Asia is the only region in the world which has been able to maintain strong and consistent growth patterns over several decades, led first by Japan and then by the newly industrializing economies (NIEs) of Hong Kong, South Korea, Singapore, and Taiwan. These economies have achieved not only two-digit growth rates and vast improvements in social indicators, but also very favorable income distributions. In the NIEs, the lowest quintile of the population receives more than five percent of total income and the highest quintile receives less than thirty percent. From 1965 to 1990, incomes grew at 6 to 7 percent per capita in the NIEs, and 3 to 5 percent per capita per annum in the newly emerging growth pole of Southeast Asia (Indonesia, Malaysia, Thailand). By contrast, the less developed countries (LDCs) on average recorded 2.5 percent per capita growth, and Africa only grew by 0.2 percent per capita over the same period (Naya and Imada

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1992; Roemer 1993). In the first years of this decade, economic growth in Africa did not keep up with population growth of over three percent per annum, leading to a decline in per capita incomes of roughly one percent per year (Yaker 1992).

This paper discusses some of the possible lessons to be learned from the Asian development experiences and their relevance for African development. We focus on Japan, the NIEs of East Asia, and Southeast Asian countries; in the interests of brevity, we may refer to "Asian" experiences. Nevertheless, it should not be forgotten that there are many poor countries in Asia: "Asia has more billionaires than any other continent [but also] nearly twice as many people living in conditions of absolute poverty than the entire continent of Africa" (Swedish Foreign Ministry 1992, p. 43). Moreover, several Asian countries are transition economies, such as Mongolia, Vietnam, and North Korea.

There is no single Asian development model. This is even more apparent now than it was for writers in the early to mid-1980s, as first Thailand and Malaysia, then Indonesia and China, established their credentials as rapidly growing economies. Some of the success of the NIEs may be attributable to initial conditions and other fortuitous events, but the improved economic performance of the Association for South East Asian Nations (ASEAN) countries after adopting similar policies "clearly attests to the importance of outward-looking policies" (Naya and Imada 1992, p. 45). Economic development has taken place in countries of widely varying cultural backgrounds, and under a wide range of political regimes – from democratic to authoritarian. In the People's Republic of China (PRC), for example, the southern province of Guangdong – which launched China's open policy in 1979 and continues to grow at an annual rate of 12-13 percent – is led by such leaders as communist party secretary Xie Fei, who opened the recent provincial party congress with the maxim "poverty is not socialism" (Far Eastern Economic Review, 3 June 1993, p. 21).

The diversity among the countries of Asia is as great as the diversity in Africa, in terms of population size, climate, resource base, and culture (see Tables 1 and 2). Just as no single strategy was or could have been used in all of Asia, no single strategy drawn from the Asian experiences should be considered optimal for most or perhaps any African country. At best we offer a number of recommendations

TABLE 1

Basic Indicators

	Population (Millions) mid-1990	Area (thousand square km.)	GNP Per Capita		Life Expectancy 1990
			Dollars 1990	Growth Rate 1965-90	
Sub-Saharan Africa					
Mozambique	15.7	802	80	na	47
Tanzania	24.5	945	110	0.0	48
Ethiopia	51.2	1,222	120	-0.2	48
Somalia	7.8	638	120	-0.1	48
Chad	5.7	1,284	190	-1.1	47
Malawi	8.5	118	200	0.9	46
Burundi	5.4	28	210	3.4	47
Zaire	37.3	2,345	220	-2.2	52
Uganda	16.3	236	220	-2.4	47
Madagascar	11.7	587	230	-1.9	51
Sierra Leone	4.1	72	240	0.0	42
Mali	8.5	1,240	270	1.7	48
Nigeria	115.5	924	290	0.1	52
Niger	7.7	1,267	310	-2.4	45
Rwanda	7.1	26	310	1.0	48
Burkina Faso	9.0	274	330	1.3	48
Benin	4.7	113	360	-0.1	50
Kenya	24.2	580	370	1.9	59
Ghana	14.9	239	390	-1.4	55
Central African Rep.	3.0	623	390	-0.5	49
Togo	3.6	57	410	-0.1	54
Zambia	8.1	753	420	-1.9	50
Guinea	5.7	246	440	na	43
Mauritania	2.0	1,026	500	-0.6	47
Lesotho	1.8	30	530	4.9	56
Liberia	2.6	111	na	na	54
Sudan	25.1	2,506	na	na	50
Zimbabwe	9.8	391	640	0.7	61
Senegal	7.4	197	710	-0.6	47
Cote d'Ivoire	11.9	322	750	0.5	55
Cameroon	11.7	475	960	3.0	57
Congo	2.3	342	1,010	3.1	53
Botswana	1.3	582	2,040	8.4	67
Mauritius	1.1	2	2,250	3.2	70
Angola	10.0	1,247	na	na	46
Namibia	1.8	824	na	na	57
Gabon	1.1	268	3,330	0.9	53

for policies that might fit into an overall development strategy, a plan that must, to be effectively implemented, be embraced (if not designed) by national and local governments and bureaucracies.

The recommendations that follow are distilled from common themes in the development policies of Asian countries over their most successful periods. They are not meant to be panaceas or magic formulas. In fact, the adoption of any given policy without regard to

TABLE 1 - Continued
Basic Indicators

	Population (Millions) mid-1990	Area (thousand square km.)	GNP Per Capita		Life Expectancy 1990
			Dollars 1990	Growth Rate 1965-90	
Other Africa					
Egypt, Arab Rep.	52.1	1,001	600	4.1	60
Morocco	25.1	447	950	2.3	62
Tunisia	8.1	164	1,440	3.2	67
Algeria	25.1	2,382	2,060	2.1	65
South Africa	35.9	1,221	2,530	1.3	62
Asia					
NIEs:					
Hong Kong	5.8	1	11,490	6.2	78
Korea	42.8	99	5,400	7.1	71
Singapore	3.0	1	11,160	6.5	74
Taiwan	20.2	36	7,510*	na	na
ASEAN-4:					
Indonesia	178.2	1,905	570	4.5	62
Malaysia	17.9	330	2,320	4.0	70
Philippines	61.5	300	730	1.3	64
Thailand	55.8	513	1,420	4.4	66
South Asia:					
Bangladesh	106.7	144	210	0.7	52
Myanmar	41.6	677	na	na	61
India	849.5	3,288	350	1.9	59
Nepal	18.9	141	170	0.5	52
Pakistan	112.4	796	380	2.5	56
Sri Lanka	17.0	66	470	2.9	71
China	1133.7	9,561	370	5.8	70
Japan	123.5	378	25,430	4.1	79

* 1989
Sources: World Development Report 1992 and Asian Development Outlook 1991.

the current policy environment may be as likely to hurt as to help economic growth. There is no substitute for saving more out of already meager incomes, working hard and productively for low pay, exposing domestic firms to competition from efficient foreign firms and accepting the fact that some will not survive, and taxing economic activities fairly, while encouraging risk-taking and profit making.

When considering prospects for economic development, it is important to remember that there are no "basket cases." No matter how grim prospects may seem for parts of Africa, one should take heart from the fact that such currently dynamic economies as Singapore, South Korea and Taiwan were viewed as hopeless after

TABLE 2

Growth of Production

	Average annual growth rate (percent)							
	GDP		Agriculture		Manufacturing		Services, etc.	
	1965-80	1980-90	1965-80	1980-90	1965-80	1980-90	1965-80	1980-90
Sub-Saharan Africa								
Mozambique	na	-0.7	na	1.3	na	*-1.4*	na	-3.2
Tanzania	3.9	2.8	1.6	4.1	5.6	-0.4	10.8	1.3
Ethiopia	2.7	1.8	1.2	-0.1	5.1	3.1	5.2	3.7
Somalia	3.5	2.4	na	3.3	na	-1.7	na	0.9
Chad	0.1	5.9	-0.3	2.7	*-0.6*	*7.9*	0.2	8.6
Malawi	5.5	2.9	4.1	2.0	*6.4*	3.6	6.7	3.5
Burundi	7.1	3.9	6.6	3.1	6.0	5.5	5.2	5.4
Zaire	1.9	1.8	na	2.5	na	2.3	na	1.6
Uganda	0.6	2.8	1.2	2.5	-3.7	5.2	1.1	3.3
Madagascar	1.6	1.1	na	2.4	na	*1.2*	na	0.3
Sierra Leone	2.7	1.5	3.9	2.6	0.7	-1.6	4.3	1.4
Mali	4.2	4.0	2.8	2.3	*1.8*	*6.8*	7.6	5.6
Nigeria	6.0	1.4	1.7	3.3	14.6	-1.0	5.9	2.7
Niger	0.3	-1.3	-3.4	na	*11.4*	na	0.6	na
Rwanda	4.9	1.0	na	-1.5	na	1.0	na	3.9
Burkina Faso	na	4.3	na	3.3	na	2.6	na	4.9
Benin	2.1	2.8	na	3.6	na	5.8	na	1.8
Kenya	6.8	4.2	5.0	3.3	10.5	4.9	7.2	4.9
Ghana	1.3	3.0	1.6	1.0	2.5	4.0	1.1	5.7
Central African Rep.	2.8	1.5	2.1	2.7	*5.3*	*3.0*	2.9	0.0
Togo	4.3	1.6	1.9	5.4	*6.8*	0.7	4.7	-0.2
Zambia	2.0	0.8	2.2	3.7	5.3	3.5	1.8	0.2
Guinea	na	na	na	na	na	na	na	na
Mauritania	2.1	1.4	-2.0	0.7	*2.2*	*4.9*	6.5	0.8
Lesotho	6.8	3.1	na	-0.7	na	13.5	na	5.6
Liberia	na	na	na	na	na	na	na	na
Sudan	3.8	na	2.9	na	*3.1*	na	4.9	na
Zimbabwe	5.0	2.9	na	2.4	na	2.8	na	3.4
Senegal	2.3	3.0	1.4	3.1	4.5	4.8	1.9	2.9
Cote d'Ivoire	6.8	0.5	3.3	1.0	*10.4*	*0.3*	11.8	-0.1
Cameroon	5.1	2.3	4.2	1.6	7.0	10.2	4.8	2.1
Congo	6.2	3.6	3.1	3.6	*9.9*	6.8	4.7	2.3
Botswana	13.9	11.3	9.7	-4.0	13.5	5.3	11.5	11.9
Mauritius	5.2	6.0	na	2.6	na	10.8	na	5.1
Angola	na	na	na	-0.5	na	-4.6	na	na
Namibia	na	0.4	na	1.0	na	1.4	na	3.0
Gabon	9.5	2.3	na	na	na	na	na	na

World War II. In the 1960s, Singapore was regarded as "Asia's Cuba." South Korea, devastatingly war torn and divided, with its agricultural base bereft of the mineral resources in the north, nevertheless emerged within a generation of its civil war as a model of rapid and surprisingly equitable economic development.

The outlook is indeed bleak for much of Africa. But economic development is a long-term process. Societies cannot change overnight.

TABLE 2 - Continued

Growth of Production

	Average annual growth rate (percent)							
	GDP		Agriculture		Manufacturing		Services, etc.	
	1965-80	1980-90	1965-80	1980-90	1965-80	1980-90	1965-80	1980-90
Other Africa								
Egypt, Arab Rep.	7.3	5.0	2.7	2.5	*6.9*	*4.3*	13.7	6.7
Morocco	5.7	4.0	2.4	6.4	*6.1*	3.8	7.1	4.1
Tunisia	6.5	3.6	5.5	2.3	9.9	6.0	6.4	4.5
Algeria	na	3.1	na	4.3	na	3.0	na	2.9
South Africa	3.7	1.3	3.0	2.6	5.6	-0.1	4.7	2.4
Asia								
NIEs:								
Hong Kong	8.6	7.1	na	na	na	na	na	na
Korea	9.9	9.7	3.0	2.8	18.7	12.7	9.6	9.2
Singapore	10.0	6.4	2.8	-6.2	13.2	6.6	9.1	7.2
Taiwan	9.7*	8.5*	1.8*	1.5*	12.8*	8.2*	9.0*	9.7*
ASEAN-4:								
Indonesia	7.0	5.5	4.3	3.2	12.0	12.5	7.3	6.7
Malaysia	7.4	5.2	na	3.8	na	8.8	na	4.2
Philippines	5.7	0.9	3.9	1.0	6.8	0.1	5.0	2.6
Thailand	7.3	7.6	4.6	4.1	11.2	8.9	7.4	7.8
South Asia:								
Bangladesh	1.7	4.3	0.6	2.6	2.8	2.8	3.6	5.8
Myanmar	na	na	na	na	na	na	na	na
India	3.6	5.3	2.5	3.1	4.5	7.1	4.4	6.5
Nepal	1.9	4.6	1.1	4.8	na	na	na	na
Pakistan	5.2	6.3	3.3	4.3	5.7	7.7	5.9	6.9
Sri Lanka	4.0	4.0	2.7	2.3	3.2	6.3	4.6	4.7
China	6.8	9.5	2.8	6.1	8.9	14.4	11.9	9.1
Japan	6.4	4.1	-0.6	1.3	7.8	5.3	6.8	3.8

Notes: Figures in italics are for industry other than manufacturing.
* For Taiwan, figures are growth rates for valued added in the periods 1971-80 and 1981-90.
Sources: World Development Report 1992 and Asian Development Outlook 1991.

Economies take time to grow, adjust, and develop. With Africa's abundant natural and human resources (though unevenly distributed and developed), it can certainly build a more prosperous future.

In the sections below, we will first contrast the post-war development experiences of Asia and Africa with regards to the four main "gaps," or fundamental challenges of development: the agricultural (basic needs) gap, human resource development, savings and investment, and foreign exchange. Closing or eliminating these gaps allows a country to grow according to its underlying potential (which may still be quite different in different societies).

The third section of the paper looks directly at differences in economic policies in the two regions and how those differences contributed to different outcomes. In particular, policies led to the closing or effective management of the four gaps in many – albeit not all – Asian countries, and the widening of the gaps in most – but not all – African countries. The role governments seek to play in their societies and what the populace expects from government will also be discussed. In addition, the paper touches upon the role of culture in economic development and the impact of external factors on domestic economic policies and performance.

II. The Four Development Gaps

A. The Agricultural (Basic Needs) Gap

Without exception, the success stories in Asia have been characterized by the expansion of the provision of basic human needs – food and shelter – to the vast majority of the population. The proper development of agriculture and meeting the society's basic needs form the basis for filling the other development gaps, particularly the human resource gap, which involves nutrition, health, education, and training. Only a population with its basic needs met can be further cultivated as a resource. The burden on other resources of closing the agriculture/basic needs gap is directly related to the growth rate of the population (see Table 3).[2]

Despite the widely known fact that growth in manufacturing exports is the single most remarkable feature of the performance of the dynamic Asian economies, agriculture played an important role in the growth of all but the city-states of Hong Kong and Singapore. According to James (1990), "the empirical record of economic growth

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2 For a thorough and balanced study of the impact of population growth on economic development, see Johnson and Lee et. al. 1986. For example, they feel that the reduction in fertility in China had a positive effect on per capita agricultural income, but that the agricultural policy reforms begun in 1979 were more important. While noting that some problems and inefficiencies in Africa may be due to the sparseness of population, the authors state on page 89 that "In contrast (to China), tropical Africa has a comparatively high land/population ratio, but appears to be particularly vulnerable to problems induced by population growth."

TABLE 3

Population Growth and Projections

	Annual Growth of Population (percent)			Population (Millions)		
	1965-80	1980-90	1989-2000	1990	2000	2025
Sub-Saharan Africa						
Mozambique	2.5	2.6	3.0	16	21	42
Tanzania	2.9	3.1	3.1	25	33	64
Ethiopia	2.7	3.1	3.4	51	71	156
Somalia	2.9	3.1	3.1	8	11	21
Chad	2.0	2.4	2.7	6	7	14
Malawi	2.9	3.4	3.4	9	12	24
Burundi	1.9	2.8	3.1	5	7	14
Zaire	3.1	3.2	3.0	37	50	89
Uganda	3.0	2.5	3.3	16	23	42
Madagascar	2.5	3.0	2.8	12	15	26
Sierra Leone	2.0	2.4	2.6	4	5	10
Mali	2.1	2.5	3.0	8	11	23
Nigeria	2.5	3.2	2.8	115	153	255
Niger	2.6	3.3	3.3	8	11	24
Rwanda	3.3	3.3	3.9	7	10	23
Burkina Faso	2.1	2.6	2.9	9	12	22
Benin	2.7	3.2	2.9	5	6	10
Kenya	3.6	3.8	3.5	24	34	64
Ghana	2.2	3.4	3.0	15	20	34
Central African Rep.	1.8	2.7	2.5	3	4	6
Togo	3.0	3.5	3.2	4	5	9
Zambia	3.0	3.7	3.1	8	11	20
Guinea	1.5	2.5	2.8	6	8	15
Mauritania	2.4	2.4	2.8	2	3	5
Lesotho	2.3	2.7	2.6	2	2	4
Liberia	3.0	3.1	3.0	3	3	6
Sudan	3.0	2.7	2.8	25	33	55
Zimbabwe	3.1	3.4	2.4	10	12	18
Senegal	2.9	2.9	3.1	7	10	19
Cote d'Ivoire	4.1	3.8	3.5	12	17	31
Cameroon	2.7	3.0	2.9	12	16	28
Congo	2.8	3.4	3.3	2	3	6
Botswana	3.6	3.3	2.5	1	2	2
Mauritius	1.6	1.0	0.9	1	1	1
Angola	2.8	2.6	3.0	10	13	27
Namibia	2.4	3.2	3.0	2	2	4
Gabon	3.6	3.6	2.8	1	1	3

and development in Asia over the past three decades convincingly demonstrates that countries neglecting agriculture tend to grow much more slowly than those that pursued agricultural development early on."

One critically important aspect of the success of Asian agricultural development has been land reform. In Japan, South Korea, and Taiwan, the implementation of agrarian reforms laid the

TABLE 3 - Continued

Population Growth and Projections

	Annual Growth of Population (percent)			Population (Millions)		
	1965-80	1980-90	1989-2000	1990	2000	2025
Other Africa						
Egypt, Arab Rep.	2.1	2.4	1.8	52	62	86
Morocco	2.5	2.6	2.4	25	32	47
Tunisia	2.1	2.3	1.9	8	10	14
Algeria	3.1	3.0	2.8	25	33	52
South Africa	2.4	2.4	2.2	36	45	65
Asia						
NIEs:						
Hong Kong	2.0	1.4	0.8	6	6	7
Korea	2.0	1.1	0.9	43	47	54
Singapore	1.6	2.2	1.2	3	3	4
Taiwan	na	1.9	na	20	na	na
ASEAN-4:						
Indonesia	2.4	1.8	1.6	178	209	275
Malaysia	2.5	2.6	2.3	18	22	32
Philippines	2.8	2.4	1.8	61	74	101
Thailand	2.9	1.8	1.4	56	64	84
South Asia:						
Bangladesh	2.6	2.3	1.8	107	128	176
Myanmar	2.3	2.1	2.0	42	51	70
India	2.3	2.1	1.7	850	1,006	1,348
Nepal	2.4	2.6	2.5	19	24	37
Pakistan	3.1	3.1	2.7	112	147	240
Sri Lanka	1.8	1.4	1.1	17	19	24
China	2.2	1.4	1.3	1,134	1,294	1,597
Japan	1.2	0.6	0.3	124	128	128

Sources: World Development Report 1992 and Asian Development Outlook 1991.

foundation for agricultural development and more equitable distribution of the fruits of economic growth. A vigorous smallholder promotion scheme in Malaysia contributed to agricultural development. In contrast, several attempts at land redistribution in the Philippines resulted in "spectacular failure" (Hill 1993, p. 17). More successful Asian economies invested in the infrastructure, institutions, and organizations important for rural development, and adopted realistic taxation policies so that "explicit or implicit taxation of agriculture was of limited extent or duration" (Naya and Imada 1992, p. 51). A sharp rise in agricultural productivity contributed to some or all of the following benefits for the dynamic Asian economies: (1) the release of labor to

manufacturing activities in the cities; (2) the provision of foreign exchange (either directly through exports or through savings on food imports); and (3) the lowering of urban food prices, inflation, and thus pressures for wage increases.

The green revolution and its technologies were crucial for Asia, using the abundant water and labor intensively, along with fertilizer, to generate high yields and thus economizing on scarce land. Yet Japan and Taiwan (and to a lesser extent, South Korea) were successful even before the dissemination of the new technologies. Furthermore, Malaysia in particular has gone beyond a simple adaptation of new technologies developed elsewhere for tropical agriculture to develop one of the leading research programs and outreach efforts in developing or developed countries (Roemer, Tomich, and Vincent 1993). Other food products have been important since the mid-1970s, especially for Malaysia and Thailand, where income growth has substantially decreased the fraction of rice in total caloric consumption and increased demand for animal protein and feed (primarily maize). "While the Green Revolution in rice has attracted the attention of those who are hopeful of deriving lessons from the Southeast Asian experience, it is important to note that edible oil, maize, and cassava production also made important contributions both to increasing domestic food consumption and to exports. ... It is clear, particularly for Malaysia and Thailand, that food commodities other than rice are driving production growth, maize and cassava in Thailand and edible oil in Malaysia" (Goldman 1993). Thus, whereas any mention of Asian food production must begin with the green revolution – which is not generally transferable to Africa without massive investments in irrigation, fertilizers, and at a tremendous cost in foreign exchange – that is not the end of the story. Many of the policies used to increase yields in maize, edible oils, and other food products had more modest infrastructure requirements and may be more appropriate for Africa.

Table 4 lays out the contrasting agricultural performance statistics of Asian and African countries. The three largest increases in food production per capita among all low and middle income developing countries from 1979-81 to 1987-89 were in Malaysia, China, and Indonesia, where policies conducive to agricultural growth were instituted or strengthened during the period. The cases of China and Indonesia in particular provide compelling evidence to refute the claim

TABLE 4

Agriculture

	Proportion of GDP (%)		Growth Rate %		Index of Food Output (1979-81=100)
	1965	1990	1965-80	1980-90	1988-90
Sub-Saharan Africa					
Mozambique	na	65	na	1.3	81
Tanzania	46	59	1.6	4.1	88
Ethiopia	58	41	1.2	-0.1	84
Somalia	71	65	na	3.3	94
Chad	42	38	-0.3	2.7	85
Malawi	50	33	4.1	2.0	83
Burundi	na	56	6.6	3.1	92
Zaire	20	30	na	2.5	97
Uganda	52	67	1.2	2.5	95
Madagascar	25	33	na	2.4	88
Sierra Leone	34	32	3.9	2.6	89
Mali	65	46	2.8	2.3	97
Nigeria	55	36	1.7	3.3	106
Niger	68	36	-3.4	na	71
Rwanda	75	38	na	-1.5	77
Burkina Faso	37	32	na	3.3	114
Benin	59	37	na	3.6	112
Kenya	35	28	5.0	3.3	106
Ghana	44	48	1.6	1.0	97
Central African Rep.	46	42	2.1	2.7	91
Togo	45	33	1.9	5.4	88
Zambia	14	17	2.2	3.7	103
Guinea	na	28	na	na	87
Mauritania	32	26	-2.0	0.7	85
Lesotho	65	24	na	-0.7	86
Liberia	27	na	na	na	84
Sudan	54	na	2.9	na	71
Zimbabwe	18	13	na	2.4	94
Senegal	25	21	1.4	3.1	102
Cote d'Ivoire	47	47	3.3	1.0	101
Cameroon	33	27	4.2	1.6	89
Congo	19	13	3.1	3.6	94
Botswana	34	3	9.7	-4.0	75
Mauritius	16	12	na	2.6	100
Angola	na	13	na	-0.5	81
Namibia	na	11	na	-0.1	93
Gabon	26	9	na	na	84

that macroeconomic reforms and openness only serve the benefit rich industrialists.

In China agricultural reforms begun in 1979 with the introduction of the "production responsibility system," which transformed agriculture and greatly benefitted rural residents. By breaking up the commune system, contracting production down to the household level, raising procurement prices, and allowing for market-based prices at

TABLE 4 - Continued

Agriculture

	Proportion of GDP (%)		Growth Rate %		Index of Food Output (1979-81=100)
	1965	1990	1965-80	1980-90	1988-90
Other Africa					
Egypt, Arab Rep.	29	17	2.7	2.5	118
Morocco	23	16	2.4	6.4	128
Tunisia	22	16	5.5	2.3	87
Algeria	na	13	na	4.3	96
South Africa	10	5	3.0	2.6	87
Asia					
NIEs:					
Hong Kong	2	0	na	na	80
Korea	38	9	3.0	2.8	106
Singapore	3	0	2.8	-6.2	69
Taiwan	17*	4	1.8*	1.5*	na
ASEAN-4:					
Indonesia	51	22	4.3	3.2	123
Malaysia	28	na	na	3.8	147
Philippines	26	22	3.9	1.0	84
Thailand	32	12	4.6	4.1	106
South Asia:					
Bangladesh	53	38	0.6	2.6	96
Myanmar	na	na	na	na	93
India	44	31	2.5	3.1	119
Nepal	65	60	1.1	4.8	115
Pakistan	40	26	3.3	4.3	101
Sri Lanka	28	26	2.7	2.3	87
China	38	27	2.8	6.1	133
Japan	10	3	-0.6	1.3	101

* Figures for Taiwan are for 1970, 1990, 1971-80 and 1981-90, respectively.
Sources: World Development Report 1992 and Asian Development Outlook 1991.

the margin (after output quotas had been met), the PRC agricultural sector was able to exceed a 7 percent annual average increase of gross value of agricultural output from 1978 to 1984 (more than twice the rate achieved over the previous two decades). Farmers' incomes in 1983 were 2.3 times that of 1979 in nominal terms, outstripping the growth of urban incomes, even though the urban/rural income ratio in real terms was still over 2 : 1 (World Bank, "China: Agriculture to the Year 2000," 1985, p. 9, 13). Although some top Chinese officials seem discouraged by the seemingly stagnant performance of grain output since 1984, overall agricultural output in China has continued to grow at a high rate; anomalies in the agricultural data or overemphasis on

"the grain problem" should not obscure the fact that the household responsibility system has made and continues to make a remarkable contribution to China's agricultural development (Johnson 1990, pp. 116-119).

Policies that have been tremendously successful in generating manufacturing exports in Asian countries have spurred food production as well. The only caveat to this strong statement is that several other Asian countries who did not substantially change policies (e.g., Laos and Myanmar) or began to shift only late in the period (e.g., India and Vietnam) also recorded substantial, though smaller, gains.

The picture for African countries is almost completely reversed. Only four sub-saharan African countries recorded any significant increases: Burkina Faso, Benin, Ghana, and Senegal,[3] and perhaps only in Ghana can the increase be directly tied to policy changes. Far more serious is the situation in the rest of Africa, typified by the performance in the world's four poorest countries: Mozambique, Ethiopia, Tanzania, and Somalia. In these countries, per capita food production dropped by 3 to 17 percent. While factors less subtle than economic policies – such as war – affect the figures for individual counties, the widespread decline throughout Africa is clear evidence of a net policy bias against food production and food producers, generally a numerous and already impoverished group. The consequences of the stagnation or decline in food production are increased human suffering and increased reliance on commercial grain imports and/or aid.

It is, of course, not crucial for all countries in the region to be self-sufficient in food production. If the stagnation in food production were due to African countries specializing in other agricultural products such as coffee, cocoa, cotton, etc. in which they hold a comparative advantage, then trading with countries such as the U.S. (where 26 percent of the annual U.S. corn harvest is stored, with the potential for expansion of output if export demand increased), then there would be no problem. Yet similar declines in export crops were recorded in many of the same countries.

In sum, agricultural development in Asia provided the foundation for industrial growth. Agriculture proved to be a source of savings

3 The tiny country of Comoros (with a population of half a million) actually registered the highest increase.

and foreign exchange for investment in other sectors, as well as providing income to farmers with which they could purchase manufactured goods. Taiwan's integration of agricultural development and industrialization is perhaps the most successful in the world (Roemer in Winrock International 1991, p. 51). African counties may be able to learn from Asian development experience. Not all countries should strive for food self-sufficiency, but neither should agricultural development be neglected.

B. Human Resource Development

Frequently one hears that social development and economic growth are in conflict. By competing for resources, they vie for priority among a country's long-term goals. Asian experiences show that this need not be the case; some countries have achieved both. The human development indicators of South Korea and Taiwan, for example, rival developed countries in many areas.

There are four basic issues in human resource development (HRD): how much of the society's resources can be devoted to HRD, how effectively those resources can be translated into services, how well services can be targeted to specific segments of the population, and how consistent the pattern of HRD is with the pattern of economic growth. To illustrate, let us consider the experience with HRD in several Asian countries.

Investment in people has been a focal point of East Asian development. One key has been the initial emphasis on labor-intensive industries, which, through raising the demand for labor, raised incomes and spread the benefits of growth relatively equitably throughout the society. High rates of public sector spending on HRD were augmented by considerable private spending, especially for education. In East Asia, relatively homogeneous societies, good infrastructure, and well-developed institutions enabled human resource services to be delivered at a reasonable cost. No major segments of the population were passed over for reasons of ethnicity, gender, caste, or geography. Economic growth provided opportunities for newly developed health, education, and skills to be utilized in productive employment; employment in turn provided higher incomes, a portion of which was spent to further augment HRD, thus forming a virtuous cycle.

In some Asian countries, parts of the cycle were either lacking or weak. High levels of spending on public sector enterprises and exorbitant defense expenditures squeezed out HRD in South Asia, with the exception of Sri Lanka and the neighboring Indian state of Kerala. Poor roads, communications, and a harsh geography made provision of basic services extremely costly in parts of India, Nepal, Bhutan, Indonesia, the Philippines, and parts of Indochina and the PRC. Cultural attitudes toward women, the Caste system, tribal peoples with indigenous languages in Southeast Asia, "border peoples" in Myanmar-Bangladesh, Myanmar-Thailand, Indonesia-Malaysia (Borneo), Indonesia-Papua New Guinea and elsewhere, all contribute to unequal access to health services, education, and other aspects of HRD services. Economic stagnation contributed to the inefficient use of human resources in the Philippines and in all of South Asia, particularly Sri Lanka. In the Philippines and Sri Lanka, discontent among the educated unemployed contributed to social unrest. (For the Philippines, emigration eased social problems and provided some return on the investment in higher education in the form of foreign exchange remittances).

(1) Health

In Africa, the health situation is more grave than in virtually any of the Asian countries (see Table 5). The infant mortality rate provides a good picture of nutrition and health care in developing countries. Every single low-income country in Africa is below average for the group of low-income countries, and many (13 of 24), including but not limited to the poorest, have more than twice the infant mortality rates of the group. China and Sri Lanka stand out as countries whose provision of health and welfare related services has far outpaced their economic development. In China, for example, between 1970 and 1990, life expectancy increased from 61 to 70, and infant mortality rates declined while daily per capita calorie intake increased significantly. UNICEF considers China an example of "how the health, education, and welfare of children can be dramatically improved even at a low level of national income" (Swedish Foreign Ministry 1992, p. 210).[4] In contrast, no country in Africa is immune from the charge

4 One must add that studies of international purchasing power conclude that China's

TABLE 5
Health

	Population Per Physician (thousands)		Infant mortality rate (per 1,000 live births)		Daily calorie supply (per capita)	
	1965	1984	1965	1990	1965	1989
Sub-Saharan Africa						
Mozambique	18.0	na	179	137	1,712	1,680
Tanzania	21.7	25.0	138	115	1,831	2,206
Ethiopia	70.2	78.8	165	132	1,853	1,667
Somalia	43.8	20.0	165	126	1,718	1,906
Chad	72.5	38.4	183	125	2,395	1,743
Malawi	47.3	11.3	200	149	2,259	2,139
Burundi	55.9	21.0	142	107	2,131	1,932
Zaire	34.7	13.5	141	94	2,187	1,991
Uganda	11.1	na	119	117	2,361	2,153
Madagascar	10.6	9.8	201	116	2,447	2,158
Sierra Leone	16.8	13.6	208	147	2,014	1,799
Mali	51.5	25.4	209	166	1,938	2,314
Nigeria	29.5	6.4	162	98	2,185	2,312
Niger	65.5	39.7	180	128	1,996	2,308
Rwanda	72.5	35.1	141	120	1,856	1,971
Burkina Faso	74.0	57.2	190	134	1,882	2,288
Benin	32.4	15.9	166	113	2,019	2,305
Kenya	13.3	10.1	112	67	2,208	2,163
Ghana	13.7	20.4	120	85	1,937	2,248
Central African Rep.	34.0	na	157	101	2,055	2,036
Togo	23.2	8.7	153	88	2,454	2,214
Zambia	11.4	7.2	121	82	2,072	2,077
Guinea	47.1	na	191	138	2,187	2,132
Mauritania	36.5	11.9	178	121	1,903	2,685
Lesotho	20.1	18.6	142	93	2,049	2,299
Liberia	12.6	9.3	176	136	2,158	2,382
Sudan	23.5	10.2	160	102	1,938	1,974
Zimbabwe	8.0	6.7	103	49	2,075	2,299
Senegal	19.5	na	160	81	2,372	2,396
Cote d'Ivoire	20.6	na	149	95	2,352	2,577
Cameroon	26.7	na	143	88	2,011	2,217
Congo	14.2	na	129	116	2,260	2,590
Botswana	27.5	6.9	112	38	2,045	2,375
Mauritius	3.9	1.9	65	20	2,269	2,887
Angola	13.2	17.8	192	130	1,907	1,807
Namibia	na	na	145	100	1,900	1,946
Gabon	na	2.8	153	97	1,950	2,383

exchange rate is extremely undervalued, thus standard comparisons of per capita income in dollar terms understate China's level of development, perhaps by as much as a factor of four (Summers and Heston 1991). Yet a correction of income measured for purchasing power parity does not alter the basic conclusions of either the cited report or this paper — that Asian countries devoted more public and private resources to HRD relative to their incomes, while African countries seem to devote less, with less effect, than their more successful Asian counterparts.

TABLE 5 - Continued

Health

	Population Per Physician (thousands)		Infant mortality rate (per 1,000 live births)		Daily calorie supply (per capita)	
	1965	1984	1965	1990	1965	1989
Other Africa						
Egypt, Arab Rep.	2.3	0.8	145	66	2,399	3,336
Morocco	12.1	4.7	145	67	2,112	3,020
Tunisia	8.0	2.2	145	44	2,217	3,121
Algeria	8.6	2.3	154	67	1,701	2,866
South Africa	2.1	na	124	66	2,759	3,122
Asia						
NIEs:						
Hong Kong	2.5	1.1	27	7	2,486	2,853
Korea	2.7	1.2	62	17	2,178	2,852
Singapore	1.9	1.4	26	7	2,285	3,198
Taiwan	na	na	na	na	na	na
ASEAN-4:						
Indonesia	31.7	9.4	128	61	1,791	2,750
Malaysia	6.2	1.9	55	16	2,353	2,774
Philippines	na	6.6	72	41	1,875	2,375
Thailand	7.2	6.3	88	27	2,138	2,316
South Asia:						
Bangladesh	8.1	6.4	144	105	1,970	2,021
Myanmar	11.9	3.7	122	64	1,897	2,440
India	4.9	2.5	150	92	2,021	2,229
Nepal	46.2	30.2	171	121	1,889	2,077
Pakistan	na	2.9	149	103	1,773	2,219
Sri Lanka	5.8	5.5	63	19	2,171	2,277
China	1.6	1.0	90	29	1,929	2,639
Japan	1.0	0.7	18	5	2,668	2,956

Source: World Bank, World Development Indicators, World Development Report 1992.

that neglect of this aspect of HRD has hampered development efforts. Even at higher levels of income, African countries are often outliers, with infant mortality rates two to three times higher than in comparable countries (Cote d'Ivoire, Congo, Cameroon, Namibia, and Gabon).

One specific health challenge is how to cope with the AIDS epidemic sweeping across equatorial Africa. In Zambia, 43 percent of soldiers tested positive for the HIV virus, as did 36 percent of pregnant woman. Thirty percent of supposedly healthy relatives of the AIDS patients, when screened for blood donations, also tested positive for the

virus. In Sub-Saharan Africa as a whole, one adult in 40 is HIV infected, as are nearly one million children (Human Development Report 1992, p. 14). The World Health Organization estimates that at least 6.6 million adults in Africa are infected with the AIDS virus, and that by 1994 the figure will have risen to 10 million (GCA 1992 Annual Report, p. 13).

While the rise in the death rate to date represents only the tip of the iceberg, deaths of people in the prime of life are already cutting into the scarce supply of skilled labor. To cope with the rising mortality rates, private companies and government agencies alike must train more employees and managers than they anticipate needing. Corporate heads and policymakers are not immune, either. Individual African countries and the world community as a whole must respond to this crisis. Although Asia by no means has all of the answers, something in this area too can be learned from certain anti-AIDs programs, specifically in Thailand.

(2) Education

In terms of an educational system, what is needed in LDCs is a structure which starts by emphasizing primary, secondary, and vocational education. Over time, a country needs to increase the size of the pool of skilled labor and the ratio of skilled to unskilled workers. Skills can and should be developed not only in the classroom, but also on the job, through learning-by-doing. Japan, South Korea, Taiwan, Singapore – all these economies have reaped the rewards of investment in education, leading to highly skilled labor forces. In some countries, the educational investments have still not been enough, leaving the human resource gap incompletely filled. Thailand's investment in primary education, for example, has paved the way for development so far, but future progress is clouded by the lack of adequate secondary educational foundations.

Studies of the social value of education in developing counties identify primary education as the level at which returns are highest.[5] The percentage of the population completing at least a fourth grade

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5 While this general conclusion holds across countries and regions, it is disturbing that estimates for Africa are much lower in absolute terms, indicating major

education is a guide to the capability of a country's labor force to perform simple industrial jobs requiring limited literacy and numeracy. Furthermore, female education is particularly important. Information about family planning, nutrition, and health – including information on how to stop the spread of the AIDS virus – can only be effectively transmitted to households through female literacy.

In terms of these basic educational levels, the picture looks a bit better for Africa than does the situation in health (see Table 6). A few counties have an overwhelming majority of the latest cohort completing the fourth grade, even among the low income countries (e.g., Tanzania, Zambia, Ghana, Mauritania, Burkina Faso, and Niger); and others (Burundi, Rwanda, Cameroon, and Zimbabwe) are making rapid progress toward achieving that level. In contrast, several countries in Africa are experiencing stagnation or even retrogression in the provision of basic education to their populations. The pressure of rapid population growth is only one of several factors. In fact, the entire basic educational system in some countries appears to be in disarray or decay. These countries include Benin, Zaire, Ethiopia, Kenya, and Togo. Severe data problems limit the value of numerical comparisons. The basic problems may be more or less severe in a given country than the figures indicate, or just as severe in countries for which data are not available or are not as startling.

Most countries are making improvements in extending basic education to the female population. Yet there are still only about two female pupils per three male pupils in primary schools, an one per two or three in secondary schools throughout much of Africa. Zaire is a fairly typical case for low-income Africa, with the ratio of female to male students rising from 0.48 to 0.73 in primary and from 0.15 to 0.43 in secondary schools between 1965 and 1989. In no country is the gender inequality in education increasing (with the possible exception of secondary education in Mozambique); only in a few countries – Chad, Benin, and Guinea – does female education seem to be stagnating at a low level.

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differences in the quality of basic education in the two regions (Glewwe 1991). Improvements in the quality of education would raise the private rate of return to investments in schooling, thus eliciting better attendance and other, complementary private investments.

TABLE 6

Education

	Percentage of age group enrolled in education						Adult illiteracy (percent)
	Primary		Secondary		Tertiary		
	1965	1989	1965	1989	1965	1989	1990
Sub-Saharan Africa							
Mozambique	37	68	3	5	0	0	67
Tanzania	32	63	2	4	0	0	na
Ethiopia	11	38	2	15	0	1	na
Somalia	10	na	2	na	0	na	76
Chad	34	57	1	7	na	1	70
Malawi	44	67	2	4	0	1	na
Burundi	26	71	1	4	0	1	50
Zaire	70	78	5	24	0	2	28
Uganda	67	77	4	13	0	1	52
Madagascar	65	92	8	19	1	4	20
Sierra Leone	29	53	5	18	0	1	79
Mali	24	23	4	6	0	na	68
Nigeria	32	70	5	19	0	3	49
Niger	11	28	1	6	na	1	72
Rwanda	53	69	2	7	0	1	50
Burkina Faso	12	35	1	7	0	1	82
Benin	34	65	3	na	0	2	77
Kenya	54	94	2	23	0	2	31
Ghana	69	75	13	39	1	2	40
Central African Rep.	56	64	2	11	na	1	62
Togo	55	103	5	22	0	3	57
Zambia	53	95	7	20	na	2	27
Guinea	53	95	7	20	na	2	76
Mauritania	13	51	1	16	na	3	66
Lesotho	94	110	4	26	0	4	na
Liberia	41	na	5	na	1	3	61
Sudan	29	na	4	na	1	3	73
Zimbabwe	110	125	6	52	0	6	33
Senegal	40	58	7	16	1	3	62
Cote d'Ivoire	60	na	6	20	0	na	46
Cameroon	94	101	5	26	0	3	46
Congo	114	na	10	na	1	6	43
Botswana	65	111	3	37	na	3	26
Mauritius	101	103	26	53	3	2	na
Angola	39	94	5	11	0	na	58
Namibia	na	na	na	na	na	na	na
Gabon	134	na	na	na	na	4	39

Finally, an important issue in African human resource development is the brain drain from the continent. By 1987, nearly a third of Africa's skilled people had moved to Europe, impairing Africa's capacity to govern and to train a new generation of professionals. Estimates put the drain of middle-and high-level managers from Africa at up to 60,000 between 1985 and 1990. In Ghana, for example, 60 percent of doctors trained in the early 1980s are now abroad. In 1978

TABLE 6 - Continued

Education

	Percentage of age group enrolled in education						Adult illiteracy
	Primary		Secondary		Tertiary		(percent)
	1965	1989	1965	1989	1965	1989	1990
Other Africa							
Egypt, Arab Rep.	75	97	26	81	7	20	
Morocco	57	68	11	36	1	11	51
Tunisia	92	115	16	44	2	8	35
Algeria	68	94	7	61	1	11	43
South Africa	90	na	15	na	4	na	na
Asia							
NIEs:							
Hong Kong	103	105	29	73	5	na	na
Korea	101	108	35	86	6	38	na
Singapore	105	110	45	69	10	na	na
Taiwan	na	na	na	na	na	na	na
ASEAN-4:							
Indonesia	72	118	12	47	1	na	23
Malaysia	90	96	28	59	2	7	22
Philippines	113	111	41	73	19	28	10
Thailand	78	86	14	28	2	16	7
South Asia:							
Bangladesh	49	70	13	17	1	4	65
Myanmar	71	103	15	24	1	5	19
India	74	98	27	43	5	na	52
Nepal	20	86	5	30	1	6	74
Pakistan	40	38	12	20	2	5	65
Sri Lanka	93	107	35	74	2	4	12
China	89	135	24	44	0	2	27
Japan	100	102	82	96	13	31	na

Source: World Bank, World Develoopment Indicators, World Development Report 1992.

alone, Sudan lost 17 percent of doctors and dentists, 20 percent of university teaching staff, 30 percent of engineers and 45 percent of surveyors (Human Development Report 1992, p. 57). Although there are no easy answers, it would be worthwhile to consider the experience of South Korea. It successfully overcame its brain drain problem by actively recruiting back expatriate professionals. To do so, salaries offered had to be reasonable and competitive.

With the exception of several low-income countries in South Asia, it is clear that Africa is starting at a tremendous disadvantage relative to Asia in the critical area of human resource development. The

challenge facing both domestic policy makers and external aid organizations is daunting: to reallocate spending and mobilize new resources for HRD; to make the provision of services more efficient despite considerable geographical, social, institutional, and infrastructural difficulties; to target overlooked groups based on ethnicity, gender, geography, or religion; and to remove obstacles to labor-intensive growth. As Asia has amply demonstrated, rapid expansion of employment opportunities is the best way to combat poverty and inequality. Employment generates private savings and investment (including investment in HRD), as well as tax revenues for complementary public investment programs.

C. The Savings/Investment Gap

The mobilization of domestic savings has played a critical role in Asian development. Those scanning macroeconomic data on the developing Asian economies are often most struck by the high rates of savings and investment in the region (see Table 7). This was not always true, and as will be illustrated in the next section, this achievement illustrates the importance of both macroeconomic stability and appropriate policies. South Korea and Singapore increased their savings rates from five to ten percent in the early 1960s to 37 and 45 percent respectively in 1990. Indonesia's savings rate varied from 0 to 8 percent in the mid-1960s before rising to 37 percent in 1990. Consistently high savings rates fueled and were further boosted by rapid growth.

In Africa, savings rates have been low and widely fluctuating, as illustrated in Table 7. There is a clear distinction between the haves and have-nots in terms of resources. Savings reflect resource endowments, and vary widely with terms of trade shocks. The three richest countries in terms of marketable resources – Botswana, Gabon, and Nigeria – all exhibit routine fluctuations of about 10 percentage points in their in their savings rates, with peak fluctuations of 18 to 20 percent (IMF 1992). Such variance puts incredible stains on development planning and fuels boom and bust cycles, exacerbating the high level of uncertainty and risk characteristic of developing economies.

Conversely, the poorest countries in Africa save less than 10

TABLE 7

Savings and Investment

	Gross Domestic Savings (% of GDP)		Gross Domestic Investment (% of GDP)	
	1965	1990	1965	1990
Sub-Saharan Africa				
Mozambique	na	-12	na	37
Tanzania	16	-6	15	25
Ethiopia	12	6	13	13
Somalia	8	22	11	16
Chad	6	-15	12	10
Malawi	0	10	14	19
Burundi	4	1	6	19
Zaire	16	na	17	11
Uganda	12	-1	11	12
Madagascar	0	8	7	17
Sierra Leone	8	5	12	11
Mali	5	10	18	26
Nigeria	10	29	15	15
Niger	3	na	8	9
Rwanda	5	4	10	12
Burkina Faso	4	5	10	20
Benin	3	2	11	12
Kenya	15	18	14	24
Ghana	8	11	18	15
Central African Rep.	11	-2	21	11
Togo	23	11	22	22
Zambia	40	17	25	14
Guinea	na	21	na	20
Mauritania	27	3	14	15
Lesotho	-26	-41	11	71
Liberia	27	na	17	na
Sudan	9	na	10	na
Zimbabwe	23	21	15	21
Senegal	8	9	12	13
Cote d'Ivoire	29	14	22	10
Cameroon	12	19	13	17
Congo	5	31	22	16
Botswana	-13	na	6	na
Mauritius	13	21	17	30
Angola	na	na	na	na
Namibia	na	na	na	na
Gabon	37	37	31	19

percent of domestic production in a normal year, and in a bad year consume all domestic production and much of whatever capital inflows they can generate. No fewer than thirteen African countries consumed more than 99 percent of their domestic product in at least one year since 1980, leaving themselves totally dependent on foreigners to finance (and direct?) their development. Obviously, rain-fed agricultural societies will be heavily dependent on weather; variability in rainfall is

TABLE 7 - Continued
Savings and Investment

	Gross Domestic Savings (% of GDP)		Gross Domestic Investment (% of GDP)	
	1965	1990	1965	1990
Other Africa				
Egypt, Arab Rep.	14	10	18	23
Morocco	12	20	10	26
Tunisia	14	19	28	27
Algeria	19	38	22	33
South Africa	26	25	27	19
Asia				
NIEs:				
Hong Kong	29	33	36	28
Korea	8	37	15	37
Singapore	10	45	22	39
Taiwan	na	28	na	22
ASEAN-4:				
Indonesia	8	37	8	36
Malaysia	24	33	20	34
Philippines	21	16	21	22
Thailand	19	34	20	37
South Asia:				
Bangladesh	8	2	11	12
Myanmar	na	na	na	na
India	15	20	17	23
Nepal	0	8	6	18
Pakistan	13	12	21	19
Sri Lanka	13	15	12	22
China	25	43	24	39
Japan	33	34	32	33

Sources: World Development Report 1992 and Asian Development Outlook 1991.

thus magnified in the savings rate, since savings is the residual of income minus consumption.

The need to mobilize savings for growth is critical in these countries. Rather than a problem of managing fluctuations, it seems to be more a question of creating something out of nothing. Yet even the poor save, though usually in the form of livestock, land, or seed. Often it is a question of how to develop institutions and institutional mechanisms that are *trusted* by the people to intermediate savings through a financial system. Where capital markets don't work, either through inappropriate policies or due to problems inherent in

developing countries (high information costs, etc.), the expansion of economic activities for all but the largest private sector corporations can be accomplished only through self-finance. An entire economy attempting to finance growth through retained earnings cannot easily restructure of transform itself from an agrarian to a manufacuturing-based economy.

(1) Formal and Informal Financial Intermediation

Studies indicate that three factors underlay the successful mobilization of domestic savings in dynamic Asian economies: (1) Positive real interest rates gave the populace incentives to save; (2) Sufficient availability and convenience of savings institutions, such as the postal savings system in Japan, encouraged savings and pooled resources; and (3) the profitability of investment opportunities promoted domestic savings. That similar policies are important for African economies is substantiated by Ikhide (1992) in his finding of a positive statistical relationship between real interest rates on the one hand and financial deepening and efficiency of investment on the other, based on a sample of Sub-Saharan African countries. The government of a developing country has to provide incentives for financial intermediation so that the economy can move away from self-finance to utilization of financial intermediary institutions. Development of a financial system also depends heavily on the establishment of an effective regulatory system, so that financial soundness is maintained. Perhaps most importantly, financial reform and development require political commitment and macroeconomic stability.

In the formal financial sector, dynamic Asian economies have often implemented policies of financial regulation and credit allocation. Indeed, credit allocation has been one major tool of industrial policy, a tool which is still not obsolete. South Korea, for example, has been talking seriously about the need for financial reform for a long time, but even the financial plan of the reform-minded Kim Young Sam administration shows that administrators are loath to give up control of credit levers: "Even if the Kim administration holds to the reform timetable, it is unclear when banks will ever become totally independent of the government.... the situation could leave the government in firm control of the financial system" (Paisley 1993).

In many areas of Africa, less than forty percent of the population has access to a bank (Nzemen 1989). According to Nowak (1989), "per capita bank credit in the private sector amounts to $ 48 p.a. in sub-Saharan Africa, but 90 percent of the economic operators have no access to it" (p. 68). Development of the banking sector should be a priority for African LDCs.

Asian countries developed an effective substitute for working formal capital markets. Several Asian countries, most notably South Korea and Taiwan, developed Kerb (or curb) markets — the name evoking a street corner setting as opposed to a bank building. Working through the extended family, a local money lender could economize on the gathering of information related to the credit worthiness of a borrower by making the extended family responsible for the repayment of loans. Limited personal mobility in East Asian societies and a broad scope for individually tailored terms and conditions helped to make the system work. In Southeast Asia, for example, moneylenders, pawn shops, trade credits, and rotating credit associations performed an essential function for small borrowers; in some cases, governments tried to extend and adapt the state banking system to the requirement of these small borrowers (Hill 1993, p. 37). Throughout Asia, high interest rates in curb markets choked off demand for consumption loans. Borrowers needed good prospects for large profits to make the risk of lending worthwhile; thus the system contributed to allocative efficiency in investment.

African economies have also developed effective informal financial systems, such as the tontines of Cameroon, Senegal, Cote d'Ivoire and Congo, also known as ' esusu' in Nigeria, ' likelemba' in Zaire, ' susu' in Liberia and ' cilimba' in Zambia. Tontines form an informal financial market whereby members invest their savings and can obtain credit on a rotating basis. Tontines contribute to the monetarization of the rural economy, channeling otherswise hoarded funds into small-scale investments, which benefit from the collective monitoring by tontine members (Nzemen 1989). As in Asia, the interest rates are high: 50-90 percent for tontine members, 120-180 percent for non-members, with "credit facilities for small traders and purveyors of services often [involving] interest of 10 percent or 20 percent per week and sometimes per day" (Nowak 1989, p. 69). Credit is difficult to obtain, but risks are also high. Africa's informal financial institutions

thus play a vital role in pooling funds and allocating them efficiently in underdeveloped areas.

Of course, informal intermediaries have their limitations: "financial dualism aggravates economic dualism" (Nowak 1989, p. 68). There is no substitute for sound development of the formal financial sector, using convinient, readily accessible, and trustworthy institutions. Nevertheless, in view of the relative success of Asian economies' curb markets, the role of such African informal financial institutions merits further study and encouragement as a partial answer for the mobilization and intermediation of savings in Africa.

(2) Foreign Aid and Direct Foreign Investment

Foreign resource inflows allow countries to invest at a rate above that supportable by domestic savings alone. Of course, such inflows require corresponding flows of equity or debt; even overseas development assistance (ODA) may come with strings or conditionalities. Private capital flows follow investment opportunities, so they may strengthen economic development once it begins to "take-off." Yet private capital flows can also magnify boom and bust cycles, boosting investment when it is already high and exhibiting a net withdrawal of resources through debt service payments and withdrawal of equity when times are already tough. Concessional loans and aid should be counter-cyclical, but in practice, hard times are strongly correlated with recessions in the donor countries; thus, ODA tends to be stretched more thinly at the very time that export revenues are declining.

Whereas foreign aid can be important in assisting economies fill in gaps in savings and foreign exchange and can be channeled into extremely useful areas such as human resource development, these are only short-term solutions. In the long run, aid can only be supplementary; a country cannot **depend** on aid in the long term. The effectiveness of foreign aid in helping an economy launch its own sustained development depends critically on how the aid is used. Aid did play a role in Asian development, and that role was positive mostly because aid was on the whole put to productive and efficient use. "Aid has worked in East Asia where it has augmented an increase in domestic savings to support much higher levels of investment than

could otherwise have been contemplated and not worked in instances where it has substituted for a lack of growth in domestic savings (South Korea from 1953 to 1960 and the Philippines)" (Swedish Foreign Ministry 1992, p. 156). Aid can also assist in structural adjustment efforts. In the end, however, development must be internally generated.

Different countries and regions pursue different basic patterns of foreign resource utilization (see Tables 8 and 9). Rapidly growing Asian countries generally drew in modest resources from abroad – about 2-5 percent of GDP – during their periods of high growth. "Crises" in this context are manageable, such as South Korea's 4.4 percent fall in its savings at the onset of the second oil shock in 1980. Investment rates fell 4.3 percent in 1980 and another 2.2 percent in 1981, even though consumption had stabilized (International Monetary Fund 1993). Thus the decline in foreign resource inflows was modest and delayed; as a result, investment rates stabilized as a fraction of GDP and rapid growth resumed.

The worst Asian crisis in recent years may have been that faced by the Philippines in the mid-1980s. Savings plummeted from 26 to 21 to 16 percent of GDP in 1983, 1984, and 1985. Investment fell even faster – from 30 to 22 to 16 percent – as net foreign resources declined from four percent to zero, and the Philippines GDP contracted by more than 15 percent in 1984-85. Nevertheless, the Philippines was able to restore a measure of investor confidence, leading to a repatriation of capital, a rise in investment levels to 20 percent of GDP, and a return to modest (3-6 percent) growth despite a continuing drop in net foreign capital inflows (-1 and -2 percent) in the next two years (International Monetary Fund 1993).

Indonesia also has had problems with its external debt. After defaulting in the mid-1960s, rapid economic growth and the oil boom helped Indonesia keep debt levels low until another crisis emerged in the mid-1980s, due to falling oil prices, maturing debt, and the rapidly appreciating yen (in which some 40 percent of the debt was denominated). The debt-service ratio approached 40 percent in the late 1980s. Indonesia avoided default by quick adoption of reform policies; a flexible donor response was also crucial (Hill 1993, p. 55).

Thus the dynamic Asian economies have largely avoided onerous debt burdens, the key being effective management of foreign capital inflows and flexible responses, both by governments and donors.

TABLE 8

Official Development Assistance

	Millions Of dollars			Per Capita (dollars)	As a % of GNP
	1988	1989	1990	1990	1990
Sub-Saharan Africa					
Mozambique	893	772	946	60.2	65.7
Tanzania	982	920	1,155	47.1	48.2
Ethiopia	970	752	888	17.4	14.6
Somalia	433	427	428	54.8	45.9
Chad	264	241	315	55.5	28.6
Malawi	366	412	479	56.3	25.7
Burundi	188	196	265	48.8	24.0
Zaire	576	634	823	22.0	10.9
Uganda	363	403	557	34.1	18.4
Madagascar	304	321	382	32.8	12.3
Sierra Leone	102	100	70	16.9	7.8
Mali	427	454	474	56.0	19.4
Nigeria	120	346	234	2.0	0.7
Niger	371	296	358	46.7	14.2
Rwanda	252	232	287	40.3	13.4
Burkina Faso	298	272	315	34.9	9.9
Benin	162	263	261	55.1	na
Kenya	808	967	1,000	41.4	11.4
Ghana	474	552	465	31.2	7.4
Central African Rep.	196	192	232	76.3	17.8
Togo	199	183	210	57.8	13.0
Zambia	478	392	438	54.0	14.0
Guinea	262	346	292	51.0	10.4
Mauritania	184	242	211	107.0	20.0
Lesotho	108	127	138	78.0	24.5
Liberia	65	59	115	44.9	na
Sudan	937	772	792	31.5	9.3
Zimbabwe	273	265	343	35.0	5.5
Senegal	569	650	739	99.8	12.7
Cote d'Ivoire	439	403	689	57.9	6.9
Cameroon	284	458	483	41.2	4.3
Congo	89	91	209	92.0	7.3
Botswana	151	160	148	118.2	5.5
Mauritius	59	58	89	82.9	3.6
Angola	159	148	212	21.2	na
Namibia	22	59	57	32.0	na
Gabon	106	133	140	123.0	3.0

Africa lacks both. Africa's debt is now larger than the annual regional GNP and almost two and a half times the value of exports. Whereas developing countries in other regions have received substantial debt relief, the debt crisis is still very real for Africa. Debt service consumes almost 31 percent of exports. There is need of a global initiative to address Africa's debt problems (Yaker 1992).

Poor management of foreign capital inflows in Africa has

TABLE 8 - Continued

Official Development Assistance

	Millions Of dollars			Per Capita (dollars)	As a % of GNP
	1988	1989	1990	1990	1990
Other Africa					
Egypt, Arab Rep.	1,537	1,568	5,604	107.6	15.9
Morocco	481	450	970	38.6	3.8
Tunisia	316	234	316	39.2	2.5
Algeria	171	152	227	9.1	0.4
South Africa	na	na	na	na	na
Asia					
NIEs:					
Hong Kong	22	40	37	6.4	0.1
Korea	10	52	52	1.2	0.0
Singapore	22	95	-3	-1.0	0.0
Taiwan	na	na	na	na	na
ASEAN-4:					
Indonesia	1,632	1,839	1,724	9.7	1.6
Malaysia	104	140	469	26.3	1.1
Philippines	854	844	1,277	208.0	2.9
Thailand	563	739	805	14.4	1.0
South Asia:					
Bangladesh	1,592	1,800	2,103	19.7	9.2
Myanmar	451	184	170	4.1	0.8
India	2,097	1,895	1,586	1.9	0.6
Nepal	399	493	429	22.7	13.8
Pakistan	1,408	1,129	1,152	10.3	2.9
Sri Lanka	598	547	665	39.1	8.2
China	1,989	2,153	2,076	1.8	0.6
Japan	na	na	na	na	na

Source: World Bank, World Development Indicators, World Development Report 1992.

magnified the boom and bust cycle observed in savings. Year-to-year adjustments in investment levels of 14 percent in Botswana, 11 percent in Tanzania and Zambia, and a remarkable 25 percent in both Gabon and the Congo, are extreme but hardly atypical (International Monetary Fund 1993). They evoke images of gold rushes to spend money on poorly planned and questionable projects, made more costly as scarce resources (including planning capabilities) were stretched too thinly or bid up in price, followed by half-completed buildings rusting to the ground, half-finished roads and dams abandoned, and other less visible testaments to good intentions gone bad. Why would a country

TABLE 9

Total External Debt

	Millions of dollars	Debt/GNP Ratio	Debt Service/Export Ratio
	1990	1990	1990
Sub-Saharan Africa			
Mozambique	4,718	3.8	na
Tanzania	5,866	2.2	0.3
Ethiopia	3,250	0.5	0.6
Somalia	2,350	2.5	0.1
Chad	492	0.5	0.0
Malawi	1,544	0.9	0.2
Burundi	906	0.8	0.5
Zaire	10,115	1.2	0.1
Uganda	2,726	0.8	0.4
Madagascar	3,938	1.5	0.5
Sierra Leone	1,189	1.2	0.0
Mali	2,433	1.1	0.1
Nigeria	36,068	1.1	0.2
Niger	1,829	0.8	0.2
Rwanda	741	0.3	0.1
Burkina Faso	834	0.3	0.2
Benin	1,427	0.8	0.1
Kenya	6,840	0.8	0.5
Ghana	3,498	0.6	0.3
Central African Rep.	901	0.8	0.1
Togo	1,296	0.9	0.2
Zambia	7,223	2.1	na
Guinea	2,497	1.0	na
Mauritania	2,227	2.2	0.1
Lesotho	390	0.4	na
Liberia	1,870	na	0.0
Sudan	15,383	na	0.1
Zimbabwe	3,199	0.5	na
Senegal	3,745	0.7	0.3
Cote d'Ivoire	17,956	2.0	0.5
Cameroon	6,023	0.5	0.4
Congo	5,118	2.2	0.2
Botswana	516	0.2	na
Mauritius	939	0.4	0.1
Angola	7,710	na	0.1
Namibia	na	na	na
Gabon	3,647	1.0	na

attempt to invest 60 percent of its GDP in a single year, as the Congo did in 1982, given its level of economic development and absorptive capacity? Why would it borrow 13 percent of its GDP, over and above a healthy 47 percent savings rate, to finance such a spree? Alas, no better answer is forthcoming than that it was available.

The poorest countries for the most part rely on aid and lending to sustain double digit investment rates. An investment rate of, say, 12

TABLE 9-Continued

Total External Debt

	Millions of dollars 1990	Debt/GNP Ratio 1990	Debt Service/Export Ratio 1990
Other Africa			
Egypt, Arab Rep.	39,885	1.3	1.0
Morocco	23,524	1.0	0.4
Tunisia	7,534	0.6	0.4
Algeria	26,806	0.5	0.5
South Africa	na	na	na
Asia			
NIEs:			
Hong Kong	na	na	na
Korea	34,014	0.1	0.1
Singapore	na	na	na
Taiwan	881	na	na
ASEAN-4:			
Indonesia	67,908	0.7	0.3
Malaysia	19,502	0.5	0.1
Philippines	30,456	0.7	0.3
Thailand	25,868	0.3	0.2
South Asia:			
Bangladesh	12,245	0.5	0.3
Myanmar	4,675	na	0.2
India	70,115	0.2	0.3
Nepal	1,621	0.5	0.4
Pakistan	20,683	0.5	0.3
Sri Lanka	5,851	0.7	0.1
China	52,555	0.1	0.1
Japan	na	na	na

Sources: World Development Report 1992 and Asian Development Outlook 1991.

percent barely covers depreciation, with little left over to facilitate capital broadening to accommodate a rapidly growing labor force, much less to deepen capital to allow for improvements in the technological level of production and to fuel labor productivity growth. When one further considers that past policies have titled the structure of production in the economy away from labor-intensive export activities and toward capital-intensive, state owned industry, the picture is even more bleak.

Many Asian economies have been quite successful in attracting and absorbing direct foreign investment (DFI). Here again, patterns

differ. Singapore welcomed DFI; South Korea preferred international borrowing. In light of the debt crises of many African countries and the fact that few economies in the world could work their way out of debt as effectively as South Korea managed to, it makes sense for Africa to follow the pattern of encouraging DFI. Indeed, several African countries have already seen the wisdom of this approach. DFI is an important channel for receiving and absorbing foreign knowledge, including management skills and technology. Most critical in attracting DFI is the overall political and economic stability of the host country. Fiscal incentives, such as tax holidays and accelerated depreciation allowances, although widely used, are less important than a predictable policy environment and good infrastructure. In the late 1980s, for example, Indonesia did not offer incentives but attracted much more foreign investment than the Philippines, which did (Hill 1993, p. 41). DFI is also linked to human resource development, both because low human capital – in terms of health, education, and skills – lowers returns to investments, and because a host economy's capacity to absorb the beneficial transfers from DFI relies critically on its human resource base.

Many African countries have begun to realize the importance of attracting DFI. Unfortunately, political and economic instability, sometimes corrupt and not impartial systems of justice, and overregulated policy environments in Africa do not inspire confidence among potential investors. In addition to addressing these fundamental problems, we would recommend that countries interested in further promoting DFI seriously consider establishing a "one-stop investment" office. By cutting through the red tape that foreign investors have to face, a country can go a long way toward enhancing its attractiveness to potential investors. Of course there is no substitute for basic political and macroeconomic stability, but policies to cut red tape and delays can help.

D. The Foreign Exchange Gap

The previous section's discussion of foreign resource inflows in development as a complement to domestic savings draws no distinction between foreign and domestic currencies. In reality, however, most developing countries, particularly those whose currency is not freely

convertible, ration foreign exchange. The government appropriates what it needs for debt service, defense hardware, and other needs at a preferential exchange rate; then the remainder is sold at a premium in a secondary market or worse, allocated to licensed importers according to capacity, history, politics, or rent seeking. Under such a system, many inefficiencies develop. Imports of needed capital, intermediate goods, and raw materials are rationed to the private sector, introducing a further bias toward public sector production and against exporting, as the proceeds from exporting are usually captured by the government (purchased at the preferential rate). Thus, more important than gross flows are the extent of regulation in the foreign exchange market and the access of the private sector to foreign exchange.

The main feature which sets apart Asian countries is their emphasis on trade. Trade has been the engine of growth in the region. Country after country has promoted export-led growth strategies because domestic markets were not large enough for efficient import substitution development. Small city-states like Singapore and Hong Kong had no choice but to implement export-led growth; other countries such as Japan – and later Taiwan and South Korea – had a choice, but also chose export-led development. Most recently, ASEAN countries and coastal China, particularly the freewheeling southern provinces, have adopted similar policies, with similarly remarkable results (see Table 10).

Outward-looking policies impose discipline on the domestic economy through international competition and market forces. The exchange rate and factor and input prices must be realistic in order to maintain export competitiveness. Openness therefore imposes an upper boundary on how much domestic prices can deviate from world market prices (Naya and Imada 1992, p. 48). The efficiency constraint of outward oriented policies has played an important role in Asian economic dynamism. Successful export promoters have avoided overvalued exchange rates, devaluing whenever inflation threatened the economy's international competitiveness. Dollar (1992) shows that such policies have indeed made a difference in growth performance: "For the period 1976-1985, the most open quartile of countries had a per capita growth rate of 2.9 percent; the next quartile, 0.9 percent; the third quartile, -0.2 percent; and the most closed quartile, -1.3 percent"; among his conclusions is the estimate that a shift to an Asian level of

TABLE 10

Growth of Merchandise Trade

	Merchandise trade (millions of dollars)		Average annual growth rate (percent)				Terms of trade (1987=100)	
	Exports	Imports	Exports		Imports			
	1990	1990	1965-80	1980-90	1965-80	1980-90	1985	1990
Sub-Saharan Africa								
Mozambique	na	na	na	na	na	na	na	na
Tanzania	300	935	-4	-7	2	-1	101	108
Ethiopia	297	1,081	-1	0	-1	4	117	84
Somalia	130	360	4	-3	4	-4	107	111
Chad	200	450	na	na	na	na	na	na
Malawi	412	576	5	4	3	1	104	93
Burundi	75	235	3	-2	0	5	133	70
Zaire	999	888	5	-11	-3	-4	111	163
Uganda	151	458	-3	-2	-5	3	143	88
Madagascar	335	480	1	-2	0	0	98	102
Sierra Leone	138	146	-2	-1	-5	-2	106	80
Mali	347	640	10	10	4	7	95	97
Nigeria	13,671	5,688	11	-2	15	-15	167	100
Niger	435	230	13	4	7	-9	126	77
Rwanda	112	279	8	0	5	11	116	98
Burkina Faso	160	480	4	10	6	1	108	100
Benin	93	483	na	na	na	na	na	na
Kenya	1,033	2,124	4	1	2	2	114	103
Ghana	739	1,199	-3	4	-1	0	106	75
Central African Rep.	130	170	-11	-11	-5	6	107	109
Togo	300	700	6	2	9	1	118	114
Zambia	na	na	na	na	na	na	na	na
Guinea	na	na	na	na	na	na	na	na
Mauritania	468	248	4	4	6	-5	113	107
Lesotho	na	na	na	na	na	na	na	na
Liberia	500	450	4	-3	2	-2	97	111
Sudan	400	600	0	-1	2	-8	106	100
Zimbabwe	na	1,851	na	na	na	na	100	na
Senegal	783	1,620	3	6	4	5	106	106
Cote d'Ivoire	2,600	2,100	6	3	8	-1	110	80
Cameroon	1,200	1,300	5	-1	6	-3	139	91
Congo	1,130	570	10	6	1	-3	145	99
Botswana	na	na	na	na	na	na	na	na
Mauritius	1,182	1,616	3	10	5	11	83	114
Angola	3,000	1,200	na	na	na	na	na	na
Namibia	na	na	na	na	na	na	na	na
Gabon	2,471	760	9	1	10	-2	140	96

outward-orientation in Africa would lead to a gain of 2.1 percentage points in per capita growth (p. 540). East Asian export promotion was extremely aggressive and relatively accepted in an earlier era of the international trading regime; Southeast Asian export promotion has been of a later vintage, and perhaps more relevant for Africa.

African countries in general are smaller in terms of population than Asian developing countries; therefore, African countries face an

TABLE 10 - Continued

Growth of Merchandise Trade

	Merchandise trade (millions of dollars)		Average annual growth rate (percent)				Terms of trade (1987=100)	
	Exports	Imports	Exports		Imports			
	1990	1990	1965-80	1980-90	1965-80	1980-90	1985	1990
Other Africa								
Egypt, Arab Rep.	2,985	10,340	0	2	4	-2	131	76
Morocco	4,263	6,918	4	6	7	3	88	86
Tunisia	3,498	5,471	11	5	10	1	105	99
Algeria	15,241	10,433	2	5	13	-5	174	99
South Africa	23,612	18,258	8	2	0	-4	105	93
Asia								
NIEs:								
Hong Kong	29,002	82,495	9	6	8	11	97	100
Korea	64,837	69,585	27	13	15	11	103	108
Singapore	52,627	60,647	5	9	7	7	99	100
Taiwan	66,240	52,700	na	15*	na	18*	na	na
ASEAN-4:								
Indonesia	25,553	21,837	10	3	13	1	134	111
Malaysia	29,409	29,251	5	10	2	6	117	94
Philippines	8,681	13,080	5	3	3	2	93	93
Thailand	23,002	33,129	9	13	4	10	91	99
South Asia:								
Bangladesh	1,674	3,646	na	8	na	8	109	95
Myanmar	322	270	-2	-10	-4	-15	106	127
India	17,967	23,692	3	7	1	4	96	96
Nepal	162	543	na	na	na	na	98	na
Pakistan	5,590	7,377	-2	9	0	4	90	95
Sri Lanka	1,984	2,689	0	7	-1	2	103	90
China	62,091	53,345	5	11	7	10	109	111
Japan	286,768	231,223	11	4	5	6	71	91

*1985-90. Sources: World Drvelopment Report 1992 and Asian Development Outlook 1991.

even greater constraint on industrialization if pursued through import substitution, relying on domestic markets. Export-led economic growth is thus even more critical for African developing countries. The relative success of export promotion in Mauritius and Zimbabwe, despite perhaps limited transferability, demonstrate that African economies can respond to similar policies. The record of former stars — such as Kenya, Cote d'Ivoire, and Ghana — underscores the fact that countries can go up or down. Among the countries that have shown a commitment to establishing export processing zones are Kenya, Liberia, Senegal, Togo, Nigeria, and Tanzania. Fafchamps (1992) notes that

"Africa's rich artistic tradition can help [inspire the] design [of] products that are very appealing to western consumers and yet are differentiated from Asian exports" (p. 35). African countries would do well to encourage such exports as part of an overall package of outward-oriented development.

Filling in the foreign exchange gap involves a number of policies centered on flows of trade, investment, debt, and development assistance. The exchange rate is one key, as it affects the relative profitabilities of producing non-traded versus traded goods and selling in the home market versus exporting. But exchange rate manipulation does little good if private actors are insulated from the impact by non-convertibility of the currency and/or strict licensing. Too often well-meaning policies to regulate the use of scarce foreign exchange result in a shrinking supply, as incentives to obtain foreign currency are curtailed. Thus both policies designed to increase the net inflow of foreign exchange and those designed to allocate foreign exchange more efficiently should be considered.

In this area, it is especially clear that different Asian countries followed different policies, and different policies proved effective for different countries. In South Korea, Taiwan, and even Japan, full convertibility was achieved quite late in the development process. The allocation of foreign exchange was controlled by the government, not through formal licensing but by subtle incentives and controls. Although this worked rather well in each case, the system depended on strong ties between the business and public sectors and on the competence – even "moral authority" – of the bureaucracy. The system does not seem to be transferable to many African countries; such tight controls have failed dismally in India and in a number of other developing countries. Indonesia and the Philippines each tried convertibility relatively early; Indonesia has not faced recurrent bouts of capital flight, while the Philippines has.

Exports were not the only source of foreign exchange for dynamic Asian economies. Direct foreign investment has provided additional capital, as well as technology and managerial skills. Open policies attracted DFI from Europe and the United States; more recently, Japan and the NIEs have invested heavily in their Asian neighbors, relocating "sunset industries" in labor-intensive manufacturing to Southeast Asia and the PRC. This has been an important element of

growth in the region (Naya and Imada 1992, p. 50). Local firms have learned quickly how to bypass multinational channels and work directly as international subcontractors, especially in the textile industry (Hill 1993). The African private sector must try to do the same with its incoming DFI. Labor-intensive industries from Asia have already begun to seek out low wages in some African countries. Mauritius hosts a good deal of recent investment from Hong Kong; and Taiwan is the leading investor in Madagascar (Winrock Roundtable 1991, p. 19).

DFI can be an important supplement or even substitute for high levels of debt. What is most important, however, is not so much the actual borrowing or investment, but how productively funds are utilized. In Southeast Asia, there has been a trend away from public debt toward private debt. Africa needs to try to start a similar trend. Attraction of DFI requires a conducive environment, an issue to which we turn below.

III Critical Determinants of Development Performance

A. Economic Policies

(1) Macroeconomic Stability

Asia's economic success is based on macroeconomic stability, a feature sorely lacking in Africa. Macroeconomic stability is critically important, since it affects each of the four development gaps, as well as constituting a key component of structural adjustment policies. Most fundamentally, economic development is a long-term process which must be founded on macroeconomic stability. Long-term planning is too often held captive in Africa to crisis-mode operation; natural disasters, wars, and political instability demand attention and divert scarce human and physical resources, both domestic and foreign, away from long-term development planning and implementation. But as the Asian experience (particularly that of Thailand) demonstrates, maintenance of macro stability even in the face of political and socio-economic crises forms a basis for economic development.

Stabilization begins with controlling inflation. The detrimental effects of inflation are numerous. Inflation inhibits the poor from access to basic needs and increases the dependency burden non-

working household members place on those who are employed. This in turn limits the ability of families to finance education out of savings or an individual to defer employment for education, despite the prospects of higher pay in the future. Inflation deters savers who do not have access to financial instruments which earn positive real rates of interest, especially those accustomed to holding currency. It discourages financial intermediation by encouraging the purchase of unproductive assets as inflation hedges. It discourages investment by introducing additional uncertainty into an already risky environment. This is especially true where some prices are controlled by the government; a large element of investment becomes guessing when administered prices will be changed, and by how much. Rent seeking to influence these decisions is common. An important administered price in many countries is the exchange rate. Inflation erodes competitiveness by altering the real exchange rate, reducing the incentive to export. Unless the exchange rate is adjusted almost constantly, the widening gap between the nominal exchange rate and purchasing power generates expectations of a devaluation, which encourage foreign currency speculation if not outright capital flight, both of which widen the foreign exchange gap.

To control inflation, a country must manage money supply growth and the budget deficit. Monetizing a large budget deficit is the primary cause of double-digit inflation in developing countries. Asian countries were willing, when necessary, to sacrifice incomes in order to bring inflation under control. Only a few – the Philippines, South Korea, and Thailand – borrowed excessively, and the later two soon corrected their mistake. In fact, policy flexibility, in the face of policy-induced as well as exogenous shocks, is an extremely important albeit underemphasized feature of Southeast Asian development (Hill 1993, p. 38). Policy makers must make hard decisions, both on how to allocate spending among conflicting economic and political priorities and on how to raise revenues to finance their spending plans. Both policy flexibility and allocating spending relate strongly to the role of the state, the topic of the next sub-section.

The correlation between macroeconomic stability, as measured by average inflation, and economic performance is astounding in both Africa and Asia (see Table 11). All Asian countries with inflation rates above 10 percent for the decade of the 1980s had rates of per capita

Table 11

Macroeconomic Stability

	GNP Per capita Growth rate (percent)	Average annual rate of inflation (percent)	
	1965-90	1965-80	1980-90
Sub-Saharan Africa			
Mozambique	na	na	36.6
Tanzania	-0.2	9.6	25.8
Ethiopia	-0.2	3.4	2.1
Somalia	-0.1	10.2	49.7
Chad	-1.1	6.2	1.2
Malawi	0.9	7.4	14.7
Burundi	3.4	5.0	4.2
Zaire	-2.2	24.7	60.9
Uganda	-2.4	21.4	107.0
Madagascar	-1.9	7.7	17.1
Sierra Leone	0.0	7.9	56.1
Mali	1.7	9.0	3.0
Nigeria	0.1	14.6	17.7
Niger	-2.4	7.5	2.9
Rwanda	1.0	12.5	3.8
Burkina Faso	1.3	6.3	4.5
Benin	-0.1	7.4	1.9
Kenya	1.9	7.2	9.2
Ghana	-1.4	22.9	42.5
Central African Rep.	-0.5	8.2	5.4
Togo	-0.1	7.1	4.8
Zambia	-1.9	6.3	42.2
Guinea	na	na	na
Mauritania	-0.6	7.6	9.0
Lesotho	4.9	6.7	12.7
Liberia	na	6.3	na
Sudan	na	11.5	na
Zimbabwe	0.7	5.8	10.8
Senegal	-0.6	6.3	6.7
Cote d'Ivoire	0.5	9.4	2.3
Cameroon	3.0	9.0	5.6
Congo	3.1	6.8	0.5
Botswana	8.4	8.4	12.0
Mauritius	3.2	11.8	8.8
Angola	na	na	na
Namibia	na	na	13.4
Gabon	0.9	12.8	-1.7

GNP growth below three percent over the same period. In the Philippines, the highest inflation rate was coupled with the lowest growth rate. In Africa, countries exhibiting double-digit inflation had low or negative per capita income growth over the decade. But it is worth noting that only a few of the countries with single-digit inflation managed positive growth. Once stabilization is achieved, it still may take a push to get growth started.

Table 11 - Continued

Macroeconomic Stability

	GNP Per capita Growth rate (percent)	Average annual rate of inflation (percent)	
	1965-90	1965-80	1980-90
Other Africa			
Egypt, Arab Rep.	4.1	6.4	11.8
Morocco	2.3	7.0	7.2
Tunisia	3.2	6.7	7.4
Algeria	2.1	10.9	6.6
South Africa	1.3	10.3	14.4
Asia			
NIEs:			
Hong Kong	6.2	8.1	7.2
Korea	7.1	18.4	5.1
Singapore	6.5	5.1	1.7
Taiwan	9.1*	11.1*	3.1*
ASEAN-4:			
Indonesia	4.5	35.5	8.4
Malaysia	4.0	4.9	1.6
Philippines	1.3	11.4	14.9
Thailand	4.4	6.2	3.4
South Asia:			
Bangladesh	0.7	15.9	9.6
Myanmar	na	na	na
India	1.9	7.5	7.9
Nepal	0.5	7.8	9.1
Pakistan	2.5	10.3	6.7
Sri Lanka	2.9	9.4	11.1
China	5.8	-0.3	5.8
Japan	4.1	7.7	1.5

*Figures for Taiwan are for 1971-90,1971-80 and 1981-90, respectively.

Sources: World Development Report 1992 and Asian Development Outlook 1991.

Is there a lesson from Asia on how to get this push? It takes investment, and if private investors are reluctant, then a mix of public policy and investment designed to create opportunities for profitable investment in the economy is necessary. Policy makers must be pragmatic at such a time, an suspend their opinions of what type of investment they want (domestic or foreign, in Asia — Chinese or Malaysian/Indonesia, in Africa — Indian or East African, etc.) and just get the ball rolling.

To avoid monetizing budget deficits, revenues must be raised. There are two points that often trip up policy makers in raising revenues through a process of growth and structural change. The first is the extension of taxation to the agricultural sector. There is a tendency to spare the agricultural sector from taxation. Whether for reasons of politics, equity, or cost-effectiveness (the cost of administering an income tax on farmers may be seen as prohibitive, relative to the costs per dollar of revenue of a trade tax), agriculture may be exempted. This policy leads to a number of unfortunate consequences, as it did in South Asia: (1) farmers perceived that subsidy was their due, and other government programs such as credit to rural areas yielded dismal repayment rates; (2) structural transformation from agriculture to industry and services was inhibited, as one would be moving from outside to under the government's control; (3) in South Asian countries where agriculture makes up about a third of GDP, the policy limits the tax base, but in African countries where nearly two-thirds of GDP is agriculture the impact is unavoidably such a heavy tax on other sectors of economy and trade that private, formal sector economic activity is minimal; (4) in the long run, the policy never seems to help the very rural poor it targets; instead the effect seems to be to keep them rural and poor; and (5) the policy is devilishly hard to change once instituted. East Asia had success by combining land reform with a taxation system that appeared to be fair to all, encouraging formal sector economic activity and not inhibiting the transformation from agriculture to industry.

The second point is the transition from indirect to direct taxation. The Asian experience indicates that there is scope to maintain revenue tariffs, particularly on consumer goods, until well into the development process. Thailand has average tariffs of over 20 percent, and Taiwan and South Korea had many tariffs in the twenties until quite recently. Japan has still not fully liberalized its trade in some areas. Tariffs, so long as they are rebated to exporters, perform a useful function in encouraging production for export rather than the domestic market. What must be avoided is a system of non-tariff barriers and prohibitive tariffs (with exceptions made for favorites), such as characterized India until quite recently. The conversion of non-tariff barriers to tariffs increases both government revenues and the transparency of trade incentives. Many countries have learned that the

only thing worse than wasting foreign exchange on the purchase of expensive foreign luxury goods is encouraging the inefficient production of those luxury goods domestically.

As part of trade policy, what is most critical is not necessarily the tariff rates per se – which may remain in the 30 percent range as revenue tariffs – but their dispersion. The dispersion of tariff rates needs to be reduced, so that the rates are more even across the board. Simultaneously, NTBs and red tape – such as collection invoices and required documentation – must be reduced and streamlined. What is important is not tariff rates as such, but the cost of doing business, and an argument can be made that reducing deadweight losses from slow customs clearance, delays in loading and unloading, etc. are even more important than tariff reductions, after the transition from prohibitive to revenue tariffs is made. Singapore's success as an entrepot for China and Southeast Asia may have initially relied on its low tariffs, but it has maintained or enhanced its position even as tariffs declined throughout the region by increasing its efficiency in customs, cargo handling, and other areas.

Converting NTBs to tariffs and reducing tariffs from "prohibitive" (100 percent or more) to "revenue" (20 to 40 percent) can allow the private sector to get better established before burdening both it and a fledgling bureaucracy with more complicated direct taxes. A corporate income tax and a value added tax, along with a (normally nominal and self-reporting) personal income tax, are generally the best places to start. These taxes do not greatly distort important incentives for exporting, saving, investing, and improving technological sophistication. Value-added taxes were introduced in Indonesia in 1985 and in Singapore in 1993; Kenya has led the way in Africa with the introduction of a value-added tax in 1991 (Hill 1993; World Economic Survey 1992).

At first, as reporting procedures and institutional arrangements are being developed and refined, tax inspectors may do little more than survey places of business, decide how much business they should be doing, and levy what is essentially a lump-sum tax (which is less distorting of incentives anyway). Of course, one must guard against corruption. The Singapore system of meritocracy, relatively high pay (and status) for government service in order to attract good people, and zero tolerance for abuse of rank or position may be relevant to

Africa, although the system may take hold more or less easily in different cultures.

(2) Structural Adjustment and Sequencing

Macroeconomic stability is the precondition for structural adjustment. Often it is considered an integral step in the process. Structural adjustment packages usually contain three elements: (1) stabilization measures, including good fiscal, monetary, and exchange rate policies that keep both the government budget and inflation under control; (2) corrections of distortions, including price, tax and financial reforms, as well as liberalization, deregulation, and privatization; and (3) institutional factors, building capacity to accommodate the economic reforms. Later policies include the establishment of bank branches in rural areas, the setting of a forward market in foreign exchange, and the development of an effective bureaucratic capacity for economic management.

In many respects it was not difficult for Asian economies to adopt such structural adjustment policies, since they are very consistent with the policies that were already in place. When policies advocated by the World Bank and other institutions conflicted with Asian prerogatives, policies were tailored to fit domestic conditions. For example, many economies have eschewed wholesale privatization of state enterprises. In China and Thailand, the issue of privatization is extremely sensitive. Policymakers have recognized the need to proceed slowly in such sensitive areas of the political economy, thus structural adjustment policies have been adopted to local conditions and constraints, sometimes keeping intact the original intent of the external policy initiative and sometimes finessing the changes entirely.

Structural adjustment policies may have been easier for Asia, but they are essential for Africa. Macroeconomic stability and the usefulness of structural adjustment policies cannot be overemphasized. When suitably tailored to host country circumstances and sustained over a reasonable period of time, adjustment policies can have dramatically positive results. Although there is a common perception that such policies increase poverty (at least in the short run), empirical evidence from the Asian experience does not support this perception. The removal of agricultural price controls boosted rural incomes, and

new labor-intensive export industries provided employment and incomes to low skill level workers. Structural adjustment need not exacerbate poverty. As Hill (1993) notes, "the fact that this conclusion holds in a country which reformed quickly and maintained growth momentum (Indonesia) and another where reform and growth were a good deal slower (Philippines) suggests that the structural adjustment-poverty nexus as postulated in much of the general literature is simplistic at best and wrong at worst" (p. 66).

The sequencing of reform policies is a complex and delicate issue. Much debate surrounds the topic of proper sequencing. Taiwn's development experience gives one example of a reasonable and effective sequencing of reforms: after stabilization was achieved, the next steps were interest and exchange rate reforms, including unification of exchange rates and efforts to keep the exchange rate realistic. Taiwan liberalized the commercial account prior to liberalizing the capital account. Policies shifted from quantity controls to tariffs, maintaining a significant level of domestic protection while building international competitiveness in exporting industries and through export processing zones; only later did Taiwan liberalize imports (Ranis in Winrock Roundtable 1991, pp. 30-31). This sequence of structural adjustment policies was logical and obviously worked quite well for Taiwan. Different economies may consider variations in sequencing more appropriate to their conditions and capacities.

The entire concept of sequencing implies a degree of control over politics and policies by technocrats or economic planners not always found in developing or even developed countries. What is sometimes called a lack of political will to institute or sustain reform and adjustment policies may be inherent in factional or decentralized political systems. In some instances it may be best to grasp whatever opportunities for reform one can, whenever they present themselves, as opposed to seeking an ideal sequencing.

(3) The Informal Sector

The macroeconomic statistics, social welfare indicators, and continuing policy failures paint a gloomy picture for Africa's future. One ray of hope in the picture, however, as noted by many authors, is the dynamism of the informal sector in many African economies. The

expansion and vigor of this sector stand in sharp contrast to the performance of large and/or state-owned enterprises. In 1985, the sector contributed as much as 34.6 percent of GDP in Liberia and 24.5 percent of GDP in Nigeria; it is estimated that in 1989, the informal sector employed 59 percent of the urban labor force (19 percent of the total African labor force) and contributed substantially to ongoing employment creation (Grey-Johnson 1992). The situation is reminiscent in many ways of that of China in the late 1970s, India in the mid-1980s, and Vietnam today. Such similarity indicates that policy reforms comparable to those instituted in the above mentioned countries could impart dynamism to the economies as a whole.

The informal sector can flourish for a number of reasons. Straightforward policy reforms cannot always spread this growth throughout the economy. Informal sector firms gain many advantages that are not generalizable to the economy as a whole, such as tax avoidance, ignoring regulations regarding health, safety, and the environment, and even engaging in activities prohibited under certain civil and criminal laws. But it is safe to say that the health of the informal sector in Africa is a clear indicator of overregulation by governments, to the detriment of incentives for production, distribution, and accumulation.

Motivations for regulation can seem innocuous. No one could object to the guarantee of a minimum wage sufficient to meet basic human needs, or to licensing requirements to allow urban and industrial planning. Yet in practice, politicians tend to escalate minimum wages far above the level justified by productivity, and impose a maze of other regulations on hours, vacations, health, retirement, unemployment, and rights to unionization. Licenses are often approved and revoked arbitrarily or by rent-seeking bureaucrats. The consequences are too little entry of firms, too much market concentration, too little employment creation, and lack of incentives to work hard once a worker is employed.

The situation in Africa has been characterized as follows (Fafchamps 1992): The problem – poor work motivation and initiative. The cause – patronage and "defensive bureaucratization" in large firms. The solution – self-employment in small, informal sector firms. Family labor minimizes supervision costs, allows flexible hours, and shares risks and returns. The informal sector hires dropouts who are

unemployable in the glutted formal labor market. They receive training in exchange for long hours at low pay. When they have learned enough, they often go into business for themselves, continuing the cycle with their own family members and apprentices. Small businesses can thrive in areas like artisanship, micro retailing, and money lending, where informational advantages more than offset any scale economies. These firms are frequently the only outlet for small investors seeking better returns than those available in the regulated banking system. For example, civil servants might invest in the business activities of less educated family members.

Instead of encouraging such activities, African governments have often persecuted the informal sector. Avoidance of regulation, arbitrage, and speculative activities draw the ire if not the fire of the local authorities. Efforts to control or restrain such trade have included bulldozing of markets, setting up roadblocks, and executing suspected black marketeers. One feature of the informal sector which draws such bureaucratic ire is its perceived tax evasion. As Oyowe (1993) points out, however, under the tax exemption thresholds for low income levels, much of the informal sector would be exempt from taxation anyway, since even small business owner's incomes are extremely low and unstable (p. 80).

A few recommendations for policy changes regarding the informal sector are as follows: (1) Foster a change of attitude toward the informal sector and acceptance of the sector as a resource to the economy. (2) Streamline and reform business registration and licensing for health, safety, and environmental concerns. Currently, officials have and exercise the authority to close firms down, or threaten to do so, unless bribes and patronage are forthcoming. There are many obstacles to a successful business-government partnership for economic development, including historical animosity, ethnic and tribal divisions, and innumerable jealousies. Accommodation is necessary. Much can be learned from the Asian experience of government-business relations, discussed further below. (3) Extend government credit, training, and other services to the informal sector, to help firms compete on a more equal footing, while simultaneously deregulating the economy as a whole. (4) Help informal sector firms develop trader-producer linkages, obtain subcontracting agreements, and gain access to informational economies. The dynamism of the informal sector can thereby infuse

export activities as well. Important in this regard is the role of private traders linking small domestic producers to foreign suppliers and markets. Ideally, some processes will be standardized and mechanized; but the role of small subcontractors will continue to expand. These policies are along the line of a Taiwan model of export development. As Fafchamps (1992, p. 33) notes, "what Africa perhaps needs most is an active trading class well versed in international trade." Here again the crucial significance of human resource development comes to the fore.

B. The Role of the Government

The private sector should serve as the engine of growth and the implementer of the development vision. The importance of the private sector, however, does not diminish the role of the government in economic development. Letting the private sector be the engine of growth does not equate with the Western idea of laissez faire. The governments of all of the dynamic Asian economies (except Hong Kong) played a much larger role than dictated by neoclassical economics, i.e. the provision of public goods and the correction of market failure. Asian governments played a crucial role in their economies by creating factors conducive to the working of the private sector.

In contrast, African states have not done enough to foster private-public sector cooperation. Dole Olowu (1993) notes that African states "must not repress but encourage private sector initiatives .... As the experience of the Asian countries shows, the state must help to reduce uncertainty faced by private entrepreneurs ... [as well as] create a regulatory regime that fosters domestic and international assistance to small scale businesses in the informal sector [and] maintains law and order ..." (p. 5). Whereas Japan and South Korea promoted large business conglomerates (known as zaibatsu and chaebol), Taiwan fostered development of small and medium-sized businesses. Given African bureaucratic capacities, one important role of African governments would be to follow the Taiwanese model in terms of promoting small and medium-sized enterprises.

Asian economies have been the beneficiaries of relatively efficient and disciplined government bureaucracies. The "high degree of

professionalism in the ranks of the civil service" in the NIEs (James, Naya, and Meier 1989, p. 211) has been critical in enabling close government-business relationships to remain growth-stimulating instead of corrupt and growth-inhibiting. The role of government in East Asia also went beyond an autonomous bureaucracy to one of close partnership between government and business: "In the Asian form of capitalism, a positive relationship exists between the business community and the government. Instead of the adversarial relationship often found in the West, there is a hierarchical relationship in East and Southeast Asia where the government may directly influence the conduct of private enterprises for the benefit of the public good, and, in turn, government is expected to assist and protect the private enterprises. Close collaboration helps to ensure that appropriate policies are adopted and that a constituency supporting these policies exists. A cozy relationship between government and business can invite corruption, however, and thus care should be taken to maintain accountability of public officials" (Naya and Imada 1992, p. 54). The latter point is underscored by the myriad political corruption scandals currently reverberating throughout the Japanese and South Korean political economies. One must also beware of government-business ties leading to an abdication of the government's role in protecting consumers from unsafe products and collusive pricing. Nevertheless, close government-business relationships can and have provided important benefits for development: "Government support in the context of an outward-looking strategy helps to encourage risk taking and innovation by business. The hierarchical relationship allows for coordinated and timely responses to unforeseen contingencies" (James, Naya, and Meier 1989, p. 211).

What is important is the role the government plays, not its absolute size (see Tables 12 and 13). Too much emphasis is placed on the size of government. In Asia, the successful Thai government, the unsuccessful Philippine government, and the extremely successful South Korean government are the smallest as a percent of GNP. At the other end of the spectrum, the successful Malaysian government, unsuccessful Papua New Guinean government, and the extremely successful Singaporean government are the largest. Seven of the thirteen African countries for which data are available are in the 15 percent to 30 percent range defined by the aforementioned Asian countries. Of the

TABLE 12

Central Government Current Revenue

	Percentage of total current revenue						Total current Revenue as a % of GNP	
	Direct Taxes		Domestic Transactions Taxes		International Transactions Taxes			
	1972	1990	1972	1990	1972	1990	1972	1990
Sub-Saharan Africa								
Mozambique	na	na	na	na	na	na	na	na
Tanzania	29.9	na	29.1	na	21.7	na	15.8	na
Ethiopia	23	na	28.8	na	30.4	na	10.5	na
Somalia	10.7	na	24.7	na	45.3	na	13.7	na
Chad	16.7	na	12.3	na	45.2	na	10.8	na
Malawi	31.4	35	24.2	33.2	20	17.7	16	23.7
Burundi	18.1	na	18.3	na	40.3	na	11.5	na
Zaire	22.5	28.9	12.1	16.5	57.8	47.3	10.2	12
Uganda	22.1	5.5	32.8	19.1	36.3	75.3	13.7	5.3
Madagascar	13.1	na	29.9	na	33.6	na	14.7	na
Sierra Leone	32.7	26.3	14.6	25.7	42.4	44.6	19.5	8.8
Mali	na	10.8	na	28.6	na	12	na	18.9
Nigeria	43	na	26.3	na	17.5	na	10.3	na
Niger	na	na	na	na	na	na	na	na
Rwanda	17.9	na	14.1	na	41.7	na	9.8	na
Burkina Faso	16.8	na	18	na	51.8	na	8.6	na
Benin	na	na	na	na	na	na	na	na
Kenya	35.6	27.4	19.9	42.8	24.3	15.8	18	22.6
Ghana	18.4	28.7	29.4	28.3	40.6	35.2	15.1	13.9
Central African Rep.	na	23.9	na	13.1	na	45.2	na	13.3
Togo	na	na	na	na	na	na	na	na
Zambia	49.7	38.1	20.2	37	14.3	15.8	23.2	11.9
Guinea	na	na	na	17.1	na	74.4	na	14.6
Mauritania	na	32.3	na	19.4	na	36.8	na	21.8
Lesotho	14.3	12.4	2	22.8	62.9	54.5	11.7	21.2
Liberia	40.4	33.9	20.3	25.1	31.6	34.6	17	17.8
Sudan	11.8	na	30.4	na	40.5	na	18	na
Zimbabwe	na	44.9	na	26.3	na	17.5	na	35.6
Senegal	17.5	na	24.5	na	30.9	na	16.9	na
Cote d'Ivoire	na	na	na	na	na	na	na	na
Cameroon	na	45.2	na	20.2	na	14	na	17.7
Congo	19.4	na	40.3	na	26.5	na	18.4	na
Botswana	20.1	38.6	1.4	1.5	47.7	13.2	30.4	60.9
Mauritius	22.7	13.9	23.3	20.9	40.2	46.4	15.6	24.2
Angola	na	na	na	na	na	na	na	na
Namibia	na	42.9	na	28.5	na	16.4	na	43.6
Gabon	18.2	na	9.5	na	44.9	na	26.1	na

six that are not, three are "too high" and three are "too low." Much more emphasis should be placed on what government does, how well it does it, and how it finances its activities.

A government needs to set forth the long-term vision for development, and to establish a rule of law which is simple and as transparent as possible. Another critical role is establishing good

TABLE 12 - Continued

Central Government Current Revenue

	Percentage of total current revenue						Total current Revenue as a % of GNP	
	Direct Taxes		Domestic Transactions Taxes		International Transactions Taxes			
	1972	1990	1972	1990	1972	1990	1972	1990
Other Africa								
Egypt, Arab Rep.	na	15.9	na	11.9	na	14	na	35.9
Morocco	16.4	na	45.7	na	13.2	na	18.5	na
Tunisia	15.9	12.9	31.6	20.1	21.8	27.9	23.6	31.8
Algeria	na	na	na	na	na	na	na	na
South Africa	54.8	48.6	21.5	34.1	4.6	4.9	22.1	30.9
Asia								
NIEs:								
Hong Kong	na	na	na	na	na	na	na	na
Korea	29	34	41.7	33.5	10.7	10.6	13.1	15.7
Singapore	24.4	24.3	17.6	19.6	11.1	2.5	21.5	27.9
Taiwan	na	na	na	na	na	na	na	13.3
ASEAN-4:								
Indonesia	45.5	57.5	22.8	25.1	17.6	6	13.4	18.3
Malaysia	25.2	30.5	24.2	24.3	27.9	16.7	20.3	28.9
Philippines	13.8	28.3	24.3	30.7	23	25.1	13.1	16.3
Thailand	12.1	24.2	46.3	41.4	28.7	22.1	12.5	19.9
South Asia:								
Bangladesh	3.7	8.6	22.4	25.8	18.0	27.3	8.4	11.4
Myanmar	28.7	9	34.2	30.7	13.4	14.9	na	na
India	21.3	15.4	44.5	35.5	20.1	28.8	10.2	14.8
Nepal	4.1	10.8	26.4	35.7	36.7	31	5.2	10
Pakistan	13.6	10	35.9	32.2	34.2	30.6	12.5	19
Sri Lanka	19.1	10.8	34.7	46.4	35.4	28.6	20.1	21.1
China	na	na	na	na	na	na	na	na
Japan	64.8	71.2	22.6	12	3.5	1.3	11.2	13.9

Sources: World Develpoment Report 1992 and Asian Development Outlook 1991.

macroeconomic policies, and intervening to make the market work rather than intervening to destroy market mechanisms. Several East Asian countries have implemented industrial policies, utilizing tools of financial control, tariffs and quotas, weak antitrust laws, favoritism in government procurement, and administrative "guidance" by such institutions as Japan's MITI and South Korea's EPB. More recently, industrial policy has focussed more on promoting research and development for selected sectors, rather than direct intervention. Successful industrial policy depends upon a strong, effective bureaucracy, as well as a special government-business relationship; the

TABLE 13

Central Government Expenditure

	Percentage of total expenditure				Expenditure as a percentage of GNP		Surplus/deficit as a percentage of GNP	
	Defense		Education Health					
	1972	1990	1972	1990	1972	1990	1972	1990
Sub-Saharan Africa								
Mozambique	na	na	na	na	na	na	na	na
Tanzania	11.9	na	24.5	na	19.7	na	-5.0	na
Ethiopia	14.3	na	20.1	na	13.7	na	-1.4	na
Somalia	23.3	na	12.7	na	13.5	na	0.6	na
Chad	24.6	na	19.2	na	14.9	na	-2.7	na
Malawi	3.1	5.4	21.3	16.2	22.1	29.2	-6.2	-1.9
Burundi	10.3	na	29.4	na	19.9	na	0.0	na
Zaire	11.1	6.7	17.5	2.1	14.1	13.0	-2.7	1.9
Uganda	23.1	na	20.6	na	21.8	na	-8.1	na
Madagascar	3.6	na	13.3	na	16.7	na	-2.0	na
Sierra Leone	3.6	5.3	20.8	14.0	23.9	11.1	-4.4	-1.4
Mali	na	8.0	na	11.1	na	28.9	na	-4.6
Nigeria	40.2	na	8.1	na	9.1	na	-0.8	na
Niger	na	na	na	na	na	na	na	na
Rwanda	25.6	na	27.9	na	12.5	na	-2.7	na
Burkina Faso	11.5	na	28.8	na	8.4	na	0.3	na
Benin	na	na	na	na	na	na	na	na
Kenya	6.0	7.8	29.8	25.2	21.0	31.4	-3.9	-6.8
Ghana	7.9	3.2	26.4	34.7	19.5	14.0	-5.8	0.4
Central African Rep.	na	na	na	na	na	26.1	na	na
Togo	na	na	na	na	na	na	na	na
Zambia	0.0	0.0	26.4	16.0	34.0	21.9	-13.8	-5.0
Guinea	na	na	na	na	na	24.9	na	-4.2
Mauritania	na	na	na	na	na	33.5	na	-4.2
Lesotho	0.0	9.9	27.5	22.6	16.6	25.1	-0.9	-2.8
Liberia	5.3	9.8	25.0	17.0	16.7	na	1.1	na
Sudan	24.1	na	14.7	na	19.2	na	-0.8	na
Zimbabwe	na	16.5	na	31.0	na	40.5	na	-7.9
Senegal	na	na	na	na	17.4	na	-0.8	na
Cote d'Ivoire	na	na	na	na	na	na	na	na
Cameroon	na	6.7	na	15.4	na	20.8	na	-3.2
Congo	na	na	na	na	na	na	na	na
Botswana	0.0	11.6	16.0	25.0	33.7	42.2	-23.8	12.6
Mauritius	0.8	1.3	23.8	23.0	16.3	24.2	-1.2	-0.5
Angola	na	na	na	na	na	na	na	na
Namibia	na	5.5	na	31.9	na	42.8	na	7.0
Gabon	na	na	na	na	37.0	na	-11.9	na

transferability of this aspect of Asian development, therefore, may be limited. Southeast Asian countries have demonstrated that industrial policies are not indispensable ingredients in outward-oriented development success stories.

A more important feature of successful Asian development has been the ability to recognize mistakes and to correct defective policies. Singapore, for example, tried to raise wages excessively in the mid-

TABLE 13-Continued

Central Government Expenditure

	Percentage of total expenditure				Expenditure as a percentage of GNP		Surplus/deficit as a percentage of GNP	
	Defense		Education Health					
	1972	1990	1972	1990	1972	1990	1972	1990
Other Africa								
Egypt, Arab Rep.	na	12.7	na	16.2	na	40.2	na	-6.9
Morocco	12.3	na	24.0	na	22.8	na	-3.9	na
Tunisia	4.9	6.5	37.9	22.4	23.1	37.2	-0.9	-4.5
Algeria	na	na	na	na	na	na	na	na
South Africa	na	na	na	na	22.7	34.6	-4.4	-2.4
Asia								
NIEs:								
Hong Kong	na	na	na	na	na	na	na	na
Korea	25.8	25.8	17.0	21.8	18.0	15.7	-3.9	-0.7
Singapore	35.3	21.6	23.5	22.8	16.7	23.3	1.3	10.5
Taiwan	na	na	na	na	na	15.0	na	1.6
ASEAN-4:								
Indonesia	18.6	8.0	8.8	10.4	15.1	20.4	-2.5	-2.1
Malaysia	na	na	na	na	26.5	31.3	-9.4	-2.8
Philippines	10.9	11.0	19.5	21.0	14.2	19.8	-2.1	-3.5
Thailand	20.2	17.3	23.6	26.9	16.7	15.1	-4.2	4.9
South Asia:								
Bangladesh	5.1	10.1	19.8	16.0	9.2	15.0	-1.9	-0.4
Myanmar	31.6	24.7	21.1	21.4	na	na	na	na
India	26.2	17.0	3.8	4.1	10.5	18.2	-3.2	-7.3
Nepal	7.2	6.0	11.9	15.7	8.5	20.4	-1.2	-8.1
Pakistan	39.9	30.9	2.3	2.7	16.9	23.6	-6.9	-7.2
Sri Lanka	3.1	7.4	19.4	15.3	25.4	28.4	-5.3	-7.9
China	na	na	na	na	na	na	na	na
Japan	na	na	na	na	12.7	16.7	-1.9	-2.9

Sources: World Development Report 1992 and Asian Development Outlook 1991.

1980s, but soon realized the folly of trying to hasten a market process. South Korea, when it instituted policies speeding up the development of chemical and heavy industries in the late 1970s and early 1980s, also soon recognized that its policies were working at cross-purposes to market mechanisms and that they had to revert to earlier policies.

In attempting to define an appropriate role for the government, it must be remembered how inexperienced Africa is self governance. The bureaucracies are weak; there is limited indigenous capability for planning, formulating, and implementing policies. Yet the private sector is in many ways no more developed. And the relationship between the

two sectors ranges from sheer hostility to close but inefficient cooperation – for example, in capturing domestic markets in monopolistic or oligopolistic ways (Winrock Roundtable 1991, p. 140). Attitudes need to change, and productive cooperation must be fostered. In addition, an argument can be made that both the public sector and the private sector should focus their attention and talents on an extremely limited number of tasks.[6] These tasks would quite rightly differ from country to country. It may be that a blanket statement such as "African governments should specialize in the provision of transportation and irrigation infrastructure" may be as limiting as "African economies should specialize in the production of garments."

Rather than reserving sectors for government activity, policy makers should be looking for effective cooperation in a number of traditional and innovative new areas. Cooperation with the private sectors has worked extremely well for some Asian countries. Cooperation with multi-national corporations in the building of needed infrastructure in a build-operate or build-operate-transfer mode could hasten development while economizing on spending and foreign exchange. Even in the areas of health, nutrition, and basic education, scope exists to expand cooperation with NGOs and donors. Following this line of thinking, African governments are not so much too big as they are overcommitted. The ultimate goal of this strategy for both African countries and donors must be to build capacity for effective analysis and action in Africa.

In Asia, not only have individual governments tended to define their appropriate role narrowly and to stick to that definition in the face of pressures to solve all of the country's ills, but regional institutions have also contributed to economic growth by playing a limited and appropriate role. ASEAN has often been termed a failure from the perspective of economic integration. But economic integration was never its intent. In many ways, its rhetoric on economic issues was an excuse to forge political and security ties in the region. But this in turn has yielded economic benefits to its member countries. Defense spending as a percent of GDP dropped, particularly in Indonesia and Singapore, where it declined from 19 and 35 percent

6 For a more thorough treatment of this subject, see H. Bruton, "Barriers and Opportunities in African Development," mimeo, 1993.

respectively in 1972 to 8 and 22 percent in 1990 (see Table 13). Data for Africa is much more sketchy, but casual evidence suggests that ratios in excess of 20 percent are common, and no similar reduction in defense spending is evident. According to official statistics (which probably understate expenditure), "an estimated 4.8 percent of GDP is used for defense in Sub-Saharan Africa, compared with 3.6 percent in South Asia and 1.6 percent in Latin America" (Global Coalition for Africa 1992 Report, p. 6). Regional institution building, aided by U.N. initiatives, could help in this area, allowing a shift in expenditures toward investments in human and physical capita.

In Asia, as countries have become interdependent, increasing interaction has taken place not only between the government and the private sector, but also between all kinds of professionals. Because neighboring countries have all adopted outward-oriented policies, international meetings of scholars and policymakers within the region have become more and more frequent. Often policymakers are themselves scholars, and move back into academic circles after serving as statesmen. With frequent meetings between professionals on policy issues, much cross-fertilization takes place. Bad economic policies become difficult to justify. This kind of interaction needs to be fostered in Africa as well. One effective way to build capacity in Africa, and at more than just the overall institutional level, would be to support such professional interactions on a broad scale. An important side effect of such professional interactions is the demonstration effect of both good and bad policies. Initially, multilateral institutions such as the World Bank and the United Nations can play an important role in facilitating meetings of professionals and strengthening bureaucracies.

C. Cultural Factors

In the 1980s, a number of debates broke out on the topic of the relative importance of cultural factors versus economic policies in the determination of economic growth rates. Those that argued for the importance of cultural factors made a good point, that "Eastern capitalism" is fundamentally different from "Western capitalism", and thus a Western-centered perspective is not adequate (Berger and Hsiao 1988). Rather than resting the argument on the formal Confucian

traditions of Asia (that had earlier been held responsible for the *slow* growth rates of China, Singapore, and Taiwan), they defined a more pragmatic post-Confucianist culture, augmented by Buddhist, Shinto, and numerous folk religions.

Our position is that culture is indeed important, as economic incentives and motivations are certainly not the only determinants of behavior. While not to ignore cultural factors, we have now seen countries in Southeast Asia and even South Asia fundamentally change the direction and nature of their economic policies, and, apparently as a result, jump from a low to a high growth path. "Some have argued that Confucianism, which encourages hard work, saving, and education, has been an instrumental factor [in Asian development], and indeed it has. High rates of savings permitted domestic expansion without large external debts. The emphasis on education created a large pool of literate and skilled workers able to meet the needs of an industrializing economy. But these characteristics are not confined to those with the Confucian ethic" (Naya and Imada 1992, p. 56). Cultural differences between countries such as South Korea, Taiwan, Indonesia, and India (and even within countries such as Malaysia, Singapore, Indonesia, and India), and sharp changes in economic performance following policy changes within a country, invalidate the claim that the economic success in Asia is dependent on a common, homogeneous culture. It is clear that what changed in the late 1980s in India, in the mid-1980s in Indonesia, in the late 1970s in China, and in the early to mid-1960s in South Korea and Taiwan was not the culture (which can evolve and change, but not rapidly), but economic policies.

We can now demonstrate fairly conclusively the importance of economic policies in explaining why long term growth rates have differed among countries with relatively similar endowments and in a given country in different periods. Yet it may be true that cultural factors determine how responsive an economy is to economic policy changes, or why eliminating the four gaps may produce (hypothetically) 10 percent long-term growth in China and 6 percent growth in Indonesia. We hint at areas for future study by hypothesizing that social and cultural factors affect the cost of providing a given amount of human resource development, influence the prospects for institution building and use of informal mechanisms in areas traditionally subject to market failures in developing countries

(such as the kerb market for credit), and affect the response to policy stimulus. These issues deserve careful study by scholars knowledgeable in these areas.

D. External Factors

It is important to recognize that each Asian "success story" took place in a specific global context. Even as the link between stimulus and response in the physical sciences may be dependent on the environment (altitude, temperature, etc.), the link between economic policies and results may also be dependent on the specific global economic environment. Having stated this, one is struck by the variance in the economic situation in which different waves of Asian countries successfully pursued economic growth through policies that were hardly identical, but seem much more similar than the global context in the 1960s, 70s, 80s, and early 90s. Rather than being able to dismiss the Asian success stories as being a product of their specific environment and thus having little relevance for countries today, the remarkable fact is how consistently these countries recorded high rates of growth in manufactured exports and GDP despite changes in their environment. Through the high growth 1960s, the commodity price boom, inflationary bouts, and low interest rates of the 1970s, and the high interest rates, exchange rate realignments, and slow growth in output and world trade volumes in the 1980s, Asian countries have continued to grow. Expanding market shares have substituted for rapid world trade growth; prudent policies have limited the impact of interest rate fluctuations; and the flexibility of policymakers and firms alike have helped Asian economies to change with rapidly changing circumstances.

The chief fear of the 1990s seems to be that the end of the cold war will spawn a new protectionism in developed countries. Indeed, a cursory look at recent trade policies and conflicts in the United States and Europe seems to support that view. Yet one must also consider the recent success of China, India, Indonesia, and Pakistan in expanding their manufactured exports at rates varying from 10 to over 30 percent per year in the early 1990s. For the determined exporters, there are in fact more markets available now: "not only are there the US and the EC, but also the NIEs themselves, a resurgent Latin

America, and Eastern Europe" (Winrock Roundtable 1991, p. 19). While it may well be more difficult to penetrate developed country markets in the future, alternatives to a more outward-oriented and open economy have failed to deliver either economic growth or substantial improvements in the lot of the common people over the long run. Rather than increasing vulnerability to external shocks, the policy mix in Asia seems to promote adaptability to changing circumstances in the global economy. Aside from the clear connections between high human resource development, a competent bureaucracy, and openness to information and technology from abroad (not just price signals), this link is rather complex and worthy of further study.

We have described a number of "virtuous cycles" in the development process of a single country; for instance, increased investment, increased income, increased savings, increased investment, etc. and increased investment in HRD, increased complementary investments in human and physical capital, increased economic activity, increased tax collections (which can be used in part for further HRD expenditure), etc. The following short section will attempt to quantify how a "virtuous cycle" can develop for a region, building on what is often termed the "demonstration effect," and how countries can be left out (e.g., the Philippines).

Successful development in one country can lead to the emulation of those policies identified (by either the leader or follower country) as instrumental to economic development. It is hypothesized that the strength of the demonstration effect is directly proportional to distance, where "distance" may be defined beyond mere geography to include ethnic, religious, and other cultural factors. Yet two other less widely recognized factors may be just as important: the leader economy's direct pull on regional trade and investment flows, and the flow of ideas and information through ministerial and sub-ministerial meetings in regional fora (for Asia, ASEAN, APEC, PECC, PBEC, etc.).

Rapid economic growth in a country provides an opportunity for neighboring countries to be pulled along, through increased trade – including tourism and other services – and investment flows. Fast growth means increased demand for raw materials, components, and consumer goods from all trading partners, but with a natural bias toward neighboring countries (based on transportation cost and time advantages, greater information about products, cost, and quality,

common tastes, and often well-developed regional supply relationships). Rapid growth also involves restructuring the economy. In Asia, this meant spinning off industries in which comparative advantage was falling to neighboring counties at the appropriate level of development. For Japan, first textiles and then simple electronics, and finally capital-and space-intensive manufacturing (such as some chemical and metal processing) moved abroad as first labor then land became relatively expensive. The extent to which this phenomenon actually occurs depends on the strength of regional bias and of the lead country's reliance on external suppliers and markets, but primarily on the degree of outward orientation in the follower countries, especially their receptiveness to foreign investment and policies affecting exports. The inducement for policy change is thus not merely the fact that a neighboring country is growing rapidly, but also the opportunity to ride directly on its coat-tails to more rapid growth.

Similarly, a follower country is more likely to make policy changes in response to a successful development if (1) the context and implementation of the policy is well-understood; (2) questions about the impact of the potential policy shift on different groups can be asked and answered in advance; and (3) if there is someone to consult with in the event that problems develop during the planning or implementation stages. What better way is there to develop the personal contacts among mid-and upper-level bureaucrats and policy makers in the region than through regional and sub-regional meetings? ASEAN, for instance, was initially criticized for having too many meetings, with too little tangible output. But very important intangible outputs have been developed in the form of personal friendships, good working relationships, and a growing policy consensus.

Once again, the implications for African development and the U.N.'s role are not straightforward. Some observers have used the "demonstration effect" logic to argue for the concentration of development resources in one or two especially promising countries, to engineer regional successes in Africa. But would this work? The supporting conditions appear to be weak. Traditional trade links are with European countries; transportation costs within the region are quite high (for instance, direct air freight routes between African countries are uncommon, requiring long layovers or transshipment through Europe); and (at least initially) growth would not be outward-

oriented. The exchange of information and personal networks present in ASEAN also seem to be lacking, despite the best efforts of ECOWAS and other regional fora. The U.N. can help to build these links.

IV. Conclusions and Recommendations

Economic development is a long-term process. Looking at the dynamic Asian economies of today, it is hard to imagine that they were once considered "basket cases," but they were. The present African crises of starvation, civil war, natural disasters, collapsing economies and unacceptable human suffering do indeed make the future seem bleak. But an old Chinese proverb reminds us that "it is often darkest right before dawn." The potential for change and progress in Africa is there.

Unlocking Africa's potential requires effective economic policies. The Asian development experience points to several critical policy areas for sustainable development: (1) macroeconomic stability; (2) agricultural development; (3) human resource development; (4) mobilization of savings, development of financial intermediation, and incentives for productive investment; (5) outward-orientation and attraction of DFI; (6) effective management of foreign exchange resources and incentives to producers of foreign exchange; (7) proper sequencing of structural adjustment policies; (8) institutional capacity building and attention to the problem of governance; (9) development of the informal sector; and (10) encouragement of a dynamic private sector working in cooperation with government toward a society-wide vision of development.

Donors need to help Africa build capacity for effective economic management. Although humanitarian aid and short-term assistance is necessary, the focus needs to be put on building institutional capacity. We have proposed that programs to foster networking between the policymakers and development scholars of Africa also be given priority. One effort to monitor closely and perhaps build upon is the African Capacity Building Foundation, a joint initiative of the United Nations and concerned African institutions begun in 1991. Funded by a consortium of donors and African governments, it will focus, at least initially, on the key areas of policy analysis and development management.

In addition, there is no reason why the Asian experience of

successful economic development and its relevance for Africa has to be mediated by Western scholars. Programs should be established to foster direct interactions between Africans and Asians. We propose the development of scholarships and training programs to sponsor visits by African policymakers to Japan, China, the NIEs, and other Asian countries to learn firsthand of their development experiences. Attention should be given not only to government policy, but also to private sector dynamism and to how the two sectors worked in partnership for development.

In the long-term process of economic development, multilateral institutions, such as the United Nations and the World Bank, and the western partners in African development (in Europe, North America, and elsewhere) can and must play a supportive role. But ultimately African development depends upon the African people. Just as Asians have turned economies that were seemingly "basket cases" into dynamic and even model developing countries, Africans face the challenge of putting into practice their own vision of development. It will inevitably take time and determination to make the economies grow, adjust, and develop. But with Africa's abundant natural and human resources, a more prosperous future is not out of reach.

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A QUALITATIVE ASSESSMENT OF THE EFFECTS OF NAFTA ON JAPAN'S FOREIGN INVESTMENT AND TRADE WITH EAST ASIA AND MEXICO: OPPORTUNITY OR DIVERSION?

William E. JAMES*

I. Introduction and Background

The Japan that can say "no", presumably to foreign (mainly U.S.) pressures and demands, is by now a familiar concept.[1] Moreover, a Japan that can even say "yes" to launching its own international initiatives is gaining attention (Anderson 1992).[2] Indeed with the decision to send troops to Cambodia as a part of the United Nations' peace-keeping forces, the visit of the emperor to China, and the assumption of the position of largest donor of Official Development Assistance (ODA) on the globe, there are real signs that Japan is beginning to play a role in world affairs that approaches its huge role in the global economy and in its trade and investment in particular. In fora such as the World Bank, some Japanese economists have even had the temerity to question the premises of the Structural Adjustment Lending (SAL) program and have held up the experiences of Japan and East Asia as counter points to American-style free market reforms.[3]

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1 Ishihara, 1991.

2 Anderson argues that Japan has become an activist state in the conduct of foreign policy and cites examples such as Prime Minister Miyazawa's willingness to confront Russia on the issue of the four northern territories, as well as the examples of sending troops to Cambodia, the emperor's China visit, and Japan's role as an ODA power.

3 Far Eastern Economic Review, 1 August 1991, p.56 and Far Eastern Economic Review, 24 September 1992, p.108.

A Japan with a decisive and independent foreign policy may be more inclined to respond to initiatives like the North American Free Trade Agreement (NAFTA) and the forming of a single market in the European Community (EC92) with initiatives of its own. Before exploring the possible responses of Japan to the creation of NAFTA, some caveats are in order.

First, to cast Japan in the role of a bold international player is to some extent an exaggeration. In the crucial negotiations to complete a GATT accord on agricultural subsidies, it is the U.S. and the EC (mainly France and Germany) that are the major actors. Japan has been relegated to the sidelines. Rather than announcing that it will begin to reform its rice import ban by adopting tariffication and other measures in order to help break the impasse, Japan has been perfectly willing to sit on its hands in the politically safe position of doing nothing (illustrating how the scandal-tainted LDP is beholden to the domestic farm lobby). This timidity on the rice issue is not even necessary. Voices of reason such as well known agricultural trade and development economist Yujiro Hayami have pointed out the shift to a regime of tariffs and permissible imports will be a spur to accelerating the type of structural changes within the rice and agricultural sector that are essential to raise productivity to competitive levels.[4] The inevitable need to expand and consolidate farms into larger units and to reduce labor use relative to other variable inputs will remain as the principal pressures for change in rural Japan. Adopting rice tariffs initially of some 700 percent and opening the market so that 3 to 5 percent is captured by imports will hardly cause earthshaking dislocations inside Japan. Thus far, Japan has been content to mouth its hope for success of the GATT round without taking a lead in making a successful conclusion more likely. Such a position is particularly annoying as it is Japan that has benefitted most from the open multilateral system that the GATT has safeguarded.

A second caveat results from the fact that Japanese government initiatives in respect to international trade and investment will only be effective if the private sector is in strong support. I can think of several cases where private support for government initiatives has failed to materialize. In recent years, for example, Japan has become

4 Hayami, 1988.

the largest bilateral ODA donor to the South Asian countries (India, Pakistan, Sri Lanka, Bangladesh, and Nepal), yet its private investments and trade with these countries remain paltry even in the face of drastic reforms that are opening these formerly closed economies (Abe and Igawa 1992). Government initiatives in even nearby countries like the Philippines have also generated a less than enthusiastic response from Japan's private sector.[5] Japan has sought to play an increased role in sub-Saharan African and Eastern European economic reconstruction, but has had at best limited effect because of unwillingness of investors to follow the government's lead. The private sector can hardly be blamed for not wanting to throw good money after bad or to venture into situations where the very security of life and limb are at daily risk. Of course, there are also counter examples that spring to mind. The cautious response of the Japanese government to the Tiananmen slaughter and the continued emphasis on economic relations with China has been well-received by Japanese businesses which have continued to venture into China in increasing numbers. It is important to keep in mind the critical role of the private business sector in any assessment of Japanese official initiatives, particularly with respect to economic cooperation.

In short, there are still some good reasons to be skeptical about Japan's willingness and ability to play a leading role in regional and global affairs, particularly if the initiative in question is likely to be viewed askance in Washington. Despite this skepticism, it remains a good probability that Japan will become more assertive, particularly in Asian and Pacific affairs.

II. The Impact of NAFTA and Japan's Response on Asia.

The motivation for preparation of this paper stems from the substantial role international trade and investment have come to play

5 Japanese FDI remained quite low in the Philippines even after the overthrow of Marcos in 1986 and the restoration of democracy. The government of Japan was instrumental to the Multilateral Aid Initiative (MAI) to help pull the Philippines out of a debt crisis and to rekindle economic growth. The MAI has seen some improvement on the debt front, yet the economy remains weak, with growth rates barely keeping pace with population increases. While Japanese investment flows had been booming in neighboring countries, the Philippines attracted only a trickle (see Asian Development Bank, 1992 p.134 and Tecson 1992). Also see Far Eastern Economic Review, 2 May 1991, pp.44-6.

in the economic advancement of the countries and territories of East and Southeast Asia. In the region encompassing Japan, China, the newly industrialized economies (Hong Kong, Chinese Taipei, South Korea, and Singapore) and the four largest members of the Association of South East Asian Nations (Indonesia, Malaysia, Philippines, and Thailand, henceforth the ASEAN-4), in 1990 the average share of international trade in gross domestic product (GDP) was 53 percent (table one). It is Japan which stands at the apex of the East Asian economic pinnacle. Undeniably, Japan plays a significant role in global and regional trade and Japanese multinationals and trading companies have had a major influence on the emergence of East Asian economies through trade and investment and other financial transactions (Katano, Murakami and Ikemoto 1978; Ichimura 1988). In the 1980s and into the early 1990s Japanese foreign direct investment (FDI) and related transfer of technology, restructuring of industry, and creation of stronger marketing ties and management innovations became especially noticeable in the region.[6]

The question I have been concerned with is what will be Japan's response in future trade and investment decisions and, possibly in the area of economic cooperation initiatives, to the NAFTA accord? In turn, how will Japan's response affect trade and investment flows and patterns in East and Southeast Asia and, consequently, the prospects for continued rapid economic growth? These questions will assume greater urgency should the current agreement on EC agricultural subsidies and oilseeds fall apart. Agreement on agriculture is essential to breaking the impasse in the GATT round. Failure would increase greatly the prospects of a U.S.-EC trade war, though it stretches the limits of any logic, that a single country (France) could convince the entire EC to abrogate the agreement with the U.S. after such arduous negotiations and with the entire GATT accord at stake. If the GATT round does unravel and the U.S. and EC remain at odds, and opt for protectionist positions, will trade and investments be diverted from Asia to the huge and protected markets of NAFTA and the EC? It is also possible that discord within the EC may mount and reduce the likelihood of a single market, protected or otherwise. The outcome, in the context of a weak global economy and an unsettled trade system

6 See Omori and Takata, 1992 and Plummer and Ramstetter, 1991.

would be that much more gloomy for recovery to robust growth.

There are those in Asia who have called for a more firm Asian response to regionalism in Europe and the Americas. To date, the Mahathir proposal for an East Asian Economic Grouping (EAEG) has been the most forceful call to create an exclusive Asian cooperation group. However, the proposal has been scaled back to an East Asian Economic Caucus (EAEC) and even this has been overshadowed by the APEC and the move by ASEAN itself to create the ASEAN Free Trade Area (AFTA) within the next 10-15 years. Asia-Pacific Economic Cooperation (APEC) itself was first proposed by former Prime Minister Hawke of Australia to exclude North America. This was overruled by other members and the U.S. was, with Canada, brought into the fold. APEC, therefore, bridges East Asia and North America and this is an important characteristic of the APEC process. Within East Asia, open regionalism has received strong support from scholars and policymakers (Elek 1992). A proposal for Regional Cooperation in East Asia (RCEA) with the aim of strengthening the regional structure of production and trade without resorting to discriminatory tariffs, has gained attractiveness as it is expected that intra-regional trade will continue to increase more rapidly than global trade (Furukawa 1992). I will return to this point in considering what Japan might propose as a counter to NAFTA in the context of possible configurations of an Asian-Pacific cooperation agreement.

There are new trends and patterns emerging in East Asian trade that have permitted the region to continue its rapid economic growth into the early 1990s despite the U.S. recession and stalled recovery, slowdown in Japan and sluggishness in parts of Europe, and notably Germany (Toida 1992). Despite the weakening global economy, the average rate of real economic growth in the NIEs and ASEAN-4 together was as high as 7.1 percent in 1990 (see table two), 6.8 percent in 1991 and is projected to exceed 7 percent in 1992 and 1993 (Toida 1992 and ADB 1992). China has reported nearly double-digit real economic growth for most of 1992 and shows few signs of slowing down. The economic growth has been helped by the remarkable recent expansion of intra-regional trade and investment (Toida 1992). From 1986 to 1990, growth of intra-regional exports among the NIEs and ASEAN-4 have been expanding at a phenomenal rate of 23 percent per annum, above the rates of expansion of exports to the world (19

percent), the U.S. (18 percent), the EC (21 percent), or Japan (15 percent) and in 1990 the combined share of the NIES and ASEAN-4 in ASEAN-4 exports exceeded the shares going to the U.S., Japan, or the EC (Toida 1992 and IMF 1991). It is also apparent that trade expansion has been complemented by a rapid rise in flows of overseas direct investment particularly involving Japan as an investor, the NIEs as both investors and hosts, and ASEAN-4 and China mainly as hosts (Japan Committee for PEO 1992).[7]

Recent research in the economics of regionalism has sought to evolve meaningful measures, in a quantitative sense, to determine whether a proposed or existing grouping is "natural" so that it will result in beneficial net trade creation. The criteria used by Krugman (1991) and Frankel (1992) among others, has focussed on the volume or value of intra-block trade as the key determinant of whether a grouping will tend to be trade-creating on balance. If intra-block trade is already a large share of existing trade of block members as is the case in NAFTA, then the effect can be expected to be positive or trade-creating. However, Kreinin and Plummer (1992a and 1992b) have proposed and estimated an alternative criterion that focusses on the pattern or composition of trade. They argue that if a block largely preserves a pattern of trade that is closely correlated to a ranking of revealed comparative advantage, then the block is likely to be a natural grouping. They have shown this to be the case for the NIEs (less Chinese Taipei) and the ASEAN taken together. The addition of Chinese Taipei (Taiwan) would be likely to strengthen rather than weaken this result. I will come back to consider the inclusion of Japan later in the paper.

A spectacular example of dynamic growth within the region can be seen in the Hong Kong-Southeast China-Chinese Taipei triangle. Economic growth in Guangdong has been reported to be in the vicinity of 20 percent per annum in real terms in recent years.[8] Moreover investments have been rising between the 3 Chinese economies sparking even higher growth and trade expansion. However, this example is

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7 A surprising finding of the Pacific Economic Outlook (PEO) project on "Changing Patterns of FDI in the Asia-Pacific Region" is that China's outward investment in Hong Kong exceeds Hong Kong's FDI in China. See Tang 1992, pp.110-1.

8 Far Eastern Economic Review, 16 May 1991, pp.64-8.

telling about the prospects for Asia to try to go it alone as well as indicative of how dependent growth in the region is on continued access to global markets. In 1992, Hong Kong has reported a growth rate of exports exceeding 20 percent.[9] However, domestic exports of goods and services produced in Hong Kong have been growing only at a 2 percent rate. In contrast re-exports of goods produced largely by China are growing at a rate of over 30 percent and are now over 3 times as large as domestic exports. The U.S. is the largest market for these re-exports and has a huge trade deficit with China when re-exports are considered to originate in China.[10] A U.S. decision to withdraw MFN (most favored nation) status would certainly bring a sharp slowdown to growth in the Chinese triangle. No wonder there is deep concern about U.S. trade frictions and political differences with Beijing in both Taipei and Hong Kong. Japan has shown little ability to absorb East Asian exports in volumes that would do anything to obviate the loss of the EC or North American markets. Table three shows that U.S. imports have been a multiple of those of Japan. In addition, Japan's imports of manufactured goods, though rising from 24 percent of total imports in 1981 to about 50 percent in recent years, are far less than what the U.S. imports.

It is clear that prosperity in the NIEs continues to depend as much or more on access to the North American market than it does on intra-regional trade in East Asia. In 1990 the U.S. purchased nearly 28 percent of the NIEs exports compared to 11.5 percent for Japan. Intra-regional markets in East Asia (including the NIEs, Japan, China and ASEAN-4) by 1990 took around 40 percent of the NIEs exports, compared to around 30 percent for North America. The NAFTA markets combined are around three times as important as any individual East Asian market is for the NIEs, except in the cases of Hong Kong vis-a-vis China, where the NAFTA is only slightly larger, in Singapore vis-a-vis Malaysia where the NAFTA is about two times as large, and in South Korea vis-a-vis Japan where the NAFTA is about 1.5 times as large. The point is underscored by the fact that the

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9 This was reported in the Asahi Evening News, October 20, 1991 p.4. Also see Asian Development Bank, 1992, p.75 for data on domestic exports and re-exports in recent years.

10 In 1992 it is estimated that the U.S. deficit with China will be $15 billion. See The Daily Yomiuri, November 25, 1992, section A, p.5.

composition of exports from the NIEs to the North American market is more concentrated in sophisticated manufactured goods than is the export trade with Japan. This is even more so in the case for the ASEAN-4 exports where the U.S. has been a major purchaser of manufactures, whereas Japan has mainly imported primary goods and slightly processed raw materials.

The creation of NAFTA will result in elimination of trade restrictions between the three countries involved: Canada, Mexico and the United States. Therefore, all other countries including those in East Asia would be discriminated against in the North American market when competing with producers that are internal to NAFTA. One empirical study (Kreinin and Plummer 1992c) has computed the static effects of the NAFTA on the ASEAN (including Singapore and Brunei with the ASEAN-4) and South Korea (hereafter Korea). The Kreinin and Plummer study involved determining which industries in ASEAN and Korea which currently export into North America would be adversely affected by tariff discrimination after NAFTA takes effect. The study involves matching of competing industries at the four digit SITC level with a cutoff at exports of $250,000 into North America in 1987 or 1988. The same cutoff was used for competing industries in Mexico and Canada, with a $500,000 cutoff for the U.S.-based competing exporters. Because of the difficulties involved in quantifying non-tariff barriers (NTBs), the study focussed on the effects of tariff discrimination and so probably understates the degree of trade diversion caused by NAFTA by what may be a factor of 2 or 3. The results indicate that the integration of North America will divert $484 million or about 4 percent of ASEAN exports and $1,015 million or 5 percent of Korean exports.

Among the sectors that will be hardest hit for ASEAN are chemical compounds, veneer, textiles and clothing, and some machinery items. Singapore appears to bear a disproportionate share of the trade diversion within ASEAN. This is perhaps a result of the fact that Singapore (like Korea) has been graduated from the U.S. General System of Preferences (GSP) scheme. The ASEAN-4 continue to enjoy GSP access for eligible exports to the U.S. For Korea the most affected sectors include organic chemicals, leather manufactures, textiles and clothing, iron and steel, metal manufactures, railway vehicles, travel goods, footwear, furs, fish, and instruments (including

watches and clocks). Most of the trade diversion is, of course, accounted for by the U.S. market, which is huge compared to those of Canada and Mexico. It is unsurprising that these sectors are those where U.S. tariffs are rather high and that also have a strong incidence of NTBs (e.g. textiles and clothing, iron and steel) as well. I have not come across similar studies of the effect of NAFTA on Japan, or the 3 Chinese economies. NAFTA may have a strong effect on certain sectors important to Japan, particularly automobiles, other transport equipment and electrical equipment and machinery. Local content regulations on autos may make it difficult for Japanese auto assemblers to substitute vehicles produced within NAFTA for exports from Japan or for such locally assembled models to have free access to the NAFTA market as a whole. The three Chinese economies have even more reason to be concerned about NAFTA, as textiles and clothing, along with footwear, consumer electronics, and chemicals are all significant in their exports. They are more competitive with Mexico in these and other areas like toys, metal manufactures, leather products, and processed food, hence effects are bound to be significant. Japan is more complementary than competitive with Mexico and also enjoys having on the ground major production and distribution networks throughout North America, though less so in Mexico than in the U.S. or Canada.[11]

The trade diversion resulting from the creation of NAFTA is, in effect, a once-and-for-all loss from the terms of trade effect of tariff discrimination in the North American market. A direct implication is that if the GATT round succeeds and global tariff cuts (and reduction of NTBs) occur, the losses due to discrimination by regional groupings such as NAFTA and EC will be that much lower. Hence, it is clearly in the interest of the East Asian countries to pursue a successful close of the GATT negotiations as quickly as is possible.

III. Evaluation of NAFTA From A Dynamic Perspective.

For a number of reasons, I am inclined to the view that the dynamic consequences of the NAFTA accord are likely to far outweigh the static losses. The key elements in this are the far-reaching

11 See Omori and Takata, 1992, p.155, Also see Far Eastern Economic Review, 11 July 1991, pp.42-6.

economic reforms undertaken in recent years by Mexico and the effects these (along with NAFTA) will have on factor flows, investment and economic growth and, in turn, how these elements impact on international trade. As the dynamic effects occurring through changes in investment (and labor migration) between the U.S., Canada, and Mexico are likely to dominate static measures, it is important to consider patterns of investment in varying scenarios.

In this context, it is noteworthy that Mexico has implemented an unparalleled program of trade and investment liberalization along with achieving macroeconomic stabilization. Inflation has been brought down from an average of over 70 percent per annum in the decade 1980-1990 to near a single digit rate. Economic growth averaged a paltry 1 percent annually in the 1980-1990 decade, but in recent years has been in the 3-5 percent range. Mexico has been able to cut its debt service ratio nearly in half from 50 percent in 1980 to 28 percent in 1990 and, as interest rates have fallen, it has cut the ratio of interest payments to exports of goods and services to 16.7 percent in 1990, down from almost 30 percent in 1980. After major devaluations, the Mexican peso has been freely floating and a competitive real exchange rate has been maintained. As exports have been growing (reaching nearly $30 billion in 1990, more than Malaysia or Indonesia), further progress in debt service reduction can be expected.

NAFTA is like an insurance policy for sustained economic reform in Mexico. In preparing for the implementation of the agreement, Mexico has reduced its maximum external tariff from 100 percent to 20 percent, and has cut the overall average of its tariffs from 23 percent to just 10 percent. The highly restrictive foreign investment law of 1973 was greatly liberalized in 1989 and, in anticipation of NAFTA, in 1992 further reforms to foreign investment regulations were announced. These include a simplification of registration procedures, and clarification of the legal requirements for investment in real estate and Mexican financial instruments. Not only has the climate for foreign investors been improved, but also for all types of private investment. Mexico is in the process of privatizing state enterprises as well. Private investment, including a return of flight capital, could further bolster income growth in Mexico and contribute to further expansion of Mexico's external trade, not only within NAFTA but also with other regions including East Asia. If this income effect from higher private

investment on imports is strong enough, it could more than offset the static losses from trade diversion.

The main issue of concern is that NAFTA may lead to investment diversion that will mean that Japanese, Korean, and Chinese investors in Hong Kong, Taipei, and Singapore may, on the margin, reallocate investments from Southeast Asia or mainland China to Mexico. Similarly, U.S., Canadian, Australian, and EC-based firms may also shift FDI flows to Mexico and away from East Asia. While FDI flows from multinational corporations based in the U.S., Japan and Europe have not accounted for a very high proportion of total capital formation in East Asian developing economies, FDI has been a significant factor in manufacturing investment (Naya and Ramstetter 1992). And though the shares of output and employment of multinational affiliates in the NIEs and ASEAN-4 have been rather small, they have been responsible for a very substantial share of international trade, particularly in manufacturing. With the debt crisis and the slowdown of international commercial bank lending in the 1980s, other forms of private financial transactions including direct and portfolio investment have become more important sources of capital for developing countries, especially in East Asia. In the latter half of the 1980s, FDI has been a major factor in the continuing economic dynamism of the ASEAN-4, the NIEs and China.[12] Investment diversion is more likely to occur in an industry or sector where there are both strong effects from trade diversion and a relatively large amount of FDI. For ASEAN (including Singapore) the sectors that appear to meet the above criteria are food, textiles and clothing, chemicals, metals, and electronics.[13] For Korea the sectors facing investment diversion are: chemicals, machinery, electronics, and transport equipment.[14] These are industries that are likely to be of strategic importance in the future economic development of East Asia. A decline in FDI is cause for concern because of the potential negative effects

12 Far Eastern Economic Review, 28 February 1991, p.72; Asian Wall Street Journal, November 25, 1992, p.8; R.H.Myers, 1992 and Plummer and Ramstetter, 1991. Myers reports that two-way trade between Taiwan and China increased from $2.7 billion in 1988 to $5.7 billion in 1991 and that 3,000 companies from Taiwan have investments in China topping $3 billion. In the past five years over 4 million people from Taiwan have visited the mainland.

13 Kreinin and Plummer, 1992c.

14 Ibid.

this could have on future size and growth of trade and, secondarily, employment.[15] In 1988, for example, export-sales ratios for majority-owned non-bank foreign affiliates of non-bank U.S. parents in the ASEAN-4 averaged (over all industries) more than 50 percent. In Korea over 40 percent of sales of U.S. multinational affiliates were exports in 1988. Foreign affiliates of Japanese multinationals operating in the NIEs and ASEAN had expoirt-sales ratios averaging over 40 percent in 1988.[16] U.S. and Japanese multinational affiliates share of total merchandise exports of the NIEs and ASEAN-4 exceeded 20 percent in 1988 (Ramstetter and James 1992). The substantial role multinationals play in the foreign trade of Asian NIEs, ASEAN-4, and China implies that investment diversion could weaken the export growth of these economies in the future.

While shares of multinational affiliates in total employment remain, for the most part, rather small (it is largest in Singapore, where the employment share of U.S. and Japanese affiliates combined was only 5.3 percent in 1988, elsewhere it rarely exceeded 1 percent of total employment), in particular industries like electronics there could be substantial effects. For example, foreign affiliate employment in Korean electronics and electrical machinery was as high as 57 percent in 1986.[17] A substantial drop in FDI could therefore have a disruptive effect on employment in a key industry.

Quantifying investment diversion is, at best, a heroic exercise with a substantial margin of error. Moreover, given the data problems with FDI statistics, particularly in Japan and the East Asia, any statistical effort to estimate investment diversion would be highly unreliable. Therefore, the approach I will take is to seek to assess qualitatively how Japanese multinationals might respond to NAFTA. In September of 1991 a survey of 563 Japanese affiliates was conducted by a

15 Ramstetter and James 1992; also see Far Eastern Economic Review, 11 July 1991, pp.42-3. A recent article in The Economist (November 7-13, 1992, p.85) asserts that because profit margins are higher and labor costs lower in Asia than in Europe or North America, Japanese FDI will increase more in developing Asia than elsewhere, once investment levels recover in the mid-1990s.

16 Ramstetter and James, 1002, pp.80-4. These ratios vary considerably between countries and over the course of time and ultimately reflect the degree of openness and export-orientation of the host country.

17 Kreinin and Plummer, 1992c; Plummer and Ramstetter, 1991 and Ramstetter and James, 1992. The latter show that employment in Korean affiliates of U.S. parents in electric and electronic equipment increased by over 40 percent between 1986 and 1988.

Japanese economic journal, Nikkei Sangyo, with 269 responses. The survey sought to determine prevailing attitudes among Japanese managers of affiliates already on the ground in the U.S. towards the creation of NAFTA. Of those replying, 52.4 percent regarded NAFTA as protectionist, 14.9 percent disagreed that NAFTA was protectionist, and 32.7 percent did not have an opinion either way at present. The survey went on to ask how NAFTA would affect the U.S. economy in the following specific areas U.S. competitiveness, employment, agricultural prices, trade in services, and if NAFTA would squeeze out Japanese firms in the U.S. market. 42 percent of respondents felt that U.S. competitiveness would increase, 46.5 percent felt it would decrease and 11.5 percent had no opinion. 58 percent believed NAFTA would reduce employment in the U.S., 27.9 percent believed employment would increase and 14.2 percent were unsure. 33.1 percent said NAFTA would reduce U.S. farm prices, 42.8 percent said it wouldn't and 24.1 percent didn't know. 63.2 percent said NAFTA would boost U.S. service trade, particularly export of communication equipment, 17.5 percent disagreed, and 20.3 percent had no view. Interestingly, only 17.5 percent of the respondents felt NAFTA would squeeze Japanese firms out of the U.S., with 54.6 saying it wouldn't and 27.9 percent not sure either way. Regarding the effects of NAFTA on Mexico, the survey asked if NAFTA made Mexico more attractive to Japanese firms. An overwhelming 62.1 percent agreed the NAFTA enhanced Mexico's attraction to their firm. Another 34.6 percent felt NAFTA would have no effect or didn't know. Only a paltry 3.3 percent believed NAFTA reduced Mexico's attractiveness. The issue of local content requirements of NAFTA has been asserted to be among the most important influences on trade and investment within NAFTA. A recent study (Fukasaku, Lee and Yamawaki, 1992) finds that local procurement ratios of components and parts (to total procurement) of Japanese affiliates in 1989 averaged 53 percent in Europe and 47 percent in North America. However, when taking into account value added, (including, in other words, labor, depreciation, and other overhead costs in addition to parts and components) local content was as high as 73 percent in North America and 70 percent in Europe. Thus, the actual measurement procedure for local content makes an enormous difference. The survey tended to bear this out as 54.3 percent felt local content regulations would have a major impact on

Japanese firms operations, 41.3 felt the effect would not be large, while only 4.1 percent felt there would be no effect. The survey included some comments and observations from particular industries that are also of interest. Automakers were among the most sensitive and some view NAFTA as a deliberate policy aimed at reducing Japan's market share. Construction companies also expressed concern over protectionism. Machinery producers and steel companies feel NAFTA will induce companies to move production facilities to Mexico to take advantage of lower labor and other costs. Financial firms and brokerages, in contrast, expressed skepticism over the reliability of Mexico as an investment destination and even felt the longterm effect of NAFTA might be to weaken U.S. competitiveness in finance. Trading companies pointed out the huge scale of Japanese FDI in the U.S. and asserted NAFTA was unlikely to have much impact on their operations. Paper companies and producers of electronic goods took a more positive attitude and expressed interest in expanding sales to Mexico and improving the local content of their products.

The annual survey of Japanese FDI conducted for 1991 by the Research Institute of Overseas Investment of the Export-Import Bank of Japan included a section on NAFTA (Tejima 1992). The survey was targeted at 551 manufacturing firms with three or more foreige-registered affiliates of which 298 or 54 percent replied.[18] The survey asked the firms to indicate how regional integration in European and North American markets might affect their access and, accordingly, what influence this will have on future FDI in those markets. Interestingly, far more respondents (118 or 42.3 percent) thought that access to Europe would become more difficult than those that thought this would be the case (73 or 26.6 percent) for North America. In fact 73.5 percent of respondents thought that access to North America would be unaffected or remain easy compared to 57.6 percent for Europe. The perception that European integration is more likely to result in a protected market led a greater number of Japanese firms (98 or 35.2 percent) to state that they would increase the level of FDI there. In the case of NAFTA only 49 respondents or 17.8 percent expressed an intent to increase FDI as a means to ensure market

18 The firms answering the survey had a total of 4,617 overseas affiliates including 1,463 in the U.S., 1,047 in the EC, and 1,391 in the NIEs and ASEAN combined. For details of the profile of responding firms see Tejima, 1992, p.27.

access. While 62 percent of firms indicated there would be no change in their investment plans because of European integration, 80 percent indicated the NAFTA would not effect their future FDI. An interesting note to the survey is that the Japanese manufacturing multinationals in the survey were about as keen to expand their FDI in Latin America as in the Asian NIEs, the U.S. or Canada. China and ASEAN continued to be the favorite areas for expansion of future FDI. A preliminary analysis of the 1992 survey shows that Japanese multinationals are growing more concerned about the rise of regionalism in Europe and North America. Though they expressed increased anxiety over regionalism, the firm's surveyed were not planning to alter their investment strategies substantially and were interested in the details of how the NAFTA scheme would be implemented. One could surmise from this that Japanese firms are taking a wait-and-see attitude towards NAFTA in formulating their future strategies.

Though of interest, survey results such as those above should not be considered definitive of Japanese multinationals' attitudes towards NAFTA. It is cause for some concern that the survey was conducted prior to the U.S. presidential elections, and with a new and unfamiliar U.S. administration coming to power, Japanese views may have changed.

IV. Japanese Officials' Views and the Private Sector's Reaction to NAFTA.

Officialdom in Japan seems genuinely concerned over the direction NAFTA might take (a) under Clinton instead of Bush and (b) with a GATT agreement in place or without. Japanese officials have been engaged in consultations with their largest Asian economic partners, Korea, ASEAN, and China. Korea and Japan have agreed to carefully monitor NAFTA and to work together against discriminatory or protectionist actions by the U.S. Japan's Minister of International Trade and Industry, Kozo Watanabe, openly criticized U.S. advocacy of regionalism and the Bush proposal to negotiate free-trade agreements along lines similar to NAFTA with other countries in the Pacific. Watanabe specifically objected to the discriminatory local content regulations of NAFTA and pointed out the Bush proposal contradicted U.S. opposition to Malaysia's proposal to create a block in East

Asia.[19]

Even as officials monitor the implementation process of NAFTA, it appears Japanese companies are already moving to position themselves to take advantage of NAFTA. For example, Nissan which has been assembling light trucks and autos in Mexico since 1966 is making efforts to boost the local content of its Mexican production runs. Nissan recognizes that NAFTA will only give tariff breaks to Japanese subsidiaries in North America if they increase the use of local suppliers. Nissan Mexico recently begun placing orders with U.S. parts suppliers, acting as if NAFTA was already in effect. One such supplier is Snider Mold of Wisconsin, which now exports molds to produce components to Nissan in Mexico.[20] Honda also appears to be responding effectively to the U.S.-Canada FTA of 1988 as it has established assembly operations in Canada and in the U.S. it has invested in production of engine components. Recently Canadian and U.S. negotiators came to terms in accepting Hondas assembled in Canada as being Canadian rather than Japanese in origin, thereby reversing a U.S. Custom's Service decision to charge import duties.[21] The decision came after three years of wrangling and is cited as a result of the August 12 signing of NAFTA, which allows parts produced by American subsidiaries of Japanese companies to be considered locally produced. The inclusion of Mexico in NAFTA will allow parts sourced there to come within local content regulations of the agreement and this may induce producers of autos and auto components to invest there. In order for such investments to materialize, Mexico will need to demonstrate political stability and continued improvement in economic conditions for private investors from abroad. As Japanese companies have expressed some skepticism over the ability of Mexico's labor and production managers to meet the stringent productivity levels, quality controls, and delivery schedules required, these appear to be areas where Mexico will have to make visible strides.

Despite the wait-and-see attitude that appears to be dominant in the Japanese private sector towards NAFTA, in official quarters vocal criticisms against U.S. regionalism and protectionism are increasingly heard. It is somewhat perplexing to the Japanese that the U.S. would

19 See the Asahi Evening News, October 19, 1992, p.1.
20 Asian Wall Street Journal, November 2, 1992, pp.1,6.
21 See the Asahi Evening News, October 19, 1992, p.7.

insist on moving ahead with FTAs in the Americas (and elsewhere such as with Israel), yet vehemently oppose any Japanese initiatives or support for a regional grouping in East Asia. Japan does not appear to favor an East Asian block, and would much rather continue to engage in trade, investment and other transactions on a multilateral, non-discriminatory basis. Yet Japan has cautiously begun to consult more closely with important economic partners in East Asia in how to deal with the perceived threat of fortress-like blocks in the EC and NAFTA, It also has company in Korea and Chinese Taipei on the rice issue, which puts these three economies in the odd position of desperately needing GATT to succeed, but not to the extent it threatens their protectionist stand in rice and agriculture. There are other signs of change in patterns of trade and investment in the region that are related to creation of NAFTA, in particular, investment flows from the NIEs to Mexico, that are of concern to the ASEAN-4 and China.

V. The NIES, ASEAN, China and Japan: Coordinated Response or Individual Strategies?

For the economies of East Asia, international trade and investment are their life lines to sustained economic growth. A successful conclusion to the Uruguay Round of the GATT is the closest thing to a first-best solution to the problems posed by regionalism in Europe and North America. Yet a closure to the GATT negotiations is still uncertain, even with the agricultural compromise between the EC and U.S. there will remain many difficulties in hammering out final agreements in agriculture, services, textiles, intellectual property rights, and trade-related investment measures, particularly in arriving at agreement on implementation, dispute settlement mechanisms, and enforcement measures. The phasing out of the Multi-Fibre Agreement (MFA) is to take place over a ten year period with MFA quotas being replaced with tariffs and textiles trade being brought under the GATT umbrella. The U.S. has shown that, while its foremost interest is in strengthening the multilateral trading system, it is also ready to move ahead with bilateral negotiations and arrangements such as FTAs where it feels these are in the national interest. The question for East Asian economies is whether they should seek individual bilateral negotiations with the U.S., including entering into FTAs with the U.S. as

has been suggested by some academics (see for example Schott 1989) and, more recently by the out-going Bush administration, as well as some members of the U.S. Senate. Alternatives to this appear to be for East Asian economies (1) to push more aggressively for a satisfactory and timely GATT accord; (2) to strengthen economic cooperation among themselves through existing institutions (e.g., ASEAN, APEC); or (3) to create new mechanisms for regional cooperation in East Asia (e.g. EAEC or RCEA). These approaches are not conceptually mutually exclusive, but given the limited resources available and the difficulties of negotiating on more than one front without ending up at cross purposes, it is important for East Asian economies to set priorities. China and Chinese Taipei are both currently seeking membership in GATT and have some additional work to do to conform with GATT standards. For Chinese Taipei like Japan and Korea, agriculture remains the achilles heel of their trading system coming into conformity with the new GATT accord. Japan and Korea seem to be spending an inordinate amount of effort and political capital in the defensive posture of seeking to exempt themselves from tariffication and market opening measures in agriculture. This may be smart or safe from the standpoint of short term domestic political interest, but it appears to be very unwise from an economic point of view. The argument that agricultural protection is essentially a national security issue is fallacious, as food stocking and storage is a far less costly alternative (Tsiang 1989). Moreover, the benefits to these economies of a successful GATT would far exceed the costs. An OECD study projected the change in income that would accrue to various countries or regions from successful implementation of GATT-sponsored liberalization measures in the year 2002. East Asian economies emerged as the biggest winners, with China gaining 2.5 percent of GDP, the NIEs and ASEAN averaging a 2.6 percent gain, and Japan gaining 0.8 percent.[22] Gains for the three NAFTA members, in contrast, were: U.S. 0.2 percent, Canada 0.1 percent, and Mexico 0.3 percent. Japan should also take into account the fact that the global gain to all developing economies from a successful GATT would be equal to around $90 billion over the next decade, almost as much as Japan's

22 The results of the OECD study were reported in the International Herald Tribune, November 21-22, 1992, p.1.

entire ODA will be. Losers among the developing economies like some African countries and, possibly some Asian countries could easily be compensated for their losses through additional ODA grants.

The option (2) mentioned above, can also be pursued profitably and without jeopardizing the GATT process. The creation of AFTA over the next 10-15 years is a case in point. Though it is still a long way off, the free trade agreement in ASEAN is being implemented gradually through mutual trade liberalization. While AFTA, as in NAFTA, will embody preferential (that is to say, discriminatory) tariff treatment for members, it is being done in the context of overall liberalization on a MFN basis. Indonesia is an excellent example of this process, and has not only reversed the trend towards higher protection of the late 1970s and early 1980s, but it has substantially rationalized and reduced protection since then (GATT 1991). Japan, China, and the NIEs can use the APEC forum to strengthen cooperation and to engage the U.S. interest in the dynamic Asia-Pacific region. APEC can be used to bring attention to outstanding issues or problems that NAFTA might create and make the U.S. aware of the opportunities cooperation might entail. Clearly, the best interests of East Asia will be served by a successful implementation of the GATT agreement and by strengthening regional economic cooperation on an open and non-discriminatory basis. In this context, an East Asian group such a RCEA could be created as a means of broader consultation within East Asia without threatening ASEAN or creating a bloc on a discriminatory basis as a defense against the EC or NAFTA. AFTA itself can be expected to eventually reduce external tariffs to the point where internal tariff preferences would become negligible. This is already the case for Singapore and Brunei.

One of the concerns NAFTA has raised beyond its possible effects on Japanese FDI, is that the capital surplus NIEs will also divert investments to Mexico from the ASEAN-4 and China. There have been reports of Korean and Chinese Taipei textile producers relocating to Mexico and it is highly likely that textile trade will be among the sectors most strongly impacted by NAFTA. Korean auto producers Hyundai and Kia Motors have already established production and distribution facilities in North America, with Kia Motors announcing the opening of an auto plant in Mexico in 1991. Furthermore, the Korean conglomerates, Samsung and Lucky Goldstar have announced

their intention to locate a $150-200 million color television production plant in Mexico.[23] With the slowdown of Japanese overseas investment since 1991 projected to continue into 1993, there has to be concern in China and ASEAN.[24] Despite this situation China has reported record levels of incoming FDI in 1992, and FDI realized has mounted from $3.4 billion in 1990, to $4.2 billion in 1991 and $6.4 billion in the first three quarters of 1992 ![25] In fact, it is more likely that China, and not Mexico, will be the primary competitor for FDI inflows for the ASEAN-4. Vietnam and India also loom as future competitors within the region.

The investment boom in China is seen as a result of several favorable trends. The pronouncements by Deng that endorsed open market reforms and high economic growth in South China, coupled with an emphasis on deepening the reform process to expedite China's membership in GATT and a successful compromise with U.S. trade negotiators that led to continuing MFN treatment are the reasons for invigorated investor confidence. China's proximity and inherent attractiveness to overseas Chinese investors, particularly those in cash-rich Taiwan, Hong Kong and Southeast Asia are also enabling factors. The establishment of full diplomatic relations with South Korea, despite objections from China's erstwhile ally in the north, has no doubt boosted Korean ventures in China. Problems remain, however. The recent discord between the Chinese authorities and the in-coming British Governor of Hong Kong threatens to undermine economic relations. A new administration in Washington D.C. that has characterized the policies of President Bush towards China as "failed" is another worry. Should Clinton decide to withhold his veto power over legislation to deny China MFN status, investor confidence and trade would suffer a strong blow. Continuing to include China in a regional dialogue that encompasses the U.S., Japan, and ASEAN along with Hong Kong, Korea, and Chinese Taipei is an important reason for using option 2 above. Japan's largest trade partner in East Asia in the future is going to be China, replacing Korea. Japan has a very strong interest in seeing China grow and prosper and would bear high costs should China collapse into stagnation or chaos. Hence one can expect

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23 Far Eastern Economic Review, 12 November 1992, p.65.
24 See Omori and Takata, 1992, pp.146-7.
25 Asian Wall Street Journal, November 25, 1992, p.8.

Japan to play a leading role in bridging China and North America as well. For this reason, it would appear to be a superior strategy for Japan to seek to do its part to move GATT forward by agreeing to open the rice market and accept tariffication and, at the same time, to seek a coordinated effort in East Asia to embrace open regional cooperation. Japan has thus far resisted option 3 above when interpreted as a move to create a discriminatory bloc in East Asia, and it would do well to continue to eschew a strategy of building an exclusive block in East Asia. An RCEA-type grouping, however, could have advantages for Japan as it would provide a forum for East Asia to engage in consultations and, at the same time, allow East Asians to work together for more open and liberal trade globally. Moreover, it is probable that such a grouping would be natural. That is, it will not distort the pattern of trade away from comparative advantage and, hence, would satisfy the criteria discussed earlier (Kreinin and Plummer, 1992a, 1992b). Despite this, a formal East Asian grouping is not likely to be established in the near future. (Yamazawa, 1992). Engaging in the creation of an organization or grouping that is exclusively East Asian also carries with it some risk. It could easily be perceived as a first step towards a trade block. In addition, any likely configuration of such a grouping would involve parties that have substantial political and security differences. Bilateral relationships that are under strain include those between China and Hong Kong, Viet Nam, and Chinese Taipei. While economic integration characterizes East Asia, political problems such as reunification of the Korean peninsula, holding peaceful elections in Cambodia, and deciding on how to deal with the Burmese military dictatorship are less easy to resolve. A final problem is that an East Asian group would leave out the populous and impoverished nations of South Asia as well as the Asian republics and territories of the former Soviet Union. It would be more beneficial for East Asia and Japan if the South Asian nations, especially India, could join in the region's economic dynamism. Conditions that would help the momentum of economic reform there include a successful GATT and greater trade and investment links with Japan and East Asia. Japan could also choose to simply seek to cut itself the best deal it can individually at GATT (gain an exception to agricultural reform in rice) and in a bilateral deal with the U.S. over NAFTA and other frictions. The latter course would be consistent with

Japan's traditional approach and would represent a failure of Japan to internationalize its outlook and take up a global role commensurate with its economic status.

VI. Conclusion

In the early 1990s the global economy has experienced a slowing of growth and trade, including recession in the United States, Britain, Canada, Australia, New Zealand, and Germany. Japan itself has been plunged into recession by the collapse of the so-called bubble economy. The broad nature of the economic slowdown has been attributed to the weak and halting U.S. recovery and to the fact that the U.S. alone is not capable of serving as a locomotive. Indeed, the limited U.S. growth in 1992 is largely a result of export growth and such growth cannot be sustained without improvement elsewhere. The only bright spots in the world economy are in East Asian along with a few Latin American developing countries. East Asian growth has been maintained in the face of a global slowdown mainly because of booming intra-regional investment and trade. However, this has not been sufficient to stimulate growth elsewhere, particularly in Japan where financial conditions associated with the bursting of the bubble economy may preclude an early recovery. A successful end to the GATT round, while not in itself a sufficient condition for recovery, is certainly a necessary one. Japan, which finds itself with huge and mounting trade surpluses resulting from declines in imports and sustained exports, risks enraging its trade partners in both North America and Europe and providing justification to protectionist interests therein. Japan's obstructing a settlement of GATT over the issue of rice is extremely unwise from an economic perspective. Japan would be setting a bad precedent and would be seen as lending support to protectionist interests elsewhere. Japan's stand is clearly in favor of GATT in almost every area but agriculture, and there is a strong self-interest motive for Japan to compromise on rice in order to secure the benefits a stronger, rejuvenated multilateral system of trade would bring. Though Japan can find support for its stand on agriculture in Korea and, perhaps, in Taipei, it would be travelling on the low road to invoke such support in an effort to carve itself out an exception and leave the way open for others to follow.

In responding to NAFTA, it appears the Japanese government is well aware of the dangers of a proliferation of bilateral discriminatory pacts between the largest single market economy on the globe and others. Japanese multinationals seem to be adopting a cautious wait-and-see attitude, while being reasonably confident of their ability to retain access to the NAFTA market through the investments they have already made. It is well within reason for Japan to seek to strengthen existing regional fora for economic cooperation as a means of pressuring the U.S. to keep NAFTA open and to avoid the path of bilateralism in its economic relations and dealings in the Asia-Pacific.[26] To quote a former Deputy Director-General of GATT, Gardner Patterson: "For a believer in the virtues--and the feasibility if pursued vigorously by the United States--of an updated, broadened, and strengthened GATT-type nondiscriminatory, multilateral trading system, the implications of a spread of U.S.-fostered FTAs are downright ominous.[27] Now that the GATT round has been brought to the brink of success, it is incumbent upon beneficiaries of the system to step forward and ensure success.

East Asia continues to lead the world in economic growth and in no small measure this is because of the region's closer integration through trade and investment brought about largely by market forces. The open regionalism practiced in the Asia-Pacific region is being challenged by alternative models in Europe and North America. Success in GATT could help to lead to convergence of the alternative approaches that are now based on formal and discriminatory arrangements (particularly the EC), with the more open style of regionalism found in the Pacific. Globalization of economic activity also means that a nation's (or a region's) self-interest must depend on the well-being in other parts of the world. For Japan and East Asia, it is clear that they have a basis for closer economic cooperation, but not along discriminatory lines. They will benefit most from a strengthened GATT system and continued openness as individual economies and as a region. Hence, Japan would do well to adopt all necessary measures to see that this is the outcome.

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26 At a recent ASEAN-related conference it was asserted that NAFTA would cost ASEAN members at least $2 billion in annual exports, The Daily Yomiuri, November 25, 1992, p.11.

27 Patterson, 1989, p.364.

TABLE 1
International Trade and Asia (1990)

		(1) GDP (US $mil)	(2) EXPORTS (US $mil)	(3) IMPORTS (US$mil)	(4) TRADE/GNP (%)
NIES					
	Hong Kong	69,998	82,144	82,482	118
	Korea	239,772	60,457	68,453	27
	Singapore	34,590	52,753	60,954	164
	Chinese Taipei	156,993	67,214	54,719	39
ASEAN-4					
	Indonesia	93,969	25,675	21,931	25
	Malaysia	42,506	29,409	29,251	69
	Philippines	43,861	8,171	12,993	24
	Thailand	80,172	22,805	33,741	35
Othe Asia					
	China	363,788	69,478	58,632	18
	Japan	2,961,047	287,678	235,307	9
	Simple Average a		53		
	Weighted Average b		15		

Note: a The sum of column 4 divided by 10, the ratios in (4) are calculated by averaging exports and imports and dividing by GDP.
b The sum of columns 2 and 3 divided by 2, divided by the sum of column 1.

Sources: IMF International Financial Statistics, Yearbook 1991.
IMF Direction of Trade Statistics Yearbook 1991.
Republic of China, Ministry of Finance, Department of Statistics, Monthly Statistics of Exports and Imports Taiwan Area, Republic of China, No.257, (January 1991).
Republic of China, Finance Statistics, Taiwan District, September 1991.

TABLE 2

Economic Growth and Asia

Group	1985	1986	1987	1988	1989	1990	1991	1992*	1993*
NIEs	4.9	11.7	12.3	9.6	6.3	6.8	7.3	7.1	7.1
ASEAN	4.0	0.6	4.5	6.0	8.1	8.7	7.6	6.0	6.7
NIEs + ASEAN 4	3.2	9.0	10.0	9.1	7.1	7.1	6.8	n.a.	n.a.

Note: *projection

Sources: Toida(1992)
ADB(1992)

TABLE 3

Imports of Manufactured Goods in Japan and the United States,1988

	(1) Total Imports ($Mil.)	(2) Manufactures ($Mil.)	(3) Ratio of (2)to(1) (percent)
Japan	187,354	90,488	48.3
United States	460,260	374,549	81.3

Note: Manufactures are broadly defined to include industries in SITC single-digit categories 5 through 8.

Source: United Nations, Yearbook of International Trade Statistics, 1991, New York.

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DYNAMIC EFFECTS OF TAX POLICIES IN A Q MODEL OF INVESTMENT*

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1. Introduction

The purpose of this paper is to demonstrate a theoretical possibility that tax policies designed to stimulate domestic investment are ineffective if domestic firms compete with foreign firms which face the tax policies of foreign governments. Abel (1982) provided the framework for a version of q theory of investment which makes possible a rigorous dynamic analysis of tax policies. He proved that an unanticipated permanent tax cut[1] stimulates current investment. While his framework is sufficiently general to cover both perfectly competitive and monopolistic firms, it does not deal with any strategic relationship between firms, i.e., oligopolistic interdependence is beyond its scope. Fershtman and Muller (1984) developed a dynamic framework of a duopolistic market, formulated a differential game between firms which accumulate capital and rigorously proved the existence, uniqueness and global asymptotic stability of the open-loop Nash solution of the game, Mino (1987) constructed a dynamic game with a mathematical structure virtually the same as that of Fershtman and Muller, and proved an interesting comparative static analysis of the stable steady state. In this paper we provide a sensitivity analysis of the effects of changes in tax policies on *current* investment intended by firms in a duopolistic market and show that a tax cut in Abel's sense[1)] can reduce current investment of one of the firms if the size of

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1) Abel showed that one or some combination of (i) an increase in the investment tax credit (κ), (ii) an increase in the present value of depreciation deduction (z) by means of introduction of accelerated depreciation and (iii) a decrease in the

the tax cut is sufficiently different between firms.

2. The Model

The model in this paper is an amalgam of Abel (1982) and Fershtman and Muller (1984). There is a duopolistic market in which each firm seeks to maximize the present value of its net cash flow. Let $\pi_i(K^1, K^2)$, $i = 1, 2$, be the instantaneous operating profit of the firm when capital stock of ith firm is K^i, $i = 1, 2$. Let I_i and $C_i(I_i)$ be the rate of real gross investment of the i th firm and the cost of purchasing and installing I_i. The functions $\pi^i(K^1, K^2)$ and $C_i(I_i)$ satisfy Assumptions 1 − 5 in Fershtman and Muller (1984). K^i accumulates according to the Nerlove-Arrow capital accumulation equation,

$$\dot{K}^i = I_i - \delta_i K^i, \quad i = 1, 2,$$

where δ_i is the physical depreciation rate. In what follows, we shall assume that $\delta_i = \delta$.

Now, let us superimpose Abel's assumptions concerning the corporate income tax, depreciation deductions and the investment tax credit (ITC) on the above duopoly model. One may easily verify that this can be done without causing any substantial change in the duopoly model and that the fundamental system of differential equations describing the Pontryagin trajectories can be described as

$$\dot{K}^i = I_i(q^i) - \delta K^i, \tag{1}$$

$$\dot{q}^i = (r + \delta) q^i - T_i \pi^i_i (K^1, K^2) \tag{2}$$

where r is the after-tax discount rate, q^i the ratio of the shadow price of installed K^i to the net marginal cost of uninstalled capital, T_i the tax parameter[2] concerning the ith firm, which is supposed to be time-invariant, and $\pi^i_j(K^1, K^2) \equiv \partial \pi^i (K^1, K^2) / \partial K^j$, $\{i, j\} = \{1, 2\}$.[3]

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corporate income tax rate (u) under $z + \kappa < 1$ stimulate current investment. In what follows, we shall use the term "tax cut" in this sense.

2) Using the notation of footnote 1, the tax parameter of the ith firm is $T_i = (1 - u_i) / (1 - \kappa_i - u_i z_i)$. See Abel (1982, p.538).

The system (1), (2), is virtually the same as eq. (19) in Fershtman and Muller (1984). Thus, we can directly make use of their propositions and theorem concerning the open-loop Nash equilibrium. First, the stationary state of the system of equations (1) and (2) uniquely exists. (Propositions 5.1 and 5.2 of Fershtman and Muller (1984)) Let it be denoted by $q^{i*}(r, \delta, T_1, T_2)$ and $K^{i*}(r, \delta, T_1, T_2)$. Second, above the entire positive (K^1, K^2) plane there exists a unique two-dimensional time-invariant and stable manifold $q^i = q^i(K^1, K^2; r, \delta, T_1, T_2)$ such that for any initial condition $(K^1(0), K^2(0))>0$, *the solution to* (1), (2), $(q^i(t), K^i(t))$ asymptotically converges to $(q^{i*}(r, \delta, T_1, T_2), K^{i*}(r, \delta, T_1, T_2))$ if $q^i(0)$ is taken to be equal $q^i(K^1(0), K^2(0); r, \delta, T_1, T_2)$. (Theorem 3 in Fershtman and Muller (1984)) This solution to (1), (2), describes the open-loop Nash equilibrium for given initial condition $(K^1(0), K^2(0))$.

3. The Propositions

Using the functions $q^i(.)$, the current investment function of the ith firm can be expressed as

$$\begin{aligned} I_i(0) &= g_i(K^1(0), K^2(0); r, \delta, T_1, T_2) \\ &\equiv I_i(q^i(K^1(0), K^2(0); r, \delta, T_1, T_2)). \end{aligned} \tag{3}$$

Now let us state the main proposition of this paper.

PROPOSITION 1 Suppose $\pi^i_{ij}(K^1, K^2) \equiv \partial^2\pi^i(K^1, K^2)/\partial K^i \partial K^j$, $i, j = 1, 2$, is negative when $i \neq j$. If $K^1(0) = K^{i*}(r, \delta, T_1, T_2)$, then

$$\partial g_i / \partial T^j > (<) \; 0, \text{ according as } i = (\neq) j, \quad i, j = 1, 2. \tag{4}$$

Proof: Consider the variational equations of the system(1), (2), with regard to T_j, $j = 1$ or 2. Initially evaluating T_j as unity, we have

3) (1) and (2) are derived as the first order conditions for the following optimal problem:

$$\underset{I_i}{\text{Max.}} \int [(1-u_i)\pi^i(K^1(t), K^2(t)) - (1-\kappa_i - u_i z_i) C_i(I_i(t))] e^{-rt} dt$$

subject to $\dot{K}^i(t) = I_i(t) - \delta K^i(t)$ *and* $K^i(0) = K^i{}_0$ for $i=1, 2$.

$$\dot{K}^i_{Tj} = I_i' q^i_{Tj} - \delta K^i_{Tj}, \quad i = 1, 2 \tag{5}$$

$$\dot{q}^i_{Tj} = (r + \delta) q^i_{Tj} - \pi^i_{i1} K^1_{Tj} - \pi^i_{i2} K^2_{Tj} - e_{ij} \pi^i_i, \quad i = 1, 2 \tag{6}$$

where $K^i_{Tj} \equiv \partial K^i / \partial T_j$ $q^i_{Tj} \equiv \partial q^i / \partial T_j$ and

$$e_{ij} = \begin{cases} 0, & \text{if } i \neq j \\ 1, & \text{if } i = j. \end{cases}$$

Since it is assumed that $K^i(0) = K^{i*}(r, \delta, T_1, T_2)$, all coefficients of K^i_{Tj}, and q^i_{Tj}, in (5) and (6) are time-invariant, which implies that (5), (6) is a system of linear differential equations. Resorting to the usual method of solving linear differential equations, we obtain the general solution,

$$K^i_{Tj} = \sum_{h=1}^{4} \phi_i(\lambda_h) \exp(\lambda_h t) A_{hj} + \bar{K}^i_{Tj} \tag{7}$$

$$q^i_{Tj} = \sum_{h=1}^{4} \psi_i(\lambda_h) \exp(\lambda_h t) A_{hj} + \bar{q}^i_{Tj} \tag{8}$$

where $(\bar{K}^i_{Tj}, \bar{q}^i_{Tj})$, $i = 1, 2$, $j = 1$ or 2, is the stationary state of (5), (6), λ_h, $h = 1, \cdots, 4$, the eigenvalues of the coefficient matrix of (5), (6), A_{hj}, $h = 1, \cdots, 4$, $j = 1$ or 2, constants to be determined from the initial condition of (5), (6) and

$$\phi_1(\lambda) \equiv 1$$

$$\phi_2(\lambda) \equiv \frac{(-1)}{I_1' \pi^1_{12}} [I_1' \pi^1_{11} + a(\lambda)] \tag{9}$$

$$\psi_1(\lambda) \equiv \frac{(-1)}{I_1'} (\lambda + \delta) \tag{10}$$

$$\psi_2(\lambda) \equiv \frac{(-1)(\lambda + \delta)}{I_2' I_1' \pi^1_{12}} [I_1' \pi^1_{11} + a(\lambda)] \tag{11}$$

where $a(\lambda) \equiv (\lambda + \delta)[\lambda - (r + \delta)]$. As was shown by Fershtman and Muller (See their Proposition 5.3), the coefficient matrix of the system (7) and (8), has two positive and two negative real eigenvalues under their Assumptions 1−5. Let λ_1, λ_2 be negative. Then,

considering $K^i_{T_j} \to \bar{K}^i_{T_j}$ and $q^i_{Tj} \to \bar{q}^i_{Tj}$ as $t \to \infty$, we have from (7), (8),

$$K^i_{T_j}(0) = \sum_{h=1}^{2} A_{hj}\phi_i(\lambda_h) + \bar{K}^i_{T_j}, \quad i = 1, 2 \tag{12}$$

$$q^i_{T_j}(0) = \sum_{h=1}^{2} A_{hj}\psi_i(\lambda_h) + \bar{q}^i_{T_j}, \quad i = 1, 2. \tag{13}$$

Solving (12) with regard to A_{hj}, substituting it in (13) and considering (9)-(11), we have[4]

$$q^1_{T_1}(0) = \frac{\pi^1_1 \delta(r+\delta)\,[I_1'\,\pi^1_{11} - \lambda_1\lambda_2 - \delta(r+\delta)]}{(\lambda_1+\lambda_2-r)I_1'\,I_2'\,\Delta}$$

$$+\frac{\pi^1_1\{I_2'\,\pi^2_{22}[\lambda_1\lambda_2+\delta(r+\delta)] - I_1'\,I_2'\,[\pi^1_{11}\pi^2_{22} - \pi^1_{12}\pi^2_{21}]\}}{(\lambda_1+\lambda_2-r)I_1'\,I_2'\,\Delta}$$

$$q^1_{T_2}(0) = \frac{-\lambda_1\lambda_2\pi^2_2\pi^1_{12}}{(\lambda_1+\lambda_2-r)I_1'\,I_2'\,\Delta}$$

where $\Delta \equiv [\delta(r+\delta)(1/I_1') - \pi^1_{11}]\,[\delta(r+\delta)(1/I_2') - \pi^2_{22}] - \pi^1_{12}\pi^2_{21}$, which is positive, because $\pi^1_{11}\,\pi^2_{22} - \pi^1_{12}\,\pi^2_{21} > 0$ (Fershtman and Muller's Assumption 5). Since π^i_{ij}, λ_1 and λ_2 are all negative, it follows that $q^1_{T_1}(0) > 0$ and $q^1_{T_2}(0) < 0$ if $\pi^i_{ij} < 0$. $q^2_{T_1}(0) < 0$ and $q^2_{T_2}(0) > 0$ can be similarly verified. Those results obviously imply (4).

Q.E.D.

REMARK Our assumption implies the "strategic substitute" discussed in Bulow, Geanakoplos and Klemperer (1985). As is easily shown, $\partial g_i / \partial T_j$ becomes positive for both $j = 1$ and 2 when the strategic complement is satisfied.

Suppose that the governments of countries 1 and 2 both make tax cuts but of different sizes $dT_i = \theta_i d\varepsilon > 0$, $\theta_1 \neq \theta_2$. The above proposition implies that if the difference between θ_1 and θ_2 is very great, $\theta_1 \gg \theta_2$, then the second firm reduces its current investment even though the government of country 2 cuts the tax on the second firm.

However a tax cut by domestic government does not necessarily discourages the investment of a foreign firm. In other words, under

4) The derivation of $q^1_{T_1}(0)$ and $q^1_{T_2}(0)$ is available from the authors on request.

some certain conditions, a tax cut by domestic government could increase the level of investment not only for a domestic firm but also for a foreign firm.

Let $T \equiv T_i$, $i = 1, 2$. Similarly to (5), (6), we have the variational equations with respect to T,

$$\dot{K}^i_T = I'_i q^i_T - \delta K^i_T \tag{5'}$$

$$\dot{q}^i_T = (r+\delta) q^i_T - \pi_{i1} K^1_T - \pi_{i2} K^2_T - \pi^i_i, \quad i = 1, 2 \tag{6'}$$

Suppose that both firms are completely symmetric, i.e. $I_1' = I_2' \equiv I'$, $\pi^1_{11} = \pi^2_{22} \equiv \pi_{ii}$, $\pi^1_{12} = \pi^2_{21} \equiv \pi_{ij}$. By a similar argument to that which is used in PROPOSITION 1, we see

$$q^i_T(0) = \frac{1}{2I'} [\delta - \frac{\pi_i}{\Delta} (\lambda_1 + \delta)] [\frac{\delta}{I'} - (\pi_{ii} - \pi_{ij})], \quad i \neq j$$

We can prove $\lambda_1 + \delta < 0$ [5]. Therefore, considering that $\lambda_1 < 0$, $\pi_{ii} < 0$, $\Delta > 0$ and Fershtman and Muller's Assumption 5, $q^i_T(0)$ is positive if π_{ij} is negative[6]. We can derive the following proposition from the above considerations.

PROPOSITION 2 Suppose both firms are completely symmetric, and π_{ij}, $i, j = 1, 2$, $i \neq j$, is negative. If $K^i(0) = K^{i*}(r, \delta, T_1, T_2)$ then $\partial g_i / \partial T > 0$, $i = 1, 2$.

Let us restrict θ_i to the nonnegative simplex $\{(\theta_1, \theta_2) \mid \theta_1 + \theta_2 = 1, \ \theta_i \geqq 0\}$. Propositions 1 and 2 suggest that the graphs of $\partial g_j / \partial T_i$, $i \neq j$, , can be depicted like Figure 1, if the firms are sufficiently alike. Here, within the intervel of $(\bar{\theta}, \underline{\theta})$, a tax cut by domestic government could raise the level of investment for the firms in both countries.

5) From the characteristic equation of the system (5), (6), we see that $a(\lambda_i) \equiv (\lambda_i + \delta)[\lambda_i - (r+\delta)]$ must be positive for any eigenvalue of the coefficient matrix of (5), (6). Since $\lambda_1 - (r+\delta)$ and $\lambda_2 - (r+\delta)$ are obviously negative, it follows that $\lambda_1 + \delta$ is negative.

6) When $\pi^1_{11} = \pi^2_{22} \equiv \pi_{ii}$, $\pi^1_{12} = \pi^2_{21} \equiv \pi_{ij}$ $((i, j) = (1, 2), i \neq j)$ are satisfied, Fershtman and Muller's Assumption 5 leads to $\pi^1_{11}\pi^2_{22} - \pi^1_{12}\pi^2_{21} = (\pi_{ii})^2 - (\pi_{ij})^2 = (\pi_{ii} + \pi_{ij})(\pi_{ii} - \pi_{ij}) > 0$.

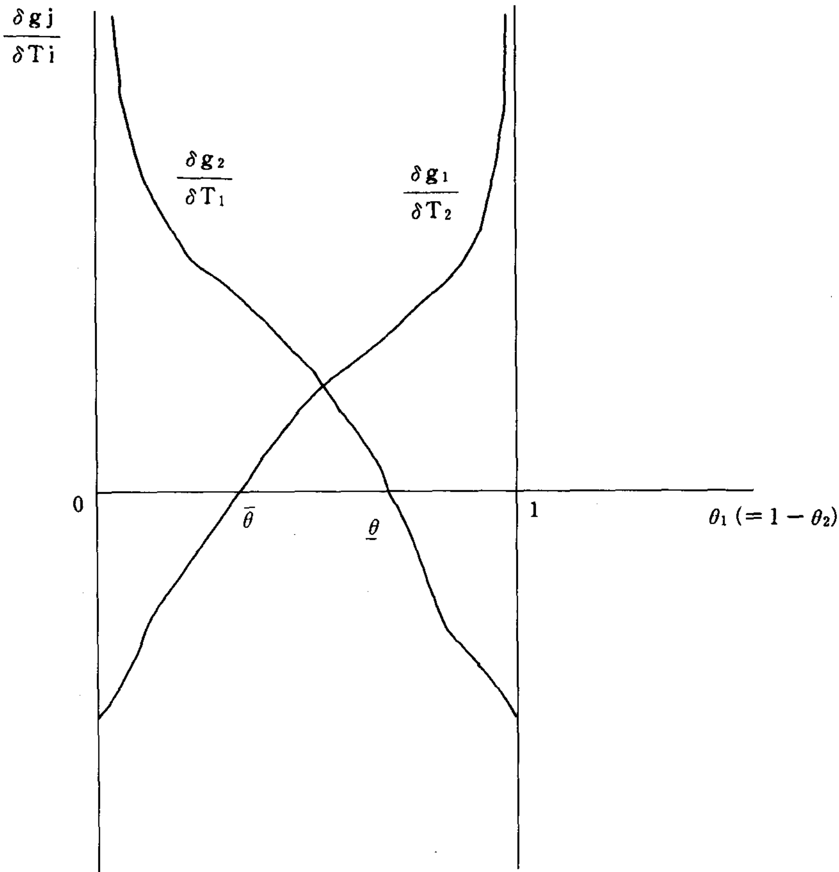

FIGURE 1. The graphs of $\frac{\partial g_j}{\partial T_i}\left(=\frac{1}{\theta_i}\cdot\frac{\partial g_j}{\partial \varepsilon}\right)$

4. A Concluding Remark

In this paper we have only dealt with the dynamic game within the private sector. It may be a possible way of developing the present research to consider whether our results, particularly the discouraging spillover effect (Proposition 1), can be carried over to an extended version of the game in which the government in either country takes part as the Stachelberg leader.

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CORPORATE GOVERNANCE IN GERMANY, JAPAN, AND THE UNITED STATES: A COMPARATIVE STUDY*

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Abstract

Various systems of corporate governance have evolved in different countries. This paper examines the corporate governance in Germany, Japan, and the United States. It demonstrates the U.S. companies have tended to address hazards of self-interested behaviors among stakeholder by delineating the responsibilities of one to another, make the board of directors ensure the interests of shareholders, and resort to market for corporate control to correct failure of the board of directors. The effects of business relationships on German and Japanese corporate governance can help explain inactive market for corporate control in those countries. Japanese companies have established corporate governance with relationship-based control mechanisms to promote building and maintaining long-term business relationship. The board of directors in Germany provides effective safeguards against self-interested behaviors to consider interests of stakeholder to achieve the long-term corporate goals. Although there is some evidence that corporate governance in each country is converging, the significant differences may sustain.

1 Introduction

Modern corporations in capitalist economies are frequently described as a nexus of contracts among stakeholder of many types -

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shareholders, creditors, managers, workers, suppliers, and so forth. While these diverse groups have a strong incentive to cooperate in order to further their individual interests, they are also frequently tempted to exploit the corporation's resources to foster their own individual interests at the expense of others. Various systems of corporate governance have evolved in different countries to attenuate these hazards of self-interested behaviors. The different legal arrangements prevailing capitalist economies are evidence of the wide breadth of responses to problems of governance of which such economies are capable. The diversity within even a single country can be staggering, making it problematic to identify any particular system of governance as a prototype of an entire country. Nevertheless, broad differences do appear to separate the systems most commonly found among large corporations in different countries such as Germany, Japan, and the United states.

Whatever parallels one may draw across corporations in three countries, there is no inevitability about convergence of three different corporate governance. The reason convergence cannot be foreseen stems from a fundamental premise: companies in those three economies have historically evolved significantly different systems of corporate governance. As capital and product markets have become more globally integrated, national differences in corporate governance have been drawn into sharp relief. One of the major differences among corporate governance in different countries is the relationships between capital and labor markets and industrial corporations. Specifically, it is commonly observed that large financial intermediaries in Germany and Japan tend to have closer, long-term relationships with their industrial clients than do their counterparts in the United States.

While legal and historical considerations help to explain why industrial organizations in each country have followed distinctive trajectories, we need to explain the difference of patterns across the countries as well as the similarity among firms within each countries and their sustainability with providing economic rationale. The key to responding to that problem is comprehensive understanding of the corporate governance system with comparative study. This paper examines the corporate governance in three industrialized countries, Germany, Japan, and the United States, three of whose manufacturing sectors are highly competitive each other. The primary purpose of the

paper is threefold: to present institutional characteristics of corporate governance of the three countries in comparative perspectives, to identify important differences in the corporate governance systems of these countries, and to provide economic rationale for these differences across the countries and similarity among firms within each country.

The interpretation of the descriptions of institutional characteristics in corporate governance takes place within the context of agency theory. The agency theory focuses on problems associated with the separation of ownership and management in the modern corporations. For reasons of unobserved actions of management, agents hired to do a job cannot always be counted on to act in the best interests of the principals that engaged them. Within the context of modern public corporations, considerable value may be dissipated by managers whose interests are not able to be perfectly aligned with those of investors. Rational investors will recognize this possibility in advance and reflect expectations of self-interested and unobserved actions by managers in the prices paid for the corporation's securities. The more interesting problem, however, is to create internal control mechanism with monitoring, voice, and compensation systems that will reduce the losses associated with the separation of ownership from management. When prevailing internal control mechanism proves deficient, the existence of external control mechanism with stock prices, takeovers, and relationship-based control may be used to realign manager's interest with investors'.

Since stockholders are the ultimate holders of the rights to corporate control and also the bearers of residual risk, the purpose of corporate governance is to ensure that the actions of corporation's managers accurately reflect the interests of its stockholders. This purpose, however, is not necessarily valid outside the United States. The purpose of corporate governance may be to control and coordinate the behaviors of various stakeholder of corporation so that they achieve the goals defined by their country's culture, and legal and political systems. The term "corporate governance" is, therefore, meant here to imply the entire set of mechanisms used to control and coordinate the behaviors of various self-interested stakeholder interacting in corporate management in order to achieve corporate goals efficiently.

This study demonstrates that U.S. companies have tended to address hazards of self-interested behaviors among stakeholder by

delineating the responsibilities of one to another in formal contracts enforced by courts; relying heavily on competitive market transactions with a large number of lenders, suppliers, customers, managers, and so forth; and relying upon the incentives and discipline of the market to ensure mutually beneficial behavior. Traditionally, groups of stakeholder are distinctly separate in the typical U.S. corporations, and there are reasonably clear boundaries separating a company from the factor and product markets in which it transacts. The primary responsibility of the U.S. board of directors is to safeguard the interests often particular stakeholder, the shareholders, and to ensure that managers seek to maximize the value of the shareholder's stake in the corporation. Consistent with the U.S. propensity to rely upon competitive markets to induce satisfactory behavior among contacting parties, an active market for corporate control is relied upon to correct failures of the board of directors to act as a safeguard of shareholders interests.

The effect of stable and flexible business relationships on the German and Japanese corporate governance can help explain inactive market for corporate control in those countries. Japanese companies have established corporate governance which resorts to relationship-based control mechanisms against the hazards of self-interested behaviors to promote building and maintaining long-term business relationships. Major characteristic among these can be identified that financial institutions that are major shareholders as well as lenders are able to exert considerable influence through board representation and direct intervention into operations of lending companies. This is a significant institutional difference with the governance in the United States.

German corporate governance bears many similarities to the Japanese system, particularly regarding the maintenance of long-term lender-borrower relationships and bank ownership of equity. In at least one important respect - the composition of corporate boards of directors - German governance provides more effective safeguards against self-interested behaviors than does the Japanese system. Japanese boards tend to be dominated by inside managing directors. German supervisory boards, in contrast, are at least half-composed of representatives of the corporation's major institutional shareholders and elected worker representatives. All major constituencies thus

influence corporate goals and the responsibility of achieving the promotion of the company's best interest, according to German law. While they are concerned with investors and nonowners, German boards are expected to consider these interests in the context of how they will influence the company's long-term well-being. Differences between Germany and Japan are more matters of degree than of kind, however, especially in comparison to common practice in the United States.

2 The Nature of Corporation

2.1 Public Corporation

Among the notable innovations within the capitalist economy, the joint-stock corporation and the stock exchange are significant. The corporate form, by establishing a division of labor between holders of capital and management and limiting the liability of the first, simultaneously opens up new sources of capital, allows for the specialization of the management function, and diffuses risk across a broader set of investors. Development of the corporation have also established arrangements whereby ownership interests would be represented, including the board of directors and the proxy voting. Emerging in conjunction with joint stock corporations, the stock market provides a highly ordered mechanism for the trading of shares that corporations issue. Access to the actual trading process being limited to a specific group of exchange members, these traders in turn make their services available to a general investing public, who are granted protection through liability limits which restrict investor risk to the amount of their investment. The market for corporate control links these two institutions, the public corporation and the stock market (Gerlach 1992).

The genius of public corporation is rooted in its capacity to spread risk over the diversified portfolios of millions of individuals and institution and to allow investors to customize risk to their unique circumstances and propensity. By diversifying risks that would otherwise be borne by owner-entrepreneurs and by facilitating the creation of a liquid market for exchanging risk, the public corporation reduces the cost of capital. The public corporation makes no restrictions on who can own their residual claims and this makes it

possible for customers, managers, labor, and suppliers to avoid bearing any of the corporate residual risks. Because shareholders guarantee the contracts of all constituents, they bear the corporation's residual risk. The absence of restrictions on who can own corporate residual claims allows specialization in risk bearing by those investors who are most adept at the function. As a result, the corporation realizes great efficiency in risk bearing that reduce costs substantially and allow it to meet market demand more efficiently than other organizations. These tradable claims on corporate ownership also allows risk to be borne by investors best able to bear it, without requiring them to manage the corporations they own. From the beginning, through, these risk-bearing benefits came at a cost. Tradable ownership claims create fundamental conflicts of interest between those who bear risk and those who manage risk (Jensen 1984; 1989).

In discussions of the relationship between the corporate form and the stock exchange, Berle and Means (1932) argued that the rise of the large, diffusely held, professionally managed corporation fundamentally altered the nature of the relationship between ownership and management over the firm. They worried that in separating these two functions, corporate management machinery were created to be largely unaccountable to equity holders and to pursue their own interests at shareholders' expenses. The major concern of Berle and Means was the increasing dispersion of ownership in public corporations and the consequent loss of shareholder control, with the result that large corporations were run by professional managers rather than by company's owners. But this trend has also has an economic rationale. To the extent that large, bureaucratic organizations are capable of achieving the objectives of reducing coordination costs for complex and capital-intensive economic tasks, it makes sense to establish a division of labor in expertise. Professional managers are to specialize in running corporations while investors specialize in the capital provision and risk-bearing function. Benefits from efficient management can be achieved by delegating management functions to professional managers at all level of the company who have specific knowledge, rather than allocating all management and control to the company's owners. This division of labor and the corresponding managerial revolution has appeared in advanced capitalist economies (Fama and Jensen 1983; Gerlach 1992).

The major problem is associated with the separation of ownership and management in the modern corporation. Managers hired to run a corporation cannot always be counted on to act in the best of the shareholders that engage them. This fundamental reality induces shareholders to expend resources in the development of incentives and monitoring mechanisms designed to reduce self-interestedly opportunistic behavior by managers. The cost of designing and running these mechanisms, and the value lost due to the remaining self-interested opportunism by managers, are the agency costs that rational investors must take into account when pricing the company's securities. From this perspective, the primary purpose of corporate governance is to develop efficient monitoring and incentive mechanisms that will reduce the amount of foregone value associated with the separation of ownership from management (Kester 1992).

2.2 Corporate Governance

The modern public corporations have developed primarily internal and external control mechanisms for corporate governance. The internal control mechanisms in which incentives and monitoring devices are established facilitates professional managers to act in accord with the shareholders' interest. Internal control in the public corporation is delegated by shareholders to a board of directors. Shareholders generally retain approval right by vote on such matters as board membership, auditors choice, merger, and new stock issues. The board then delegates most management and control functions to managers. When internal control mechanisms work well, the board of directors replace top management whose capability is no longer the best ones available for the job. When these mechanisms break down, however,shareholders receive some protection from external control mechanism. The transferability of stocks of public corporations gives rises to an external monitoring device - a stock market that specializes in pricing common stocks and transferring them at low cost. Stock prices are visible signals that summarize the outcomes of management for current and future cash flows. This external monitoring in the stock market exerts pressure to direct a corporation's management toward the interests of shareholders. External control from market for corporate control is also unique to public corporations and its attributable to the unrestricted nature of its residual claims. The

market for corporate control facilitates alternative management teams to compete for the rights to manage the corporation's assets. This competition can take the form of mergers, tender offers, or proxy fights. Takeover enables new owners to change the company's assets, alter inefficient trade relationships, and change management. Other organization forms such as nonprofit, partnership, or mutual insurance companies and saving banks do not benefit from the same kind of external control mechanism (Fama and Jensen 1983; Jensen 1984).

Berle and Means (1932) had entangled in a debate over whether they had ignored the importance of stakeholder other than shareholders. Perhaps it is not shareholders alone, this argument went, but firm's collective stakeholder that are important. Jensen (1984) argues that shareholders are commonly portrayed as one of the groups in corporate constituencies, or stakeholder. It is asserted that shareholders are not equal with these other groups because they are the ultimate holders of the rights to corporate control. Public corporations are unique organizations because they make no restrictions on who can own their residual claims and this makes it possible for customers, managers, labor, and suppliers to avoid bearing any of the corporate residual risks. Because shareholders guarantee the contracts of all constituents, they bear the corporation's residual risk. The absence of restrictions on who can own corporate residual claims allows specialization in risk bearing by those investors who are most adept at the function. As a result, the corporation realizes great efficiency in risk bearing that reduce costs substantially and allow it to meet market demand more efficiently than other organization. Shareholders as the bearers of residual risk hold the right to control of the corporation, although they delegate much of this control to a board of directors. Williamson (1985) argues that the unsecured position of shareholders' investments give them priority for corporate governance, with management granted a secondary position. Constituencies other than these two are better off, Williamson asserts, protecting their business interests by direct contractual guarantees rather than through board representation.

Based upon the ideal of shareholder democracy and the perceived need to prevent abuse of corporate power, the corporate governance system in the U.S. is the product of constantly evolving American jurisprudence. It seeks to promote allocative efficiency through

antitrust laws that separate the interests of numerous stakeholder and that keep them in competition with one another, and seeks to maintain the accountability of corporate managers to corporate owners through the board of directors and the proxy-voting mechanism (Lightfoot 1991). The corporate goal of the U.S. companies is established to maximize the shareholders' wealth . From that point of view, it has often been argued that managers have been consistently unwilling to return surplus cash, so called free cash flow (Jensen 1989), to their shareholders, preferring to hold on to it for a number of reasons: excess cash provides managers with autonomy vis-a-vis the capital markets, reducing their need to undergo the scrutiny of potential creditors or shareholders. Jensen (1989) argues that free cash flow must be distributed to shareholders rather than retained for a company to operate efficiently and maximize shareholders' value . But this happens infrequently; managers have few incentives to distribute the funds, and there exists few mechanisms to compel distribution.Managers have incentive to retain cash in part because cash reserver increase their autonomy vis-a-vis the capital markets. Large cash balances and independence from the capital markets can serve a competitive purpose, but they often lead to waste and inefficiency. Consider that companies distribute excess cash to shareholders and then must convene the efficient capital markets to supply funds as sound economic projects arise. Shareholders are at a great advantage in this world, where management's plans are subject to enhanced monitoring by the capital markets.

Managers also resist distributing cash to shareholders because retaining cash increases the size of the companies they run; managers have many incentives to expand company size beyond that which maximizes shareholder wealth. Compensation is one of the most important incentives. The tendency of companies to reward middle managers through promotions rather than annual performance bonuses also creates an inclination toward growth. Organization must grow in order to generate new positions to feed their promotion-based reward systems. Furthermore, corporate growth enhances the social prominence, public prestige, and political power of senior executives (Jensen 1989).

Modern industrial corporation faces vastly more complex problems of coordination and control. The larger scale of operations

today has in and of itself heightened the complexity of problems. In addition, large corporate customers and suppliers, and new providers of factors of production such as equity owners, large institutional lenders, professional managers, full-time employees, and so forth, have emerged as groups of stakeholder whose economic welfare depends upon the activities of the corporation in question, but whose priorities with respect to the proper focus of those activities can differ sharply one from another. Thus, controlling and coordinating the behaviors of these corporate stakeholder, each of which is fundamentally self-interested and able to undertake some behaviors or to exploit some information hidden from the view of other stakeholder, generates one of the major problems facing modern capitalist economies (Kester 1991b).

Shareholder welfare is enhanced when cash is deployed in those activities promising at least as much value in terms of discounted future cash flows as the amount expended in the present. Employees would presumably prefer richer compensation and greater job security. Suppliers might want to have expanded volume of orders. Needless to say, such diverse interests need not be mutually exclusive. Investments might simultaneously expand capacity, provide jobs, and lower production costs, as well as create value for shareholders. Such uses of cash might naturally entail little or no conflict among stakeholder. When internally generated cash is scare relative to available uses, conflicts on the use of cash are more likely to be resolved in favor of shareholders and other suppliers of capital to the firm. Generally, new capital will be forthcoming only if investors are confident that their interests will be protected and their welfare advanced. Even if managers do not seek external capital, thus avoiding capital markets tests of the perceived efficiency of planned investments, product market tests may apply. Rivalry among competitions in the company's product markets will exert a disciplinary force driving managers to seek sustainable competitive advantage, which is the very foundation of value creation for shareholders. The company's internal control mechanism in which compensation schemes are tied to equity interests may further constrain the scope of managerial discretion in the use of cash when capital is scared.

Stakeholder conflict about the use of cash tends to be greatest when internally generated cash is abundant relative to investment

requirements. Under these conditions, managers enjoy greater latitude in its deployment. A surplus of cash relative to value-creating investments allows managers to minimize capital oversight. The imperatives of product market competition can be satisfied without precluding the ability to pursue other stakeholder priorities. Internal monitoring and control may also be less strictly executed when cash is liberally available. Management's incentive alignment with equity may be too weak to overcome desires to act in its own interests or that of other stakeholder demanding a greater share of the firm's economic rents. The results often is the investment of excess cash at rates of return below the cost of capital. If such investment becomes chronic, conflict among shareholders, managers and other corporate stakeholder will eventually emerge (Jensen 1989; Kester 1991a).

Since shareholders are the ultimate holders of the rights to corporate control and also the bearers of residual risk, the purpose of corporate governance is to ensure that the actions of corporation's managers accurately reflect the interests of its shareholders. This purpose, however, is not necessarily valid outside the United States. The purpose of corporate governance may be to control and coordinate the behaviors of various stakeholder of corporations so that they can achieve the goals defined by their country's culture, legal and political systems.

Japanese corporations have a distinctively different approach to corporate governance. The interests of external stakeholder get represented in Japan. But boards of directors are not the primary mechanisms for ensuring this. Rather, these stakeholder take equity positions in other firms in which they have business interests, creating economic stakes in those companies that serve as legitimate bases of influence. In this way, key external stakeholder like banks, suppliers, customers, and so on get represented by becoming legally empowered constituency of the firm. The interests of internal stakeholder are represented in two ways. Managers dominate the boards of their own companies, ensuring a substantial influence on internal decision making. Since corporate shareholding is often reciprocal, at least among large firms, managers are also able to exercise influence over the external shareholding companies that constrain them. Mutual shareholdings attempt at control in one direction are balanced against reciprocal holdings in the opposite direction. In the United States, these investors

have become largely separated from the activities of the firm themselves - that is, from their employees, lenders, and trading partners. Therefore, a large constituency of institutional investors have common interests but little ongoing interest in the firms in which they hold shares. For corporate involvement in equity shareholding is so pervasive in Japan, Gerlach (1992) characterizes that Japanese stock markets have been transformed largely into instruments of corporate rather than purely financial interests.

The goals of U.S. corporations center on earning high returns on investment and maximize current stock prices. Managers exercises the dominant influence on corporate goals, interpreting signals about desired behavior from the external capital market, influenced by compensation based on current accounting profits or unrestricted stock options that heighten stock price sensitivity. U.S. executive's preoccupation with shareholders wealth contrasts sharply with the goals that guide German and Japanese managers: adequate returns, secure employment, and enhanced international competitiveness. Banks, the German manufacturer's principal shareholders, have reinforced this emphasis on economic growth because they want greater lending activity and more stable dividends. Moreover, because lender, shareholder, and employee representatives all sit on the supervisory boards, each group can ensure that the company's goals at least in part reflect its interest.

The goals of the Japanese companies will be growth and longevity, with less emphasis on maximizing current returns on investment and stock prices. In fact, independent shareholders will rank fairly low on the list of constituencies whose interests management is to represent.[1] The typical large Japanese corporation does not have clear lines distinguishing stakeholder from one another with carefully delineated

1 Some supporting evidence comes from comparative data provided in a questionnaire survey of Japanese and the U.S. managers (Kagono, et al. 1985). When asked to rank the relative importance they placed on nine preselected corporate goals, the two sets of managers showed striking differences. Ranking far most important in senior executives' corporate goals in the United States was return on investment, followed by capital gains for stockholders. In Japan, in contrast, the primary goals was increasing market share, followed by return on investment and company's new product ratio (which was only seventh on the American list). Capital gains for shareholders ranked at the bottom of the list and were cited by almost none of the Japanese managers as an important goals for their companies.

rights and responsibilities between them. Rather, it is a coalition of stakeholder - suppliers, lenders, customers, shareholders - holding a complex blend of senior and junior, short-term and long-term, implicit and explicit claims against the company. Because of the hazards of expropriation to which equity claims are exposed when ownership is separated from management, corporations are typically governed by boards of directors elected by shareholders to act in their best interests. Shareholder value maximization is the presumed goal of the board and the managers it oversees. However, when a majority of shares are distributed among a variety of stakeholder, each holding different senior claims and able to extract returns by various means other than dividends and capital gains on stock, strict shareholders value maximization can be problematic as the dominant corporate objective. Different stakeholder groups owning voting shares may be pursuing their own goals. Some opportunities to add to shareholder value, such as prematurely repaying a high fixed-rate bank term loan, for example, may cost one of the shareholders more than it stands to gain from a pickup in the value of the stock it owns (Kester 1991a).

Unbundling the debt, equity, and other claims is one way of restoring the dominance of the shareholders' objective. But to the extent these complex bundles of claims evolved, this may not be impossible. Under these conditions, corporate growth tends to emerge as the common denominator among the stakeholder groups - the one objective that nearly everyone can agree on as having a potential benefit. When the shareholders are also valuable long-term creditors, supplier, and customers, focusing management's attention on growth may better serve the goal of ex ante value maximization than would explicit profit maximization. Growth also attenuate disputes among stakeholder by relieving pressure to compare one group's gains to the gains of another with tradeoff. Given corporate stakeholder hold the bundling interests, their interests will be served in a variety of ways apart from direct returns on their investments. Many of these interests will lead them to encourage company growth or other goals at the expense of shareholders' value. In the case of banks, these interests include not only higher debt-equity ratios but also new fee businesses from the client, increased loans to related companies, an expanded employee base for bank deposits, increased compensating balances, and an improvement in their own equity capital positions

through reciprocal shareholding positions which help to improve their own equity bases (Kester 1991a; Gerlach 1992).

In contrast to the United States, German shareholders and managers contrast the goal of corporation in the United States to their own country. German managers believe that they think differently about the goal of their companies in their society than do their U.S. counterparts and believe these differences impact on their own and U.S. corporate governance. Communitarian values, limited involvement in equity investing, and the belief that the corporate priority is to serve customers and provide employment instead of just creating shareholders wealth is part of "cooperative capitalism" (Lorsch and MacIver 1991).

The term "corporate governance" is, therefore, meant here to imply the entire set of mechanisms used to control and coordinate the behaviors of various self-interested stakeholder involved in the corporation in order to achieve corporate goals efficiently.

3 Corporate Environment

3.1 Characteristics of Capital Market

3.1.1 Institutional Investors in the United States

Approximately half of all shares in the United States are held by individuals, and the other half by institutions. Institutional share ownership has been rising since 1950, when institutions with assets of $107 billion owned 8% of all outstanding equity. By 1980, institutions with assets of $2 trillion owned 33% of outstanding equity, and by 1990, with assets of $6 trillion, institutions controlled about 20% of all financial assets and 45% of all outstanding equities. In 1989, pension funds controlled about two-thirds of stock held by institutions, and investment companies and endowments each controlled about one-sixth.[2] Because individual shareholders tend to be more stable investors than institutions and tend to hold diversified stock portfolios, their incentive and ability to participate actively in corporate

2 The critical change is the concentration of shareholdings in the hands of fewer and fewer large institutions, namely, pension funds that provide retirement income and health care benefits to state and local public employees. Pension funds control $2.5 trillion worth of assets-more than 40% of all assets under institutional control-and own shares worth $1 trillion, more than 25% of all publicly held equity in U.S. companies. The 20 largest pension funds control assets worth more than $620 billion-26% of all pension fund assets (Taylor 1990).

governance are attenuated. Although individual own about half of all shares, they do only about 20% of the trading whereas institutions do about 80%. Heavy institutional trading is not surprising, however, when one considers the types of institutions that hold major equity positions in the U.S. companies: pension funds, investment companies, and endowments. Indeed, most equity-owning institutions are financial in nature. Institutional investors hold highly diversified portfolios with small stakes in many of companies. For example, in 1990 the California Public Retirement System (CalPERS) reportedly held stock largest holding was 0.71% of a company's equity. This fragmented pattern of share ownership is due in part to legal constraints on concentrated ownership, fiduciary requirements that encourage extensive diversification, and investors' strong desire for liquidity. The goal of institutional investors in the U.S. are purely financial and are focused on quarterly or annual appreciation of their investment portfolio compared with stock indices. Because managers are measured on their short-term performance, their investment goals understandably focus on the near-term appreciation of shares. Mutual funds and actively managed pension funds hold their shares, on average, for only 1.9 years (Porter 1992).

Because of their fragmented stake in so many companies, short holding periods, and lack of access to proprietary information through disclosure of board membership, institutional investors tend to base their investment choices on limited information that is oriented toward predicting near-term stock price movements. The system drives them to focus on easily measurable company attributes, such as current earnings or patent approvals, as proxies of a company's value on which to base market timing choices. Institutional agents do not sit on corporate boards, despite their large aggregate holding. As a consequence, they have virtually no direct influence on management behavior. Indeed, with small stake in the company and an average holding periods of two years or less, institutional agents are not viewed by management as having a legitimate right to serious attention (Porter 1992).

3.1.2 Legal Restrictions in the U.S. Capital Market

Often preferring to take a passive role in corporate governance, large shareholders - especially mutual funds and pension funds - are

apparently absent from corporate boards. Legal restrictions in the U.S. capital market explains why large institutional shareholders are not represented in many instances, and why they are loathe to participate actively in governance. Banks, the largest of all U.S. financial institutions are prohibited by law from owning controlling blocks of stock in industrial companies. Bank themselves, as opposed to their trust funds, cannot directly own any stock in an industrial company. Nor can they own stock indirectly through affiliation with investment banks. The Glass-Steagall Act of 1933 effectively blocked these means. Bank holding companies, which can be owned and controlled by Banks, are similarly restricted. The Bank Holding Company Act of 1956, later reinforced by the "One-Bank Holding Campany" legislation in the 1970's restricts a holding company's activities to those "closely related" to banking. In addition, a bank holding company cannot own more than 5% of the voting stock of a non-banking company and cannot otherwise control an industrial company. It is this limitation on control, rather than ownership, which distinguishes the financial structure in Japan from that in the U.S.[3]

Although banks can own stock in a fiduciary capacity in their trust funds, no more than 10% of a bank's trust fund can be invested in the stock of any corporation. In addition, other trustee laws encourage trustees to pursue a strategy of high diversification to protect themselves, further diminishing the potential ownership role of trust funds. Thus, many of the indirect ways to control a company which are commonly employed by banks in Germany and Japan as a substitute for large stock ownership are precluded to U.S. banks (Edwards and Eisenbeis 1991). Furthermore, banks that exert actual or effective control over a company could be subjedt to "equitable subordination" of their loans in the event of a bankruptcy proceeding, and might ever be subject to other liability, including penalties under the Racketeer Influence and Corrupt Organizations Law, or RICO (Lightfoot 1991).[4]

Pension funds are currently the largest institutional holders of

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3 Geographic, product, and activity restrictions, as well as extensive deposit insurance, account for American banks, small size, weak boardroom power, and thin equity base. American public opinion, which mistrusted private large accumulations of power, and interest group politics explains these characteristics of the U.S. banks (Roe 1993).

4 The U.S. has long-lived democracy, founded on a premise of checks and balances,

common stock that control two-thirds of institutionally owned equities. They own more than 25% of all public-held equity in U.S. companies. The largest 20 pension funds, together with the 10 largest U.S. money managers, hold more than 16% of the shares of the largest 10 U.S. corporations. Although pension funds own substantial amount of equities, they have virtually no representation on corporate boards. Individually, no pension fund may hold more than 10% of the stock of any company if it wishes to receive favorable tax treatment as a diversified fund. As a result, no individual fund has that much voting power. Pension funds might obtain considerable power if they voted as a block. Any attempt to sway shareholder opinion, however, could collapse on legal obstacles: if a participant in a proxy fight tries to influence more than ten stockholders, he must obtain prior Securities and Exchange Commission (SEC) approval.[5] Thus, a number of political, institutional, and legal constraints combine to limit the role that pension funds can play as influential owners. While a relaxation of these constraints could enhance the ability of pension funds to

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dividing power among the branches of government. This fragmentation of governmental power helped produce fragmenting financial regulation that yielded corporate governance by centralization of power in managers. Politics influences the structure of the large public firm. Firms in nations that tolerate large pools of private economic power evolve differently than firms do in nations that repeatedly fragment financial institutions, their portfolios and their ability to network blocks of stock (Roe 1993).

5 First, pension funds embrace many different firms and political entities, which generally do not encourage them to behave as influential owners. Pension plan sponsors control the investment managers of pension funds, and the managers of private firms are unlikely to encourage their pension fund managers to exert control over the managers of other firms. This may be on reason that plan sponsors typically divide pension assets among many different money managers, thereby diluting the potential for any one fund manager to exercise control. Government sponsors also have been reluctant to encourage their pension fund managers to exert control . For example, many government sponsors sought to prohibit their fund managers from financing hostile takeovers.

Second, ERISA (The Employee Retirement Income Security Act of 1974) requires that a pension fund should be diversified, unless it is clearly prudent not to be diversified. To interpret this restriction, the courts define what is "prudent" largely by looking at what has been the customary, generally-accepted, fiduciary behavior. Fiduciaries commonly hold hundreds of different stocks, and look to various broad market indexes as performance benchmark. To deviate from this practice fund managers would risk enhanced liability. Thus, the ERISA diversification requirement, as presently interpreted, is an obstacle to pension funds holding requirement, as presently interpreted, is an obstacle to pension funds holding controlling blocks of stock in large public corporations.

Third, various fiduciary rules discourage pension fund managers from exercising a controlling role. In particular, if pension fund managers were to take seats on the boards of portfolio companies they might be subject to a

exercise a controlling influence in the future, these changes are unlikely to occur (Edwards and Eisenbeis 1991; Lightfoot 1991).

Like pension funds, mutual funds tend to refrain from exercising large shareholder rights in order to receive favorable tax treatment. From their beginning mutual funds were viewed as passive investment vehicles. Investors could pool their assets with other investors to achieve a more diversified portfolio and to obtain professional management. Mutual funds, however, are not to be in the business of monitoring and controlling managements of their portfolio companies. To prevent mutual funds from seeking control right, the Investment Company Act of 1940 and the Internal Revenue Code subject them to a number of restrictions.[6]

The law regulating insurance companies is state law. To sell in a

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higher standard of care. As passive investors, ERISA holds fund managers to a "prudent expert" standard: they must know something about the business of investing. If they assume positions on the boards of portfolio companies, however, the prudent expert standard might well mean that they will be held to a standard of expertise in the "business of the company." This standard of care would be higher than the usual corporate law's "business judgement" standard that is now applied to board members, thereby subjecting fund managers to enhance liability *vis-a-vis* their beneficiaries (Edwards and Eisenbeis 1991).

6 First, unless a mutual fund qualifies as a diversified mutual fund, it is taxed in a highly unfavorable way. If the fund is not diversified, its income is taxed at the ordinary corporate tax rate, and is taxed again when distributed to the fund's shareholders. Thus, an undiversified mutual fund loses the pass-through tax advantages of a diversified fund.

Second, both the tax and the Investment Company Act of 1940 define a diversified mutual fund as one that must have at least half of its investments in companies that constitute no more than 5% of its portfolio and constitute no more than 10% of the portfolio company's outstanding stock; and, with respect to the other half of the fund portfolio, no more than 25% of the fund's assets can be invested in a single company.

Finally, to further inhibit mutual funds from seeking controlling interests, the Investment Company Act of 1940 restricts a fund from advertising itself as "diversified" if the regulated part of its portfolio has more than 10% of the stock of any company, even if such stock holding constitutes a trivial portion of the mutual fund's portfolio. Not surprisingly, almost all mutual funds want to be considered as "diversified." The result, therefore, is that mutual funds are excluded from performing the monitoring and controlling functions of large investor. This results is reinforced by other legal restrictions. For example, if the mutual fund owned 5% of a portfolio company's stock, or simply sat on its board, the portfolio company would become a statutory affiliate of the mutual fund and of the mutual fund's principal underwriter. Or if the mutual fund wished to assert control jointly with another affiliate - defined as any company also owning 5% of a portfolio company - it would need prior SEC approval. This role clearly discourages the kind of financial networks that are used in Japan to exert control (Edwards and Eisenbeis 1991).

state, insurance companies must adhere to the laws of that state. Since most large companies wish to sell insurance nationally, they are governed by laws of the most restrictive states. New York permits 20% of a life insurer's assets, or one-half of its surplus, to be invested in stock, but insurance companies cannot put more than 2% of their assets into the stock of a single company. Property and casualty insurers also cannot own more than 5% of a company's voting stock. Similarly, California, Illinois, and Texas prohibits life insurers from investing more than 10% of the insurer's capital and surplus in a single company. Thus, with few exceptions state law prevents insurance companies from acquiring controlling blocks of stock, virtually eliminating them as effective owners (Edwards and Eisenbeis 1991).

The numerous legal and institutional constraints on financial institutions in the United States have effectively prohibited them from becoming controlling stockholders. While they clearly have the financial resources to exercising large shareholder rights, financial institutions are inhibited from playing this role. This is in sharp contrast to the roles played by financial institutions in Germany and Japan. Therefore, institutional investors in the United States simply sell the stock of underperforming companies as quickly as they can. There are no feasible options. Since they cannot work with the managements of poorly-performing companies to improve performance, their best strategy is to remove these companies from their portfolios.

The problem is that these large institutions, whether corporate or public pension funds, mutual funds, or endowments, cannot act as owners in the sense that they could take a long-term view of ongoing company prosperity, understand the company's business and the circumstances in which it operates, and participate in the selection and election of directors. The obvious reason is that their primary fiduciary responsibility is to their investors and beneficiaries, which can lead to a conflict of interest with their acting as owners. Current practice suggests that a large institutional fund can be managed on the way of which leads to broadly diversified portfolios. The fund can index its portfolio, investing it in hundreds of companies. For example, CalPERS, with $62 billion in assets, holds equity in 1,300 U.S. corporations plus 300 international ones. In such a situation, the limited budget available for an internal staff makes it absolutely impossible to develop the detailed knowledge and to provide the

oversight.[7] Alternatively, a large fund can distribute its assets to several external investment managers and urge them "to beat the average." It is impractical that money managers could be expected to serve as the informed owners, because they are short-term investors, not owners. In addition, they also have a clear conflict of interest because these firms constantly solicit clients among the U.S. large corporations. Their own self-interests make them loathe to become actively involved in corporate governance because they do not wish to offend present or potential clients. Furthermore, current SEC regulations restrict the shareholders' ability to communicate with each other about governance matters, thus inhibiting institutions from collectively selecting directors or exerting oversight in other ways (Lorsch 1991; Taylor 1990).

3.1.3 Intercorporate Shareholding in Japan

Corporate shareholding in the United States generally takes the forms of a capital market transaction, the primary purpose of which is to earn high returns on investment and to maximize current share prices. The buying of corporate shares by investors is seen as based on a welfare-maximizing reckoning, sensitive to price signals reflected in changing share prices among anonymous traders in dairy, ongoing market. To the extent that investors have generally symmetrical access

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7 The hardheaded economies of institutional ownership make exit an increasingly unattractive option. As they account for a large percentage of outstanding shares, pension funds find it harder to beat the market regularly. The very act of buying or selling large blocks of share - funds as big as giant pension funds in New York trade in large blocks - cannot help but affect prices in the wrong direction. When pension funds exit, they take everyone with them and administer self-inflicted damage on their own valuation. These facts have persuaded big pinsion funds to adopt buy-and-hold strategies through stock indexing. The essence of indexing is to create a class of permanent shareholders with a long-term perspective on corporate performance, that is, selling shares is not chosen.

Public pension funds, the institutions with the greatest freedom to use their resources to exercise voice, are the least equipped to do so effectively. The institutions best equipped to exercise voice have the least discretion or inclination to act. For decades, pension fund fiduciaries hired full-time staff members who in turn hired portfolio advisers, consultants, and money managers. These professionals were experts on identifying undervalued shares and designing computer-based trading strategies that took advantage of arbitrage opportunities, in short, in an ownership option based on exit. But in a world of indexing, where buy-and-sell decisions are essentially eliminated, decision making returns to the fiduciaries. CalPER can afford to hire the best financial advisers in the world. But most of them are experts in when to buy and sell stocks, bonds, and options-not in how to restructure a big corporation (Taylor 1990).

to information, the stock market conforms closely to its original purpose of raising and allocating capital by corporate stock issues.

This is not the only significance of the stock market's operation, however. Where investors are other corporations, as it is the predominant pattern in Japan, ownership becomes a means for building relationships among those corporations in ways that set markets for capital and control in the context of other business interests. This does not imply that the stock market no longer allocate capital or responds to conditions of supply and demand in Japan. Rather, corporate ownership takes on the added feature of being one of the main means by which corporation's strategic interests are secured and promoted. This difference is reflected in the concrete pattern of relationships among shareholders. The importance of Japanese intercorporate relationships is nowhere more evident than in the case of intercorporate ownership networks. Since Japanese intercorporate shareholding primarily reflects concrete strategic interests rather than those of portfolio diversification, major shareholders should take more substantial positions in other firms. Corporate ownership is far more concentrated in Japan than in the United states. Major intercorporate ownership dyad are not only more prevalent in Japan, they represent stronger relationships than in the United States.[8]

There is good reason to believe that the relationship between shareholders and a company in Japan will be a highly durable one where shareholders take on the role of a reliable constituency of well-known trading partners. Independent estimates of holding by stable shareholders typically fall somewhere around 60% of outstanding shares held on the Tokyo Stock Exchange. In comparison, U.S. institutional shareholders are seen as extremely active traders in corporate securities and, by implication, unstable shareholders. It is this ability to exit the relationship that gives institutional investors in the United States their power over corporations (Gerlach 1992). Substantial numbers of shares are typically owned by corporations and financial institutions with important business relationships with companies within a group, even if they are not themselves part of that

8 Intercorporate shareholding in Japan are rather recent phenomena. In the 1960s, Japanese firms feared the U.S. firms would takeover the Japanese with owning the Japanese firm's stock. Japanese firms chose to deter the U.S. domination by cross-shareholdings.

group. Individual ownership of public corporations in Japan accounts for small proportion and is declining. Table 1 provides aggregate percentage holdings by investor category for all firms listed on any of eight stock exchanges in Japan. Banks, insurance companies, and business corporation owned 64% of listed share and individuals owned 23% in 1990.

Table 1
Share Ownership of Japanese Firms by Type of Investors, All Listed Companies (%)

	1980	1985	1990
Government	0.2	0.8	0.6
Financial Institutions	40.5	44.4	46.9
Banks	17.3	19.5	21.7
Investment Trusts	1.5	1.3	3.6
Annuity Trusts	0.4	0.7	0.9
Securities Companies	1.7	2.0	1.7
Life Insurance	12.5	13.5	13.2
Other Insurance	4.9	4.5	4.1
Other Institutions	2.2	2.6	1.8
Business Corporations	26.0	24.1	25.2
Individual & Others	29.2	25.2	23.1
Foreigners	4.0	5.7	4.2

Source: *Tokyo Stock Exchange Factbook*

3.1.4 Small Securities Market in Germany

The stock market is only used by a few companies for financing purposes in Germany. There were about 2 million companies in Germany in 1987. 220 thousands companies were private companies with limited liability and less than 2,800 were stock corporations. Only 649 companies are quoted on a stock exchange and less than 100 are widely held and traded (Baums 1992). The German stock markets have the small size. In fact, the market capitalization of all German exchanges at the end of 1990 were only 561 billion D.M. compared to 3 trillion dollars on the New York Stock Exchange. The volume of shares traded on all exchanges in Germany in 1988 was 848,000 shares, of which 671,000 were of German companies. Compared to the 41.7

million shares traded on the NYSE in 1989, even allowing for differences in population and size of economies, the difference in investment philosophy between the United States and Germany is obvious. Large German companies engage in fairly extensive cross-shareholdings. While some of these are no doubt reciprocal and may parallel important business relationships, as in Japan, the extent of reciprocity of ownership is not clearly documented. Companies can take cross-shareholdings subject to a limitation of 25% of the voting rights associated with those shareholdings irrespective of their size. Financial institutions are especially large holders of equity in German companies, second only to other business corporations as owners of German companies. Individual ownership of German corporations is smallest in the three countries (Lorsch and MacIver 1991).

The immediate and accurate market valuation of stocks is not established well in Germany stock market. Companies' descriptions of their development in their annual financial statements and quarterly reports are unregulated. This is due to the various accounting methods available to firms in regard to financial statements, divisional structure, and valuation, among other items. The legislature has only recently decided to limit the available accounting options, which by their very diversity limited the information value of accounting data. Accordingly, information on companies listed on the stock exchange is offered by a few observers of these companies. The market for corporate information is poorly developed with the exception of the big banks having easy access to information. Due to the many available options in accounting methods and to the limited legal obstacles in place against insider transactions, there is little incentive to undertake costly analysis of publicly-available company information. This diminishes the reliability of valuations and the attractiveness of the stock market for investors who have access to internal sources of information, and thus impairs the price-making functions of market (Kallfass 1988).[9]

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9 There is no legal prohibition of insider trading in Germany. Rather, there are insider trading guidelines. These guidelines have been formulated by interested association in order to reduce the demand for restrictions. They do not require public documentation of insider transactions, provide for no official auditing, contain hardly any incentive for investors to take action against suspected insider transaction and establish no strict system sanctions. These guidelines can thus only prevent extreme abuse (Kallfass 1988).

The pensions of the employees of a German company are carried on the liability side of its balance sheet as "accrued pensions," or deferred pension liability. These liabilities are insured by a "Pension Guarantee Association," set up by German industry, to which each participating company pays a premium. It means that there are no large pension funds trading or even owning shares. Direct pension commitments accompanied by the formation of internal pension reserves have provided much greater tax benefits to corporations than retirement plans operated by legally autonomous pension funds. Therefore, internal company financing by means of pension reserves predominates. Such financing is not subject to market conditions and funds remain in the companies of their origin. These funds are subject to the decision of company management concerning their use, and substitute for bank loans and equity capital, diminishing dependence on the credit and equity markets (Kallfass 1988; Lorsch and MacIver 1991).

3.2 Ownership Structure of Public Corporation

3.2.1 Uninvolved Institutional Investors in the U.S.

Among the 40 largest German public corporations, 29, or 72.5%, have shareholders who hold 5% or more of the equity. Among the 50 largest U.S. companies, there are only 8, or 16%, with as much concentration of ownership. In Germany, these large owners are entitled by custom to a seat on the supervisory board, and they do act as owners. In the U.S., however, there are few instances where such clear ownership exists. Even where it does exist, there is no guarantee of a seat on the board. Therefore, large institutional funds simply cannot act as owners, and it is very difficult to create an environment in which there is true ownership. Active investors hold large equity or positions, sit on boards of directors, monitor and sometimes dismiss management, are involved with the long-term strategic direction of the companies they invest in, and sometimes manage the companies themselves. The high cost of being an active investors has left financial institutions and money management firms, which control more than 45% of all corporate equity in the United States, almost completely uninvolved in the major decisions and long-term strategies of the companies their clients own. They are almost never represented on corporate boards. They use the proxy mechanism rarely and usually

ineffectively, notwithstanding recent efforts by the Council of Institutional Investors and other shareholder activists to gain a larger voice in corporate affairs. Institutional investors are remarkably powerless; they have options to express dissatisfaction with management other than to sell their shares and vote with their feet. This would require a fundamental shift in the investment philosophy and practices of major institutional investors and major reform in the laws and regulations that affect their participation in the corporate governance process. None of these change is likely to occur anytime soon (Jensen 1989; Lorsch 1991).

3.2.2 Stable Shareholding in Japan

Since corporate shareholding in the United States generally takes the forms of a capital market transaction, the primary purpose of shareholding is earning high return of investment. The shareholding in Germany and Japan is markedly defferent. The purpose of shareholding can be characterized to strengthen business relationships. The dominant owners hold significant stakes and seek long-term appreciation of their shares, which they hold in perpetuity. Unlike the U.S., in which the goals are driven solely by the financial transaction, the goals in German and Japan are driven by business relationships. Suppliers and customers own stakes in each other, not to profit from the share ownership itself but to bond their business relationship.

The pattern of ownership and the goals of owners directly affect monitoring and valuation approaches. Since owners hold significant shares for long periods of time, they have both the incentive and the capability to engage in extensive and ongoing information gathering about the companies they own. And unlike the American investors, principal Japanese and German owners are driven not by the need to make decisions on buying or selling stock for profit-taking but by the desire to assess the ongoing prospects of the company. They, therefore, command the respect of management, have access to information concerning the company through business relationships, and can exert an influence on management.

While the majority of Japanese owners hold their company shares for long periods of time, the short-term owners in the country are prone to turning their shares over more frequently than owners do in the United States, and basing their investment decisions on even less

information. While roughly 60% of Japanese stock is held for the long-term, the remaining is traded at such a rapid frequency that the average rate of trading in Japan is similar to the rate of trading in the U.S.. Yet, share prices and pressure from short-term owners and investors have virtually no direct or indirect influence on management decisions (Porter 1992).

The importance of Japanese intercorporate relationships can be identified in the case of intercorporate ownership networks. Intercorporate shareholding in Japan is also more likely to be reciprocated than in the United States as a result of the system of *kabushiki mochi-ai*, cross-shareholding. The term *mochi-ai*, construed narrowly, means "to hold mutually." But it also carries an additional connotation form its other uses of helping one another, of shared interdependence, and of stability. One of the most significant outcomes of strategic interests on ownership patterns is the extent to which ties in equity networks are overlap with ties in other networks. Shareholdings positions in Japan are more likely to become embedded in other ongoing relationships between the firms, as the role of shareholder becomes merged with that of business partner. The linking of equity and loan positions indicated a transformation in the nature of each in relationships among banks and their client firms. Credit, in the form of bank loans, has come to resemble equity in allowing creditors flexibility in repayment by deferring interest and principal payments and reducing the compensation balances that corporate borrowers need to leave in bank during times of financial distress. Loans are rolled over as a matter of practice. Furthermore, banks intervene in the management of their client firms, particularly when the company is in trouble (Gerlach 1992).

Accompanying many of cross-shareholding by the financial and corporate sectors are implicit but widely understood and rigorously observed agreements not to sell shares held in connection with on-going business relationships. The effects of these substantial stable shareholding are to create a potentially formidable barrier to takeover and, thus, to entrench managers. Japanese executives continually assert that such shareholding may be effective to secure business relationships among companies and serve as an indicator of mutual long-term commitments. A decision to sell equity held under these arrangement would be seen as equivalent to a permanent repudiation of

the relationships (Kester 1991b).

3.2.3 Share Depository System in Germany

In Germany, roughly three-fourth of top largest public corporations have shareholders who hold 5% or more of the equity. These large owners are entitled by custom to a seat on the supervisory board, and they do act as owners. Since the average German owns less equity directly or indirectly through institutional investing, the pattern of ownership of German companies is different from the pattern in the United States. There is a greater concentration of ownership in Germany, with banks, founding families, foundations, other companies, and even state entities owning significant blocks of shares in many major companies. In 29 of the 40 largest German companies there are shareholders who own 5% or more of the shares. Importantly, ownership of even 10% is traditionally understood by German business leaders to entitle that shareholder to a seat on the owner's side of the supervisory board. This concentrated ownership has its roots in Germany's past, when many of prominent firms today were founded by families. Some of the families retain their shares, and many of them looked to Germany's banks for funds (Lorsch and MacIver 1991).

In addition to direct share ownership, German banks also act as depositories for stock owned by other classes of shareholders. At the end of 1988, approximately 40% of the total market value of outstanding domestic shares, were deposited in German banks. When added to their own share ownership, nearly 50% of listed German corporate shares are directly or indirectly under their stewardship. This role as a share depository has been quite important to German corporate governance because of what is known as the *Vollmachtstimmrecht* - the ability of banks to vote shares held in deposit on behalf of the depositor. For many years this right of proxy was virtually automatic, indefinite in duration, and did not require instructions from the true shareholder. It was a condition of the deposit itself known as the *Depotstimmrecht.* Today it is restricted insofar as the right of proxy must be renewed every 15 months and banks must solicit voting instructions from shareholders. Nevertheless, as a practical matter, banks continue to obtain wide latitude in the voting of shares held on deposit, giving them considerable effective

voting power (Baums 1992).[10] As with Japanese company-bank relationships, share held by banks are seldom traded infrequently. In most cases, a primary equity-owning bank of a large industrial corporation will be a *Hausbank* which has a long history of banking business. A Hausbank would be a primary lender to a company and would often enjoy representation on the supervisory board (Kester 1991b).

4 Internal Control Mechanism

4.1 Monitoring

4.1.1 Board of Directors in the U.S.

The U.S. corporate governance relies on the board of directors as its main mechanism. Elected by shareholders, the board secure shareholders interests by overseeing management and board selection, reviewing financial performance and allocation of funds, stipulating compensation of top management, and ensuring that the corporation acts in a legally and socially responsible manner. Generally, membership on U.S. boards does not reflect a company's close business or financial relationships, as it often does in Germany and Japan. Rather, board composition in the United States tends to reflect an American affinity for outside directors, or those with no direct affiliations to management. No doubt, that U.S. firms are less likely to enter into close, long-term supplying and banking relationships than their German or Japanese counterparts explains part of the difference in board composition. Most significant, however, is the emphasis on accountability of managers to directors, and of directors to shareholders in the U.S. as shown in Figure 1. Companies have responded to growing liability litigation, which has shifted the burden of legal responsibility to directors, by choosing outside directors who are considered indispensable for maintaining a neutral board capable

10 The recently available study shows the concentrated ownership in Germany. Banks collectively represented more than 80% of all votes which were present in the meetings of 32 largest public companies in 1984. As a consequence, banks were able to elect the members of the supervisory board who were appointed by shareholders. Changes of the corporate charters could not be effected against their votes. The voting rights are highly concentrated in the three largest banks such as Deutsche Bank, Dresdner Bank, and Commerzbank. These three banks held about 45% of all votes on average in those largest companies (Baums 1992).

of objective oversight.

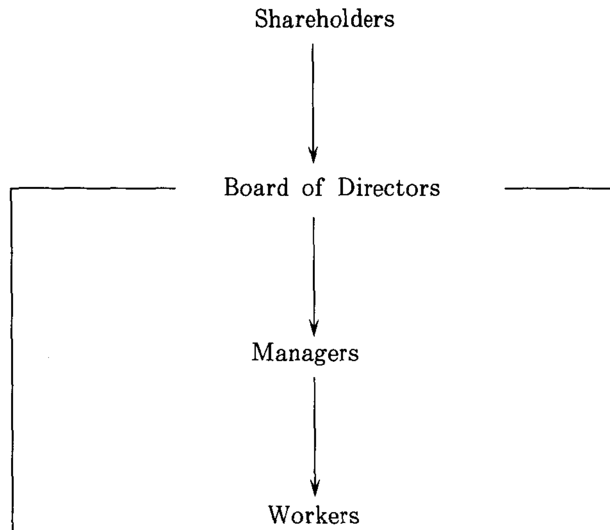

Figure 1
Board of Directors in the U. S.

Boards, which have come to be dominated by outside directors with no other links to the company, exert only limited influence on corporate goals. An estimated 74% of the directors of the largest U.S. corporations are now outsiders, and 80% are CEOs of other companies. The move to outside directors arouse out calls for greater board objectivity. But the cost of objectivity has been directors who lack ties to the company and whose own companies are in unrelated business. As a consequence, they often lack the time or ability to absorb the vast amounts of information required to understand a company's internal operations. Moreover, most directors have limited stakes in the companies they oversee. While the median aggregate holdings of the board account for an estimated 3.6% of equity, many directors have no shares at all or only nominal holdings (Porter 1992).

The Information on which directors make their judgements is a crucial element. The way information is obtained by most corporate boards is one of their weakness. Directors lack independent information and analysis regarding a company's performance. Virtually

all information comes to the board from management. Its content and use is a potent means with the CEOs can influence events. Some CEOs use information to engage the board in sound decision making; others, however, control information. There is no independent source of information and analysis. The outside directors, however, who usually meet together only five to nine times per year, must rely on information solely from management. The problems associated with information asymmetry are compounded by the shortage of time most directors can devote to their board positions (Lightfoot 1991; Porter 1992).

Several aspects of the board system may promote the selection of directors sympathetic to incumbent managers, thereby diluting management's accountability to the board. The existence of the joint CEO-chair of the board blurs the separation between management and oversight functions in many companies.[11] In fact, CEOs also chair the board in 80% of all U.S. corporations, and although CEOs can neither hire nor fire directors, they often choose the nominating committee for the directors, or even indirectly nominate the directors themselves. Voting procedures for the election of directors may also diminish management's strict accountability to the board: most shareholders who vote for or against a slate of management-nominated directors vote by proxy. Although write-in candidates are allowed, the effort required to coordinate enough shareholders to install an alternative board is formidable in most situations. The composition of corporate boards reveals a propensity to choose members inclined to support management: 63% of all board members are CEOs of their own

11 Multiple board memberships have become common today. In 1969, 49% of the inside board members in these companies sat on one or more boards besides their own. By 1985, the total had risen to 74%, and insiders who served on three or more boards more than doubled. If directors are spending much time on boards generally not spending enough time on any one board, it is not possible for directors who are responsible for running their own companies or for those retired executives who serve on more than two boards to be able to understand each business well.

It is directors with a sizable stake in a company who are most likely to question and challenge management's proposals. Experienced directors readily concede that when they see strong and independent leadership on a board, it usually comes from someone who owns a big block of stock or represents someone else's large investment. Board members who own only a few shares are not likely to influence the management, particularly if their annual compensation for serving on the board is more than they earn from the stock (Patton and Baker 1987).

corporations. (Lightfoot 1991)[12]

In general, clear ownership can provide stronger incentives for managers and directors to improve company performance. But assuming that strong ownership in the U.S. corporation remains elusive, to whom and for what should directors be accountable? The assumption that directors should be accountable solely for the owner's welfare is too simplistic and fails to take into account several important new realities. For example, in 25 states there are now laws that permit directors to consider the welfare of constituents other than shareholders - employees, customers, suppliers communities. Even in Delaware, where the majority of these companies are domiciled where there is no such law, the courts have begun interpreting directors' accountability more broadly. These rapidly changing laws compounded ambiguity and confusion about corporate goals. These new law on director accountability, stimulated by legislators' desire to protect local companies from hostile takeovers, permit directors to consider other stakeholder beyond shareholders. There is confusion in the board room about how to think about shareholder's interest and what other interests directors should represent (Lorsch and MacIver 1991).

Both the German and Japanese corporations are significantly different from the U.S.. For both, the predominant goal is to secure the position of the corporation and ensure the company's continuity. In Germany, the supervisory board consists of representatives of banks and other significant owners, and in large companies, 50% of the board comprises representatives of employees. All major constituencies thus

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12 CEOs select and groom their directors with great care, and often, by increasing the number of directors, they decrease their individual influence. Significant stock ownership is not required for board membership, and those who question the CEO's judgment or policies are excluded from the inner circles - the nominating and compensation committees. As boards of directors grew larger, meeting tends to become mere formalities, often degenerating into slide shows or theatricals carefully scripted by the chairman. There is little or no time for give and take on the issues. The chairman often becomes the sole mediators between the board and management. Most boards develop close social ties that tends to restrain their monitoring function. The outgoing chairman often continues to serve on the board after retirement. Outside directors seldom meet alone to discuss management issues. Given the way boards operated, even a CEO who understands the need for reform is up against almost formidable odds, especially if he is a career insider. It is virtually impossible for directors to change organizations and repudiate his predecessor, the man who has given him his job. That predecessor still sits on the board and has selected many of the other members (Johnson 1990).

influence corporate goals and the responsibility of achieving the promotion of the company's best interest, according to German law. While they are concerned with investors and non-owners, German boards are expected to consider these interests in the context of how they will influence the company's long-term well-being. In Japan, the perpetuation of the corporation is the fundamental goal. This goal is reinforced by the fact that most directors are inside members of management; moreover, lifetime employment is the norm in significant-sized companies (Porter 1992).

4.1.2 The Two-tiers Board Structure in Germany

One of the most unique features of German corporate governance is the structure of its board of directors. Where as the U.S. board of directors is intended to provide objective and shareholder-oriented oversight of a company's management, its German counterpart, the *Aufsichtsrat,* or supervisory board, is not chosen for its strict commitment to shareholder interest. Its membership frequently reflects the company's financial and business relationships and provides other stakeholder with a voice in the company. Indeed, the two-tiers control mechanism was created in the 1870s to give bankers an organ of control with which to oversee their investments.[13] Today, all public corporations with more than 500 employees must have a two-tiers board structure, with both a supervisory board and a management board shown in Figure 2 (Baums 1992; Lightfoot 1991). The influence of large German shareholders is exercised largely through the Aufsichtsrat. This is one of the most important safeguards embodied in the German system of corporate governance, and one unique to Germany. German Commercial Code provides for two forms of limited liability stock companies: the *Gesellschaft mit beschränkter Haftung,* to GmbH; and the *Aktiengesellschaft,* or AG. The former is privately

13 The supervisory board-management board dichotomy was introduced by the General Commercial Code adopted by the German states in 1861, not having been prevalent in the individualized articles of association of prior corporations. It was not made compulsory until 1870, when the elimination of the requirements of specific state assent to incorporation and of governmental representatives in corporate management seemed to call for some substitute supervisory organ. The present system, embodied in the 1937 act and modified in the 1965 version, is designed to perfect the supervisory board's performance of its role as a watchdog (Vagts 1966).

owned and unlisted; the latter, publicly owned and listed on a German stock exchange.

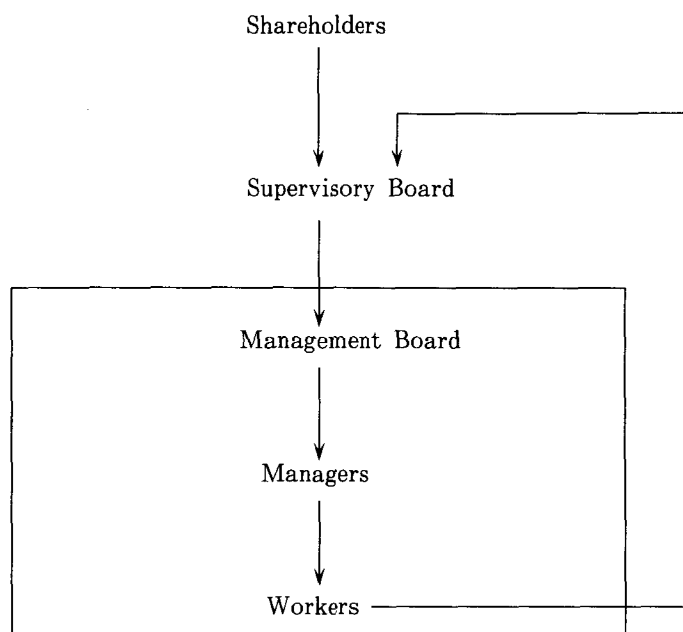

Figure 2
The Two-tiers Board Structure in Germany

By law, AGs have two-tiers boards. The *Vorstand*, management board, had day-to-day executive authority over the company and is the real decision-making body on most matters. Typically, it has between five and fifteen members who are full-time salaried executives of the company, each of which is responsible for strategy formulation and implementation, and operations. Members of the Vorstand are appointed by the Aufsichtsrat for fixed terms usually lasting three to five years, and can be dismissed in the intervening period only if there has been a clear breach of duty. The Vorstand must report to the Aufsichtsrat and gain its consent for major financial and investment decisions. The Aufsichtsrat, in contrast, is a true supervisory board, not an executive one. It is composed of nine to twenty-two members. Subsequent to the Co-determination Act of 1976, half of these are made up of elected worker representative.[14] The other half of the board is

elected by shareholders and consists entirely of members who are not full-time employees of the company. Members of the supervisory board can only be replaced with a 75% vote of shareholders.[15] It is not uncommon, however, to have retired company executives elected to the Aufsichtsrat. In fact, the chairman of the Aufsichtsrat is quite often the most recently retired chairman of the Vorstand.

In effect, the shareholder-elected half of the German Aufsichtsrat is equivalent to the "outside" directors of an U.S. corporation. An important difference, however, is that these German outside directors are more commonly drawn from the executive ranks of other major corporations or financial institutions that have a major stake of some sort in the company in question. That stake may be a substantial equity investment, a long-standing lending relationship, purchasing or supplying arrangement, or, as in Japan, some combination of these various types of claims. These directors tend to consider the company's most important investors and business relationships. They also can and will exercise considerable influence in the shaping of corporate strategy through the composition of the Vorstand (Kester 1991b).

Although legally responsible for representing shareholder interests at large, German Aufsichtsrat members are also able to act as de facto representatives of, and monitors for, other stakeholder interests. Bank executives on the boards of industrial corporations are especially well positioned to represent other stakeholder interests. To the extent their banks lend to the corporation in question, the interests of creditors as well as shareholders are directly represented. By virtue of banks' extensive lending business and large equity stakes in German

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14 The roots of employee co-determination reach back to the end of World War I and the November Revolution of 1918. The Works Council Act of 1920 brought the first comprehensive treatment of the plant constitution. At the same time, and for the first time, it ordered two places in the supervisory board of large enterprises to be occupied by representatives of employees. After World War II, the British Labor Government encouraged the coal, iron, and steel industry to adopt agreements between unions and boards of directors concerning the filling of the supervisory board with an equal number of representatives of shareholders and employees. The Co-determination Act of 1976 mandated the equal division of the supervisory boards between shareholder and employee representatives for all large enterprises with more than 2,000 employees(Raiser 1988).

15 In France, management can be dismissed by a 50% majority of voting rights. In the U.K., members of the board can be replaced by the chief executives or by controlling shareholders, possibly after payment of compensation (Franks and Mayer 1990).

Mittlestand, bank executives may also indirectly reflect the interests of smaller suppliers, customers, and so forth, who serve the needs of the larger industrial corporations. German banks have large network of interlocks among directors sitting on supervisory boards of German large corporations.[16] German board linkages represent an incorporation of major interests from both the financial and non-financial sectors. Banks act more like integrator of cross-connecting economic sectors and other fractional interests (Kester 1991b).

While the management board meets frequently, as it operates the company, the supervisory board meets only three or four times a year. By law, the members of the supervisory board meets only three or four times a year and have as their primary responsibility the promotion of the company's best interest. Such a statement does not give primary importance to any one stakeholder. Beyond granting contracts to members of the management board, the supervisory board's duties include approval of plant closing, strategic and financial decisions, reviewing company performance with the management board, approving the annual report, and selecting auditors. Closing down facilities depends on the workers' consent. An unanimous decision on the supervisory board is required. To accomplish its duties, the board has a right to collect comprehensive information and the management has to provide information periodically on all important questions. Members of board are required to treat information confidentially. In addition to these two boards, there is an annual general shareholder meeting, at which performance is reviewed and shareholders vote on relevant proposals. The general meeting can resolve whenever the management board requests its vote. In certain cases the general meeting may vote in order to resolve disputes between the management and supervisory boards. This is, for example, the case when the supervisory board does not approve certain business decisions which the management board wished to make and the management requests

16 Members of the managing or supervisory board of a bank can be members of the supervisory board of a company. A single person must not be a member of more than ten boards at the same time. However, this rule does not restrain the institution which he represents. There is no rule in German law which prohibits a membership on boards of competing firms. In 1988, managers of nine banks held 94 seats on the supervisory boards of 96 of the largest 100 companies. That equals 5.4% of all board seats in those companies. The members of the management boards of the Deutsche Bank alone held 35 of the respective seats (Baums 1992).

a vote on these issues by the general meeting (Schmalenbach 1990). It should be noted that it is the co-determined supervisory board and not the general shareholders' meeting that grants management contracts. A key but subtle difference between the United States and Germany is in the procedure for voting shares held by trustees. In the United States, shareholders must vote their proxies themselves, while in Germany the institutions that are custodians for individuals' shares, usually banks, actually vote the proxies. This is an important source of power for German banks (Lorsch and MacIver 1991).[17]

The ability to learn about how well a company is really performing and what potential problems it faces is easier in Germany than the U.S. because Germany is a relatively small country and there are close ties among those who serve on the supervisory boards. There is a network among those who serve on supervisory boards. The top executives know each other very well and exchange information with each other. They meet regularly at supervisory boards. The banks and insurance companies, whose managers are involved in so many boards, also provide a setting for their executives to exchange data and ideas. The informal information network among German executives, banks and owners provides an early warning system. The compactness of the German economy and the smaller size of its business establishment seem to allow a better flow of information. Among German managers and directors there is a widely shared expectation that the chairman of the supervisory board will act if problems are serious. The responsibility of the chairman of the supervisory board is not encoded in the co-determination law. In fact, it was constantly emphasized that the chairman's role on the supervisory board is one of building consensus. As the role of the worker's representatives in event of failing performance or other management difficulty concerns,

17 As to banks, there may be incentives to get involved in corporate governance. First, they could try to protect their own equity investment. The right to vote their clients' stock gives banks a leverage to protect or strengthen their own investment without own capital infusion. Second, banks could try to protect their credit in the firm. Mostly, a shareholder will not get earlier or broader information than a bank as a creditor. Even if banks are represented on the company's board, this will normally not provide the banks with better or earlier information than they already have as creditors. Even if banks are not able to get better information, they can improve their positions as creditors in certain aspects being equity owners or votes stock of the firm for its clients at the same time. A creditor holding majority of the votes in the shareholders' meeting of the company can choose who manages the company to secure the interest (Baums 1992).

it follows a process which is not intended in the co-determination laws. Co-determination fits with financial structure of German companies. German pensions are funded on the liability side of a balance sheet in employed companies, turning employees into long-term capital suppliers to the company. These liabilities are insured by a "Pension Guarantee Association," set up by German industry, to which each participating company pays a premium. The fact that pensions are in effect invested in the employing company can imply that German employees have incentive to get involved in the long term success of their companies. Since workers make a long-term commitment to employed companies, employee directors are concerned with long-term success. They also have more frequent contract with management, in the ordinary course of events, than owner's representatives, since they often work in the same locations. This means they know a great deal about the company (Lorsch and MacIver 1991).[18]

The supervisory board might be able to review the performance of the management by its results at the end of certain periods. According to German law, management is required to set up and publish the firm's balance sheet and profit and loss statement only annually. Both are checked by independent public accountants who are supposed to support the supervisory board and report to it. The supervisory board can be provided with information about the situation of the company and then compare the results of the company with those of its competitors to measure the performance of the management. A member of the management board can be dismissed only for causes, for example in cases of criminal offence, before the expiration date of his term (Baums 1992).

Furthermore, the workers of every company with five or more employees have the right to elect representatives to a works council by German law. The works councils have broad access to information about the financial condition of the company. They must be consulted

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18 There are marked differences in the degree to which French, German and British laws confer rights on employees and their representatives. In France, employees, trade unions and workers' councils have the rights to be consulted about a range of corporate activities but do not possess a right of veto. In the U.K., companies are free to consult and involve employees in corporate activities as they see fit but not required to do so. Therefore, employee rights are considerably greater in Germany than in France, which in turn are greater than those in Britain (Franks and Mayer 1990).

by management about organizational changes such as job classifications and flexibility in shift assignments.[19] They even have veto rights over company personnel decisions such as hiring and firing, transfer, layoffs, and overtime. Usually, union activists are elected to the councils, which, in turn, rely on the research and expertise of national unions to gauge the implications of proposed management policies (Summers 1980; Wever and Allen 1992).[20]

4.1.3 Inside Managing Directors in Japan

The goals of Japanese companies are growth and longevity, with less emphasis on maximization of shareholders' value. In fact, independent shareholders are in a rank low on the list of constituencies whose interests management is to represent. The board of directors is composed entirely of senior managers who do not hold substantial equity in the company. Large Japanese companies are controlled by boards consisting of about 20 to 25 directors. All of Japanese directors are virtually inside managing directors chosen from the ranks of top management itself. Although they are formally elected by shareholders votes at annual meetings, the slate is nominated by management itself. Retired executives of important equity-owning stakeholder join these directors as representatives of their former employers.

Since the boards of directors of large Japanese companies almost entirely comprise full-time managers in the company they direct, their meetings have the flavor of a top level executive meeting. The *jomu-kai* (meeting of top executives) has replaced the *torishimariyaku-kai* (board meetings) as the de facto locus of control. As one indication of this, we can look at the function of the *kansayaku* (company's auditors), who is in charge of supervising the management track record set by the directors as shown in Figure 3. The shareholders of

19 In the United States there is no worker participation at this level. The unions reject any such role, for they view their function as one of confrontation of management through collective bargaining, and participation in management would be inconsistent with that function. Work participation in the decisions of the company is solely through collective bargaining (Summers 1980).

20 Thelen (1991) argues that works councils, supervisory boards, and management boards make up a remarkable machine for producing consensus, which helps German companies adapt change. By allowing the German corporate governance to define external challenges in terms acceptable to all the stakeholder, such mechanism make it easier for stakeholder to agree on strategies for change.

the company are granted the legal authority to appoint this position. However, these positions are almost pervasively filled by career employees rather than by outsiders, and the job is often insignificant. Although the legal trappings of the joint stock corporation are maintained, two traditional institutions of shareholders control - the general shareholders' meeting and the board of directors have been transformed into pro forma rituals intended primarily to satisfy the requirements of procedural legitimacy by largely devoid of real substance. The general shareholders' meeting is, among the board of directors, the primary institution within which owners can, in principle, pass on the performance of the management they have hired. The Japanese Commercial Code establishes an agenda for the meeting: the election of directors, approval of the balance sheet and income

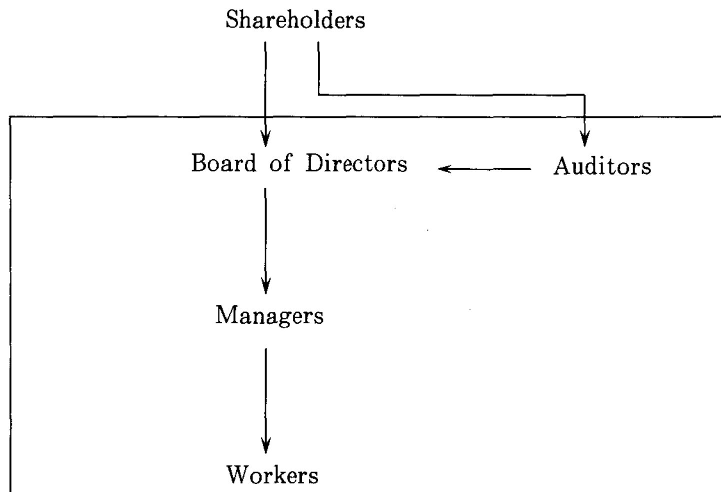

Figure 3

Inside Managing Directors in Japan

statement, as well as determination of dividends. The reality, however, is that it is a legal formality - a ceremony, the significance of which lies not in what gets communicated between shareholders and managers but in what it indicate about control over the form and in the ways it satisfies demands for legitimacy in the larger business community. Large, stable shareholders do not typically bother to show

up. In nearly 80 percent of the companies, those attending meetings account for less than 20 percent of the company's shares (Gerlach 1992).

This is not to say that the Japanese companies are undisciplined by its external stakeholder, however, for the *shacho-kai* (president council), main bank relationships, and other external controlling arrangements are capable of constrain firm management. The shacho-kai serves as a forum for the representation of a complex nexus of interests among a coalition of affiliated financial lenders and trading partners. In some ways, it serves as a substitute for the corporate board in a system where outside directors representing nonmanagerial interests are lacking. However, the shacho-kai represents these interests in a way that is different for the board of directors in a respect. The shacho-kai is an informal institution in which the monitoring function is diffused. There is no defined or legally binding governance relationship between the council and its companies, and as a result, influence is negotiated between relatively equally sized companies based on internal group relations rather than on formal authority vested in law. Associated with this is the fact that governance within the shacho-kai occurs within a known and controllable set of actors. Membership in the group is carefully defined, and controlling inside takes place among mutually positioned companies in a kind of community-based form of governance (Gerlach 1992).

Externally, the shacho-kai serves as a signal to the larger business community that a relationship exists. This confers on the member company a degree of status resulting from being associated with the name of Mitsubishi, Sumitomo, and so on. Council membership also sends signals that get picked up by managers in purchasing and finance departments of their respective companies, tilting decisions in favor of other group companies when there are no compelling reasons to go elsewhere. Membership is closely associated with pattern of banking, trade, and other business relationships involving group companies (Gerlach 1992).

Japanese companies have a number of interesting and different features that shed light on the nature of corporate control over company's management and the way in which it is embedded in intercorporate networks. Gerlach (1992) summarizes these features as

follows: first, directorships in Japan are associated with a broader system of inter-company personnel flows or employee transfer. Instead of serving as part-time directors, executives moving from one company to another typically take up full-time positions in the recipient company. The pattern of movement of personnel between companies indicates that the dispatching process serves to reinforce specific relationships between companies rather than the more general interests the company might have in monitoring its environment. Second, the dispatching of directors most often expresses a vertical relationship, with the flow of directors moving unidirectionally from one company to another. Third, as a result of the first two features, outside directorship is limited largely within a particular group of firms, but the overall intragroup network is sparse in comparison to what we might expect from the dense patterns of equity crossholding.

The predominance of full-time managers as directors is also significant because not all of them began their careers in the same company. A large portion have moved from one company to another by mutual agreement. Most involved younger employees and were only temporary transfers. These typically lasts for two years, during which the dispatching company guarantees the employee's salary. But a smaller fraction of the total were employees in their early fifties who were unlikely to be promoted to the director level in their own company before retirement. When upper-level executives are dispatched to other companies, it is usually on a permanent basis with the employee taking on an executive position in his new company. Where these employees become directors of the recipient company, they are dispatched directors. As a result of transfer, about one-third of the directors of Japan's major corporations now come in from the outside, compared to the United States where outside directors constitute over two-thirds of the total. Such transfers provide extensive networks of enduring personal relationships between individual managers in related companies, networks that may facilitate future businesses between the companies by enhancing trust between the company's managers. Reinforcing monitoring and communication at the managerial level are ties at the level of the board of directors.

The distinctive feature of this form of directorship is that, in contrast to the U.S. model in which the director is truly "outside" - that is, the directorship is a part-time position and connections to

another organization are maintained - the dispatched director in Japan becomes a full-time employee in the receiving company. These generally represent long-standing intercorporate linkages and serve the interests of management in two companies at once as part of an ongoing relationship between the companies (Gerlach 1992).

4.2 Voice

4.2.1 Voting

Dissident shareholders resort to voting rather than the takeover markets or the courts to protect their ownership rights against management entrenchment, to express their opposition to management strategies, and even to field slates of directors to run against management's nominees. Dissident investors in the U.S. would simply sell the stock and move to a better prospect. But this selling option is difficult for large institutional investors who have indexed much of their portfolios. As an alternative, the best way is to encourage and improve long-term management performance with adopting proxy voting for boards of directors. When management of a given company is significantly underperforming due to its own shortcomings, the strategy with regard to proxy voting can be taken to cast its proxy ballot so as to withhold its vote on the entire management slate of directors, thus effectively voting "no." To emphasize its seriousness, some institutional investor will seek a meeting with targeted management prior to the vote.

In the U.S., institutional investors have attempted to use the proxy contest as a way to influence management for the last few years. During 1990 institutional investors proposed more than 120 proxy resolutions, achieving some notable successes. However, the proxy system is not well-suited as a vehicle for influencing long-run corporate performance. Proxy contests have been used primarily as a way to keep managers from adopting provisions that further protect and entrench management, rather than improving a company's competitive position.

There also are significant regulatory impediments to the use of the proxy system. The Securities and Exchange Commission (SEC) must review and approve all information and analyses distributed by participants in a proxy campaign. In its review the SEC encourages simple and understandable analyses that can be readily understood by

small, unsophisticated, investors. Such communications, therefore, do not provide the kind of sophisticated analysis necessary to obtain a thorough understanding of a company's long-run policies. SEC rules discourage collective action among stockholders as well. If a shareholder in a proxy campaign tries to influence the votes of more than 10 other shareholders, or to hold a meeting with them, all communications among these shareholders must be reviewed by the SEC. This reviewing process significantly deters institutional investors from acting together. While the SEC is currently reviewing its proxy rules with a view towards making them less of an obstacle to effective corporate governance, it is unlikely that proxy contests can ever be a substitute for large ownership right. It simply does not provide the kind of format conducive to a frank exchange of information between management and shareholders, which is a necessary concomitant of a rigorous and informative analysis of corporate strategy (Edwards and Eisenbeis 1991; Taylor 1990).[21]

Conducting a successful proxy fight to change managerial policies would seem all but impossible in Japan. From the start, Japanese regulations governing the proxy device have been rather weak. Moreover, in contrast to the trend in the United States, Japan has had a history of gradually relaxing proxy regulations in favor of incumbent management. Among other steps, amendments over time have abolished advance review of proxy materials by the Ministry of Finance

21 The proxy reforms recently approved by the SEC will make it easier for investors to understand corporate incentive systems as well as to debate policies and to elect independent candidate to the board. These reforms are designed to give the owners of dysfunctional corporations the options of internal reform rather than simply selling their shares. By strengthening the system of independent directors and reinforcing their accountability, the reforms will encourage boards of directors to step in earlier to address persistent problems of corporate efficiency.

In traditional dissident proxy contests, the dissident investor chooses directors who are usually viewed as his surrogates. In the institution-dominated market, dissidents genuinely committed to soliciting independent board members can convene a committee of major stockholders to choose the best possible candidates.

The dissident can then pledge to support a slate of candidates assembled by this nominating committee. In situations where there is a clear and simple alternative to management's present policies, campaigns in which dissident investors press a specific alternative corporate agenda could become prevalent. These lobbying campaigns disseminate expert reports detailing corporate performance and arguing for specific new strategies. Dissidents canvass shareholders using sophisticated polling techniques to determine which issues are of broad concern to a large portion of the ownership base. These issues are then incorporated in the dissident agenda (Pound 1992a).

even when a contest for control is at stake, and have deleted provisions that the designated proxy agent should follow the voting instructions of the shareholder solicited (Kester 1991a).

Blank proxies, for example, were quite common in Japan and generally recognized valid in support of management's position. Vagueness in the regulations on requiring disclosure of potential conflicts of interest affecting a candidate for director have allowed corporations to state routinely that there is no conflict. Shareholders have no right to make proposals and have them included in management proxy statements. Instead, they must own at least 3% of the stock and convene a shareholders' meeting at their own expense.[22] Although penalties for the violation of proxy regulations do exist, no sanctions have ever been imposed. In any event, it appears that violation of proxy rules would not affect the validity of an action taken at the shareholders' meeting because the regulations extend only to the solicitation of proxies and not to corporate action itself (Thiazide 1983; Kester 1991a).

Certain classes of shareholders can enjoy privileged voting rights, others have no voting rights at all in Germany. AGs can issue non-voting shares up to an amount equal to that of all voting shares issued, and limit the voting power of an individual shareholders irrespective of the number of share held. The restrictions have been used in Germany to reduce the threat of takeovers (Franks and Mayer 1990).[23] By purchasing common stock in a German corporation, shareholders acquire voting rights. In the case of preferred stock, voting rights do not exist as long as the preferred dividend is paid. Voting rights are exercised at the shareholders' general meeting. For the individual shareholder, the information and attendance costs outweigh the benefit of exercising voting rights at the general meeting of a public corporation. Thus, individual investors seldom exercise

22 A shareholder with 1% of the stock may propose specific items of agenda for the meeting as elections of new directors. The agenda and resolutions proposed should be, if requested by him, included in the notice of the meeting to be sent by the company to all shareholders (Ishiguro 1990).

23 French companies are able to place serious restrictions on the transfer of shares and voting rights of shareholders. Certain classed of shareholders can enjoy privileged voting rights, others have no voting rights at all. Shareholders that have held shares for a specified period may be entitled to double votes. Up to 25% of capital can, under certain circumstances, be issued as non-voting preferred equity. Up to 25% of capital may be issued as investment certificates that can only be transferred to holders of other investment certificates (Franks and Mayer 1990).

their voting rights, excepts if they are major shareholders. Under stock corporation law, shareholders can transfer their voting rights with relative ease to the banks managing stock portfolios (Kallfass 1989).

In Germany, management does not control the proxy machinery. German managers must filter proxy solicitation through their bankers. It is doubtful that German managers can lawfully make a proxy solicitation as U.S. managers do. The German banks vote directly-held stock as they think fit and recommend to brokerage customers how to vote. The typical procedure is that the bank asks its brokerage customers for a revocable proxy to vote the stock, for a maximum period of 15 months. The bank then can vote, but informs the customer of how the bank intends to vote, giving the customer the opportunity to instruct the bank differently. Rational apathy should lead most shareholders to ignore the solicitation, and in fact customers rarely disapprove of their bank's recommendation. Through the combination of concentrated stock deposits and a proxy system that gives the banks the first-mover advantage, banks can elect a good part of the stockholding side of the supervisory board. Thus, banks and their nominees have a large voice on the supervisory board (Baums 1992; Roe 1993).

4.2.2 Direct and Ongoing Communication with Management

The essence of collective action is ongoing, private dialogue between shareholders and managers rather than open confrontation over points of disagreement in the U.S.. The Council of Institutional Investors, which was created in 1985, includes more than 60 labor and public pension funds with assets of more than $300 billion. The existence of one organization representing such vast assets suggests the possibility of creating a monitoring body that would coordinate pension fund activities with respect to individual corporations. Pension funds are also pushing hard to create formal mechanisms for direct, ongoing communication with management. For example, CalPERS introduced resolutions to create shareholder advisory committees at Avon Products, Occidental Petroleum, and TRW. Though collective action shows promise in addressing the weaknesses of public elections, it does have one grave flaw. The goal of collective action is direct communication between large shareholders and corporate managers.

Yet it is doubtful that this interaction will have much influence on corporate performance.

In Germany and Japan the banks play a leading role in exerting influence because historically they are the main source of funds, often supplying a wide range of services: they have shareholding and a seat on the supervisory board. In Japan associated companies, customers and suppliers who may be shareholders may exert influence. All of this is done quietly without public confrontation except in the extremes. Japanese ownership is built around reciprocal shareholding between companies and their banks, suppliers and customers. Such reciprocal ownership is small on a bilateral basis but powerful in the aggregate. Main bank receives detailed performance data in the course of its ongoing monitoring activities. This information flow is supplemented by a network of bank alumni who have retired from financial careers and have been placed in second careers with affiliated companies. Management transfer provides extensive networks of personal relationships in related companies, that facilitate effective communication at the various levels of management.

Since large owners have other business relationships with group companies, they have opportunities for creative problem solving during periods of trouble. It may be more accurate to describe Japanese ownership as flexible capital than as patient capital. Shareholders can sacrifice some value of their equity stake in return for other financial benefits that grow out of their group relationship. This expertise and flexibility is what gives ownership voice in Japan such power. And it is precisely what most big shareholders in the United States, especially the public pension funds, lack (Taylor 1990).

The increasingly concentrated ownership structure at major U.S. corporation has created the incentives for the development of an informal negotiation and voting-based approach by both active and institutional investors in the U.S.. The most significant aspects of the new approach to corporate governance is the rise of informal political mechanisms to supplant and even replace the mechanical and extreme measure of the formal voting challenge. The cause is increased institutional ownership concentration, which creates a more sophisticated and smaller audience of investors, and hence make possible a widely variety of less formal approaches to organizing a critical mass of shareholders support. At a corporation with a few

large institutions rather than thousands of relatively uninformed individuals, management and the board may be influenced through such means as circulating alternative policy proposals to major investors; or soliciting votes for a shareholder proposal suggesting specific reforms of corporate policy or the structure of the board (Pound 1992b).

4.3 Compensations

The pressure to achieve short-term earning that U.S. managers feel can only be understood if we also recognize the strong devotion that many have to enhancing shareholder value. They believe their primary priority must be to provide a return to their shareholders. Attending to other stakeholder, such as customers, employees, and suppliers is viewed by most managers as a means toward this end. Declines in short-term earnings and stock prices also hit the manager's incomes, because so much of their incentive compensation, which is two-thirds of their total pay, is affected by short-term earning. Furthermore, executive compensations are not based solely on short-term results. Short-term is defined as any incentive awards that were made based on one year's performance regardless of whether or not the reward is paid in full currently, in installments, or deferred to future years. About one-third of total compensation is based on long-term performance. The long-term incentives in most U.S. companies are either paid in stock grants or stock options, which further rivets top managers' attention to fluctuation in stock prices. Given these rewards and manager's preoccupation with shareholder value, it is not surprising that U.S. managers watch their shares prices daily. In this situation, even incentives intended to be long-term can have a definitive short-term spin. In spite of the compensation emphasis on short-term results and the importance of short-term performance to the capital market, many top managers would prefer to focus on longer-term results (Ellsworth 1985).

Current compensation committees usually occupy themselves with how much top management should be paid, the proportion represented by salary, and the formulas used to govern short-term and long-term incentives like stock options. Most compensation committees also focus primarily on peer-group comparisons to ensure that they pay of top executives is at least on a par with competitors. However, using peer-group comparisons often means staying in line with the

proportion of salary and short-term and long-term incentives paid by the competition. In effect, this focus abandons compensation as a means of placing more weight on a company's long-term performance than on competition (Salmon 1993).

The Security and Exchange Commission recently responded to the clamor with new rules governing compensation disclosure in proxy statements. In the past, the SEC has required companies to disclose the amount of money paid to executives. The new SEC regulations go far beyond that requirement, mandating disclosure of the process by which executive pay determinations are made. It signals a significant change in the role the SEC has traditionally played in the corporate governance arena and, if directors have accountability to shareholders for "process," may portend a major shift in corporate decision making. Under the new regulations, the compensation committee must include "the factors and criteria upon which the CEO's compensation was based" in the proxy statement. The new SEC rules require specific discussion of the relationship between compensation for the chief executive and the company's performance, along with a description of each measure affecting that compensation - for example, profitability, sale growth, return on equity, and market share. The rules also mandate a discussion of the committee's general policies regarding executive compensation. And they require a detailed explanation of any adjustments that were made to reprice outstanding options held by the CEO or any of the other four most highly compensated executives. The SEC's intent is to bring shareholders into the compensation committee or board-meeting room and permit them to see and understand the specific decision made through the eyes of the directors (Hinsey 1993).

U.S. executives' preoccupation with shareholder wealth contrasts sharply with the goals that guide Japanese managers: adequate returns, secure employment, and increased international competitiveness. Within the context of the Japanese stakeholder coalition, management is measured not so much by it ability to maximize the welfare of any one isolated stakeholder as by its ability to maximize the total welfare and maintain the stability of the coalition. Certainly the training, promotion, and reward systems for Japanese managers are aligned with these objectives. Other corporate stakeholder' preferences do indeed become part of a Japanese

manager's preferences. By the time a Japanese manager has become a senior managing director, he tends to make decisions that will generate primarily efficiency gain from which all stakeholder stand to benefit rather than primarily redistribute gains in which one or a few stakeholder gain at the expense of others.

The typical Japanese reward system reinforces this predisposition by not aligning management's interest with those of any one corporate stakeholder. Instead, management's interest is aligned with the preservation of the entire coalition of stakeholder by a system that fosters risk aversion and rewards people for achieving size, stability, and corporate longevity. Given a reward system consisting of steady promotions, seniority-based compensation, regular semiannual cash bonus, lump-sum severance indemnities, and placement in "second careers" with affiliated companies at the time of retirement, management's well-being depends on the company's longevity, growth, and the preservation of its relationships with other firms. These achievements will ensure an ever-expanding set of opportunities for promotion coupled with salary advancement and a source of income on retirement. Executive compensation system in Japan also foster an emphasis on growth. We find little profit-based incentive compensation at the division general manager level or below. Japanese executives rarely receive stock options. Japanese presidents own little of their company's common stock, and executive salaries, which are modest by American standards, are not closely tied to profits (Ellsworth 1985; Kester 1991a).

5 External Control Mechanism

5.1 Market-based Control

5.1.1 Takeovers

Takeovers can be carried out through mergers, tenders offers, and proxy fights, or sometimes through elements of all three. A tender offers made directly to the stockholders to buy some or all of their shares for a specified price during a specified time period does not require the approval of the target company's management or board of directors. A merger is negotiated with the company's management and, when approved by its board of directors, is submitted to the shareholders for approval. In a proxy contest the votes of the

stockholders are solicited, generally for the election of a new slate of directors. The takeover process penalizes incompetent or self-serving managers whose actions have lowered the market price of their corporation's stock. Takeovers enables new owners to change the company's patterns of investment, cease other deficient policies, alter maladjusted contracts, and perhaps change management itself.

The threat of hostile takeover should ensure that assets are controlled by those best able to manage them, and in the United States, with its well-developed market for corporate control, hostile takeover is the ultimate check on management. When shareholders fail to take an interest in the governance of a company, or when their governance proves ineffective, low-quality managers are able to remain in position or management's allegiance to the shareholder may falter. In either of these cases, a company's share price should drift lower so as to form a gap between the stock's actual price and its potential value. If the gap between a company's market value and its perceived potential value were to grow large enough, takeover would ensure that control over the company's assets eventually would go to those who could earn a higher return on those assets. The interests of managers and shareholders tend to be in conflict on many issues. The divergence intensifies if the company becomes the target of an unfriendly takeover. Target shareholders benefit when the bidders offer substantial premiums over current market value. During a takeover top managers of target companies can lose both their jobs and the value of their talents, knowledge, and income that are particular to the company. Threatened with these looses, such managers may try to reduce the preboiled of a successful unfriendly takeover and benefits themselves at the expense of shareholders. The existence of employee stock ownership plans, poison pill defenses, staggered boards, and super-majority provisions diminishes the threat of takeover in many instances (Jensen 1984; Lightfoot 1991).[24]

The desirability of takeover activity in the United States has been

24 Corporate charters specify governance rules and establish conditions for mergers, such as the percentage of stockholders who must approve a takeover. Since constraints on permissible charter rules differ from state to state, change the state of incorporation will affect the contractual arrangement among shareholders and the probability that a company will be a takeover target. It is alleged that some states desiring to increase their corporate charter revenues make their statutes appealing to corporate management. Allegedly, in doing so they provide

the subject of much debate. Proponents point to evidence of greater operating efficiencies and the creation of tremendous shareholders value to support arguments that an active market for corporate control is both necessary and beneficial (e.g. Jensen 1984). On the other side of this debate, many professional managers view takeovers, particularly hostile ones, as restraining the vitality of American business by diverting management's time and needlessly foreshortening the execution of good long-run strategies. Kester (1991b) stands in a middle ground between these two poles of the debate - an active market for corporate control may be both necessary and desirable within the context of the American style of corporate governance.

Both Germany and Japan have has remarkabley inactive markets for corporate control, at least as far as large-scale takeovers are concerned. Hostile takeovers are virtually unheard of in both countries. These facts contrasts sharply with the U.S. and U.K. experiences.[25] Germany and Japan have not have active markets for corporate control largely because they have not needed them, not because they did not want them or could not tolerate them. They have not needed active takeover markets because their corporate governance

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management with great freedom from stockholder protection. Delaware, for example, has few constraints in its rules on corporate charters and hence provides much contractual freedom for shareholders.

Without switching their state of incorporation, companies can amend corporate charters to toughen the conditions for the approval by shareholders of mergers. Such anti-takeover amendments may require a "supermajority" for approval or for the staggered election of board members and can thus lower the probability that the company will be taken over and thereby reduce shareholder wealth. On the other hand, the amendments can also benefit shareholders by increasing the plurality required for takeover approval and thus enable management to better represent their common interests in the merger negotiations (Jensen 1984).

25 There is a higher level of controlling ownership changes with takeovers in the U.K. than in France or Germany. Takeover activity in the U.K. is distinguished by the presence of acquisitions that are opposed by the incumbent management. The significance of these is that they give rise to more executive changes than friendly acquisitions. The U.K. imposes few impediments to the free transfer of both ownership and control. A basic premise of the U.K. capital market is that investors should have the right to determine how their property is employed and controlled. The Stock Exchange has discouraged the use of discriminatory voting rights as a means of limiting transfers of control. The Takeover Code discourages the accumulation of cross-shareholdings as a method of preventing transfers of ownership. The rationale behind these rules and regulations is the promotion of securities markets. Equal access to information and protection of small investors from exploitation by dominant shareholders are regarded as central to that process (Franks and Mayer 1990).

have dealt with the agency problems of large organizations. The threat of hostile takeover is not a significant element of German corporate governance. Indeed, friendly mergers are uncommon, and hostile takeovers virtually unheard of. The special position of banks, government antitrust policy, and the structure of the corporation all discourage unfriendly takeovers. A takeover would be virtually impossible without the support of the major banks because of their extensive stock holdings, their control over shares held on deposit, and the fact that they write the rules on takeovers.[26] In fact, there are no guidelines require the bidder to inform appropriate stock exchange of an offer, refrain from insider trading before publication of the offer, publish the terms of the offer, and give those who may have accepted a lower bid for their shares the higher price in the event that a second offer is made (Lightfoot 1991).

The government Cartel Office in Germany must clear any bid if the new concern would have more than DM2 billion in sale annually. Also, the Cartel Office has the authority to review the merger and require divestment ex post. Several other structural aspects of German corporations and corporate law impede takeovers. Major changes to the corporation require 75% approval by shareholders, law prohibits golden parachutes, and strict conflict-of-interest rules impede most would-be management buyout. Because companies with more than 2,000 workers have equal employee and shareholder representation on the Aufsichtsrat, employee support is virtually a prerequisite for a successful takeover (Lightfoot 1991).

German shareholders rarely seem to encounter the temptation of quick profits as a result of takeover attempts. The long-term investment patten is given as one reason there are few takeovers. Another reason is the long-term management contracts. Even if a

26 Sometimes under the Articles of Association of a company the transfer of ownership or title to some of the shares in the company is dependent on the consent of the company, usually given by the management board. Such shares are known as *vinkulierte Namensaktien*, and are often issued by insurance companies when the shares issued are partly paid. Such a right of refusal allows the insurance company to decide upon whether it thinks a potential shareholder could or would pay the unpaid amounts on the shares. It may also be used as a means of preventing an unwelcome takeover. Furthermore, preference shares may be issued with or without voting rights. Preferred shares without voting rights can be issued up to the total nominal amount of all other classes of shares. Since preference shares provide for the benefit of a public listing without any takeover risk, the issuing of them has become popular (Schmalenbach 1990).

raider could gain ownership control of a German company, these contracts would prevent a quick change in management. Finally, the fact that the law provides German employees with seats on the supervisory board discourages takeover attempts. A successful raider would still have to deal with workers' representatives on the board, who could well resist effort of change (Lorsch and MacIver 1991).[27]

Use of takeovers as a device for replacing a disloyal board of directors and disciplining self-serving management is also blunted by the Japanese corporate governance system. Historically, the tight monitoring of client companies by share-owning banks and their control over external funding left relatively little room for abusive self-interested opportunism by management. When such abuse did arise, they were apt to be fewer, less severe, and less costly to correct by selective intervention of the part of main banks rather than by expensive battle for majority control. Strengthening the incentives to keep management in place are cross-shareholding arrangements in Japan. The extensive ownership of a corporation's equity by other companies with which it does business provides a formidable defense against a hostile takeover. These shareholders, of course, might one day discover that they could obtain a premium by tendering their shares in a hostile bid. But they would be unlikely to do so if a change in ownership threatened to disrupt a beneficial business relationship or otherwise lower the value of explicit and implicit non-equity claims against the target company. Furthermore, reciprocal shareholding arrangements mitigate temptation to tender shares owned in a target company. Any visible cooperation with a hostile bidder would reveal the selling company to be an untrustworthy shareholders. This would almost certainly lead other corporations to dispose of their shares of the untrustworthy firm, and widespread defection from business relationships with it would follow. The selling company might

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27 French companies are able to place serious restrictions on the transfer of shares. Listed companies may limit transferability of shares by contract or articles of incorporation. Transferability may also be limited by establishing private companies that hold a group of shareholders' equity. Some of the restrictions on transfers of control in France come from involvement of the government. The French government has traditionally been a substantial shareholders in French corporations. While several firms have been privatized, the hardcore shareholding has been limited the external control that investors have been able to exert in these firms. It has delayed and impeded takeovers that have been deemed to be against the national interests (Franks and Mayer 1990).

ultimately find itself a deviant in the Japanese business community (Kester 1991a).

5.1.2 Market for Corporate Control in Japan

In the United States, a chronic transfer of value from shareholders to other corporate stakeholder at the hands of incumbent management, coupled with the high costs of disciplining management through existing corporate governance mechanisms, has given rise to an active market for corporate control. It is, moreover, one often stressed by successful unfriendly takeovers of even large corporations. In such a market, the equity interests can be given a renewed pre-eminence by taking ownership out of the hands of a widely diffused shareholder group so that management can be more effectively monitored and controlled in accord with shareholders' interest. Usually this entails changes in the board of directors, management, or both, and some recontracting with other key stakeholder such as labor, suppliers, or major customers. The threat of takeover has been considered an important means of disciplining management, even in problematic situations where ownership and management are separated. The fundamental idea is that discipline is achieved through competition among management teams within the area of the stock market, and incumbent management is thereby driven to operate the firm efficiently. However, hostile takeovers of the kind prevalent in the United States are virtually absent in Japan, and this fact reveals as clearly as any the degree to which the market for corporate control takes place not among firms that maintain longstanding relationships with each other (Kester 1991a).

There are relatively few formal, explicit legal and regulatory barriers to merger and acquisition activity in Japan. For purely domestic combinations, the established legal and regulatory apparatus is essentially neutral with respect to the fostering of business combinations. The least-used means of acquiring a target company's stock is by a tender offer. Japanese has no regulations governing tender offer prior to an amendment to the Securities Exchange Law in 1971. The 1971 legislation regulating tender offers purports to be neutral with respect to favoring either bidders or targets. However, like proxy regulations, the tender offer rules work more to the advantage of the target company's incumbent management than to the

bidder's. Whereas proxy regulations allow for concurrent filing and general distribution of proxy materials with no provision for advance review by the Ministry of Finance, tender offer regulations do require bidders to receive Ministry of Finance approval and to give the target advance notice of the bid. The need to complete a takeover within 30 days may also restrict the ability of bidders to change tactics and renew efforts if insufficient shares are tendered during the original offering period (Ishiguro 1990).

Two other aspects of securities law work to the advantage of incumbent management in potential targets and against that of the bidders, at least as far as large companies are concerned - the requirement of depositing sufficient cash prior to the announcement of the offer and the present regulatory preclusion of using so-called junk bonds to finance takeovers. Indirectly, the Japanese prohibition against repurchasing one's own shares may also inhibit the activity of bidders - repayment of any debt of the bidding company used for finance a successful acquisition with funds subsequently borrowed by the acquired corporation may be construed to be an indirect repurchase of share by the target corporation itself. Similarly, by making the purchase and sale of companies more cumbersome, the prohibition against forming or effectively functioning as a holding company also retard the activity of potential bidders (Kester 1991a).

Among the striking features of the merger and acquisition market on Japan is the great emphasis placed on gaining the approval of key stakeholder. The most important and most difficult stakeholder to appease is the company's employees, and particularly its enterprise union. A number of important mergers have been postponed or canceled because this approval could not be obtained. Why would top management bother to consider the opinions of employees and trading partners if they had decided a merger makes economic sense? In large part, this is because core employees of large firms come packaged with the companies involved. This is the case in the sense that firm and employees make strong commitments in their internal labor markets with informal employment guarantees. A large part of business activity in Japan is carried out through relationships among people based on social frameworks developed over long periods of interaction, rather than through formal definitions of roles and responsibilities in a contract (Gerlach 1992).

Current Japanese activity in the market for corporate control reflects the contracting circumstances in which Japanese companies operate. Kester (1991a) points out that a well-established corporate governance system allows Japanese companies to combine in large industrial groups that can at once realize many of the adaptive advantages of an administrative hierarchy without sacrificing most of the advantage derived from utilizing the high-powered incentives of the market. Consequently, direct ownership and control over specific assets are less imperative, and combinations involving large companies are less frequent. When they do occur, they are likely to have government promotions or be at the insistence of a few major institutional shareholders like main banks, the players in the Japanese market for corporate control are few and highly circumscribed in their behavior.

Can such the U.S. market for corporate control take root and flourish in Japan? Clearly it has not to date, and many knowledgeable observers doubt it ever will. Some point to technical, legal, and regulatory barriers that might inhibit such an evolution. Most appeal to various extralegal barriers to merger and acquisitions. These include membership in industrial groups, extensive cross-shareholdings, the potentially high costs of recontracting with other stakeholder, and a sheer cultural bias against such activity. Thus Japan's market for corporate control in the future is likely to display a controlled, symbiotic relationship between traditional stable shareholders and maverick corporate raiders. It will be more of a system in which a comparatively small number of important institutional shareholders exercise discipline over managers who fail to perform according to expectations than a true market with free competition (Kester 1991b).

5.2 Relationship-based Control

5.2.1 Long-term Business Relationships

One of the most salient and enduring characteristics of the Japanese corporations is their tendency to engage in close, long-term business relationships with other companies. This particularly characterizes their banking relationships, but also their dealing with suppliers, subcontractors, and large corporate customers. Many of these in turn have long-standing relationships with one another, resulting in an intricate network of companies connected by formal and

informal commercial and financial commitments. This corporate network is expressed in the Japanese *keiretsu* - a collection of companies federated around a major bank, trading company, or large industrial firm. It maintains stable, close relationships with a network of suppliers, distributors, and creditors. Japanese keiretsu tends to be characterized by a great deal of stability in group affiliation and loyalty as far as the favored status group memberships given each other in their business dealing. Sustaining a complex network of business relationships within the group may also require a narrowing of the scope for independent action and the occasional subordination of individual corporate interests to that of the group at large.

Substantial though they may be, the economic incentives to maintain long-term trading relationships in Japan are not perfect. Because one party to an agreement can undertake hidden action to its own benefit and to the detriment of the other, or make private use of hidden information, the risk of self-interested opportunism corrupting the relationship exists. That is why reciprocal equity ownership is required to sustain long-run business relationships. An exchange of equity between two trading parties connects their economic interests, which help mitigate incentives to act opportunistically. The more equity the trading partner owns in the firm, the less sense it makes to try to exploit other shareholders' interests. Reciprocal equity ownership between any two Japanese companies is typically small-generally in the range of 1-3% of outstanding shares. By itself, such a bilateral exchange of share constitutes a safeguard against abuse of the relationship. But embed two transacting companies in a larger cluster of interacting firms and multiply the percentage of bilaterally cross-held share by a factor of 20 or 30, and the safeguard become potent.

Another feature that helps Japanese industrial groups forestall disputes or other problems that might destroy valuable trading relationships is extensive information sharing. The core companies such as a main bank, a major industrial corporation and a large general trading company, the bank in particular, form the hub of a vast information-sharing network. Because at most 5% of each company's outstanding shares are owned by the bank, much financial information about their performance will be funneled to the bank in the natural course of its monitoring activities. Furthermore, management

transfers develop effective communication that ongoing relationships require. Mid-career managers or engineers may be temporarily transferred to related companies to help solve specific problems or to work on joint projects. Such transfers provide extensive networks of personal relationships between individual managers in related companies by enhancing trust between the company's managers. Reinforcing monitoring and communication at various levels of managers are ties at the level of the board of directors (Kester 1991a).

The quality of information that trade partners have at their disposal is clearly different from that available to outside investors. Affiliate-shareholders have learned about each other through ongoing trading relationships and through various collaborative projects and other forms of interaction that provide information not available in financial statements. If, for example, product equality begins to decline, the group trading firm and other trading partners are likely to be among the first to know this through their purchasing connections. The kind of in-depth information that the firm's main bank acquires in order to extend loans is utilized as well in its decision as shareholder. How information is understood also differs. Affiliate-shareholders are managers with concrete knowledge about and experience in running companies. They may be better able to evaluate the performance of other managers across a range of criteria than are professional investors whose skills come in other forms.

Within a keiretsu, a typical corporate stakeholder is likely to possess a rather complex blend of claims against other group companies in which it has invested - a combination of equity, credit, and trading contracts. This is clearest in the case of lender-borrower relationships, for a Japanese company's major lenders usually also rank among its major shareholders. The holding of multiple claims against a company may be even more pronounced in the case of relationships between non-financial corporations. Many enduring company-based and vendor-supplier relationships throughout the Japanese industry exhibit such multiple-claim ownership. A benefit derived from this tendency to hold a blend of different financial and other claims gainst a company is an attenuation of frictions that might normally arise among various stakeholder groups that each owns a separate and distinct claim. The incentives to breach contracts with suppliers and customers in interests of transferring value to

shareholders, or to borrow money and then take extraordinary risks that might benefit shareholders at the expense of lenders, are reduced when the impaired stakeholder are the company's principal shareholders. Helping troubled companies work out temporary financial problems will also be easier when the principal providers of capital hold roughly comparable bundles of senior and junior, shart-term and long-term claims against the company (Kester 1991a). Therefore, conflict of interests among the stakeholder can be mitigated by relationship-based control mechanism shown in Figure 4.

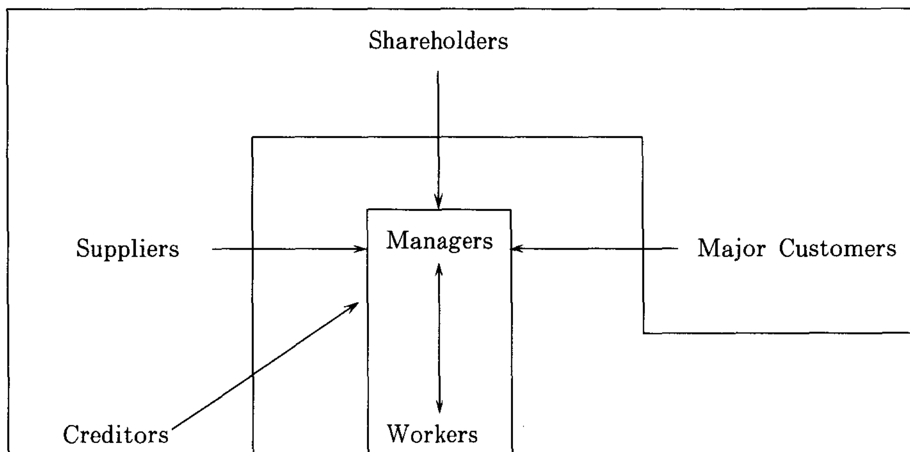

Figure 4
Relationship - based Control Mechanism in Japan

For most Japanese corporations, the long-term trading relationships with companies in which they invest constitute the chief value of their overall dealings with those companies. Value comes from the transaction efficiencies generated by creating and maintaining a long-term dealing, mutually beneficial trust relationships between managers can be nourished and cooperation fostered. Contracting can take place on a much less formal, more implicit basis, often an advantage when it becomes necessary to adjust rapidly to a changing environment. Adjustments in implicit agreements can be made much faster and in more highly nuanced way by managers dealing at the trading interface than they can by lawyers wrestling over formal

written contracts. If the business relationship lasts long enough and becomes close enough, the trading firms can become virtual extensions of one another in a vertical production and distribution system, though without some of the management control problems that plague large operations integrated under a single corporate hierarchy. Since the relationship is arm's-length and equity ownership is restricted to minority positions, market incentives are preserved and bureaucratic disabilities held to a minimum. The common assertion by Japanese managers that shareholder interests rank comparatively low on their list of priorities can be explained, at least in part, by the fact that a substantial number of a large company's shareholders typically are its major creditors, customers and suppliers. For most of these shareholders, their commercial trading relationship with the company is as important, if not more so, as their equity investment per se. Not surprisingly, therefore, Japanese managers will tend to view their primary tasks as being the preservation and enhancement of these complex relationships rather than an immediate, direct pursuit of any one stakeholder's interests such as that of exclusive equity owners (Kester 1991b).

The information and governance advantages to long-run business relationships may have the results of lowering de facto capital costs for Japanese firms even if direct costs, when measured by adjusted interest rates, are not significant lower. Trade partners-shareholders may also be willing to accept lower returns from their investments for an entirely different reason - promotion of their long-term business interests. The argument in brief is that intercorporate relationships have brought together investment and managerial decisions within an ongoing cooperative relationship between firms. Capital has been moved closer to the point of investment decision, resulting in a general pattern of rapid entry into new industries by existing firms with the early and continued support of companies in the group. In case where social benefits for investment outweigh private benefits, therefore, it makes sense for trade partners-shareholders to permit "over-investment" in certain projects if they are able to capture a sufficient portion of the benefits themselves. With the merging of shareholding positions into ongoing trading relationships, the long-term viability of the firm as a reliable supplier and customer becomes important. The continual improvement in the quality and features of firms' product

lines takes on significance in and of itself - even where these improvements are not captured in improved equity returns - because investors receive benefits in other forms. Financial institutions, for example, are among the top shareholders in large Japanese firms, yet their equity positions are typically only a fraction of the loan and other business they carry on with the same firms. Not surprisingly, these institutions are interested in ensuring that their corporate borrowers are around over the long term to service their financial obligations (Gerlach 1992).

Among the most prominent features of the keiretsu is a layered set of personnel connections that serve as conduit for information between companies and, occasionally, as a source of external discipline. Employees transfers are common among business partners, particularly among bank and their client firms and large manufacturers and their subcontractor. In addition, firms in keiretsu are linked through a variety of intercorporate executive councils that serve as a forum for managers from different levels of the companies involved. While group interaction takes place at many levels, undoubtedly the most prominent of these meetings are the presidents' councils that bring together the chief executive officers from the group's nucleus companies. The shacho-kai is a kind of informal community council, with membership limited to a set of core members. It appears that the shacho-kai in practice is less a command center to determine the policies and practices of individual companies than a forum for the discussion of matters of mutual concern. It simultaneously (1) establishes an identity for the group and its participants, signifying relationships among firms, and instilling a sense of coherence; (2) creates a setting in which issues of group-wide concern may be negotiated, including protection and promoting the group name and, less often, arranging for assistance for companies in trouble, resolving conflicts among members, or disciplining deviant group companies; and (3) enhances the group's position in the larger businesses community by presenting the image of a powerful and historically prestigious collective. More often than not, the executive remarked, nothing of particular note is discussed and the meeting is merely an opportunity to exchange views with other chief executives and to socialize. Nevertheless, the shacho-kai is considerable more than a old-fashioned business customs, for it serves both to signify membership in the group and to provide a

common arena for the expression of the strategic interests group firms have in one another. As such, it is significant both for its symbolism and for what it reveals about the dynamics of keiretsu relationship (Gerlach 1992).

5.2.2 Outsider's Intervention

Each country's manufacturing companies relate to the financial community. In Germany and Japan, these relationships are especially close, and this has important implications: banks are more likely to provide supports when their borrowers get in financial difficulty, since helping them remain competitive reduces the riskiness of their loans and sustain their long-term growth to ensure their own; banks have sufficient influence on management to ensure their goals compatible with their own. Together with the small portion of equity in corporate capital structures, these close relationships curtail the importance of shareholder wealth maximization as a corporate goal.

By setting specific debt-equity as corporate goals and by refusing to issue equity for fear of diluting earning per share, management in U.S. arbitrarily limits its available capital. Consequently, the capital potentially available becomes and irrelevant, unused asset. In Germany, big commercial banks and central savings banks, or *Landesbanken*, practice "universal banking," which includes direct investment in equities and bonds.[28] As a result, German bankers held directorships on the supervisory board of the companies. German commercial banks, facilitated by law and tax policy, own sizable portions of many large industrial companies. Ownership gives it the power to block any change in the company's statues. This has resulted in a concentration of ownership among major banks. The larger banks also reinforce their influence through the proxies they hold. These close relationships lead to a commitment of the bank which can be detrimental for it particularly in a financial distress of the company. Then, the bank is required to rescue its equity stake. If the company goes bankrupt, not only the equity stake of the bank but also the credit extended to the company by the bank will be subordinated to other debt, even if its

28 Most of 4,500 German banks are universal banks, which may be active in the banking business as well as the securities. In addition, those banks may participate in the investment business, trade in real estates, rescue operations for financially distressed firms, get involved in merger and acquisition (Baums 1992).

loan was secured by collateral. Thus, this may encourage banks to monitor and influence management of the company (Baums 1992).

Ties between banks and industry are strong in Japan. Japanese keiretsu makes extensive use of leverage and intercorporate holdings of debt and equity. Banks still play a central role in financing industries through keiretsu. Bankers often serve on manufacturing companies' boards and, particularly in periods of financial distress, become heavily involved in management. While current law requires Japanese banks to reduce their equity positions to 5% of the outstanding equity in affiliated borrowing companies, they still hold substantial equity in their client companies. In contrast, individual shareholders exercise little influence over management. Personnel in banks move frequently between banks and companies as part of an ongoing relationship that involve training, consulting, and monitoring. Japanese banks allow companies to enter formal bankruptcy only when liquidation makes economic sense-that is, when a company is worth more dead than alive (Ellsworth 1985).

The most powerful safeguard in the Japanese corporate governance system is the ability of one or more equity-owning stakeholder to intervene from time to time directly and explicitly in the affairs of another company when necessary to correct a problem. Typically, such intervention is undertaken by a company's main bank, usually to remedy nonperformance in the face of impending financial distress. This responsibility generally falls to the troubled company's main bank because it usually is the largest single supplier of capital and has quicker access to more information than most other equity-owning stakeholder. It also typically holds both debt and equity claims against companies for which it acts as main bank. Whereas fear of triggering so-called "equitable subordination" of their loans keeps most American lenders on the sidelines until a loan agreement is formally breached, and even then restrains their degree of intervention, Japanese main banks effectively assume such subordination from the outset and take far-reaching, early steps to limit the damage. A main bank for a financially distressed company voluntarily repays all of the company's debt to other lending banks. A main bank assumes sole responsibility for recovering loans form a company. Main bank intervention may also occur for reasons other than financial distress. Dispute resolution and sheer dealmaking by banks among client

companies are also observed (Kester 1991b).[29]

5.2.3 Deficiencies in Japanese Corporate Governance

Deficiencies in Japanese corporate governance may eventually give rise to sufficiently large abuses of non-controlling shareholders interests. Economic incentives are beginning to change, in large measure because of emerging weaknesses in the traditional Japanese corporate governance system. Ironically, part of the cause of that weakness is the very fruit of competitive success: an abundance of cash. The combined effects of sluggish economic growth and considerable success in product markets around the world have been the buildup of substantial free cash flow. With this have come profound changes in the financing patterns of large corporations. Net new investment by Japanese corporations has been growing less quickly and is increasingly being raised from capital markets, not from banks. This has meant a shift in the balance of power among corporate stakeholders away from financial intermediaries, the traditional primary suppliers of capital, and into the hands of corporate managers. It is now commonplace to observe Japanese companies repaying their loans completely and even refusing to accept former bank officers as nominees for director.

Financial independence has furthered the deployment of cash in ways that are of dubious value. Cash has been expended in unrelated diversification such as life science, electronic communication, advanced materials, and computer hardware and software that mature manufacturers in Japan are trying to enter. The rationale for doing so was to escape the limitations and intensifying rivalry of mature core businesses and, in particular, to keep personnel continuously employed,

29 There are a number of cases in which the main bank helps company work out of financial distress. The best-known case is Sumitomo Bank's restructuring of Mazda, the automobile manufacturer. Mazda got involved in considerable financial difficulty after the 1973 oil shock caused dramatically to reduce the demand for fuel-inefficient rotary-engine cars. In responding to these troubles, Sumitomo Bank sent a number of their executives to serve as directors in Mazda and others to manage key divisions of the company. Sumitomo Bank lent Mazda money at favorable rates and encouraged the company to sell its share in the banks. Sumitomo Corporation, the large trading company of the group, took charge of dealer networks and the newly appointed managers worked to improve efficiency in production. The bank also promoted Mazda sales among their customers firms and employees and leaned on suppliers to sell to the firm at favorable prices (Pascale and Rohlen 1983).

thereby honoring implicit promises of lifetime employment. However well-intentioned these efforts may be, there is little reason to be optimistic about their prospects for success. Many of the new businesses being pursued have loose connections with companies' present capabilities. To the extent that these capabilities are exceeded, underperformance will result and capital will have been wasted, at least from the point of view of capital suppliers.

No longer vitally dependent on bank credit to fund investment programs, Japanese corporations make more perfunctory, less substantive disclosures of information about past performance and future plans to their main banks. For their part, Japanese banks, lately under pressure to meet BIS (Bank for International Settlements) capital requirements, are becoming more sensitive to performance on their equity investments. In general, the slowing of economic activity in Japan has destabilized a number of traditional relationships and resulted in sales of a fraction of shares previously held under cross-shareholding relationships. Yet, many sales of stably-held shares are little more than efforts to book current period gains that can be used to boost sagging profits, and are followed by near immediate repurchases. Other sales represent only a fraction of stably held stock, not the entire amount; still others are sales to some other stable owner of the stock in question, thereby causing little substantive change in the cross-shareholding relationships (Kester 1992).

The foremost objective of the Japanese companies is to sustain growth. For many of these companies, growth is a useful proxy objective for the maximization of the value of the firm. Given the wartime destruction of much of Japan's industrial capital and substantial economies of scale in many basic industries, there was a strong fundamental profit incentive underlying strategy oriented toward high rate of investment and high market shares. However, the bias of Japanese corporation toward growth has extended well beyond the period of reconstruction. This suggests a wider role for growth than as a proxy for value maximization. It may be a means by which management might entrench itself. Managers might proactively seek to secure their positions in the firm by investing heavily in those assets that they have a special expertise in managing, even to the point of expanding beyond the point justified by profit maximization considerations. Alternatively, by pursuing unrelated diversification

strategies, some managers may create highly complex organizations that perhaps only they understand well enough to manage effectively. It may be also be argued that growth and managerial entrenchment are desired because they support the continuity of valuable long-term relationships. Growth in particular may forestall potentially costly stakeholder disputes while maladjusted contracts are realigned to changed economic circumstances. The managerial discretion afforded by excess cash has given rise to the expression of latent self-interests that were successfully contained during Japan's high-growth period. Today, some Japanese stakeholder appear to be gaining at the expense of other without any immediate prospects of recontracting. With their diminished control over the supply of capital, and being largely owned by their industrial clients, the ability of lending-shareholding financial institutions to undertake corrective action is greatly reduced (Jensen 1989; Kester 1991a).

Since the first oil shock of the 1970s, many Japanese industrial corporations have been attempting to sustain competitive advantage in their mature core businesses while searching for new avenues of growth and profitability to replace the cores eventually. At the same time, they have tried to avoid placing the burden of adjustment on any one corporate stakeholder. The dramatic appreciation of the yen in the 1980s has further threatened the profitability of industries such as steel, textiles, shipbuilding, and consumer products that were the principal engines of Japanese economic growth in earlier decades. The factor distinguishing the adjustment problems faced by the Japanese businesses in the late 1980s in the depth of the excess personnel and capacity problems. For all the progress that has been made in shrinking capacity in some of Japanese mature or declining industries, dealing with redundant workers and managers remains a serious problem at many large companies. Previously taken programs such as worker transfers to suppliers, subcontractors, and even industrial customers, early outplacement of aging employees at all ranks, and simple reliance on natural attrition to curtail the work force in line with true needs have succeeded primarily in deferring final adjustment of personnel requirements to the 1990s. The stage is being set in Japan for overt conflicts among corporate stakeholder and the emergence of struggles for corporate control. Managers in declining industries are pushing to restructure corporate strategies, particularly in the direction

of greater diversification. Upholding implicit promises of lifetime employment and maintaining the growth of their enterprises are prominent motives. This restructuring is being undertaken with less bank oversight than ever before and in the face of ever-mounting demands from these important shareholders for better financial returns (Kester 1991a).

Lending banks and other financial institutions, the traditional monitors of manufacturing companies find that their ability to exercise control over the uses of cash are severely impaired in this periods of abundant liquidity. Other means of asserting one's voice as a shareholder have always been and continue to be quite ineffective. Conducting a successful proxy fight to change managerial policies about the deployment of corporate cash would seem all but impossible in Japan. Profound change in the Japanese market for corporate control has been made inevitable by the stresses that abundant cash and waning bank authority over corporate clients have placed on the traditional Japanese corporate governance system. Whether or not that change will lead to the U.S. type of market hinges on how the Japanese corporate governance system adapts to these stresses (Kester 1991a).

6 Conclusions

In general, U.S. companies have tended to deal with hazards of self-interested behaviors among stakeholder by delineating the responsibilities of one to another, as much as possible, in formal, explicitly written contracts enforced by courts; and relying heavily on competitive market transactions with a number of lenders, suppliers, customers, managers, and so forth relying upon the incentives and discipline of the market to ensure mutually beneficial behavior. Stakeholder groups are distinctly separated in the U.S. public corporations, and there are reasonably clear boundaries dividing a firm from the factor and product markets in which it transacts. The primary responsibility of the U.S. board of directors is to secure the interests of the equity holders, and to ensure that management seeks to maximize the value of the shareholders' stake in the corporation. Consistent with the U.S. propensity to rely upon competitive markets to induce appropriate behaviors among contacting parties, an active

market for corporate control is relied upon to correct deficiency of the board of directors to act as a safeguard of shareholders interests.

By tying themselves to one another in groups through equity participation and various personal and institutionalized information-sharing networks, yet avoiding outright majority ownership and management, Japanese corporations have been able to exploit powerful market incentives that derive from independent equity ownership. Concurrently, the close involvements of major stakeholder in a company enable them to adapt their relationship with the company to the prevailing environment. In lieu of arm's-length transactions among many autonomous market participants, or extensive integration of equity ownership under hierarchies, Japanese corporations engage in close business relationships, formed by implicit contracts, personal trust among managers, and extensive information sharing. The existence of large minority equity claims among major stakeholder helps mitigate the abuse of such business relationships.

German corporate governance bears many similarities to the Japanese system, particularly regarding the maintenance of long-term lender-borrower relationships and bank ownership of equity. In at least one important respect - the composition of corporate boards of directors - German governance provides stronger safeguards against self-interested behavior than does the Japanese system. Japanese boards tend to be dominated by inside managing directors. Retired executives of important equity-owning stakeholder sometimes join these directors as representatives of their former employers. German supervisory boards, in contrast, are at least half-composed of executives of the corporation's major institutional shareholders and representatives of labors. All major stakeholder thus influence corporate goals and bear the responsibility of achieving the promotion of the company's best interest, according to German law. While they are concerned with shareholders and workers, German boards are expected to consider these interests in the context of how they will influence the company's long-term well-being. Because of their commitment to the coalition of stakeholder, German managers have viewed their tasks as being preservation and enhancement of coalitional interests rather than an immediate, direct pursuit of any one stakeholder's interests and increasing the overall welfare while allcating gains among stakeholder in such a way as to mitigate conflict among

them.

In many other respects, however, German contractual governance provides somewhat weaker safeguards for the preservation of long-term relationships. Although supervisory board representation is concentrated among a relatively small number of executives who sit on many boards, the sort of temporary personnel transfers at lower levels of management that are so common in Japan are rare in Germany. Information sharing is less institutionalized in Germany than in Japan, where intercorporate management and supplier organization are commonplace. Differences between Germany and Japan are more matters of degree than of kind, however, especially in comparison to common practice in the United States.

The nature of equity ownership among the three countries further reflects the differences in their approaches to governance. In the United States, a higher degree of specialization in risk bearing has resulted in delineating one stakeholder group from another, and making equity investors a distinct class of claimants against the firm. The advantage of such specialization is that it tends to enhance capital availability and lower capital costs by providing investors with a richer set of risk-return alternatives across which they can diversify. It also yield a clear-cut residual claimant with unambiguous incentives to monitor corporate management, for it is the residual claimant who will benefit most from efficient production and the reduction of agency costs. Thus, for the contemporary U.S. corporation with its largely specialized stakeholder and its distinctly separate residual claimants, the problems associated with the separation of ownership from management become central to the governance issue, more so than the governing of intercorporate business relationships. The outside directors, the use of the proxy voting and the development of shareholder advisory committees are emerged as preferred means for solving many of these problems. And when these governance mechanism fail, the market for corporate control has been depended upon to concentrate ownership in the hand of new shareholders who may then change underperforming patterns of investment, repeal other policies having a detrimental effect on shareholder value, and conceivably change management itself.

In Germany and Japan, residual claimants are not, for the most part, separate and distinct from other stakeholder. Rather, a majority

of stock is often owned by a few shareholders who quite often possess other claims against the corporation. The financial institutions are neither pure debt nor pure equity holders. The role of equity in German and Japan is less to vest ownership rights in residual claimants with strong incentives to monitor management than it is to bind otherwise diverse stakeholder to one another helping parties hold together in long-term trading relationships. It does so by reducing conflict that normally arise among various stakeholder when they each hold separate and distinct claims. The incentives to breach contracts with suppliers and customers in the interests of transferring value of shareholders, or to borrow money and then take extraordinary risks that might benefit shareholders at the expense of lenders, are lessened when the impaired stakeholder are also the company's principal shareholders. Thus, the conflicts of interests among the stakeholder can be mitigated by relationship-based control mechanisms.

The agency problem is addressed in Germany and Japan by placing representatives of significant equity-owning stakeholder on the board, and by relying on main banks and Hausbanks as delegated monitors for other major lender-owners. Importantly, the production process, itself, also serves as a kind of monitoring system for equity-owning stakeholder in Japan. Such monitoring by large shareholders do not completely resolve agency problems of the separation between ownership and management. Indeed, from the perspective of Japanese individual or non-group institutional shareholders without a voice on the board, this sort of problem may actually be worse in Japan than in the United States. Overinvestment in declining core industries, excess employments, excess diversifications, and speculative uses of excess cash, among other problems, appear to be at least as problematic in Japan as in the U.S.

While possibly recognizing deficiencies in the value maximizing behavior of the corporations in which they invest, non-controlling German and Japanese shareholders may, nevertheless, acquiesce to such behavior so long as they perceive the advantages of sustaining long-term business relationships that support their investment to be worth more than the foregone incremental value. In other words, they may tolerate agency costs associated with the separation of ownership from management as high or even higher than those present in the U.S. corporations if the offsetting gain from bearing such cost is

substantially reduced transaction costs, and greater efficiency in production (Kester 1992).

There is some evidence that these systems of corporate governance are converging - that Japanese and Germany are moving toward a more American-like system. Japanese banks may be forced to liquidate some of their equity holdings to maintain adequate cash balances; in Germany, there are proposals to limit bank ownership of equity. Yet these changes are modest - if Japanese or German owners are forced to sell their nonpermanent shares that are actively traded and have little influence on corporate behavior. Changes are also occurring in the United States, as institutional investors have discussions with management and some boards take a more active role in corporations. As in Japan and Germany, these changes appear isolated and infrequent.[30] All three countries have evolved unique and effective systems of corporate governance. None of them, however, are stationary. As the world's capital and product markets integrate, and as companies domiciled in different countries engage in investments and transactions across the border, these systems are increasingly coming into direct contact and, sometimes, conflict with one another. As they do so, the advantages and limitations of each become more clearly revealed.

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30 Breeden (1993), the chairman of the U.S. Securities and Exchange Commission, contends that the German and Japanese corporate governance models, while well-suited for those countries, are not appropriate to U.S. traditions. The closed nature of governance under those systems contradicts U.S. values of openness, mobility, and accountability in running publicly owned corporations in the U.S. Limiting information about corporate successes and failures to a handful of people behind closed doors would not likely improve either the economy or the competitive position in the U.S.. Strengthening broad-based participation in corporate governance in a reasonable manner will help ensure both a strong and open investment market and prompt and meaningful managerial accountability for consistent profitability and growth.

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ECONOMIC ISSUES IN INTERNATIONAL DEBT: A SURVEY

Hideki IZAWA

I Introduction

Since the debt crisis occurred in Mexico in 1982, the debt problem in the developing countries has received more attention. In 1989 Brady, the U.S. Treasury Secretary, announced a plan for debt forgiveness and then applied it to Mexico and other countries. Recently the creditor banks to Brazil and Argentina have agreed to choose in exchange for bank loans either new bonds to forgive 35 % of the principal or to reduce debt service (interest). This is called securitization.

We make use of the "principal-agent model" to analyze the debt problem under asymmetric information. The principal (or uninformed player) is the creditor, international banks, while the agent (or informed player) is the debtor country. Rasmusen (1989) classified the five types of principal-agent problems.

(1) Moral Hazard with Hidden Actions

The creditor (principal) and the debtor country (agent) begin with symmetric information and agree to a debt contract, but then the debtor takes an action (effort) unobserved by the creditor. The creditor cannot observe whether the debtor country consumes or invests the borrowed funds. For example, a policy-holder may neglect health precaution and an insurance company cannot observe it.

(2) Moral Hazard with Hidden Information

It is the same as (1), except that Nature takes a move observed by the debtor country but not the creditor. As the interest rate rises, the debt country undertakes higher risk and higher return projects, and increases default risk, lowering the bank's profit. The other example is that member banks of Federal Deposit Insurance Corporation do not care about safety of their loans.

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(3) Adverse Selection

Nature begins the game by choosing the debtor country's type (her payoff and strategies), unobserved by the creditor. Then the creditor and the debtor country agree to a debt contract. It is difficult to identify the type of the debtor country. As the interest rate rises, the borrowers with high probability of repayment decrease the demand for loans, while the borrowers with low probability of repayment increase it.

(4) Signalling and (5) Screening

Nature begins the game by choosing the debtor country's type, unobserved by the creditor. To communicate her type, the debtor country takes actions that the creditor can observe. If the debtor country takes the action before they agree to a contract, we say the debtor country is signalling. For example, the debtor country may accept IMF conditionality as a signal to communicate with lenders. On the other hand, if she takes the action afterwards, she is being screened. The creditor needs to monitor the debtor's actions.

In the section II, we begin with international borrowing and lending under certainty in a prisoner's dilemma situation. Then we discuss rescheduling and new lending under uncertainty. In section III we present the debt repudiation model under asymmetric information between borrowers and lenders. In section IV we examine some debt reduction schemes; unilateral debt forgiveness, and market-based debt reduction schemes (debt buy-backs, debt swaps, and debt-equity swaps). Lastly, we conclude and mention future research issues.

II Debt Problems under Certainty and Uncertainty

We discuss first of all international lending and borrowing without uncertainty and possibility of repudiation in a prisoner's dilemma. Then we consider rescheduling and new lending in an uncertain situation.

International lending and borrowing without uncertainty

First, we explain how international lending or borrowing increase welfare. In Figure 1, the horizontal axis is the current goods and the vertical axis is the future goods in a country. The production possibility curve and the indifference curves are drawn. The

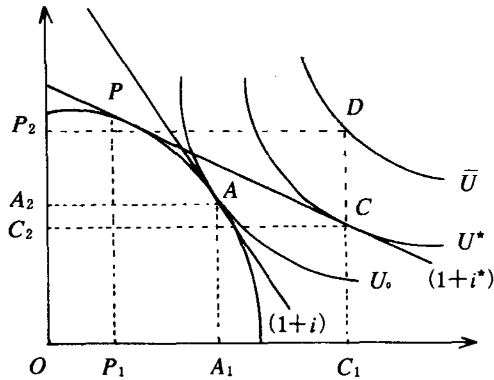

Figure 1

combination of production and consumption in the absence of capital movement is shown at point A. Now suppose that a country can borrow or lend. In Figure 1 if the international interest rate (i^*) is lower than the domestic interest rate (i), the new production is point P and the new consumption is point C. The current consumption is OC_1 and the current production is OP_1. The future consumption is OC_2 and the future production is OP_2. The country borrows P_1C_1 from abroad in the current period and repays P_2C_2 in the future period. Intertemporal welfare increases from U_0 to U^*. On the other hand, if the international interest rate is higher than the domestic interest rate, the country lends to a foreign country in the current period and receives in the future period. Thus each country's welfare increases. International borrowing and lending, that is, capital movements play a role to exchange internationally consumption goods between the current period and the future period.

However, the debt country has an incentive to repudiate the debt repayment in period 2 once the debt country borrowed in period 1, even if she can be solvent. The debt country selects the point D in period 2 in Figure 1. The initial plan C is time-inconsistent. We show this problem as an example of a prisoner's dilemma.

Prisoner's dilemma

If a debt contract between the creditor and debtor cannot be enforced, the debtor can violate some or all contractual stipulations,

thereby inflicting losses on the creditor. Table 1 shows the strategic situation which two players face in an unenforceable contract. The creditor (lender) chooses rows either 'lend' or 'do not lend', and the debtor (borrower) chooses columns either 'repay' or 'do not repay'. The payoffs are defined as the gains. The first entry is the payoff to the creditor and the second entry is the payoff to the debtor.

Table 1

		debtor	
		repay	do not repay
creditor	lend	1, 1	−1, 2
	do not lend	0, 0	0, 0

The Nash equilibrium is a strategy (do not lend, do not repay) if a contact fails to prevent the debtor from cheating, although under cooperation the Pareto-optimal payoff (1, 1) could be reached. Although the debtor prefers cooperation to not receiving the loan, her ex-post incentive makes her cheat once the loan is made.

The situation described above is a variant of the one-shot prisoner's dilemma game. Debtors, however, are often interested in a long-term credit relationship. In an infinitely repeated prisoner's dilemma supergame, threats of retaliation such as a credit embargo may deter a debtor from cheating and may support cooperative equilibria for non-cooperative repeated games. However, if the game is repeated only finitely, cheating and thus not lending is optimal in the last round of the game since it is a single-stage prisoner's dilemma game. By backward induction it is also optimal not to cooperate in the last but one stage, and so on down to the first round of the game.

Next we take into account uncertainty on repayment capacity of the debt country.

Rescheduling and New Lending

In Figure 2 consider a two-period model of a country that has inherited a debt D which comes due in period 1. The resource transfer in period 1, X_1 is known. If D exceeds X_1, the debt country must reschedule the debt or borrow new lending equal to $D-X_1$ and repay $(1+i^*)(D-X_1)$ in period 2 where i^* is an interest rate. However, the potential resource transfer in period 2, X_2 is a random variable and

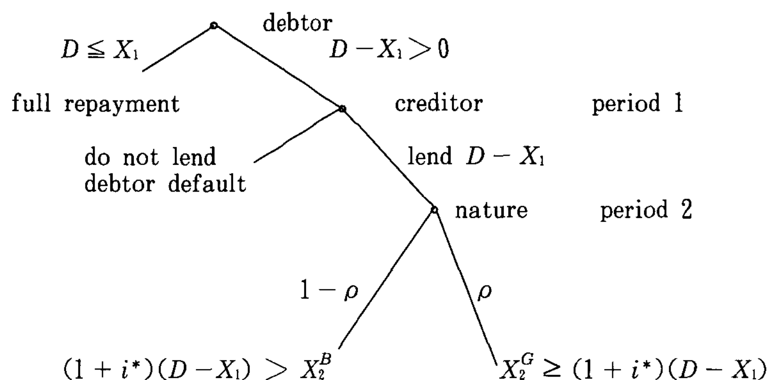

Figure 2

takes either X_2^G (good state of nature) or X_2^B (bad state of nature). We assume that the good state in which a country can repay in full has a probability of ρ and the bad state has a probability of $(1 - \rho)$. Then the expected receipt of creditor is $\rho \cdot X_2^G + (1 - \rho) \cdot X_2^B$. If it exceeds $(1 + i^*)(D - X_1)$, the creditor may agree to reschedule or lend a new loan. In this case there is only a 'liquidity problem' and not a debt crisis. The creditor is still better off than default in period 1. However, if the debt is accumulated and is not permanently repaid, the debt crisis happens.

If a lender (competitive banks) raises his interest rate, the borrower's behavior changes because adverse selection and moral hazard raise default rates. Borrowers who expect to default are less concerned about the high interest rate, so the default risk rises. The lenders would not lend to a risky borrower who offers to pay more than the interest rate which maximizes the expected return to the lenders. As a result, credit is rationed in a loan market (see Stiglitz and Weiss [1981]). In fact the private international banks have reduced new lending to LDCs since the debt crisis.

Ⅲ Debt Repudiation Model

We present the debt repudiation model under asymmetric information between the lenders and the borrowers, based on Jaffee and Russell (1976).

debt country (borrower)

The debt country solves a utility maximization problem of a two-period model as follows. The utility consists of consumptions in periods 1 and 2. The equation (2) shows the budget constraint in period 1 to the debtor country. The equation (3) shows the budget constraint in period 2 and if the principal and interest payments of the borrowing is less than the repudiation cost (Z), a penalty such as embargo, seizure of overseas assets, or exclusion from international capital markets, the debtor country will pay the debt. However, if they exceed the repudiation cost, the debt country does not have intention to pay the debt even if it is solvent. The maximization problem to the debtor country is as follows.

$$\max_{\{C_1, C_2, L\}} U\ [C_1,\ C_2] \tag{1}$$

$$s.t.\ C_1 = Y_1 + L \tag{2}$$

$$C_2 = \begin{cases} Y_2 - (1+r) \cdot L & \text{if } (1+r) \cdot L \leq Z \\ Y_2 - Z & \text{if } (1+r) \cdot L > Z \end{cases} \tag{3}$$

where Y is production (given), C is consumption, L is borrowing, r is the interest rate, Z is repudiation cost.

If $(1+r)\ L$ is equal or lower than Z, the debt country will not repudiate the debt. Then the first-order condition is

$$\frac{\partial U}{\partial L} = U_1 - (1+r)\ U_2 = 0 \tag{4}$$

where U_i is the partial derivative of U with respect to the ith argument. The demand for borrowing (foreign debt) is drawn as a down-sloping curve, DD' in Figure 3.

And whenever the repudiation cost Z is less than the debt repayment, the debt country chooses $L = \infty$ and repudiate the repayment even if it can be solvent. The conditon for debt repayment, $(1+r) \cdot L \leq Z$, is shown as an area below the hyperbola ZZ' in Figure 3. Thus the demand curve for debt is shown as DA and ∞ in Figure 3. The indifference curves have zero slope where they intersect the demand curve and become vertical above ZZ'. The borrower's utility increases in the direction of the arrow.

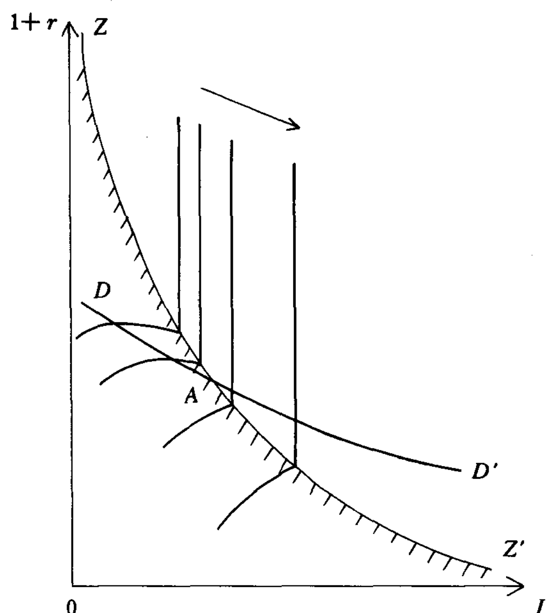

Figure 3

lenders (competitive banks)

We assume that there exists asymmetric information about Z between borrowers (debt country) and lenders (banks). Each borrower knows his Z while the lenders cannot identify the good debtors and bad debtors. Thus we assume that to the lenders Z is a random variable which has lower and upper limits, $\underline{Z} \leq Z \leq \overline{Z}$, and $f(Z)$ is the probability density function.

The risk-neutral banks are assumed to maximize their expected profits. In competitive loan market, a zero profit condition must hold.

$$E\left[(1+r) \cdot L \mid L \leq \frac{Z}{1+r}\right] + E\left[Z \mid L > \frac{Z}{1+r}\right] = (1+i) \cdot L \qquad (5)$$

The expected revenue is equal to the cost to banks where i is the constant (deposit) interest rate.

Now we examine the three cases as follows.

Case (i) $L \leq \frac{Z}{1+r}$

No debt country will repudiate the debt. Then we obtain $r = i$.

The supply of bank loan is shown as a horizontal line at $1+r=1+i$ up to $L=\frac{\underline{Z}}{1+i}$ in Figure 4.

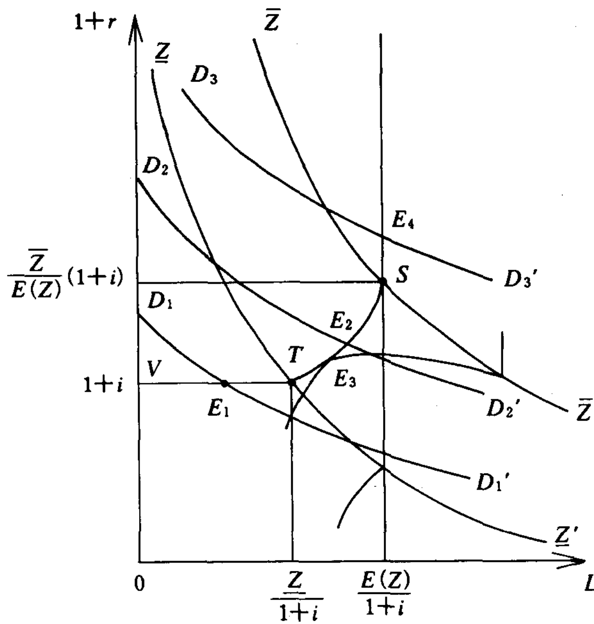

Figure 4

Case (ii) $\quad \frac{\underline{Z}}{1+r} < L \leq \frac{\bar{Z}}{1+r}$

Some debtors will repay and the others will not. From (5)

$$(1+r)L\int_{(1+r)L}^{\bar{Z}} f(Z)\,dZ + \int_{\underline{Z}}^{(1+r)L} Z\,f(Z)\,dZ = (1+i)\,L \qquad (6)$$

Since $\frac{d\,(1+r)}{d\,L} = \frac{1+i-p\,(1+r)}{p\,L} > 0$ where $p=\int_{(1+r)L}^{\bar{Z}} f(Z)\,dZ,$ which is the probability of repayment, the supply curve of bank loan is shown as TS in Figure 4. As L increases, the interest rate increases in order to cover repudiation risk.

Case (iii) $\quad \frac{\bar{Z}}{1+r} < L$

All debtors will repudiate their debts. The banks refuse to lend the loan more than the ceiling, $E(Z)/(1+i)$. Then the supply schedule is shown a vertical line at S.

equilibrium

(i) If a demand curve, D_1D_1' in Figure 4 intersects between V and T, the equilibrium is shown at point E_1 where every debt country will not repudiate and always repay the debt.

(ii) If a demand curve is D_3D_3', the equilibrium is the point E_4.

(iii) If a demand curve, D_2D_2' intersects between T and S, the pooling equilibrium is shown at point E_2. There exists no credit rationing where r exceeds i by exactly amount necessary to compensate for the repudiation risk. The good borrowers with high Z, who do not intend to repudiate, have to pay a risk premium above i to support indistinguishable bad borrowers. On the contrary, the separating equilibrium is shown at point S to bad borrowers who always intend to borrow as much as possible regardless of the interest rate and repudiate, and at E_3 to good borrowers where an indifference curve is tangent to the supply curve TS. When the banks offer various loan contracts, the good borrowers choose E_3 and the bad borrowers choose S and reveal themselves. This mechanism is called self-selection. Then the banks can perfectly screen the types of debt countries. The banks lend to only debt countries who choose E_3 and do not lend to those who choose S. Therefore the separating equilibrium does not hold. So the bad borrowers mimic the good borrowers and choose E_3. Thus every borrower chooses E_3 and the pooling equilibrium holds. However, E_3 is below a demand curve and credit rationing occurs.

IV Debt Forgiveness and Market-based Debt Reduction

Debt Forgiveness

Now consider that the creditors reduce the debt. The debt forgiveness reduces payments in the good state, leaving payments in the bad state unaffected. If the probability of the good state is unaffected by the debt reduction, it may not be in the creditors' interests. Since there is a free-rider problem, it is difficult to arrange

unilateral debt forgiveness of syndicated loans for risk-sharing by the creditors. Therefore unilateral debt forgiveness must be a concerted action, which is involuntary to the creditors.

When the debt country has to pay all foreign exchange to the creditor whatever the state of nature realizes, the debt country has zero residual. However, a reduction of debt leaves some residual benefit to the debt country in a good state of nature. At very high levels of debt obligations, the incentive effect may be so strong that a reduction in debt will increase the debtor's expected payment. In Figure 5, the horizontal axis is the present value of a debt country's

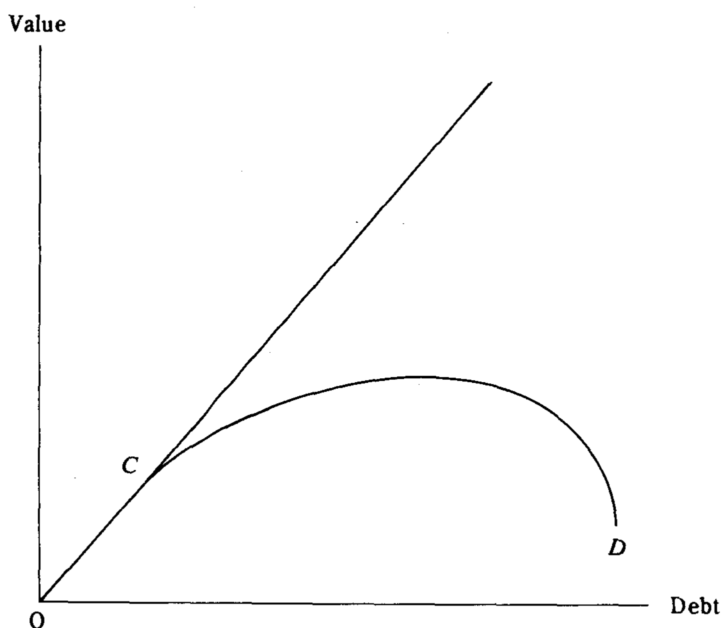

Figure 5

debt obligation and the vertical axis is the expected present value of its future debt service. If the country owes a low level of debt, it would be expected to repay the debt in full and thus the expected value would lie along the 45-degree line. At higher levels of debt, however, there would be an increasing probability of default and thus the expected payments would lie along a curve like CD, falling increasingly below the 45-degree line. Krugman calls it the "debt Laffer curve" in analogy to the Laffer

curve in tax. A reduction in the debt will actually increase its expected payments if it is on the wrong side of the debt Laffer curve. Thus it is in the collective interest of creditors to offer unilateral debt forgiveness. However, we do not know where the countries really are on the curve.

We present the model of debt forgiveness by Sachs (1989). Suppose that the heavily indebted country is excluded from the international capital markets and cannot make new borrowing. Then the debtor country's problem is as follows.

$$\max_{\{C_1, C_2, I_1\}} U(C_1, C_2)$$

$$\text{s.t. } C_1 = Q_1 - I_1$$
$$C_2 = Q_2(I_1) - S$$
$$Q_2 = Q_1 + (1+g) \cdot I_1 \qquad g > 0$$
$$S = \min(R, Q_2)$$

where

C: consumption, Q: production, I: investment, S: actual debt service in the second period, R: the amount of debt after debt-forgiveness

On the other hand, the creditor country chooses R such that it maximizes S, subject to $R \leq D$, where D is the debt (principal and interest) due in the second period.

Consider the debtor country's problem, taking R as a parameter. For low values of R, the debtor will be able to fully repay R since R will be less than $Q_2(I_1)$. Thus with $S=R$, the interior solution sets $(1+g)$ equal to the marginal rate of substitution between the first and the second period consumptions. The investment I_1 is an increasing function of R in this range. The debtor country makes adjustments by saving today and investing more in order to raise the second period production.

For large values of R, however, the debtor will not be able to fully repay R since $R > Q_2(I_1)$. In this case of debt overhang, the optimal decision is zero investment since $C_2 = 0$. And the actual debt service is equal to Q_1. The entire increase in output due to higher investment would accrue to the existing creditors rather than to the debtor country. There is no incentive to invest.

In Figure 6, the horizontal axis measures production and consumption in the first period and the vertical axis measures those in

the second period. When debt $D=0$, the consumption frontier is given by the line CC which has slope $-(1+g)$. The point $Q=(Q_1, Q_1)$ is the consumption point when $I_1=0$. The equilibrium is point A where CC is tangent to the indifference curve U. When $D>0$, the CC shifts vertically downward by the amount $D(\leq Q_1)$ in Figure 6 (a). The equilibrium is point B. The existence of a small amount of debt spurs investment which is the horizontal distance between C_1 and Q_1.

For large level of debt $(D>Q_1)$, the CC″ is kinked because of the constraint $C_2 \geq 0$ in Figure 6 (b). The optimal policy is to set $I_1=0$, and consume at the corner solution E, with $C_1=Q_1$ and $C_2=0$. Since D is so large that it will not be fully repaid, an increase in I_1 raises the second period output without raising the second period consumption. With zero investment, $Q_2=Q_1$, and the actual repayment S is Q_2. Instead of D, the creditor can demand a smaller amount R through debt forgiveness. The result is a new equilibrium at point F. The debt forgiveness raises the actual repayment from S to R, leaving the debtor country's utility unchanged. It is obvious that a higher level of debt forgiveness could make both the debtor country and the creditor country better off than at point E.

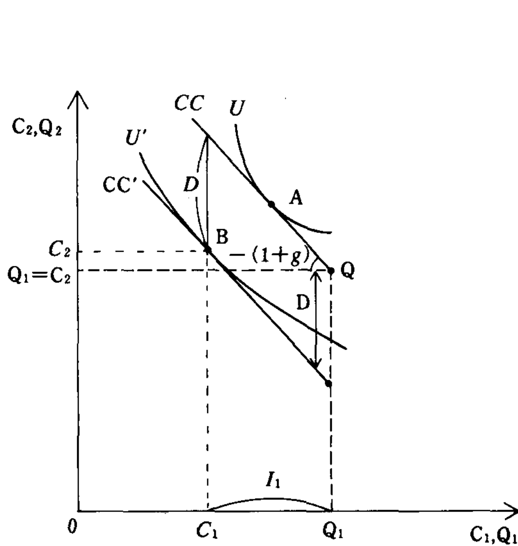

Figure 6 (a) Low Debt

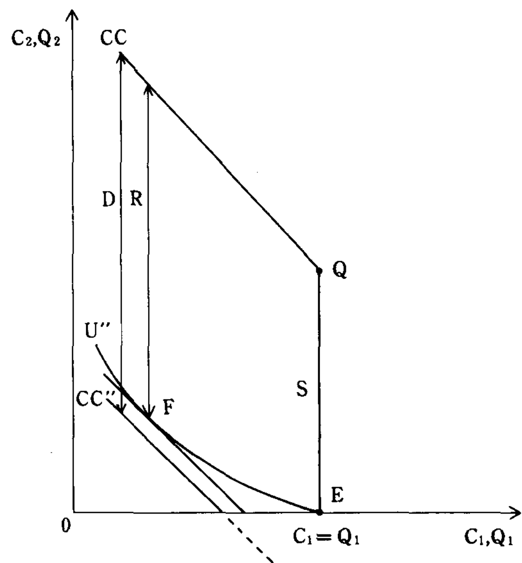

Figure 6 (b) High Debt

Market-based Debt Reduction

We examine market-based debt reduction approaches through voluntary action rather than concerted debt forgiveness. If there is a secondary market in the debt, the market price is equal to the expected repayment of the debtor country. The discount is (1 − market price divided by the face value of the debt).

(i) Debt Buy-backs

Debtors may repurchase their own debt at a discount. However, debt buy-backs is prohibited. There are two reasons. One is the issue of seniority. Existing creditors are entitled to first claim on whatever repayment the debtor can make. The other is a moral hazard problem. Allowing debtors to buy back their debt at a discount rewards the creditor who has the lowest secondary price. The effect of a buy-backs lowers the price of debt in the secondary market and reduces the expected total payment to the creditors. When the debt obligations after buy-backs with foreign exchange still exceed the revenue in the good state of nature, there is no incentive for the debt country to buy back the debt with foreign exchange.

(ii) Debt Swaps (Securitization)

In a debt swap a debt country issues a new bond and exchanges it for the existing debt. The debt country needs no foreign exchange. However, the new bond must be senior to old debt in the sense that it has a prior claim on the country's payments. Then the effect of debt swaps on the expected receipts to the creditor and the debtor is the same as in the debt buy-backs. In fact, the debtor which owes a bank loan is prohibited from issuing senior bonds.

(iii) Debt-Equity Swaps

The creditors sell debt at a discount in return for equity. Such debt-equity swaps simply exchange one kind of external liability for another so that the total debt does not change. The equity is not necessarily senior than bond. In addition, if the creditor sells equity and the capital flows out of the debt country, the debt-equity swap is the same as debt buy-backs by foreign exchange. The problem is whether or not debt-equity swaps generate additional equity investment.

Such market-based debt reduction schemes will be beneficial to both debtor and creditor only when the debtor is on the wrong side of the 'debt Laffer curve'. It implies that there is no magic in market-based debt reduction, as opposed to the orthodox strategy of concerted lending and debt forgiveness.

V Concluding Remarks

We treat the debt problem as a principal-agent problem under asymmetic information between the debtor country and the creditor country and examine the possibility of moral hazard and adverse selection. And we present the debt repudiation model and examine pooling and separating equilibria. Furthermore, we present the model of debt forgiveness to derive the debt Laffer curve and then compare debt forgiveness and market-based debt reduction schemes. We find that they are beneficial to both debtors and creditors only when the debtor is on the wrong side of Krugman's 'debt Laffer curve'.

The World Bank reports in *World Debt Tables* 1992-93 that the total debt outstanding by the developing countries including Russia is 1,703 billion dollars at the end of 1992. We need to reconsider the role of international organizations such as the IMF and World Bank as well as ODA to the LDCs, to advise structural adjustment and support economic development.

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A NOTE ON THE ESTIMATION OF SCALE ECONOMIES AND THEIR USE IN MODELING FREE TRADE AGREEMENTS[1]

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Economists are fascinated by the concept of increasing returns to scale (IRS) or economies of scale, perhaps due to the universal allure of getting more (output) than you pay for (in inputs).[2] However, there is some theoretical confusion as to what economies of scale are, and even more uncertainty in how to measure them. The result is that economic models purporting to incorporate "economies of scale" may be measuring something else entirely, yielding conclusions and policy recommendations diametrically opposite to those both of more standard models and of empirical observation.

The existence of economies of scale is readily apparent, especially in modern manufacturing operations. All sorts of fixed costs, such as research and development, marketing, structures, etc., must be covered in the price of output, and increasing production volume should decrease average costs, thus raising profits and/or lowering prices and increasing the quantity demanded.[3] Questions remain on how best to model economies of scale, including such basic questions as: Are the economies of scale internal to the firm, domestic industry, or international industry (Ethier 1979)?

The theory, as applied to modeling international trade and free trade areas, has been known for more than 25 years (Balassa 1967, Corden 1972, Krugman 1979 and 1980, Helpman 1981), but the

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1 I would like to thank Professors Shigeyuki Abe, Kazuhiro Igawa, Shoji Nishijima, and Koji Shimomura for helpful comments on an earlier draft.

2 Although many economists use the two terms interchangeably, IRS is technically defined as alpha>epsilon, where alpha is the percentage increase in output resulting from an epsilon percent increase in the quantities of *all* inputs to production. Economies of scale, the focus of this note, are defined as declining average costs of production as output increases in some relevant range.

3 At some high level of output, the firm structure and organization may become so unwieldy that the cost advantage to greater output is lost. Another way of looking at the problem is to say that fixed factors are only "fixed" for output variations in a given range.

application to empirical models is relatively recent, with pathbreaking studies by Harris (1984) and Cox and Harris (1985). A spate of studies have emerged recently, aimed at estimating the impact of NAFTA, particularly on Canada and Mexico, using the same (Cox and Harris 1992 and Sobrazo 1992, in USITC 1992) or a slightly modified (Roland-Holst et. al. 1992) modeling framework. Before similar models appear extolling the gains from the next EC enlargement, an ASEAN FTA, and the Enterprize for the Americas Initiative (also called Western Hemisphere FTA or WHFTA), it is worth reevaluating the basic model, with an eye toward its applicability to developing countries and to economies in a process of adjustment, as it is now being used.

A brief review of the Harris and Cox framework is given below in section I. Section II discusses some key assumptions of the model in detail, and questions their applicability to developing countries undergoing structural change. The final section offers two alternatives to modelers of trade liberalization in developing countries and some conclusions.

I. Overview of the Cox-Harris Model

Many standard assumptions are made: two factors of production, capital and labor, with capital being perfectly mobile across the 29 productive sectors and two regions at the exogenous interest rate and labor being perfectly mobile across industries but immobile across regions. Of the 29 sectors, 20 were designated a priori as "non-competitive increasing returns sectors," all of which are tradeable manufactures. The 9 CRS sectors include, agriculture, forests, fisheries, and mining (sectors in which Canada has a traditional comparative advantage) and all non-traded sectors. The economy is assumed to be a price taker in imports, but foreign and domestic output are imperfect substitutes, as in Armington (1969). Correspondingly, firms are price makers in export markets. In competitive sectors, price equals marginal cost, while pricing rules assumed in monopolistically competitive or oligopolistic sectors are discussed in more detail below. Factor markets are perfectly competitive. Firms enter and exit freely, with fixed costs being the only barrier to entry. In a particularly rich version of the model, found in Harris (1984), firms also endogenously determine the number of product lines produced, trading off the lower

cost of longer production runs with the demand of consumers for variety (see footnote 11 below). External balance requires that a trade surplus be balanced by rental payments on foreign capital (note that assumptions yield a one-way flow of FDI to Canada from the rest of the world, and thus a trade surplus must be maintained).

The large welfare gains this modeling framework predicts come from two basic sources: the reduction in average costs (the economies of scale effect) and the reduction in the price-cost spread (the pro-competitive effect). The second effect is actually the principal component of the size and variability of the estimated gains, with the source of the variability being the (assumed) extent of oligopolistic pricing behavior in a given industry, incorporated in a weighting parameter in a linear combination of monopolistically competitive and focal point (on the price of imports) price setting.[4] But this point, as with other points that have been raised about the suitability of the Armington assumption, Cobb-Douglas welfare, and the choice of supply and demand elasticities used, is not the focus of my comment.[5] They are not likely to yield policy recommendations at odds with the Stolper-Samuelson theory and empirical observations, and their weaknesses have been widely discussed and in some areas acknowledged by the authors.[6]

The economies of scale effect is itself quite large. To quote Harris

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4 Cox and Harris (1985), Roland-Holst et. al. (1992), and Sobrazo (1992) present sensitivity analysis on the pricing rule parameter. In Cox and Harris, raising the weight of the Eastman-Stykolt rule from 0.2 to 0.7 (assuming that markets are less competitive and more oligopolistic) raises the estimated welfare gains for Canada from unilateral liberalization to the world from 1.9 percent to 7.8 percent of GDP, a factor of four. Roland Holst et. al. present output effects for 26 industrial sectors in the U.S. under Cournot pricing and contestable markets, and the estimate for contestable markets is generally 60 percent or more larger. Sobrazo varies the Eastman-Stykolt weight as in Cox and Harris, but from 0 to 1, yielding estimates of Mexican output and welfare gains from NAFTA that vary by factors of fourteen and five, respectively.

5 Further, the somewhat questionable Armington assumption can be compounded by the choice of elasticities. Sobrazo 1992 chooses an elasticity of substitution in demand of. 0.375 between domestic autos and imports, *despite the fact that the overwhelming majority of auto production in Mexico is done by multinationals — Ford, GM, Volkswagen — in many instances, the same makes and models are imported.*

6 Whalley (1984) delivers the following criticism: "The weakness, however, is that from a theoretical point of view the model relies on an ad hoc assumption of collusive behaviour. Collusive behaviour, (sic) is assumed rather than derived from profit maximizing behaviour of firms. A further weakeness is that in Canada there is collusion, abroad there is not."

(1984), "Notice the large increases in average production runs – in the order of 50 percent under both UFT and MFT (unilateral and multilateral free trade). Indeed the domestic tariff alone seems responsible for much of the increased scale economies at the industry level." These factors result in 40 to 50 percent of the welfare gains reported for Canada in Cox and Harris (1985) (extrapolating from the sensitivity analysis in table 4 and 5, pp. 136-37, comparing the result using the mean of all parameter values and the extrapolated result for minimal efficient scale of operation [MES] approaching 0).

Two parameters combine to generate the economies of scale effect: an estimate of the MES, defined as the point where the difference between average and marginal costs falls below one percent, and the cost disadvantage ratio (CDR), which is one minus the ratio of average cost at an output level one half of MES to average cost at MES.[7] The values used are the mid-point between economic estimates and engineering estimates (which tend to be substantially higher).

II. The Applicability of the Cox-Harris Model to Developing Countries, Particularly Mexico

The appeal of this approach is apparent, especially as traditional models of the resource allocation effects of FTAs yield minuscule welfare gains, generally less than one half of one percent of GDP.[8]

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7 Total costs in the Harris and Cox framework are $TC_i = F_i(r,w) + V^i(P)^* y_i$, where F is fixed costs (units of capital and labor needed to begin production, multiplied by the corresponding rental and wage rates) and V^i is a variable unit cost function of input and factor prices assumed to be independent of the level of output. Thus, raising the level of output reduces average cost, which asymptotically approaches marginal cost as output rises.

8 Five of the studies reviewed by the U.S. Congressional Budget Office (1993) present estimates of the impact on GDP of the U.S. and Mexico solely from resource allocation effects. These estimates range from 0.0 to 0.23 percent for the U.S. and -0.04 to 0.32 percent for Mexico. Three broad classes of studies attempt to look beyond domestic resource allocation issues of NAFTA. Studies that model factor movements across borders (investment, migration, technology transfer, or some combination) include Adams, Alanis, and del Rio (1992), Bachrach and Mizrahi (1991), Brown, Deardorff and Stern (1992), Hinojosa-Ojeda and Robinson (1991), McCleery (1992), and Young and Romero (1992). Studies that focus on a single industry and its international structure, including non-tariff barriers to trade, include Hunter, Markusen and Rutherford (1992) and Trela and Whalley (1992). Studies that model economies of scale include Brown, Deardorff and Stern (1992), Cox and Harris (1991, 1992), Hunter, Markusen and Rutherford (1992), Roland-Holst, Reinert and Sheills (1992), and Sobrazo (1992).

Some attempt to to go beyond the traditional competitive markets paradigm to consider how a trade agreement would impact countries involved in an FTA given the oligopolistic structure and pricing patterns as well as economies of scale in certain key industries is called for, especially in the case of a U.S.-Mexico FTA or NAFTA.

But three of the assumptions of the Cox-Harris model must be questioned, especially in attempts to extend the model to developing countries like Mexico. First, there is an implicit assumption of identical technologies. This standard assumption allows one to bypass the difficult task of estimating the extent of potential scale economies in each sector and use U.S. scale levels as indicators of the MES (although note that Harris and Cox *do not* do this). Secondly, the assumption that average costs are diminishing at all output levels may grossly overstate both potential output expansion and welfare gains from trade liberalization. Thirdly, the assumption that a difference between marginal and average cost always reflects unexploited economies of scale is questionable. Several different reasons for a spread between marginal and average cost exist, and a country undergoing structural change due to changes in trade or other key economic policies (such as Mexico, Indonesia, Spain, indeed, most developing countries today) may not be observed in equilibrium in the base year chosen for model calibration. These points will be elaborated below, and two alternatives will be presented: either attempt to improve the measurement of economies of scale in this type of model or focus on the dynamics of adjustment and how trade agreements affect growth rates.

A fundamental point of concern is the way economies of scale are introduced and measured. The treatment of economies of scale is somewhat questionable in original U.S.-Canada context and may be entirely insupportable in the U.S.-Mexico situation or other developing country context. The various authors appear to contend that economies of scale are present in all industries in which marginal costs are lower than average costs, and that point estimates of the ratio of marginal to average costs provide parameters for scale economies that hold for production increases in the range of 15 to 38 percent for Mexico (Sobrazo 1992) and 41 to 67 percent for Canada (Cox and Harris 1985), in some sectors and scenarios.

There are two distinct alternative possibilities. First, the cost

curves may be U-shaped rather than declining forever, and the large production increases predicted here could actually move firms up the other side of the U.[9] Secondly, if costs are decreasing throughout, then the industry is what is known as a natural monopoly, and the body of analysis relevant to the behavior and regulation of those rare situations (generally utilities) applies here. The burden of proof in that case would be on the authors to show why, in the integrated North American market, any production at all takes place in Mexico. The modeling answer is, of course, the Armington assumption, combined with Cobb-Douglas utility, prevent any domestic industries from severe contraction. I suggest that the first interpretation is more likely, and furthermore the author may well be measuring excess capacity from some optimal factor mix (and, given different technology in Mexico, MES may be lower and the minimum point on the average cost curve may be much higher than in the U.S.) in the recessionary base year of 1985, and that marginal costs would be rising as output approaches capacity. Excess capacity would be observed in the Cox-Harris estimations as high fixed costs, and thus a high CDR.[10]

Excess capacity in a time of trade liberalization can mean one of several things. First, it can be an indication of extreme shortages of imported intermediate goods. If foreign exchange is rationed, producers may have to scale back production despite the fact that an increase in production would be profitable at the prevailing vectors of input, factor, and output prices. Secondly, it can be an indication of

9 As mentioned in an earlier footnote, organization diseconomies may eventually outweigh scale economies at the plant level, and fixed costs may not be fixed for increases in output of 25 to 50 percent or more.

10 Three definitions of "excess capacity" will be introduced here, two static and one dynamic, each dependent on some factor market imperfection. In the static sense, on can imagine a firm that finds itself with too much capital relative to labor to produce a given level of output efficiently after trade liberalization has decreased the wage/rental rate. In a putty-clay capital model, no secondary market will exist for in-place capital goods, which can only be adjusted at the rate of depreciation. Alternatively, one can picture a Leontief production relationship with one or more imported intermediate goods (televisions picture tubes, computers and chips, etc.) that could constrain production to a level inconsistent with the level of fixed costs when imports are restricted. In a dynamic sense, the profit maximizing level of output may be O, until a transition can be made to production based on state-of-the-art technology. Rather than electing to shut down, a firm with a trained labor force, distribution system, and other assets may elect to stay in business at some level of output that employs its core labor force in hopes of negotiating a merger or buy-out, even if it cannot cover its marginal costs in the short run.

poor or constrained management – an unwillingness or inability to cut back on expenses, particularly labor, in bad times. Thirdly, it could be a result of import penetration, indicating that the domestic firms are inefficient technologically and unable to compete with imports with their present organization, capital stock, and management structure. Only in the first instance is it likely that industries with a large spread between marginal and average cost would be the biggest gainers from trade liberalization.

In fact, it can be said that Sobrazo's results for Mexico, even more so than the original Cox-Harris results for Canada, are almost the exact opposite of what would have been projected from so-called revealed comparative advantage calculations or from a Heckscher-Ohlin-Samuelson (H-O-S) model based on factor endowments. In one of their original articles, Harris and Cox state "The model has much in common with the traditional Heckscher-Ohlin trade model, in which comparative advantage plays the key role. The comparative advantage effects are present in the model, but in addition there is scope for intraindustry rationalization."[11] But no such balance is evident in either the original model or subsequent works. On page 126-127 of the same paper, Cox and Harris continue "In terms of employment, the manufacturing sector gains at the expense of the rest of the economy. This result is contrary to what one would expect on the basis of traditional comparative advantage, which would argue, in the case of Canada, that trade liberalization would lead to an expansion of the primary sector at the expense of manufacturing." In Harris (1984), the perfect competition model is contrasted with the IO model with economies of scale, with the conclusion "The two models implemented on the same data base and elasticity estimate yield dramatically different conclusions. The simple correlation coefficients between relative output changes for both policy experiments is less than 0.01. The hypothesis of no correlation in levels or ranks is accepted at the 99 percent level of significance.... the two models give opposite signs on expansion vs. contraction of industry in 10 of the 29 cases" (pp.1029-30). Is the cost of being freed from "the tyranny of the triangles" breaking the "iron law of factor price equalization?"

The Sobrazo paper shows the same counterintuitive pattern of

11 Cox and Harris (1985), p.122.

results. In some of the more labor-intensive sectors (agriculture, food, beverages, tobacco, textiles, apparel, and leather), gross output increases are quite modest, in the range of 3.3 to 5.5 percent (table 8, p.628). By contrast, capital-intensive sectors (non-metallic minerals, iron and steel, non-ferrous metals, metallic products, non-electrical machinery, electrical machinery, transportation equipment, and other manufacturing) enjoy double digit growth from 11 percent to over 30 percent. In perhaps the two most unlikely sectors – Iron and Steel, where no developing country since Korea has been successful, and non-electric machinery, i.e. the production of capital goods, where the United States holds an indisputable comparative advantage and wide technological edge – the projected production increases for Mexican industry are just over 30 percent.[12]

Some rather distressing policy implications come out of this work, as well, especially for developing countries with significant public enterprize sectors. In general there seems to be a prescription for a return to the bias toward heavy industry and capital intensive growth that characterized the late 1970s, however this time under a liberal trade environment and in the guise of pursuing economies of scale instead of self-reliance through import substitution. If those gains prove to be more modest than predicted, it could be a recipe for urban unemployment, balance of payments crisis, and, in general, a return to the "lost decade" of the 1980s for Mexico.

The inherent symmetry among all tradeable goods sectors in most modeling frameworks may be to blame. In fact, significant differences may exist between export and import-competing sectors, especially in developing countries, that are not easily captured in models. "When domestic firms enjoy market power, extra competition from foreign producers can force producers to expand or exit.... Trade reforms may therefore reduce the rate of catch-up to international productivity levels in import-competing sectors and accelerate it among exportables."[13]

12 Part of the problem may be attributable to the decision to hold employment constant in this version, despite the inflow of capital into a labor-surplus economy. The structure of the production functions would therefore require an outflow of labor from labor-intensive sectors in order to equilibrate at the higher level of capital, contributing to the slow growth in labor-intensive sectors. With only one type of labor specified, peasant farmers can readily and costlessly move into the capital-goods producing sectors.

13 Tybout, (1992), pp.190-191.

Naturally, the fact that the Cox and Harris predictions are at odds with traditional wisdom is not an indictment in itself. But numerous instances of trade liberalization in developing countries have emerged recently, and it is worth checking to see what type of industries seem to have expanded due to unilateral trade liberalization in the "real world." It should also be pointed out that in a number of other instances, with perhaps the case of Indonesian trade liberalization in 1983-87 being the most relevant comparison, tariff reductions in developing countries have led to changes in the pattern of production, employment and trade entirely consistent with the H-O-S approach. Indonesia's tremendous spurt of manufacturing exports came in the traditional areas of garments, textiles, and consumer electronics. Early indications from Mexico's experience do not contradict this pattern, nor does the product mix in Mexico's "free trade areas" along the border, the maquiladoras.

Policy makers might also be unduly reassured by the Cox-Harris model's predictions. We would all agree that a drop in price and an increase from the profit maximizing monopoly or oligopoly sales level should be noted in some formerly concentrated sectors. But the reassurance that a moderate reduction in the number of domestic firms in many industries is both normal and desirable on efficiency grounds ignores the conclusions of another branch of the growing trade and industrial organization literature. In Krugman (1979), an expanding market (through either labor force growth or trade liberalization) increases the number of monopolistically competitive firms and products, increasing the welfare of consumers who value product diversity and selection. It seems far more likely that a sharp contraction in the number of firms as a result of trade liberalization in industries which are already highly concentrated should be taken as evidence of weakness rather than of potential strength.[14]

I have no disagreement with the portrayal of many sectors of

14 Subsequent to making this point in my comments on the Sobrazo (1992) paper at a workshop, I discovered that Cox and Harris were aware of this impact from the beginning. Harris (1984) compares the IO model with and without product differentiation (PD) and shows that welfare gains are reduced by about 28 to 34 percent, "The reason is that the rationalization effects of free trade lowers (sic) the number of domestic firms and hence the number of domestic and foreign products; this has an adverse effect on welfare given the PD assumption" (p.1028). Cox and Harris (1985) and subsequent papers present only estimates without product differentiation.

industry as being organized oligopolistically in developing countries. But the model is predicated on the ability of these oligopolies to effectively collude in restricting output and raising product prices. One element not studied which might affect the ability of firms in a sector to collude in price setting is ownership differences. In other words, domestic firms or foreign firms based in a single country could more easily collude than a heterogeneous mix of firms. Yet another possibility is that free trade might lead to a "rationalization" in which a heterogeneous batch of producers, say, multinational from several different countries and representative of one or two Mexican "Grupos" is reduced to a smaller, more homogeneous group. This very reduction in size and diversity could lead to oligopolistic pricing behavior in the free trade scenario when such an agreement could not be maintained before. Equilibrium price could even rise (given the extremely low elasticities between imports and domestic production mentioned above) in some instances, moving the economy farther away from the competitive equilibrium. In the Cox-Harris terminology, the pricing behavior may actually be endogenously related to the number of firms, with a reduction in the number leading to more collusive behavior.

Ⅲ. Conclusions and Alternatives

In conclusion, I would offer several cautions to those considering the Harris and Cox framework for modeling the impact of trade liberalization or FTA formation on developing economies, and two suggestions for how to cautiously proceed in this important area of research. First, it must be understood that the chief source of gains from liberalization in this framework is not the economies of scale themselves, but the breaking down of oligopolistic pricing structures, and the estimates are quite sensitive to this assumed parameter. Secondly, assuming developed country technology in developing countries results in a tendency to overstate realizable economies of scale, and the non-linearity of the effect of this assumption on the results argues for caution in this regard. Even more important is the empirical difficulty of separating instances of unrealized economies of scale from excess capacity, perhaps even excess capacity caused by import competition in a previous round of liberalization. One should not automatically assume that developing countries are observed in

long run equilibrium in an arbitrary base year. Also the oligopolistic pricing assumptions and economies of scale may interact, with the reduction in the number of producers (which coincides with the longer production runs as part of the rationalization of production associated with liberalization) actually increasing the potential for collusion in price setting in the industry, as well as joint action to erect or raise non-tariff barriers to trade. Increased collusion may partially or completely offset the benefits of tariff reduction.

The difficulty in identifying excess capacity from unrealized economies of scale is but one manifestation of a widely understood problem. "An important assumption that underlies most cost function applications is that all inputs are in static equilibrium. In many instances, however, the assumption of full static equilibrium is suspect, and hence, so are the empirical results."[15] Chao and Takayama (1992) offer a possible solution in a recent paper. "... the crucial distinction here is that E, L, and M [energy, labor, and machinery, the three factors of production in their model] are, respectively, replaced by E^*, L^*, and M^* in our formulation [the estimated long run equilibrium values]..."[16] This yields a *long run* total cost curve C^*, which can be differentiated to give $\Theta = (dC^*/dY)/(C^*/Y)$, the ratio of LR marginal cost to LR average cost, when the quantities of fixed and variable factors have been adjusted to minimize costs. They go on to estimate economies of scale for U.S. manufacturing, circa 1947-71, of a modest 13 percent.[17] This sort of estimation is more difficult, but crucial in avoiding overstated results.

A further difficulty goes back to an early article by Friedman (1955) on the problems of estimating cost curves in the presence of stochastic disturbances to output levels. In the words of Whalley (1984), "Attempts to estimate scale economies taking this regression fallacy into account frequently fail to find significant scale economies. In one such recent study for Canada, Rao and Preston (1983), whose results were not available to Harris, find slightly diminishing or constant returns to scale for both durable and non-durable manufacturing (Harris's increasing returns industries) and slightly increasing returns to scale for non-manufacturing industries (Harris's

15 Brown and Christensen, (1981), p.209.
16 Chao and Takayama, (1992) p 333.
17 op. cit.

constant returns industries)." Such a gross reversal of a crucial parameter indicates the dangers in making sectoral policy recommendations based on such estimates.

And finally, this line of research leads one away from a consideration of the dynamics of adjustment (including savings and investment behavior, labor supply responses, etc.), international factor flows (capital, labor, and technology), and evaluation of the impact of trade liberalization on specific groups (labor types, owners of mobile and immobile capital, etc.) and thus on the political economy of trade agreements.[18] These issues have received relatively less attention, but may prove more important to our understanding of the motivations for and impacts of trade agreements than economies of scale. The view of mainstream trade theory toward these dynamic effects is illustrated in a quote by Robson in a book on the economics of international integration: "The whole issue of these 'dynamic' effects is fraught with difficulty and it is proposed to disregard them from this point in this chapter on the ground that, whatever its importance, and it may be very great, economic analysis has not so far shown itself capable of throwing much light on them." Thus economists are looking for answers where the "light" is best (where familiar analytical tools can be used), knowing full well that their analysis is therefore incomplete at best.

The criticisms levied here should certainly not be taken as an excuse to return to the comfortable static, competitive models of the past, but rather to better integrate the "no longer quite so new international trade theory" with both the traditional H-O-S theory of comparative advantage and with new developments in dynamic modeling, including endogenous growth theory. It is entirely appropriate for a pathbreaking work like the original Harris and Cox-Harris papers to focus attention on a formerly overlooked aspect of trade liberalization, but not for others to generalize their model beyond its intended scope and use it for studies aimed at effecting policy formation in developing countries.

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18 See McCleery in USITC 1992, and Hinojosa Ojeda and McCleery in Bustamante et. al. 1992.

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KOBE ECONOMIC & BUSINESS REVIEW

CONTENTS

NO. 31 (1985)
Toward the Negative Picture Theory of Commercial
Double-entry Bookkeeping and Financial Accounting .... *Isao Nakano*
Stability of the Demand for Money: Australian Experiences .... *Kenichi Ishigaki*
"Empirical Study of Changes in Accounting Policy" in the Case of
Japanese Enterprises .... *Hidetoshi Yamaji*
An Empirical Study on International Short-Term Capital
Movements in Japan .... *Hideki Izawa*

NO. 32 (1986)
Import Demand Structural Change in the Pacific
Basin Countries .... *Seiichi Katayama*
Kenichi Ishigaki
A Synthetic Analysis of Structuralist and Monetarist
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in the International Monetary System ······ *Seiichi Fujita*
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Grain Price Information in Fifteenth
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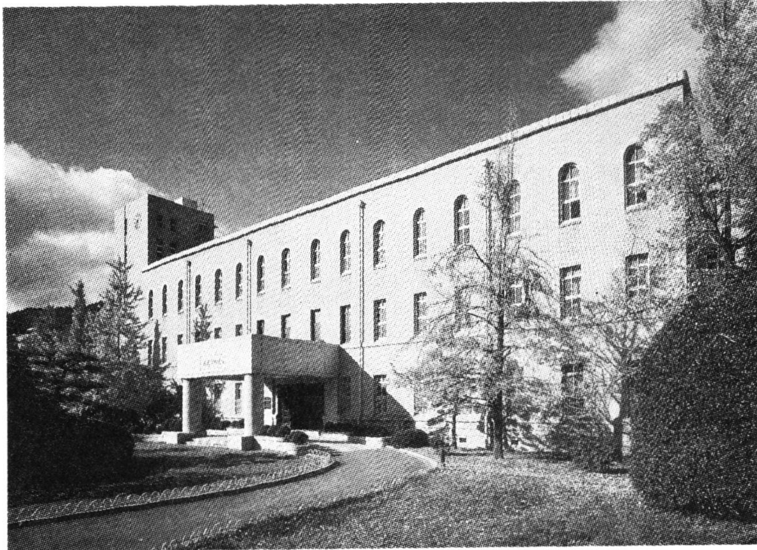

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In 1919, a research organization named the Institute for Commerce was founded in Kobe Higher Commercial School, one of the chief predecessors of Kobe University, with a gift made by F. Kanematsu & Company, a leading mercantile firm in Kobe. The organization was designed to carry on and facilitate integrated research on business and commerce and to formulate and publish the results of these studies and investigations in such form as to make them available to the business community.

With the founding of Kobe University of Commerce, successor of Kobe Higher Commercial School, in 1929, the Institute extended its research activities by adding several divisions. One was the famous Latin-American Library, which soon became the center of research in this field in Japan. A room for statistics equipped with various computing machines was established and began publication of Júyo Keizai Tókei and Sekai Bóeki Tókei annually. A filing room was prepared to deposit press clipping files systematically arranged by topics and dates. Another room was designed to become the center of all possible original records and data having to do with the beginning and progress of Japanese business.

On the campus of Kobe University of Commerce, another organization named the Institute for Business Mechanization was founded in 1941 utilizing business machines donated by the IBM Corporation and others. With Professor Yasutaro Hirai as its head a broad and forward-looking plan for business mechanization in Japan was developed.

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