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ACCOUNTING PROFIT AND TAXABLE INCOME

Susumu Watanabe

I

According to our Corporation Tax Law, "the periodical income of an inland corporation is determined as the excess of revenues over expenses". And "otherwise provided by the law", revenues mean "all facts that will lead to the increase in its net assets less liabilities except by the issuance of the corporation's own capital shares," while expenses mean "all facts that will result in decrease in its net assets except by the retirement of capital or the distribution of income."

In this way, the taxable income is computed as the difference between revenues and expenses, i.e. by means of matching expenses with revenues, and not by comparing the net assets at the beginning and the end of the period. It is often said that our taxable income is based on the "increase in net worth" concept, but this remark is only acceptable in the sense that our law has not adopted the "recurring income theory" — which excludes from taxable income non-recurring income such as capital gains or donations — but includes in taxable income all increases in net assets (except by the issuance of capital shares) unless otherwise provided by the law. In this case, such decreases in net assets as have the nature of income distribution like household expenses are not taken into account. But as far as the method of income calculation is concerned, we use the method of matching expenses with revenues, and do not determine the periodical income by comparing net assets between two days. The above-mentioned definition of revenues and expenses only means that all sources of increase in net assets are factors of revenues and all sources of decrease are factors of expenses, but it does not assert that the income is to be computed by measuring the changes of the net assets.

Thus, we have come to understand the income concept under the tax law in outline, but we have not yet solved all problems. The net assets means the excess of the total assets over total liabilities of a firm at a given point of time. So, even if all sources of increase or decrease in net assets are said to be recognized as revenues or expenses, we must know for certain what are assets or liabilities in order to clarify the entire system of income accounting. It is clear that the purchase of fixed assets or inventories as such do not give rise to any
decrease in net assets, but there are some problems as to whether deferred charges or accrued revenues can be elements of assets, or among various reserves of a liability nature, which shall participate in the calculation of net assets. On these points, our tax law takes the step of settling the matter according to specific provisions, without forming concepts of assets or liabilities. For example, it exemplifies some deferred charges to be treated as assets, laying down the method of amortization. Accrued revenues are considered to be assets as a rule, though there is no general provision for them. Generally speaking, we may say that the extents of assets and liabilities under the tax law are going to correspond with those of business accounting more and more. But according to our corporate accounting principles allowances for bad debts belong to a valuation account, while the reserve for retirement allowances and allowances for special repairs are classed under liability reserves, but the tax law does not share in this view. We shall return to this problem later.

Moreover, when it requires a rather long period according to the contract to collect the price of something sold, it is open to question whether we should treat the whole selling price as revenue during the period of the sale on the ground that an increase in net assets has taken place (as we have a claim to the whole price). As to installment sales and sales with conditions of deferred payment, we find a special provision in the tax law allowing the adoption of “the due date basis” which shall be explained later. This may be due to the fact that the law has come to recognize the impropriety of applying the “increase in net worth” concept in these cases. There are no such exceptions, however, as to a sale contract according to which the price is to be collected not in installments but after a considerably long period.

Thus, the income accounting system under the tax law is definitely constructed in outline, but in detail it leaves many problems to be solved in order to absorb the principles of modern business accounting.

II

In the following, accounting profit means the net income calculated in accordance with the corporate accounting principles. The income under accounting provisions of the commercial law is also a sort of business income. But the structure of income accounting under the commercial code, though not so obvious, seems to lay emphasis on the calculation of a profit distributable as dividends. For example, the commercial code stipulates that current assets are to be valued at their current price, when it is much lower than its original cost, excluding the case when the current price is expected to recover up to the
original cost (as the original cost basis approves valuation at cost even when the current price is lower than the original cost, except in case of physical deterioration or obsolescence, this stipulation is not on the original cost basis). And, although it is allowed to list the organization expense, development expense and experimental and research expenses as assets on a balance sheet, the commercial code disallows appropriating for dividends the excess, if any, of the total sum of the above-mentioned expenses over the sum of capital surplus and legally restricted earned surplus under section 288 (including the amount of profit to be reserved for this period).

On the other hand our corporate accounting principles state as follows: “the income statement shall cover all the revenues and expenses for the period and show net income for the period, in order to report the result of business activities”, and “all revenues and expenses are to be reported on the basis of receipts and expenditures, and they are to be properly allocated to the periods concerned.” “According to the proper accounting principles, the accrual basis is applied in the first place for the purpose of recognizing revenues and expenses, but besides this principle, the realization principle is also applied, viz. revenues and expenses which take part in the calculation of net income for the period should be those realized in the period.” “As a general rule, the accounting evidence of realization is provided by the fact that articles or services produced by a firm have been sold to a customer, we call this the sales basis.”

In short the net income of a period is determined by deducting all realized expenses from revenues realized in a period. But there lies no definition of revenues or expenses as such.

It should be noted here that the revenue in the corporate accounting principles do not concur with that of the tax law, for the accounting principles state: “A clear distinction should be drawn between capital transactions and profit and loss transactions, and especially capital surplus must not be mixed up with earned surplus”, treating following items as capital surplus; gains on sales of the corporation’s own stock (which, they assert, are properly put in capital surplus because, differing from gains on sale of other securities, they are part of stockholders’ paid-in capital and have essentially the same nature as the premium on capital stock), donations by stockholders with the implication of additional investment, gains from forgiveness of debts admitted by stockholders and creditors for the purpose of making up a deficit, governmental subsidy in aid of construction, customers’ contributions to the cost of constructing facilities, and gains on insurance claims applied to the reconstruction of destroyed assets.

All these items belong to revenue under the tax law, because all of them are “those facts which will lead to the increase in its net assets except by the issu-
ance of the corporation's own capital shares." Surely, when revenue is produced either by gifts of private means (including forgiveness of debt) by directors, etc. in case of the arrangement of a corporation, or by the cutting down of a deposit in a bank, and used to make up a loss forwarded (or what remains after deducting reserves, if any, from the loss) which is not subject to application of tax law § 9-5 (which admits 5 years carry forward of loss), then no tax is levied on the part of these revenues applied to make up the loss. This provision, however, is nothing but an exception to the general rule of treating gifts as revenue.

The corporate accounting principles assert: "There comes out no income from capital transactions," and considers the above-mentioned sale of the corporation's own stock, etc. as belonging to capital transaction.

Here we find a wide gap between the conception of the tax law and that of corporate accounting principles concerning capital or capital transaction. The capital under the tax law means, as above mentioned, what has been contributed by stockholders, while the accounting principles regard as capital not only the contribution of stockholders but also what has been offered by a third person, so long as it should be maintained as capital of the firm in accordance with the purpose of the offerer. Therefore, gifts in the sense of capital invested (governmental subsidies in aid of construction, etc.) will lead to an increase in net assets, which the tax law takes for revenue, but the corporate accounting principles consider this kind of increase in net assets as a result of a capital transaction, and no revenue occurs.

A remarkable difference can also be found as to the interpretation of a profit from consolidation.

The corporate accounting principles take the viewpoint of putting a profit from consolidation (an excess of an increase in capital of the acquiring corporation over the amount of net assets acquired from the absorbed corporation) as a whole in capital surplus, saying: "Acquisition of property from the absorbed corporation can be regarded as an investment in kind from the viewpoint of the acquiring corporation."

On the other hand, the tax law divides a profit from consolidation into the following parts: (1) the amount consisting of the capital surplus of the absorbed corporation, (2) the amount of a gain on the reduction of capital in connection with consolidation, (3) the amount composed of the earned surplus of the absorbed corporation, (4) the amount of other parts (consisting of the revaluation profit of assets). And each part is subject to different treatment. Namely, (1) and (2) are not treated as revenue but as capital surplus, (3) is not put in revenue but in earned surplus, and (4) is made an object of taxation as income. Such a distinction is necessary in order to separate capital surplus which is free from
income tax even when returned to stockholders, from earned surplus (which gives rise to the problem of income tax and dividend credit when distributed to stockholders), and to impose a tax on the revaluation profit of assets (for the writing up of fixed assets will lead to an increase in the depreciation charge of the acquiring corporation, and the writing up of inventory will add to the cost of sales). Therefore, it would be impossible for the tax law to admit the viewpoint of the corporate accounting principles without dealing with these problems.

It is also to be noted that our revised commercial code provides that of a profit from consolidation the amount corresponding to the earned surplus of the absorbed corporation may not be put in capital surplus (but in this case the amount of the earned surplus of the absorbed corporation shall be included in the legally restricted earned surplus of the acquiring corporation).

The above-mentioned differences between business income and taxable income is attributable to a divergence of capital concept (and so the concept of income), and must be said to be a fundamental problem. In other words, they are not differences in timing of revenues and expenses (if so, the total of revenues or expenses of both would turn out to be the same in the long run). The disparity is absolute, for a capital surplus on the one side is treated as an item of revenue on the other.

III

The basis of the tax law that determines the time of revenue recognition is considered to be the “kenrikakutei-shugi” (a kind of accrual basis). This consideration has a basis on the following provisions. The notification concerning the corporation tax law provides: “a profit or loss on sale of an asset shall be included in the revenue or expenses of the period in which the sales contract comes into effect, without regard to the registration of the transfer of title, or completion of the payment of the price. But as far as a sale of merchandise is concerned, the profit or loss may be included in the revenue or expenses of the period in which the goods have been delivered.” And according to the personal income tax law, an income from an enterprise means the gross receipts of the year minus necessary expenses, and “the amount of gross receipts means the sum of what are to be received.”

It will be proper to interpret that the above provision of the notification assumes the existence of objects of the sale and that “the day when the sales contract comes in effect” means the time when the title of the object has been transferred. For when the objects of sale are neither existent nor specified, it is impossible to transfer its title, and even if the sales contract has come into
force, there is no transaction in the economic sense and no increase in net assets, so long as the transfer of the title has not been made. When revenue accrues from an offer of services coming to an end in a short time, we understand the revenue will be recognized on the basis of its completion.

On the other hand, "An opinion on the adjustment between the Tax Law and Corporate Accounting Principles" says: "Since the tax law adopts the legal basis of revenue recognition, the meaning of a sale tends to be interpreted as a transfer of title in a legal sense. But the selling activities in a business transaction have so complex forms and implications that it is desirable for the tax law not to adhere to the legal basis but to admit as a basis of revenue recognition those facts which we generally accept as an execution of a sale from the viewpoint of a sound commercial practice." But we think the tax law is required to establish such a legal basis as a general principle applying to all cases not otherwise provided by the law so that it may treat all taxpayers equitably.

In case of a sale of merchandise, however, there occurs no practical problem, since it is allowed to record the profit or loss in the period in which the delivery has been made.

The legal basis under the tax law gives rise to a difference from the corporate accounting principles as to the recognition of revenue on special forms of sale, too.

For instance, under the tax law a profit or loss on commission sale "is to be treated as the revenues or expenses of the period in which the consignee has sold the consigned goods. Accordingly, it is necessary to ask for the account of sales concerning the consigned goods at least once in every period." On the other hand the corporate accounting principles state: "As to consigned goods there are cases, different from usual sales of goods, where it is difficult to apply the ordinary sales basis for the recognition of revenue on the sale, and so it is admitted to take as the basis of revenue realization, the day when the account of sales on the consigned goods sold has been received by the consignor." The basis taken by the tax law may be justified from the viewpoint of the legal nature of consignment. For if the sales revenue is allowed to be credited on the day when the account of sales was received, it would leave room for the manipulation of the timing of revenue recognition.

In case of the installment sale, the tax law adopts "the due date basis," while the corporate accounting principles adopt the collection basis. According to the due date basis, the amount to be received during the present year is to be credited to revenue, even if that amount has not yet been collected. Strict application of the legal basis would lead to reporting all revenue on installment sales in the period when the goods were sold (delivered), but the tax law has
adopted the due date basis, regarding each due date as the time when the right of claim becomes definite, as the installment sale is a particular form of selling requiring a long time until the collection is completed.

IV

Finally we shall take up some problems on expenses which are deductible from revenue.

As to fixed assets the amount of expense in each period is calculated by way of depreciation, and as to inventories by the method of cost allocation. As far as methods of depreciation and of cost allocation of inventories are concerned, there are no wide differences between the corporate accounting principles and the tax law. We are faced, nevertheless, with the following problems with regard to depreciation.

Under the tax law, the depreciation charges to be deducted should be the amount taken by a corporation and under the limit determined for using the table of legal useful lives, which raises the following two problems. First, useful lives of the same sort of fixed assets are uniformly determined by the law so that they are not always in conformity with the circumstances of individual firms; and second, only the limit of depreciation is laid down by the tax law, and under that limit each firm has the freedom of determining the amount of depreciation to be taken. On this point the corporate accounting principles say: "Depreciation should be taken by the method elected in a regular and systematic manner. It is not allowed to increase or decrease as one pleases the amount of depreciation in order to manipulate income, for such manipulation goes against a reasonable depreciation system and results in an improper income accounting," and further "Although only the uniform useful lives prescribed by the tax law are now in use in our country, ...... it is necessary to establish a system of individual useful lives corresponding to each firm's circumstances in order to rationalize our depreciation system." And the revised commercial code also requires that a reasonable depreciation for each period be taken, supporting the so-called compulsory depreciation.

It remains unsolved whether our tax law should adopt the compulsory depreciation system in the future. Under the existing circumstances it is possible that the amount of depreciation tax-wise and that of corporate accounting principles or commercial code should differ, and in that case the amount of expenses or income may differ to that extent.

According to the tax law, expenditures of the period whose benefit extends over a year after the day of disbursement are allowed (or ordered) to be treated
as deferred charges, except that amount of expenditures which should be treated as a part of the acquisition cost of an asset or as a prepaid expenses. Consequently, expenditures in the period whose benefit will come to an end within a year are to be treated as expenses of the period.

In the tax law we find the most controversial problem on the recognition of expenses in the field of allowances. According to the corporate accounting principles, as mentioned above, the net income of a period is determined by deducting all realized expenses from revenues realized during a period. These expenses should be what are regarded to be properly chargeable to current income, and some of them may not be accompanied with any confirmed liability. For example, when a payment of a retirement allowance is provided by a labor agreement, the firm is liable to pay the money on the retirement of employees. In this case it is not until an individual employee has actually retired that the firm owes the liability to pay him (while he stays in the firm, it is unsettled whether he will get the right to receive the retirement allowance or how much the amount will be), but the firm recognizes its obligation as a whole and treats the amount to be credited to the retirement allowance during this period as an expense. In business accounting such treatment is accepted as a matter of course, and also the cost accounting standards treat this expense as a labor cost. The retirement allowance, the allowance for special repairs, and an allowance for bad debts are also recognized in the tax law, but they do not seem to have been allowed as a matter of course from the standpoint of matching expenses with revenues. Generally the tax law recognizes revenue on the basis of the confirmation of a right of claim. So, if the recognition of expenses is assumed to be made on the basis of the confirmation of a liability to pay, we must conclude that it is a concession of the tax law to have admitted those allowances before the confirmation of a liability.

Under the present tax law only those allowances and reserves are accepted that are legally provided, which have the merit of restricting firms to set up allowances and reserves freely and deduct them from revenues. But this is accompanied with the defect of excluding from expenses what are properly to be charged to this period in business accounting from the standpoint of matching expenses with revenues. In short, the tax law must be provided with a more up-to-date basis concerning the recognition of current expenses (especially with respect to expenditures in the future).

Besides what have been referred to above, differences between business income and taxable income are brought about by reason of a tax policy, tax administration and also by tax theories, making it necessary to study income accounting under the tax law as well as business accounting.
ON INTEGRATION IN ECONOMIC ACCOUNTING

Nobuko Nosé

I
Introduction

The Integration Problem which started as the integration of the National Income Accounting and Input-Output Tables in early 1950, proceeded to reach a further step and now covers all social accounting systems.\(^{(1)}\)

There are the following reasons to explain the present high interest in integration: First, no social accounting system can be applied universally, but each one has the limited function of a specific tool in a national economic budget. Thus i.) National Income Accounting can be used only for an aggregative and real budget, because it is not able to estimate the flow of intermediate goods, induced investment nor the flow of funds in detail. ii.) Input-Output Tables can only be used for a commodity flow budget, because they are not able to estimate final demands, induced investment nor flow of funds. iii.) Flow of Funds Accounting can only be used for ex post financial tables, because it has no definite economic model about flow of funds and is not connected with real flow accounting i.e. National Income Accounting and National Balance Sheets. iv.) The National Balance Sheet can not be used for stock budgets unless it is combined with real accounting and its financial accounting.

Moreover, present governments need integrated systems of the above social accounting system, because integration offers many possibilities in the choice of national budgets according to particular economic situations. Added to this, integration gives identifiability in each account, thus saving time and money for calculations. This is the background which promoted integration in social accounting systems.

Now, if we intend to succeed to integrate individual social accounts, we must solve at least two problems, because the above-mentioned systems have their own specific purposes and processes of development. At first, we have to establish a “theory of value"\(^{(2)}\) for the integration of each system. A “theory of value” implies a theory which is able to set a functional relationship between


the variables of all partial social accounts and to build a general model for the
economic budget of a nation. Secondly, we have to elaborate a general social
accounting principle which can reconcile the principles of all social accounting
systems. As we know, there are many established accounting principles and
conventions in each social accounting system and they are all different from each
other. Present works about integration aim to solve these two problems, though
their weight is not equal.

We have set two tasks in this article: first, to epitomize the present works
about integration, and secondly, to examine and criticize these works in order
to arrive at some suggestive conclusion which would help to carry the problem
further.

II

Epitomization of Present Works

When we summarize the most recent works about integration of social
accounts, we notice that i.) all these works try to integrate National Income
Accounting and the other systems, treating national income accounting as the
core in all social accounts and ii.) these works can be classified into two types:
one dealing with integration of real flow and/or stock accounting systems and
the other with integration of the financial accounting system with the real flow
accounting system.

As for the first type, Prof. Stone's 'Transaction Matrix' can be considered
as typical. Prof. Stone concentrated on the integration of real flow accounting
systems rather than on integration of real flow with real stock accounting. He
developed this system in a work, 'Transaction Models', which dates back
to the early fifties. The basic idea of his 'Transaction Matrix' is that i.) the
diagonal figure of the matrices shows always that intra-sector and intra account
transactions cancel each other out, ii.) Transaction Matrices are square matrices,
iii.) Transaction Matrices are applicable in all cases i.e. to show structural
relationships and to show more aggregate levels, iv.) these matrices have general
response matrices, which are applicable to the Leontief matrix as $BV^* + A^*$
and to the Keynesian model as $BV + A$. In this line of thought, Stone tried
to construct a general social accounting matrix and to group matrix $G_1$ and

$G_2$, which are now used for classifying and integrating rows of columns of social accounting matrices to obtain specific accounts suited to specific economic models. As footnote\(^{(6)}\) shows, he got the Input-Output Table and the National Income Accounts by using $G_1$ and $G_2$ respectively and then concluded that there is no difficulty of transformation of each other nor of their integration.

On the other hand, concerning integration of accounting principles, Stone did not give it much attention. He launched this interest in the valuation principle, after the publication of the ‘Quantity and Price Indexes’.\(^{(7)}\) In this book, Stone recommended the idea that the purchaser’s price is preferable to the producer’s price and this idea proves that his approach to integration is orientated towards ‘Income Approach’. In his following works,\(^{(8)}\) he revised this point and steadily approaches the accounting principle of the Input-Output Tables. But his ideas which originated from ‘Transaction Models’ are still maintained consistently through all his works. Also, concerning integration of the national balance sheet with real flow accounting, Stone describes it as follows:

\[
X^* = (A + B)X^* + Y^* = (I - A - B)^{-1}Y^* \\
X^+ = (I - A - B)^{-1}S
\]

(6) Stone’s method is the following: If we set $G_{ie}$ and $G_{ie}$ as the grouping matrix to obtain the Input-Output Accounting and $G_{ie}$ and $G_{ie}$ as the grouping matrix to obtain the National Income Accounting respectively, then the Input-Output Table and National Income Accounts can be derived from the Social Accounting Matrix. First, $G_{ie} = \begin{bmatrix} I & O \\ 0 & 1 \end{bmatrix}$ ... (1)

(where $I$ is a unit matrix whose number of elements is number of industries, $i$ is a unit row vector whose number of elements is the number of exogeneous sectors, $0$ on the right side is a $0$ matrix whose number of elements is the number of the square of exogeneous sectors and $0$ on the left side is a $0$ row vector whose number of elements is the number of exogeneous sectors.) $G_{ie} = \begin{bmatrix} I & O \\ 0 & 1 \end{bmatrix}$ ... (2) (where $0$ on the right side is a $0$ column vector, $0$ on the left side is a $0$ matrix and $i'$ is a transpose of $i$ and the number of elements of each symbol is the same as $G_{ie}$). $G_{ie}TG_{ie} = S_{ie}$ ... (3) (where $T$, $S$ stand for social accounting matrix and Input-Output matrix respectively.) Next, $G_{ie} = \begin{bmatrix} i' \\ 0 \end{bmatrix}$ ... (4)

(where $i$ is a unit row vector whose number of elements is the number of industries, $0$ on the right side is a $0$ row vector, $0$ on the left side is a $0$ matrix, $I$ is a unit matrix.)

$G_{ie} = \begin{bmatrix} i' \\ 0 \end{bmatrix}$ ... (5) (where $i'$ is a transpose matrix of $i$, $0$ on the right side is a $0$ matrix whose number of elements is the number of the sector of numbers in national accounts, $0$ on the left is a $0$ row vector whose number of elements is the number of sectors in national accounts.) $G_{ie}TG_{ie} = S_k$ (where $T$, $S_k$ stand for Social Accounting matrix and National Income Accounts respectively and the numbers of each symbol are the same as $G_{ie}$ respectively.)


\[ X = X^* - X^+ (I - A - B)^{-1} (Y^* - S) \]  

(3)

if set \( E \) as an operator,

\[ S = B E^{-1} X \]  

(4)

then, he obtained the following equation

\[ X = A X + B AX + Y^* \]  

(5)

(\text{where, symbols } X, X^*, X^+, A, B, Y^*, I, S, \text{ mean vector of actual level of total output, vector of the total output where there is no initial stock, vector of unnecessary output because of initial stock holdings, matrix of input-output coefficient, matrix of input-capital coefficient, final demand vector which excludes stock change, unit matrix and vector of stock respectively.)

Then, Stone concluded that these two systems — real stock and real flow — are integratable by using the transaction matrix. In this case, he did not give any reconciliating principle of the two accounting systems.

Next we have to epitomize the second type: the approach toward integration of Flow of Funds Accounting with National Income Accounting.

There are two approaches to this problem: one is contained in the report on the Federal Reserve Bulletin of the Board of Governors of the Federal Reserve System of the U.S.A. and the other in the report of the OEEC. First, let us epitomize the Federal Reserve’s work and those of scholars following its ideas.

In 1959, the Federal Reserve changed its accounting structure which is epitomized in Figure 1\(^9\) into a new accounting structure shown in Figure 2\(^{10}\).

<table>
<thead>
<tr>
<th>Figure 1 FOF’s 1955 Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Structure</td>
</tr>
<tr>
<td>1. Non-financial Transaction Account</td>
</tr>
<tr>
<td>2. Financial Transaction Account</td>
</tr>
</tbody>
</table>

(where \( S_1, S_2, F, U_1, U_2 \) mean: total of source of funds in non-financial transaction accounts, total of source of funds in financial transaction accounts, excess of funds, total of use of funds in non-financial transaction accounts, and total of use of funds in financial transaction accounts respectively.)


Figure 2

<table>
<thead>
<tr>
<th>Accounting Structure</th>
<th>FOF's 1959 Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Income and Appropriation Account</td>
<td>$Y_a + T = C + S$</td>
</tr>
<tr>
<td>2. Capital Account</td>
<td>$L + S = I + I_f$</td>
</tr>
<tr>
<td>3. Financial Account</td>
<td>$I_f = I'_f + L (L = \Delta F^e, I_f = \Delta F_a)$</td>
</tr>
<tr>
<td>4. Financial Balance Sheet</td>
<td>$F_a = F^e + B$</td>
</tr>
<tr>
<td>5. Summary of Flow of Funds Accounts</td>
<td>$\Sigma S = \Sigma I + \Sigma I'_f$</td>
</tr>
</tbody>
</table>

(where $Y_a, T, C, S, L, I, I_f, I'_f, F_a, B, F^e$ mean: available income, transfer, consumption, saving (gross), current liability, real gross investment, financial investment, net financial investment, financial assets, balancing items and liabilities respectively.)

By a revised accounting structure where the principle of sectoring and itemizing becomes more functional, the Federal Reserve intended to show i.) the financial behavior of individual economic units, i.e. the portfolio selection under a constant or a changing flow of funds and the level of financial stock ii.) the way which interlocks investment as a strategy of real budget and the Flow of Funds as a strategy of a monetary budget in economy as a whole. As this intention shows, it implicitly constitutes a new theory of the Keynesian liquidity preference and tries to go a step further to integrate the Flow of Funds system, National Income accounting and the Financial Balance Sheet. Moreover, it compares the accounting principle of the former two systems in order to reconcile their principles.

Prof. Siegel\(^{(11)}\) tries to make a further step in this line. He describes\(^{(12)}\) the difference between the three social accounting systems and sets the purpose of integration of National Income Accounting with the Flow of Funds System as a first step and integration of the Flow of Funds system with Input-Tables as a second step. In his recent work, Siegel constructs the new flow of funds accounts as shown in Figure 3.

Figure 3

<table>
<thead>
<tr>
<th>Accounting Structure</th>
<th>Siegel's FOF Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Production Account</td>
<td>$X = U + Y$</td>
</tr>
</tbody>
</table>


2. Appropriation Account  \[ Y = T + Y_a \]
3. Current Purchase Account  \[ Y_a = C + S \]
4. Tangible Capital Account  \[ S + d = I + F \]
5. Financial Account  \[ F + L = I + I_f \]

His work is founded on the assumption that the Federal Reserve's revision of 1959 is imperfect and that a greater activity basis should be introduced to integrate the two systems. He says moreover that the accounting principle of the Flow of Funds system has to be reformed to be brought nearer to the principle of National Income Accounting.

Secondly, we must epitomize the Financial Accounts established by the OEEC.\(^{(13)}\)

The principle in making these accounts is not founded on Keynes' and his followers' theory, but on a neo-classical view. The OEEC tries to integrate directly the operating account in National Income Accounting and the financial account. As a corollary, the financial account does not include \( S, I, I_f \) and their principle of sectoring the economy is different from the one of the Federal Reserve. There are only three main sectors: nonbank, bank and rest of the world. Financial intermediaries, households, firms and governments are aggregated into the one group-nonbank sector.

The accounting structure of the OEEC is as given in figure 4.

**Figure 4**

<table>
<thead>
<tr>
<th>Accounting Structure</th>
<th>Accounting Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. National Account</td>
<td>( X + I = X + E )</td>
</tr>
<tr>
<td>Nonbank Sector</td>
<td>( X + M = X + F_i - F_e )</td>
</tr>
<tr>
<td>Banking Sector</td>
<td>( N^e + F^e = M )</td>
</tr>
<tr>
<td>2. External Account</td>
<td>( E + F^e = I + N^e )</td>
</tr>
</tbody>
</table>

(\( Y, M, I, E, M, F_i, F_e, N^e \) mean: GNP, GNE, import, export, increment of money supply, monetization of inland credit, monetization of foreign credit, increment of claim in external sector to inland banking sector respectively.)

These accounts can be used for describing financial transactions in a given year. But they have another use, that of analysis and estimate of the relationship of financial flow and real national products. And in the latter use, the OEEC builds a model founded on Prof. Polak's work 'Income Formation and

The OEEC model which is called an analytical table for 'expenditure gap' is as follows:

\[ X - Y_o = (y - y_o)P_o + (P - P_o)y + D \]  \hspace{1cm} (1)

\[ M = \mu_0(y - y_o) + \mu_0(P - P_o)y + D \]  \hspace{1cm} (2)

(where \( M, Y, y, P, D, M, \mu \) mean: GNE, GNP, real national product, general price level, excess import, total money supply, \( \frac{1}{V} \) and suffix 0 means previous year.)

As for the financial flow, quantity of monetization is defined as follows:

\[ M = F^i + F^e + F^m \]

\[ M = \Sigma M - \Sigma M_o = \mu Y - \mu_0 Y_o \]

\[ = \mu_0(y - y_o) - (\mu - \mu)Y \]

\[ = \mu_0(y - y_o)P - (P - P_o)y - F^m \]

(where \( F^i, F^e \), are defined as above and \( F^m \) is the relative contraction of the quantity of liquidity in an economy, caused by \( \mu \) decrease, makes an element of the quantity of total monetization that produces the total expenditure gap. \( \mu \) corresponds to Marshallian \( k \) and \( \frac{1}{V} \) in the Polakian model. Therefore, the characteristics of the OEEC system are an integration from the neo-classical view and have no saving-investment-financial investment relationship.

### III

**Critique of Present Works on Integration**

First, we have to examine the integration of the 'real type'. The main problem in Stone's work is the question whether the inter-industry table derived from the social accounting matrix is a true Leontief table or not. As we have seen in the previous chapter, Stone's Inter-industry Table is a transaction matrix in the same way as a social accounting matrix is a transaction matrix. Therefore, in his Input-Output Table derived from the social accounting matrix, all intrasector transactions being cancelled out, the input-output coefficients exclude all \( a_{ii} \). This matrix is evidently not equal to the original Input-Output Table, where \( a_{ii} \) is not equal 0. In other words, the original Input-Output Table is a gross basis and Stone's Input-Output Table is a net basis and they are not

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identical. On this point, Evance, using Kronecker’s delta, tried to change the gross real flow into a net real flow and this work is suggestive for us. But Evance’s work intended to transform the two physical flow systems. About this, we must adjust it to get a value flow table, because the operational and integratable Input-Output Table with the other social accounts should be represented in terms of money. Thus, we have to get an equation to change Stone’s table into a true Leontief table in the following way:

First, the open Leontief model is represented as in the equation:

\[
\begin{bmatrix}
    x_{ij} & y_{ir} \\
    v_{ri} & 
\end{bmatrix}
\begin{bmatrix}
    X_i \\
    V_r 
\end{bmatrix}
= 0
\]  

(1)

(where \( x_{ij} \) is the amount of \( j \) industry to produce an output of \( i \) industry, \( y_{ir} \) are \( r \) sectors’ final demands to \( i \), \( X_i \) is the total output of \( i \) industry, \( v_{ri} \) are \( r \) factors of production used in \( i \) industry and \( V_r \) is the total of \( v_{ri} \).)

Next, to obtain a matrix where intra-sector transactions are cancelled out, that is, the net flow matrix, as above mentioned, Prof. Evance gives the equation:

\[
x_{ij}(1-\delta_{ij})+\Sigma y_{ir}=X_i-x_{ii}
\]  

(2)

\[
\Sigma a_{ij}(1-\delta)X_j+\Sigma y_{ir}=X_i(1-a_{ij}^*)
\]  

(3)

(where \( \delta_{ij}, a_{ij}^* \) stand for Kronecker’s delta and the input-output coefficient in terms of physical units.) By dividing by \( (1-a_{ij}^*) \), and getting \( \frac{a_{ij}^*(1-\delta_{ij})}{1-a_{ij}^*}=a_{ij}^* \),

\[
\Sigma a_{ij}X_j+\Sigma \frac{y_{ir}}{1-a_{ij}^*}=X_i
\]  

(4)

Then, we must transform the equation (4) into a new one in terms of value:

\[
\Sigma a_{ij}\left( \frac{P_i}{P_j} \right)P_j X_j+\Sigma \frac{1}{1-a_{ij}^*} P_i y_{ir}=P_i X_i
\]  

(5)

(where \( P_i, P_j \) stand for the prices of \( i \) products and of \( j \) products respectively.) If we set \( a_{ij}=a_{ij}^\prime \left( \frac{P_i}{P_j} \right) \), \( b_{ir}=\frac{P_i}{1-a_{ij}^\prime} y_{ir}, P_iX_i=Y_i \), then we get

\[
\Sigma a_{ij}Y_j+\Sigma b_{ir}=Y_i \quad (i=1, 2, \ldots, n)
\]  

(6)

If we multiply \( v_{ij} \) with \( q_r \), the prices of factors of production, in order to express it in terms of value,

\[ \sum_{i=1}^{n} q_{vri} = q_{vr} \quad (r=1, 2, \ldots k) \]  \hspace{1cm} (7)

Then we can transform the equation (1) into a net matrix in terms of value.

\[
W = \begin{bmatrix}
    a_{ji} & Y_{j} & b_{ij} \\
    q_{vri} & 0
\end{bmatrix} \hspace{1cm} (8)
\]

(Where \( W \) is a transaction matrix which has the ability to transform a net matrix into a gross flow matrix.)

Obviously, \( W \) has a merit which the Stone system did not have, as it allows us to prove clearly the defects of the Stone Input-Output Table. We must elaborate on the above operation, because here value has two meanings: value means "purchaser's price" and "producer's price." Obviously, to use the purchaser's price as in Stone's previous method, will introduce a change in the final demand automatically and without any relation to the physical structure, i.e. a change in the indirect tax (net) effecting \( a^* \). Therefore, we need a matrix which transforms the purchaser price into a producer price.

The above points are applicable to the integration of real stock with real flow. As seen above, the matrix from which Stone derives his idea about integration of stock and flow, is a transaction matrix.

These are the points which we wish to criticize in Stone's work: The Input-Output Table and the Stock table derived from a social accounting matrix, have an isomorphic character in National Income Accounting.

Secondly, we must examine the integration of 'the monetary type'. We will face more difficulties than in the integration of the 'real type'. There are multiviews on the relationship between the Flow of Funds and the real commodity market. Moreover the monetary multiplier (if we can call it like this) is not able to define nor to estimate, because this coefficient can easily be moved by institutional conditions.

Now we have to examine the work of the Federal Reserve. Through their revision, Flow of Funds accounts are apparently improved, as i.) a more functional-view of division in sectoring and in the design of accounts is introduced and ii.) saving-investment-financial investment is clearly observable in the summary account and iii.) the behavior of the individual in the financial flow and assets is observable. It seems that the above merits make this table the best in present national financial accounting.

But, we have some reservations on this table in spite of its improvement, as the integration problem itself is not so much improved even in the integration of National Income Accounting with the Flow of Funds system. The Federal Reserve does not try to establish a definite Money-Income Relationship and
asserts that this table is usable not as a hypothetical budget but as a 'neutral'\(^{(16)}\) ex post table. On the other hand, Liquidity Preference theorists do not supply a definite model for a relation between flow of funds and stock and national income.\(^{(17)}\) Concerning the integration of Flow of Funds Accounting and Input-Output Accounting, the situation is further worsened because:

1. The saving-investment accounts in the Input-Output Table are not yet established,
2. The accounting principles of the Input-Output Table and the Flow of Funds, i.e. the principles of sectoring, differ so greatly one from the other, that the interlocking of both flows is not apparent. Therefore, the Federal Reserve has to make a rearrangement of sector accounts on a dual line — on the institutional level and the activity level and has to settle the money-real coefficient (i.e. the monetary multiplier).

In Siegel's tentative approach, we have an appraisal, because the accounting structure represents capital transactions of the government and small business transactions which are not represented in the Federal Reserve's accounts. Moreover, his attitude toward integration is rather more positive than that of the Federal Reserve. But when we examine his new accounting design, we have the impression that this revised system resembles very much Stone's earliest accounts.\(^{(18)}\) We must also notice that Stone's accounts have been improved, because they had the defect of using the mixed principle of sectoring and of accounting design and have been introduced into present National Accounts. Therefore, Siegel's attempt follows the old-fashioned viewpoint of National Income Accounting. From the viewpoint of Flow of Funds Accounting, this revised system seems to be too complicated and to lose the character of Flow of Funds Accounts. Moreover, his earlier problematical proposal about integration of Funds Accounting and Input-Output Accounting has not yet been solved. Concerning the improvement of the technique of reconciliation of accounting principles, we must appraise the merit of this tentative approach as we did for the work of the Federal Reserve. But Siegel's work about model-buildings, as that of the Federal Reserve, has not been perfected so that we cannot construct an ex ante table of integrated systems from it.

Next, we must examine the Flow of Funds Accounts as presented by the OEEC. This table has the merit that i.) it is usable not only as an ex post table, but

also as an ex ante table, if we establish $\mu$, $m$ and the other exogeneous variables. These relationships are limited in number, therefore this table has an operational nature; ii.) concerning the integration problem itself, this system is very intensive; iii.) the method to construct the table is so easy that even underdeveloped countries are able to use it. However, this table is evidently too simple to be able to analyse the relationships between multi-sectors. For example, in the non-bank sector, households, businesses, governments and financial intermediaries are consolidated and saving-investment through financial intermediaries is cancelled out, so that we cannot analyse in detail the circulation of money in the economy. Moreover, this system relies on a neo-classical view, obliging us to adjust it, if the substitution effect on near money is large enough and the Keynesian hypothesis about $L_2$ has a real meaning.$^{(19)}$ In this connection recent Japanese experience shows that monetary policy on investment is considerably important.$^{(20)}$ Moreover, Prof. Goldsmith's data show that the sphere of money should be enlarged and that the function of financial intermediaries and the function of the capital market should be analysed.$^{(21)}$ Therefore, to rely too much on the Polakian model is not advisable, although its operational character as a national financial budget has an undeniable merit. Thirdly, to use $\mu$ is quite feasible, but $\mu$ is only an average and if we examine $\mu$ in detail, the value of $\mu$ differs from sector to sector and changes through institutional conditions. Fourthly, this system implicitly sets import as an endogeneous item. But actually $M$ is composed by various items, such as competitive import or complementary import and these items should be treated separately if we wish to make a step forward in integration, and obtain an integration of Flow of Funds Accounting and Input-Output Accounting proceeds. By applying the present OEEC system, we can only obtain the integration of National Income and supplied money — or the so-called quantity of monetization — at the aggregative level but nothing more.


The above critiques concern the systems of works which we have summarized in section 2. Now, we must add some more points regarding the more recent works for integration. The first point concerns the sectoring principle in National Income Accounting. The principle of which Stone outlined the criteria is yet unsettled because, whether all activities performed by government are productive or limited, some parts remain undetermined. As Prof. Barna said, this is an age old question, and an answer to this controversy is not given by Stone nor by his followers, so that we cannot project the effect of this strategy on the field of production by using this integrated national budget. Secondly, to obtain a more accurate analysis and project, we have to introduce the point of view of size distribution. This point, although taken up by Prof. Jasji, was not taken into consideration in the above works. However, size distribution of national income, national capital or capital of the business sector is very important, because if this principle is taken into consideration, we can not only examine the effect of an integrated national budget by social classes, but also improve further the social accounting systems. For example, by introducing this view, the Flow of Funds system can establish the pattern of the consumer's portfolio selection much better and National Income Accounting can show the pattern of redistribution and of the consumption function by social classes.

Thus, we can conclude that, if the works about integration are to be developed further, these points should be introduced to the sub-sector of each main sector in each accounting system.

IV

Summary and Conclusion

From the above analysis, we arrive at the following conclusions relative to present works on integration:

1. Integration of the 'real type' is yet imperfect, because i.) these works do not consider how to obtain the gross input-output coefficient nor the gross capital-input coefficient nor do they supply a consistent method for the reconciliation of accounting principles, ii.) their principal approach leans toward National Income Accounting.


2. Integration of the 'monetary type' has been improved, but has yet serious defects, because it does not give a reliable model-building concerning the flow of funds and the real commodity market.

3. Both the types have the common defect that they are inclined to obtain an improvement of the accounting technique only and neglect to examine the basic concepts of the present social accounting systems.

4. Moreover, present tentative approaches do not consider the viewpoint of size distribution. Therefore, if we use these systems, we cannot obtain an estimate of the effect of integrated national budgets on the income distribution and redistribution in social classes.

These are the four points which we should consider in order to improve integration in economic accounting.
ÜBER „COST ACCOUNTING STANDARDS“ IN JAPAN

Tetsuo Kobayashi

I


Auch die Aufstellung von „Cost Accounting Standards“ wurde zu gleicher Zeit angefangen. Aber der sich mit dieser Aufstellung beschäftigte Unterausschuß brauchte mehr als 10 Jahre, um den vorläufigen Bericht darüber zu erstatten, denn viele Schwierigkeiten mußten im Prozeß dieser Aufstellung überwunden werden.

Übrigens, wurden in Japan bis jetzt drei wichtige schriftliche Richtlinien zur Kostenrechnung, einschließlich dieses Berichtes, von öffentlichen Ämtern veröffentlicht.

Die erste ist „Die Regeln zur Rechnung der Herstellungskosten“, die 1937 vom Handels- und Industrieministerium (SHÔ-KÔ-SHÔ) veröffentlicht wurden. Die Aufstellung dieser Regeln wurde 1930 angefangen, um damalige schwere Flauigkeit durch Rationalisierung in den industriellen Kreisen zu überwinden. Das Komitee, das sich damals mit dieser Aufstellung beschäftigte, untersuchte die wirklichen Zustände der Kostenrechnung in verschiedenen Gebieten und zog aus diesen Untersuchungsmaterialien die Regeln heraus, nach welchen die industriellen Kreise ihre Rationalisierung stufenweise befördern konnten.
Diese Regeln zielten auf die aufklärenden Effekte im weiteren Sinne. Man sagt, daß „Grundlagen der Selbstkostenrechnung“ (bzw. „Allgemeine Grundsätze der Selbstkostenrechnung“) vom „Reichskuratorium für Wirtschaft, Deutschland“ als Muster dieser Regeln bedient wurden.


Aber mit der Wiederbelebung der japanischen Wirtschaft, ist das System des offiziellen Preises von sich selbst gelöst und auch die Grundzüge zur Kostenrechnung, deren Hauptzweck in der Preisbestimmung bestand, haben ihre Geltungskraft verloren.

Aus solchem Hintergrund der japanischen Wirtschaft, ist die neue Richtlinie zur Kostenrechnung erschienen. Diese neue Richtlinie, d.h. „Cost Accounting Standards“ nimmt Rücksicht auch auf die Nützlichkeiten der Kostenrechnung zur modernen Kostenkontrolle und betrieblichen Planung (vor allem, zur kurzfristigen Planung, die als Ausgangspunkt der Budgetierung bedient wird). Diese Nützlichkeiten der Kostenrechnung sind neulich sehr stark beansprucht worden.

Aber der Charakter dieser neuen Richtlinie zur Kostenrechnung „Cost Accounting Standards“ ist nicht einfach.

Erstens, wurde sie aufgestellt, indem „man, aus den verschiedenen Gewohnheiten der Kostenrechnung, die heutzutage in den Unternehmungen dieses Staates ausgeführt werden, die im allgemeinen anerkannten, herausgezogen hat“ (Vorwort zur „Cost Accounting Standards“). Sie führt nicht zur einheitlichen Kostenrechnung, sondern sie zeigt nur den Grundrahmen, innerhalb dem jede Unternehmung seine effektiven Kostenrechnungsverfahren bestimmen und ausführen kann. Sie umfasst die Grundsätze für die guten Gewohnheiten der Kostenrechnung. Insofern kann man nicht darin die einheitliche Theorie finden.
Sie ist vielmehr ein Produkt des Kompromisses von verschiedenen Stellungnahmen.


Dieser Versuch hat viele Schwierigkeiten mit sich gebracht. Denn es ist in einem Sinne widersprechend dem Axiom „unterschiedene Kosten für die unterschiedenen Zwecke“, daß man die verschiedene Zwecke in einem Kostenrechnungssystem erfüllen wollte. Und es ist auch zweifelhaft, daß man auch zu den Kostenrechnungsverfahren, die für die innerbetrieblichen Zwecke (z. B. für die betriebliche Planung, Budgetkontrolle und Kostenkontrolle) unter speziellen Umständen jeder Unternehmung beliebig ausgeführt werden sollen, den im allgemeinen anerkannten Grundrahmen vorschreibt.


Trotzdem sind einige Grundsätze und Verfahren der Kostenrechnung für die innerbetrieblichen Zwecke nicht ausgeschlossen. Sie sind in der Regel insofern aufgenommen worden, als sie die Verfahren für die Abschlußrechnung nicht stören, bzw. als ihre Einflüsse durch irgend eine Maßregel beseitigt werden können. Das stellt wahrscheinlich die Hoffnung von „Business Accounting Council“ dar, daß das wirkliche Kostenrechnungssystem, unter Berücksichti-

II

Im ersten Kapitel „Die Zwecke und die allgemeinen Grundsätze der Kostenrechnung“(1) sind zunächst die hauptsächlichen Zwecke der Kostenrechnung, wie folgt angegeben.

1. Zusammenrechnung der „echten“ Kosten, die um für die Kapitalgeber, Gläubiger und Unternehmungsführer, auf die Abrechnungsberichten, den Gewinn- und Verlustzustand in einer vergangenen Periode und den finanziellen Zustand am Jahresende darzustellen, beansprucht werden.

2. Vorbringen der Kosteninformationen für die Preiskalkulation.

3. Vorbringen der Kosteninformationen zu den Betriebsleitern in den verschiedenen Klassen für die Kostenkontrolle. Unter der „Kostenkontrolle“ wird eine Reihe von Aktionen zur Steigerung der Kostenwirtschaftlichkeiten (cost efficiency) verstanden; nämlich, um den Kostenwirtschaftlichkeiten zu steigern, werden die Kostennormen vorausbestimmt, vorgegeben und mit den tatsächlich verursachten Kosten verglichen, die Abweichungen werden analysiert und die analysierten Ergebnisse mit den angeschlossenen Informationen werden zu den Betriebsleitern berichtet.


(1) Der Aufbau von „Cost Accounting Standards“ soll am Ende dieses Aufsatzes dargestellt werden.
5. Vorbringen der Kosteninformationen für die Aufstellung des Grundplanes. Bei der Aufstellung vom Grundplan (Aufbauplan) werden die Willensentscheidungen über die fundamentalen Sachen der Betriebsstruktur, z.B. die Art der Erzeugnisse als Gegenstand der Betriebsleistungserstellung, die Betriebsstandorte, die Produktionsanlagen, abgestellt auf die Anpassung an den dynamischen Wirtschaftsveränderungen, getroffen, um die Betriebsstruktur rationell aufzubauen. Diese Entscheidungen werden gelegentlich getroffen.


Jedoch besteht das Hauptziel der japanischen Richtlinie zur Kostenrechnung, wie oben erwähnt, in der Feststellung solches laufend auszuführenden Kostenrechnungssystems, in dem die verschiedenen Kostenrechnungszwecke möglichst harmonisch erfüllt werden können, während das Ziel des amerikanischen Berichtes in der Regel auf die Erfassung der Beziehungen zwischen Kostenrechnungszwecken und Kostenbegriffen beschränkt war.

Somit sind in der japanischen Richtlinie die Kostenrechnungszwecke, deren Erfüllung das laufend auszuführende Kostenrechnungssystem in Anspruch nimmt, zu ermitteln. Und als solche sind im zweiten Abschnitt des ersten Kapitels die Hilfsfunktionen der Kostenrechnung zur Abschlußrechnung, Kostenkontrolle und Budgetkontrolle angegeben. Die Kostenrechnung für die Analyse und Würdigung der einzelnen Alternativen im Prozeß von Grundplanung und Budgetaufstellung, also die spezielle Untersuchung für die Ermittlung der speziellen Kosten (z.B. „differential cost“, „opportunity cost“, „imputed cost“) ist als die außerhalb des Kostenrechnungssystems gelegentlich auszuführende Rechnung charakterisiert und ihre Behandlung ist gemäß der Zielsetzung dieser Richtlinie ausgeschlossen.

Aus diesem Grunde nimmt diese, japanische Richtlinie zur Kostenrechnung („cost accounting standards“) Rücksicht nur auf die Kostenrechnungszwecke, die im laufend auszuführenden Kostenrechnungssystem erfüllt werden sollen, und die allgemeinen Grundsätze der Kostenrechnung für diese Zwecke sind wie folgt angegeben (im ersten Kapitel 6.):
1. **Für die Abschlußrechnung:**
   (1) Um die Kosten des bestimmten Erzeugnisses und die Periodenkos-
ten (bzw. Periodenaufwand) zu ermitteln, sollen im Kostenrechnungssystem die Kosten, bezogen auf die bestimmte Leistung, zusammengerechnet werden. Namlich, in der Regel, (a) sollen für jedes Erzeugnis die Herstellungskosten zusammengerechnet werden, um die Umsatzkosten jedes Erzeugnisses in der Gewinn- und Verlustrechnung mit dem betreffenden Umsatze richtig verglichen zu werden, und um die Herstellungskosten der Vorräte von Halbfabrikaten, Zwischenfabrikaten, Fertigerzeugnissen usw. in der Bilanz richtig dargestellt zu werden, und (b) die Vertriebs- und Verwaltungskosten sollen zusammengerechnet werden, damit sich sie in der Gewinn- und Verlustrechnung mit den Umsätzen der betreffenden Periode richtig vergleichen lassen.

(2) Die Kostenziffern sollen die von Urkunden des finanziellen Rechnungswesens und vertrauenswürdigen Statistiken begründete Zuverlässigkeit haben. Also sollen die tatsächlich verursachten Istkosten zusammengerechnet werden. Das bedeutet aber nicht notwendigerweise, daß man mit dem tatsächlichen Anschaffungspreis rechnen muß. Auch der vorherbestimmte Kalkulationspreis kann angewandt werden (bei Istkostenrechnung handelt es sich hauptsächlich um die Rechnung der tatsächlich verbrauchten bzw. verzehrten Istmengen — Verf.). Und wenn es notwendig ist, kann man auch zur Abschlußrechnung mit Standardkosten rechnen.

(3) Aber wenn man mit vorherbestimmtem Preise od. Standardkosten rechnet, ist es zur Abschlußrechnung notwendig, für die Abweichungen zwischen diesen Sollkosten und tatsächlichen Istkosten, entsprechende Ausgleichsmaßregeln zu treffen.

(4) Die Kostenrechnung soll in der organischen Verbindung mit Finanzbuchhaltung ausgeführt werden. Also in das Kontensystem sollen die Konten, welche die verschiedenen Kosteneintragungen zusammenfassen, eingeführt werden.

2. Für die Kostenkontrolle.

(5) Um die Verantwortlichkeit jeder Verwaltungsstelle für die Kostenverursachungen klar zu stellen, sollen die Kosten jeder Kostenstelle (od. jedes Kostenplatzes) zusammengerechnet werden. Dabei unter Voraussetzung, daß die Zuständigkeiten und Verantwortlichkeiten für die Verwaltung der Kostenverursachungen delegiert werden, werden die nach der Art der Aktion eingeteilten Kostenstellen jeweils als die Verwaltungsstellen für die Kostenverursachungen angesehen.

(6) Die Kostenarten sollen nach der Art der Funktion und ferner in Einzelkosten und Gemeinkosten, fixe Kosten und variable Kosten, kontrollierbare Kosten und unkontrollierbare Kosten eingeteilt werden.

(7) Der Schwerpunkt der Kostenrechnung soll im ganzen Rechnungs-
prozeß, d.h. von Bestimmung und Vorgabe der Kostennorm bis Kostenberichtigung, auf die Mengenrechnung gelegt werden.

(8) Die Kostennorm (cost standards) soll als Maßstab, mit dem die Kostenverantwortlichkeiten und die Kostenwirtschaftlichkeiten (cost efficiency) klar gestellt und gewürdigt werden können, eingeführt werden. Als solche Norm kann man auch die Istkosten der Vergangenheit heranziehen, aber die Standardkosten, die auf Grund der wissenschaftlichen und statistischen Untersuchungen bestimmt werden, sind viel besser.

(9) Die Istkosten sollen so systematisch eingetragen und zusammenge-rechnet werden, daß sie mit den Kostennormen richtig verglichen werden können.

(10) Die Kostenabweichungen sollen analysiert und berichtet werden.


3. Für die Aufstellung vom Budget, vor allem vom Aufwandsbudget und für die Budgetkontrolle.

(12) Man soll mit vorherbestimmten Kosten od. Standardkosten, die auf Grund der vorausgesehenen Bedingungen der Budgetperiode bestimmt werden, rechnen, und die tatsächlich verursachten Istkosten sollen so systematisch zusammengerechnet werden, daß sie mit dem Budget verglichen werden können.

III

rahmen, denn die Abschlußrechnung muß die sozialen Erfordernisse von verschiedenen Interessengruppen erfüllen.


Im zweiten Kapitel „Rechnung der Istkosten“ sind also hauptsächlich unter Berücksichtigung von Hilfsfunktion der Kostenrechnung für die Abschlußrechnung, die Kostenrechnungsverfahren für die Zusammenrechnung der Istkosten und damit für die Feststellung der Erzeugniskosten mit Istkosten beschrieben, und auf einige Erfordernisse von innerbetrieblichen Kostenrechnungszwecken ist nur stellenweise hingewiesen.

Dieses Kapitel besteht aus fünf Abschnitten, und die Kostenrechnungsverfahren, die sich auf den ganzen Rechnungsprozeß, d.h. auf die Kostenartengliederung, Kostenartensammlung, Kostenartenrechnung, Kostenstellenrechnung und Kostenträgerrechnung erstrecken, sind umständlich beschrieben. Aber weil wir wegen des begrenzten Raumes nicht alle vorstellen können, möchten wir nur auf einige charakteristische Merkmale solcher Kostenrechnungsverfahren hinweisen.

Beschäftigungsveränderung (d.h. die variablen Kosten und die fixen Kosten) und
(5). Gliederung (od. Spaltung) nach der Kontrollbarkeit (d.h. die kontrollierbaren Kosten und die unkontrollierbaren Kosten).

Also hier sind die Erfordernisse nicht nur von Abschlußrechnung, sondern auch von innerbetrieblichen Zwecken in Betracht genommen. Der Grund besteht darin, daß die Kostenartengliederung den wichtigsten Ausgangspunkt für die harmonische Entwicklung des Kostenrechnungssystems bildet. Wenn die Erfordernisse von innerbetrieblichen Zwecken hier nicht in Betracht genommen werden, also wenn die Kostenarten einmal nur von Erfordernissen der Abschlußrechnung gegliedert werden, können die Kostenrechnungsverfahren für die innerbetrieblichen Zwecke nicht vollständig entwickelt werden.


3. Über die Kostenstellenrechnung sind die Grundsätze der Kostenstellenbildung, die Verfahren für die Zusammenrechnung der Stelleneinzel- und Stellengemeinkosten und für die Umlage der Hilfskostenstellen auf die Hauptkostenstellen, und ferner die Erfordernisse der Kostenplatzrechnung angegeben. Dabei ist betont, daß die Kostenstellen unter umfassender Berücksichtigung von den Gesichtspunkten, die nicht nur für die genaue Kostenermittlung zur Abschlußrechnung, sondern auch für die Betriebskontrolle beansprucht werden, zu bilden sind, während die Zusammenrechnungs- und Betriebsabrechnungsverfahren hauptsächlich von Erfordernissen der Abschlußrechnung beschrieben sind.

4. Die Kostenträgerrechnung ist in vier Hauptformen eingeteilt: (1). die reine Divisionsrechnung (process cost system), (2). die Divisionsrechnung mit Äquivalenzziffern (class cost system), (3). die Sorten- bzw. Serienrechnung (lot cost system) und (4). die Zuschlagsrechnung (job order cost system). Dabei zeigt die dritte Form zwar die kombinierte Form der Divisions- und Zuschlagsrechnung, aber in dieser Richtung ist sie als eine Kategorie der Divisionsrechnung klassifiziert. Solche Auffassung hat man in Japan häufig. Der Grund liegt darin, daß man in Japan größeren Wert auf die Produktionszu-
TETSUO KOBAYASHI


Außerdem beschreibt diese Richtlinie die verschiedenen Verfahren der Kostenträgerrechnung, die vor allem zur bilanziellen Rechnung nützlich sind. Für die Betriebskontrolle bzw. Budgetkontrolle ist es zwar bemerkenswert, daß diese Richtlinie auf die Grenzkostenrechnung in der Divisionsrechnung hinweist (es ist auf die praktischen Durchführungsschwierigkeiten zurückzuführen, daß diese Richtlinie nichts von der Grenzkostenrechnung in der Zuschlagsrechnung beschreibt). Aber nur auf das Dasein solcher Kostenrechnung und ihre Einflüsse auf die Abschlußrechnung ist hingewiesen, und die Funktionen solcher Kostenrechnung zur Betriebskontrolle und Betriebsplanung sind nicht erwähnt. Allerdings ist das auf die Zielsetzung dieser Richtlinie zurückzuführen, und das bedeutet also nicht, daß die Grenzkostenrechnung bzw. das Teilkostendenken in der japanischen Praxis gering geschätzt ist.

5. Über die Vertriebs- und Verwaltungskosten sind nur die oben erwähnten Grundsätze zur Kostenartengliederung und damit einige Grundsätze zu ihrer Kostenartenrechnung angegeben, aber die Grundsätze und Verfahren ihrer Kostenstellenrechnung und Kostenträgerrechnung sind nicht beschrieben. Auch das ist darauf zurückzuführen, daß die Vertriebs- und Verwaltungskosten in der Regel den Kostenwert der Vorräte in der Bilanz nicht konstituieren, also daß sie gewöhnlich direkt als Aufwand der verursachten Periode verbucht werden. Als die innerbetriebliche Rechnung gibt es zwar die Notwendigkeit der Selbstkostenrechnung, aber sie ist in Japan als die Kostenrechnung für Abschlußrechnung nicht im allgemeinen angewandt.

IV

Im dritten Kapitel „Rechnung der Standardkosten“ sind die Zwecke der Standardkostenbestimmung, die Bestimmungsweise und Revision der Standardkosten und die Vorgabe der Standardkostenziffern erörtert. Aber die Verfahren der Standardkostenrechnung, die sich auf die Kostenartenrechnung, Kostenstellenrechnung und Kostenträgerrechnung erstrecken, sind nicht im einzelnen angegeben, denn die einzelnen Verfahren der Standardkostenrechnung,
die ursprünglich von innerbetrieblichen Erfordernissen entwickelt ist, sollen je nach der Notwendigkeit jeder Unternehmung gebildet werden. Hier ist nur der fundamentale Charakter der Standardkosten erörtert und es handelt sich hauptsächlich um die Bewertung der Erzeugnisse mit Standardkosten.

Zunächst sind die Zwecke der Standardkostenbestimmung, wie folgt, angegeben.

1. Die Standardkosten werden als die Kostennorm bestimmt, welche die Voraussetzung der effektvollen Kostenkontrolle bildet. Das ist der wichtigste Zweck der Standardkostenbestimmung.

2. Die Standardkosten bilden als die echten Kosten die Basis für die Bewertung der Vorräte in der Bilanz und für die Berechnung der Umsatzkosten.

3. Die Standardkosten bieten die zuverlässige Basis zur Aufstellung des Budgets, vor allem für die Aufstellung der vorhergesätzten Bilanz und Gewinn- und Verlustrechnung (d.h. des Gesamtbudgetes).

4. Die Standardkosten können die Verbuchungsarbeiten einfacher und schneller machen, indem man sie in das Kontensystem einführt.

Die Sollgrößen der Standardkosten sind eigentlich je nach dem Zwecke unterschiedlich. Nämlich zur Kostenkontrolle sollen die Standardkosten zu jeder Kostenstelle das zu erreichende Ziel zeigen, also auf den ziemlich hohen Wirtschaftlichkeitsgrad beruhen. Dagegen zur Budgetierung handelt es sich um die Vorherbestimmung der Istkosten, die in der Budgetperiode tatsächlich verbraucht werden, denn solche Standardkosten sollen in diesem Falle die umfassende Koordination aller Aktivitäten bewahren, also z.B. auch die Prognose des Finanzbedarfs ermöglichen. Und die Standardkosten als die echten Kosten, die für die Bewertung der Vorräte in der Bilanz beansprucht werden, sind die Kosten, die keinen Verlust, bzw kein Ungewöhnliches, Zufälliges, Extremes enthalten.

In dieser Richtlinie zur Kostenrechnung sind drei Typen der Standardkosten angegeben (im ersten Kapitel): (1) die realistischen Standardkosten, (2) die Normalkosten und (3) die vorherbestimmten Kosten. Außerdem sind auch die idealistischen Standardkosten, die mit größter Wirtschaftlichkeit und bei größtem Beschäftigungsgrad realisierbar sind, berührt, aber weil sie fast unrealisierbar, also wirklichkeitsfremd sind, sind sie aus Typen der Standardkosten im Standardkostenrechnungssystem ausgeschlossen.

Mit den realistischen Standardkosten handelt es sich um die Sollgrößen, die mit guten Wirtschaftlichkeiten realisierbar sind. So enthalten ihre Sollgrößen die Überschüsse für Mengenabnahme, Ausschuß, Leerlauf usw. insoweit sie in gewöhnlichen Zuständen erscheinen werden. Und zwar sollen solche Standardkosten auf den jeweiligen Beschäftigungs- und Preiszustand in näherer
Zukunft zugeschnitten sein.

Unter Normalkosten sind die Standardkosten verstanden, die auf Normalwirtschaftlichkeit, Normalbeschäftigungsgrad und Normalpreis beruhen. Um die Normalwirtschaftlichkeit, den Normalbeschäftigungsgrad und den Normalpreis zu ermitteln, schaltet man das Ungewöhnliche, Zufällige bzw. Extreme aus, nivelliert mit der Statistik die Istziffern der Betriebsaktivitäten in längeren Perioden der Vergangenheit und berücksichtigt die Zukunftstendenzen.

Die vorherbestimmten Kosten sind die Kosten, die mit dem erwarteten Istverbrauch und Istpreis gerechnet werden. Weil solche Kosten in der Praxis häufig als ein Typ der Standardkosten angesehen sind, sind sie in dieser Richtlinie als ein Typ der Standardkosten dargestellt, obgleich sie, genau genommen, nicht zu Standardkosten gehören.

Für die Kostenkontrolle sind unter diesen Typen der Standardkosten die realistischen Standardkosten am besten geeignet, für die Bewertung der Vorräte in der Bilanz die Normalkosten (im Falle des stabilen Wirtschaftszustandes) und für die Budgetierung die vorherbestimmten Kosten.

Aber in dieser Richtlinie zur Kostenrechnung („cost accounting standards“) ist der Unterschied von drei Typen nicht so klar dargestellt. Vielmehr erkennt sie an, daß ein Typ der Standardkosten, der für einen Zweck am besten geeignet ist, auch für andere Zwecke nützlich ist. Es ist z.B. geschrieben, daß die realistischen Standardkosten nicht nur für die Kostenkontrolle am besten geeignet, sondern auch bei der Bewertung der Vorräte in der Bilanz und bei der Budgetierung brauchbar sind. In diesem Sinne kann man auch sagen, daß jeder der oben erwähnten Typen der Standardkosten, nach der Auffassung dieser Richtlinie die Erfordernisse der innerbetrieblichen Kontrolle und die externe Berichtung nicht ausschließt.


Diese Meinung äußert sich auch in der Behandlung der Kostenabweichungen für die Abschlußrechnung (im 5. Kapitel). Nämlich werden nach dieser Richtlinie die Abweichungen der Standardkosten von Istkosten, wenn sie nicht wegen des ungewöhnlichen Zustandes verursacht werden, als Aufwand der betreffenden Periode verbucht. Anders gesagt, werden die Abweichungen
gewöhnlich, ohne sie auf die Vorräte in der Bilanz aufzuteilen, als Aufwand verbucht, also die oben erwähnten Standardkosten sind im Prinzip als die Bewertungsbasis in der Bilanz anerkannt.

V

Zum Schluß soll der Aufbau dieser Richtlinie zur Kostenrechnung in Japan (Cost Accounting Standards) dargestellt werden.

Erstes Kapitel: Die Zwecke und die allgemeinen Grundsätze der Kostenrechnung
1. Die Zwecke der Kostenrechnung
2. Das Kostenrechnungssystem
3. Das Wesen der Kosten
4. Die Begriffe der Kosten
5. Die Faktoren, die nicht zu Kosten gehören
6. Die allgemeinen Grundsätze der Kostenrechnung

Zweites Kapitel: Die Rechnung der Istkosten
7. Die Rechnungsverfahren der Istkosten
Erster Abschnitt: Die Gliederungsgrundsätze der Herstellungskostenarten
8. Die Gliederungsgrundsätze der Herstellungskostenarten
Zweiter Abschnitt: Die Kostenartenrechnung
9. Die Kostenartenrechnung
10. Die Gliederung der Kostenarten bei der Kostenartenrechnung
11. Die Rechnung der Materialkosten
12. Die Rechnung der Lohn- und Gehaltskosten
13. Die Rechnung der Unkosten
14. Die Anwendung des vorherbestimmten Preises usw. auf die Kostenartenrechnung

Dritter Abschnitt: Die Kostenstellenrechnung
15. Die Kostenstellenrechnung
16. Die Bildung der Kostenstellen
17. Die Stelleneinzelkosten und die Stellengemeinkosten
18. Die Verfahren der Kostenstellenrechnung

Vierter Abschnitt: Die Kostenträgerrechnung
19. Die Kostenträgerrechnung und die Kosteneinheit
20. Die Formen der Kostenträgerrechnung
21. Die reine Divisionsrechnung
22. Die Divisionsrechnung mit Äquivalenzziffern
23. Die Sorten- bzw. Serienrechnung
24. Die Gesamtkosten der Fertigerzeugnisse in einer Periode und die Halberzeugniskosten am Periodenende bei der Divisionsrechnung
25. Die mehrstufige Divisionsrechnung
26. Die Divisionsrechnung, bei der die mehrstufige Rechnung nur auf die Bearbeitungskosten angewandt wird
27. Die Behandlungsweise der Fehlleistung und Mengenabnahme
28. Die Behandlungsweise der Nebenprodukte und die Bewertung des Nebenproduktes
29. Die Rechnung der Kuppelerzeugniskosten
30. Die Grenzkostenrechnung (direct costing) bei der Divisionskostenrechnung
31. Die Zuschlagskostenrechnung
32. Die Zurechnung der einzelnen Kosten
33. Die Verteilung der Gemeinkosten
34. Die Verteilung der Bearbeitungskosten
35. Die Rechnung der Fehlleistungskosten und ihre Behandlung
36. Die Behandlungsweise des Ausschusses
37. Gliederungsgrundsätze der Vertriebs- und Verwaltungskostenarten
38. Die Rechnung der Vertriebs- und Verwaltungskosten
39. Die Kosten der Untersuchung der Techniken

Drittes Kapitel: Die Rechnung der Standardkosten
40. Die Zwecke der Standardkostenbestimmung
41. Die Bestimmung der Standardkosten
42. Die Revision der Standardkosten
43. Die Vorgabe der Standardkosten

Viertes Kapitel: Die Ermittlung und Analyse der Kostenabweichungen
44. Die Ermittlung und Analyse der Kostenabweichungen
45. Die Kostenabweichungen im Istkostenrechnungssystem
46. Die Kostenabweichungen im Standardkostenrechnungssystem

Fünftes Kapitel: Die Behandlung der Kostenabweichungen für die Abschlußrechnung
47. Die Behandlung der Kostenabweichungen für die Abschlußrechnung
A NOTE ON THE LOHMANN-RUCHTI EFFECT

Isao Nakano

I

The Lohmann-Ruchti Effect means the automatic growth of productive capacity of a group of plant assets by a certain policy of replacement, namely by continuous investment of accrued depreciations. It was in West Germany that this effect first drew the attention of the people and became a subject for theoretical study. In post-war West Germany the industries suffered most seriously from a scarcity of plant capital, and they had to solve the problem of finding new funds. For the purpose of recovering production in the industries, it was necessary to avoid introducing borrowed capital and to check outflow of proprietors' capital in restraint of dividends, applying these funds to the reconstruction and development of firms. Induced by these circumstances, the effect of the expansion of productive capacity by continuous reinvestment of depreciations has turned out to be an object of strong attention.

II

The above-mentioned effect is attributable to a characteristic of depreciation. In most cases the depreciation on plant assets merely means a decrease in their book values rather than a deterioration in their capacities, so that funds retained by depreciation, different from those corresponding to other expenses, are not reinvested within a short period. As this kind of funds need not be used to replace the depreciating assets for the time being, it becomes clear that they can be used to purchase additional plant assets.

To illustrate this effect, we assume the following case. A group of 50 machines of the same sort are acquired and put to use. Depreciation accruing from these assets each year is directly applied to purchase the same kind of machines, whose purchase price (100 DM per machine) does not change during the whole period. Accordingly the number of machines increases at least in

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(1) This designation is taken from the names of two German scholars, M. Lohmann and H. Ruchti, who were the first to make a systematic study of this problem.

(2) Cited from: Karl Hax, Die Substanzerhaltung der Betriebe, Köln und Opladen, 1957, pp. 230-231,
Movement of a group of machines (50 at first) with a useful life of five years per machine, straight-line method of depreciation, and continuous replacement

<table>
<thead>
<tr>
<th>Beginning</th>
<th>Number of Machines</th>
<th>Cost Price</th>
<th>End</th>
<th>Annual Depreciation Charge 20%</th>
<th>Sum of Depreciation Charges</th>
<th>Book Value 3-6</th>
<th>Additional Purchase</th>
<th>New Book Value</th>
<th>Number of Machines</th>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Going out</td>
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<td>50</td>
<td>50,000</td>
<td>0. Year</td>
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<td>10,000</td>
<td>50,000</td>
<td>50</td>
</tr>
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<td>60,000</td>
<td>1. Year</td>
<td>12,000</td>
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<td>72,000</td>
<td>2. Year</td>
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<tr>
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<td>3. Year</td>
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<td>5. Year</td>
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<td>15,000</td>
<td>49,200</td>
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<td>6. Year</td>
<td>15,800</td>
<td>49,200</td>
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<td>82</td>
<td>82,000</td>
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<td>11. Year</td>
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<td>13</td>
<td>83</td>
<td>83,000</td>
<td>12. Year</td>
<td>16,600</td>
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<td>32,600</td>
<td>17,000</td>
<td>49,600</td>
<td>50</td>
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</tbody>
</table>
A NOTE ON THE LOHMANN-RUCHTI EFFECT

The early years. Further we assume that the funds provided by depreciation at the end of each year is wholly available and used to acquire new machines on the first day of the following year, while the machines which are completely depreciated are scrapped. Column 3 shows the book value of the machine still in use each year, which becomes the basis of depreciation. Column 5 contains the depreciation of each year, and column 6 the sum of depreciation charges for the machines still in use (depreciation allowances). The amounts in column 7 are given as the differences between the cost prices of existing machines and the depreciation allowances on them. As annual deprecations (column 5) are used to purchase machines again on the closing dates, the book value rises through these additions again (column 8). And as seen from columns 2 and 12, the number of machines (and so periodic productive capacity) grows considerably by the policy of continuous reinvestment of depreciation charges (from 50 in 0. Year to 83 from 12. Year onward).

In essence this process of reinvestment of funds recovered from depreciation means that a certain amount of funds originally invested comes to be connected with a larger number of machines, so that we may call it a process of diffusing funds. Then, to what degree is this growth of productive capacity by diffusing funds possible? This problem depends on some conditions relative to the purchase of additional plant assets --- ex. whether new ones or used ones are acquired, whether price changes occur or not, and whether technical improvement has taken place or not --- on one hand, and on the ratio of the useful life of these assets to the average period required to recover the plant capital(3) on the other hand. If the assets to be purchased with recovered depreciation funds remain the same in quality and price as the original ones, the continuous reinvestment of depreciation will lead to a growth of the productive capacity to the extent determined merely by the above-mentioned ratio. When the capacity has expanded to this degree, "(1) the existing plant assets are distributed evenly among all ages. (2) The annual depreciation is just sufficient to replace the assets to be scrapped in each period, so that the balance on hand remains unchanged in number and book value."(4) This state of equilibrium is reached because the essence of the Lohmann-Ruchti Effect lies in allocating the currently recovered depreciation funds in excess of those necessary for current replacements to future periods in the form of reinvestments in additional productive capacities.

(4) Karl Hax, op. cit., p. 233.
III

For the purpose of establishing a law on the Lohmann-Ruchti Effect, one of following three patterns is assumed concerning the original investment in plant assets: (1) all the homogeneous assets are acquired at a time; (2) they are acquired gradually until the planned scale is reached; (3) various assets dissimilar in purchase prices and/or useful lives are acquired at a time. (ex. H. Langen, E. kosiol and K. Hax have recourse to (1), while H. Ruchti and K. H. Forster adopt (2) or (3) as the starting point). As there are no essential differences among them, however, we shall consider only case (1) in this paper.

When the original plant assets are thus assumed to have been acquired at once, the depreciation may be calculated by (a) the straight-line method or (b) the fixed percentage method, with the course of depreciation (α) corresponding to the course of provided services or (β) the depreciation going on faster than the course of provided services.

(a) The straight-line method is used.

(α) The course of depreciation corresponds to provided services.

In this case, the average period required to recover the plant capital being half the useful life of the machines, it may appear at first that the reinvestment of depreciation may double the productive capacity. It is not realistic, however, to assume a continuous reinvestment. When the useful life is \( n \) years, and the reinvestment is made at the close of each year, the average period required to recover the plant capital will amount to

\[
\frac{1}{n} + \frac{2}{n} + \cdots + \frac{n}{n} = \frac{1}{n} \cdot \frac{n+1}{2} = \frac{n+1}{2},
\]

so that the extent of capacity expansion is

\[
\frac{n}{n+1} \cdot \frac{2n}{n+1} = \frac{2}{1+\frac{1}{n}}.
\]

(β) The course of depreciation goes on faster than the course of provided services.

This is the case where the depreciation is completed before the end of the useful life of plant assets. Reduction of the period of depreciation (when compared with case (α)) leads to a shortening of the average period required to recover capital, which will increase the expansion of capacity to that degree. When the useful life of plant assets is \( n \) and the period of depreciation \( m(n \geq m) \), the average period to recover plant capital is

\[
\frac{m+1}{2},
\]

with the result that the
capacity expansion will amount to \( \frac{n}{m+1} = \frac{2n}{m+1} \) times. (ex. \( n: 10 \) years, \( m: 8 \) years, \( \frac{2n}{m+1} = \frac{20}{9} = 2.2 \)). So long as we take the case of a single asset firm, the sum of depreciation charges remains within its original cost, and so the over-depreciation in early years is surely offset by the under-depreciation (or no depreciation) in future years. But when reinvestment is being made successively, a state of equilibrium is attained where the over-depreciation on new assets is equal to the under-depreciation on old assets with some secret reserve existing at all times. Therefore the amount of invested plant capital is not constant but increases by the secret reserve.

(b) The fixed percentage method is used.

(a) The course of depreciation corresponds to the course of provided services.

When the pattern of services provided by the plant assets each year declines corresponding with the depreciation charges, it is impossible to increase the productive capacity by reinvestment of depreciations. It is true that the assets increase in number, but as the services provided each year drop with the lapse of their useful lives, the total provided services each year remains unchanged.

On this point H. Langen shows the following example.\(^{(5)}\) Suppose a firm acquires a group of homogeneous machines — capable of producing 200,000 units in total, with a useful life of 5 years and scrap value of 1 —— at a purchase price of 100,000 DM in total. In this case, it is a depreciation rate of \( 100 \left(1 - \frac{5}{100000} \right) = 90\% \) that will depreciate the assets to 1 DM in five years.

We assume that the course of depreciation corresponds to the course of provided services.

<table>
<thead>
<tr>
<th>Year</th>
<th>Remaining Capacity at the Beginning of the Year</th>
<th>Provided Service ( = 90% ) of (2)</th>
<th>Remaining Capacity at the End of the Year</th>
</tr>
</thead>
<tbody>
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<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
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<td>90,000 DM 180,000 units</td>
<td>10,000 DM 20,000 units</td>
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<tr>
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<td>9,000 DM 18,000 units</td>
<td>1,000 DM 2,000 units</td>
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<td>1,000 DM 2,000 units</td>
<td>900 DM 1,800 units</td>
<td>100 DM 200 units</td>
</tr>
<tr>
<td>1953</td>
<td>100 DM 200 units</td>
<td>90 DM 180 units</td>
<td>10 DM 20 units</td>
</tr>
<tr>
<td>1954</td>
<td>10 DM 20 units</td>
<td>9 DM 18 units</td>
<td>1 DM 2 units</td>
</tr>
</tbody>
</table>

When the funds recovered from depreciation are reinvested successively;

**TABLE II**

<table>
<thead>
<tr>
<th>Year</th>
<th>the book value at the beginning of the year</th>
<th>90% depreciation of (2)</th>
<th>the residual value after depreciation at the end of the year</th>
<th>reinvestment at the beginning of the next year</th>
<th>book value after the reinvestment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100,000</td>
<td>90,000</td>
<td>10,000</td>
<td>90,000</td>
<td>100,000</td>
</tr>
<tr>
<td>2</td>
<td>+90,000</td>
<td>+81,000</td>
<td>+9,000</td>
<td>+81,000</td>
<td>+90,000</td>
</tr>
</tbody>
</table>

The services provided by the assets are represented by the depreciation in column (3) of Table II. As they are constant, it is clear that no increase in productive capacity will take place by the reinvestment of depreciation.

(β) Provided services are constant.

When the acquisition price of original assets is $A$, we have a depreciation charge of $Ap (p=$ depreciation rate) for all years, because the depreciation charges are currently reinvested so that the net book value after deducting depreciation allowances remains constant and so the annual depreciation is also unchanged each year. On the other hand, the gross book value of machines increases constantly by $A + \frac{Ap}{100}$ each year during their first useful lives through additional purchases.

When the useful life of the original plant assets is $n$ years, the total gross book value reaches its maximum limit $A + (n-1) \cdot A \cdot \frac{p}{100}$. In the $n$th year the original assets are scrapped and a state of equilibrium is attained, where the gross book value is $A + n \cdot A \cdot \frac{p}{100} = A = n \cdot A \cdot \frac{p}{100}$. Compared with the straight-line method, the fixed percentage method recovers a larger part of plant capital in the early years of the useful lives of the machines, resulting in a shorter period of capital recovery and so a larger expansion of productive capacity. As in cases (a)-(β), here is an establishment of a secret reserve and a real increase in the amount of invested capital.

**IV**

It is pointed out that some premises are required for the Lohmann-Ruchti Effect to be realized in practice. K. Hax explains them as follows: (1) new capital to be invested in plant assets must be introduced into the firm first of all;
(2) the selling price of the manufactured goods must at least compensate the costs, namely the depreciation must really be recovered; (3) the funds collected through depreciation must be currently reinvested in new plant assets. If the recovered funds are not reinvested but applied to repayment of liabilities, the process of expansion of productive capacity will stop immediately. (4) The whole plant must be divisible to a large extent so that the depreciation for a year may be invested in a part of the plant immediately. The larger the waiting is in comparison with the useful life of the plant, the less the expansion effect becomes. (5) There must be necessity of increase in productive capacity. The expansion of production will be meaningless, if there is no market for the products\(^6\).

Further it is said that other sources of funds are necessary for this effect to be developed to the full, for the effect must be diminished to a considerable degree, when depreciation must also be the source of liquid assets to be increased corresponding to the expanded capacity.

V

When we are going to inquire into the significance of the Lohmann-Ruchti Effect, we must be aware of the fact that the effect does not require the expansion of productive capacity to be realized when it is not economically necessary. The Lohmann-Ruchti theory asserts merely that depreciation can be a source of funds for additional investment in plant assets when there is already the necessity of growth of the firm and expansion of productive capacity. And so long as the growth of capacity is necessary economically, it is a natural requirement from the viewpoint of application of funds that the fund recovered from depreciation (and the retained profit) should be its source first of all, and it seems that this kind of application of funds is already practiced through financial planning.

Even if the funds recovered from depreciation and retained profit are first of all used as the source of funds for expansion as well as replacement of plant assets, there may be in practice such a case where it becomes necessary to mix other kinds of capital with them. And in this case it is not the financial effect of depreciation alone but the effect of the combination of it with other sources of capital that can be obtained. Therefore, with the technique of accounting today it is difficult, they say, to ascertain the effect of depreciation alone. And further it becomes hopeless to measure it as the Lohmann-Ruchti Effect has to do with a long period, making the significance of this theory dubious.

\(^6\) K. Hax, op. cit., p. 226.
Indeed it would be difficult to analyze a practical case to determine how far the growth of plant assets has been due to the Lohmann-Ruchti Effect. But for financial planning the most important problem lies in making receipts cover expenditures for investment in plant assets rather than an analysis *ex post facto*. And when the funds recovered from depreciation are appropriated for the purpose of expansion of plants, we find a form of the Lohmann-Ruchti Effect there.

Perhaps we may regard this effect as a matter of common knowledge. But this theory has contributed to demonstrating the possibility of the function of the internal finance of depreciation and to determining its maximum extent. And it will give us some advantages by making us aware of this function of depreciation. For instance, the Lohmann-Ruchti Effect will be of great importance, when in spite of an urgent necessity to expand productive capacity in the face of increasing demand external capital is unavailable and the high corporate income tax makes it hopeless to resort to retained profit. In such a case liquidated funds from depreciation can be planned to be set aside and reinvested. Of course it may not be possible to assert that we are all suffering from such an extreme scarcity of external funds as was found in post-war West Germany where this effect became the object of public attention. But it is possible there are individual firms which are in want of external funds and retained profit, though they have a hopeful market. And in these cases this theory will offer a valuable guide.

To sum up, the Lohmann-Ruchti Effect seems to be naturally realized through financial planning in case of a growing concern, and when it does not appear very hopeful to have recourse to external funds and retained profit in spite of the urgent necessity of expansion of productive capacity, we must plan an application of the depreciation funds in accordance with the Lohmann-Ruchti theory.
MANAGEMENT APPROACH TO REGIONAL DEVELOPMENT PROBLEMS IN JAPAN

Minoru Beika

I

Regional development depends on dynamic activities by various public and private organizations, and individuals in the community, balanced physically, economically, and socially. Industrial development is not the only way to develop prosperous regions, but yet is one of the most effective. This article aims to approach comprehensibly the regional development problems in Japan, laying stress on industrial development by the application of management philosophy.

The regional development policy of our central government of Japan is now to restrict the excessive concentration of industrial activities in a few central industrial districts and to diminish the economic differences in backward local districts. This clear policy was begun just three or four years ago. The government policy relating to regional development started about 1950, after World War II. At first, the policy of this new act for the national development program chiefly aimed at land conservation and the development of natural resources unutilized as yet, since the country had been desolated and reduced to dire poverty by the War. At the same time, the local government and communities were eager to induce new industrial plants in their districts to recover their economic condition, with the chance of raising their property tax. Some regional development acts by several regions had been established for more comprehensive development programs on the one hand, while excessive competition for the inducement of new industrial plants by the local governments and communities had resulted in the establishment of a systematic policy of information about suitable locations for industries by the central government.

In spite of these policies, the recent rapid economic development has greatly deteriorated the balance of physical, economical and social conditions for industrial and living development in the central district, and yet has increased the difference of the economic levels between central and local districts. Ever continuing regional concentration of industries has brought about traffic congestion, misuse of land, and industrial nuisances on the one hand, while the rural population, especially younger labour force engaged in agriculture, has decreased
year by year on the other hand. That is the reason why the government policy for a comprehensive regional development program as stated above has been adopted recently.

The government has divided the whole of Japan in three parts, that is the excessively concentrated areas, adjustment areas, and development areas, from the standpoint of the new regional development policy. In excessively concentrated areas the construction of new industrial plants are restricted in principle; the adjustment areas are the outer regions where there is danger of the same misuse of land as in the central district through rapid development, since they assume the part of adjustment areas to solve the problems of excessively concentration areas; and the development areas are local districts which in the future will become the focal point for the industrial development policy.

We are now confronted by some peculiar problems of regional development different from those of foreign industrial countries. The reasons are as follows.

European and American industrial countries have accumulated many experiences, through trial and error regarding regional development problems in these one hundred years, and as a result, they have not only made relatively appropriate laws and regulations for their regional development, but have also gradually formed their experiences into a relatively suitable behavior for organizations and individuals constituting the communities for a desirable regional development, even though it is not so satisfactory. Our country, as early as 1910, drew up several laws and regulations for some regional activities or city planning. But although these laws and regulations were not sufficient for regional development, Japan was not confronted with difficult problems so as to need a comprehensive development program before World War II, because our leading industries belonged to that of light industries, which in size were much smaller than that of heavy industries, and they were developing gradually. After the War, our industries have developed with such extremely long strides that their location factors have become worse and worse, and the living conditions of urban districts also have been affected undesirably by them, as stated before. We have now been confronted with many difficult regional problems within this very short time, differing from those of foreign highly industrial countries.

Therefore, special consideration and efforts are necessary for overcoming these difficulties in regional development. Regional activities are related to many public or private organizations and individuals constituting the communities. Cooperation and coordination between them are especially indispensable to solve the urgent complicated problems in regional development. It is the reason why management approach is one of the most necessary means in our
free economic system.

II

Regional development depends largely on the industrial activities of national and local enterprises, which are closely related to industrial location problems. The industrial location problems are related to both conditions of the industrial location in the districts and the management policy of the industrial enterprises. The former, location factors, are well recognized in general, while the latter, the management side, is often overlooked. The spatial characteristics of industries are built up by mutual relations of the locational conditions, chiefly relating to public activities, and the management policies, relating to private activities.

The process for the selection of an industrial location consists of two steps, which are the location selection and the site selection, and each step has its peculiar procedure of consideration for the most desirable economic and social development. The first step means the selection of the plant location in a wide area, and the second step means the selection of the plant site in the limited sphere selected in the first step.

In the first step, that is the location selection, the problems for consideration lie in the discrepancy between the government and business policies. The government expects industrial plants to locate in the so-called adjustment or development areas, avoiding the excessive concentrated areas. But individual enterprises, which are facing severe competition in their market, do not always act in such a way, because of their cost consciousness and profit seeking policy. The recent considerable public investment in these desirable areas is not fully ready to meet the late high industrial development. However, in spite of the shortage of public investment, the industrial enterprises also must be held responsible for their business policies relating to industrial location problems. This is because the business feature and business policy of the enterprise is characterized by the spatial specialities, which have accumulated because of the physical, economical, and social structure of the region located, until now. Accordingly, the enterprises need to adopt, more or less, a new business policy and reform their old business feature to adapt to the future regional structure which the government intends to develop following a different regional pattern from the past, if they see that the government policy is desirable for them too from a long range standpoint. Our former regional structure of industries has been the highly accumulative concentration of most kinds of industries in few central districts, while the expected structure of the future is to orient to some degree the regional decentralization as stated before. The business feature and busi-
ness policy of an enterprise should be changed to meet the change in the industrial structure of the region. Such a process for enterprises may create the unique business activities for their further development. It is needless to say that public investments in physical improvement are very important for regional development. The writer emphasizes simultaneously the importance of the creative activities of private enterprises which tend often to be overlooked.

The problems of the second step, the site selection, are related to the desirable land use of the district. The most suitable site for industrial plants does not always coincide with the most desirable land use of the communities. In most cases, it does not mean that the site selection by private enterprises is directly contradictory to the interest of the communities, but it means that the enterprises should be a little more community-minded, going beyond being only efficiency-minded. Undesirable disorder of land use has been recently brought in succession by the enormous industrial development in metropolitan regions of Japan. It should be recognized by industrial enterprises, that well-planned land use is one of the necessary factors in their industrial activities, too. Of course, the law and regulations of regional and city planning should be revised or renewal to meet the changing circumstances of the regions. Moreover, it is desirable that some device or facilities for industrial estates or industrial parks to attain more easily the desirable use of land be realized.

Recently some kinds of industrial estates have been formed chiefly by local public organizations. They have been of considerable use in assisting the development of small industrial businesses, since they could move to the new site of the suburban district from their urban district where there was an irregular mixture of industrial and residential use of land. But they do not seem to be so well considered as to promote urban renewal and do not include the continuous control or maintenance of conditions in their new estates, although their original form was to aim at many-sided considerations for industrial efficiency and community development through maintaining continuously better land use. The reason seems to be chiefly the sectionalism of local public activities. At any rate, regional and community development should also be concerned as one of the important problems in the business policies by industrial enterprises. These will be further referred to in a later paragraph.

III

The general idea of most suitable industries in most suitable locations or most suitable locations for most suitable industries has been a very important standpoint in the regional development policy of our government. This is not
to be denied, but in spite of it, it is not so desirable, that this policy be literally followed. Because regional conditions and industrial factors in and out of the business are likely to change dynamically. The present most suitable locations for some industries will not always be the most suitable for them in the near future, since industries are now confronted with high technical innovations and living development. Some industrial firms might have located in a certain district depending on the most suitable location factors or some other special reasons at that time, but at present, their original conditions might have been changed or been taken away for some reason, and might have become a little or greatly unsuitable for the industrial activities of the firm. In spite of this, the firm might develop more and more at the same location, overcoming their poor conditions by their business policies through creative thinking. We have seen many of these cases. The problems of industrial location are not to be analysed statically, but dynamically.

The many experiences of regional problems in European and American countries are good examples of this standpoint. They now tend to adopt a regional development policy of industrial diversification, because they had been confronted with severe unemployment problems in certain districts by the changing structure of their industries, especially in Great Britain since 1930, and in the U.S.A. since 1950. The diversification of the kinds of industries in wider regions, depending on the principle of suitable industries to suitable locations in smaller districts, is the most effective means for the absorption of regional unemployment problems directly and further for the development of adaptability in the changing region.

From the viewpoint of the private enterprise, the "business climate" of the communities and regions is now one of the essential location factors as well as of many other physical and economical factors. A better business climate is the leading factor for which private enterprise could more easily adapt to changing circumstances. The importance of "business climate" has come to be recognized gradually in Japan, also. A diversified structure of industries in wider regions could generally bring out more easily a better business climate in communities than a structure of single industries in the present innovation age, although it should not be overlooked that the regional concentration of the same kind of industries could bring about greater efficiency by external economies than that of diversification. Accordingly the balance of the centralization and diversification of industries is one of the most important points in regional development. Moreover, a better business climate in the region or community depends highly on community relations by the industrial enterprises themselves located there, as it is well recognized in the business world of the
It should now be emphasized in our country that community relations is one of the indispensable business policies of enterprises, especially as one of the long-range policies in a free competitive economic system.

In Japan, the so-called master plan for ten years or more tends to be the core subject in regional development planning, and for some economic goal (or index) for a certain future year to which great importance is attached as the leading factor in development activities. That is one of the effective means. But it is more important to develop human energy in the communities for overcoming many changing conditions in themselves or surroundings. The planning technique seems to be too static for the problems of a dynamic regional development.

### IV

The long-range planning for regional development is originally different, in its substance, from the long-range planning of a business enterprise in spite of the same terminology, in a free competitive system. While the planning of a business enterprise is formulated and actuated by one unified decision-making body, the planning for regional development is related to many independent public and private bodies in the region. The problems to be overcome tend to be misunderstood by the word planning.

The desirable regional development should depend on, above all, the close cooperation and coordination of all the public and private bodies functioning in the region. The so-called master plan of regional development perhaps could clear up their respective parts to be played in the development, but most of the regional activities are not such clear-cut problems, and they are very complicated. We have had many cases in which some development activities based on a comprehensive plan do not always have the desirable effects due to the lack of coordination in the related public and private bodies, during the execution of their planning. It is the reason why a comprehensive development process should be carefully considered as well as the so-called master plan.

In other words, public and private bodies related to regional activities should understand the importance of the regional and community problems, and approach them with cooperation and coordination through creative thinking; because each body which has been operating by itself based on a previously used procedure, should cooperate to include a change in their old procedure. These considerations are very important in our country which has less experience and less time for regional development problems than European or American highly industrial countries.
Now we must take care of a comprehensive system for regional development, which will consist of four steps. They are collection and data processing of information relating to regional activities, planning of a comprehensive regional development based on the processed data, technique of a comprehensive development process depending on the cooperation and coordination of the relating bodies, and feedback control of the result of development activities.

The second and the third steps which are the master plan and process making, were dealt with here already. The first step, that of the information system relating to the regional activities, should be reexamined as one of the essential means for efficient development. This is the improvement problem of the administrative procedure of the central and local governments of Japan. Recently, these organizations respectively have been equipping themselves with some data processing equipments as accounting machines, punched card system machines, and electronic computers, for the improvement of desk works. Gradually, these improvement activities will go to a higher level of an integrated data processing system for regional development. This topic is dealt with by another writer in this annals.

The fourth step is the feedback control of development activities by checking with the original plan. It tends to be overlooked very often, because the feedback control or the aftercare of development activities is a very sober process, contrasting to the showy start of the development plan. For example, the execution of the plan for complicated urban renewal needs the attentive feedback control of the process to minimize sacrifice. The four steps stated above literally mean the process of management approach to regional development.

Our country has become highly industrialized after World War II and now is gradually overcoming the many difficult problems in the regional development of its metropolitan and rural districts. In spite of this, we are still confronted with more new problems. They are the conflict of location selection between public and private interests, misuse of land between business, industrial, residential and other functions in the communities, industrial nuisances in industrially concentrated and newly industrialized districts, traffic congestion, deterioration of various industrial and social conditions of the communities. Many of them belong to the so-called social costs by the activities of private enterprises. It is needless to say that the private enterprises have greatly contributed to national and local economic development through their industrial activities. And yet they are requested to make further endeavors for overcoming their social cost problems. The challenge to these complicated problems could be done better by the creative cooperation of both public policies and private participation.
The public policies of the central and local governments consist of some regulations for undesirable activities by private bodies, and some assistance to private activities to overcome some of the social cost problems themselves. Private activities, especially, their business policies, are desirable on two sides that of active cooperation for regional and community development, and of self-restraint when their operations become undesirable to the communities.

Notwithstanding these public and private activities for regional and community problems, they can not always be solved so easily in free competitive economic system. Public control should not go far of private activities, and private self-restraint should also not go beyond their price limits which a severe competition would lead to in the national and international industrial world. These gap problems between public expectation and private intention are and should be more or less challenged by more careful research for the key point of the problems between the public and private interests. These attempts could gradually solve their difficulties, but yet they would be insufficient.

Recently, especially after World War II, some new types of solution for the difficult gap problems seem to have been created in European and American industrial countries. The industrial park or estate by public or private organizations are examples of the new types of desirable land use and maintenance of industrial and social conditions. New Towns in the United Kingdom is a test of the comprehensive formation of new communities to decentralize the excessively concentrated population in the capital. T.V.A. and many kinds of port authorities have also been created for the effective cooperation of many public and private activities to overcome some difficulties in regional development problems. So to speak, these new organizations have been established for absorbing the social costs to overcome more easily and effectively the gap problems in regional development in a free competitive economic system. The writer believes that this is one of the test cases for management approach to regional development.

The outline of this article is illustrated by chart as follows.
Management Approach to Regional Development Problems

- Master plan:
  - Physical, economical, and social development

- Process:
  - Dynamic standpoint

- Subject:
  - Laws and regulations, and assistance by public activities
  - Cooperation and self-restraint by private activities

Industrial location and regional development:
- Location selection
- Business feature
- Desirable land use
- Suitable site

Creative organizations to overcome the gap problem

Integrated data processing and feedback control
In Japan it has recently become one of the most important tasks of local administrations to rationalize their office-works. That is, because of the revision of the assessment-method of the residence and municipal property taxes, increases in work entrusted by the government, the necessity of preparing blue-prints for regional development, the claim of public officials for higher wages, the difficulty of securing employees and the demand for improvement in city-office services, the office-works of each of the cities are meeting with great difficulties which are expected to become more serious in the future.

Under these circumstances, it seems essential to me for each of the cities to rationalize or mechanize their office works — in some cases even to organize a so-called management information system dependent on a large-scale EDPS.

Taking into consideration the importance of this problem, we have conducted researches in office rationalization and automation of middle-scale cities since April 1962. In this paper, I intend to outline the results of this research and to examine some important points in regard to office automation of local administrations.

The objects of research were, as of March 1962, the offices of fortyeight cities which ranged from 96 thousand to 728 thousand in population, and from 625 to 6170 in the number of officials. In Japan, they constitute the offices of local administrations situated as middle-scale cities.

First, in this chapter, we shall examine the fundamental concept and general aspects of improvement in office-works — except for the mechanization of office works which we will consider in detail in the following chapters — of each of the cities.
1. On the fundamental concept of office-works improvement

For example, some cities answered our inquiry as follows:

The city of Asahigawa; (1) synthetic modernization of administrative office-works, (2) efficient and economic administration of the city, (3) maintenance of the rule of dealing with special administrative affairs individually, (4) maintenance of the rule of administration enlargement, (5) improvement of general administrative conditions, (6) estimation of human relations.

The city of Kawasaki; it has hitherto promoted the standardization of its office-works, especially of its system of forms and records. In addition to this improvement it will hereafter install a PCS or an EDPS to mechanize its general administrative office-works.

The city of Nara; it has fundamental purposes of executing economically and efficiently its administrative office-works, and to improve service to its citizens. That is, it intends to expand the department of service, by means of labor-personnel-savings or the financial surplus which is expected to be brought about by rationalization or mechanization.

The city of Tottori; it has a regional development plan which includes the plan for the rationalization of administrative organizations. Accordingly it intends, (1) to turn all forms and records in regard to its citizen to cards which are to be managed integrately, (2) to concentrate the several works at different windows to a common counter, (3) to integrate similar departments or sections to simplify the system of orders, (4) to integrate and to mechanize clerical works, (5) to integrate inventory control in charge of each department into one department, (6) to standardize all records and forms and (7) to improve the physical environment of the offices by rationalizing the lay-out of each department.

Thus, the statements, in regard to the fundamental ideas, offered by each of the cities are not always the same in their understanding of the details or in their expressions.

However, putting the answers of cities into order, we can conclude that the fundamental purposes of the cities are to save labour time and expenses of office-works, to turn the resulting reserve of power to the improvement of services for citizens and regional development, and to adjust the physical environment of administrative offices.

The items that are regarded as the most important means for improvement are as follows: (1) Reformation of administrative organization, (2) Integration and concentration of works at separate windows — in some cities a part of the works is dealt with at the head-office window and another at the banch-office window which are a few miles distant from each other —, (3) Integration of
clerical works of similar characters, (4) Reformation and standardization of the system of records and forms, (5) Integrated control of all records or documents in regard to citizens for a more efficient administration, and (6) Promotion of the mechanization of office-works.

But in regard to the fundamental ideas of administrative office-works there are a few problems to be considered.

One is that a few cities have not as yet established a fundamental policy for the improvement of their office works. That is, while on the one hand some cities have positively promoted rationalization on their basic idea as we have seen above, on the other hand, other some cities still retain their very primitive conditions.

We can say that the basic recognition for office-works improvement of each city is ill-balanced. And that conditions are also considered to be decided by individual factors.

We are sure that the persons concerned must attach more importance to this state because the grade of fundamental recognition substantially limits the progress of rationalization, especially as to the installation of an EDPS for administrative office-works.

Another point is that the public has more and more come to recognize that office-works improvement itself is closely connected with the reformation of the whole of local administration.

But the connection is only recognized from the viewpoint of short-term administrative purposes such as the level-up of citizen-services or the integration of many kinds of works at separate windows, and is not recognized from the viewpoint of long-range purposes such as regional development or the environmental adjustment of citizen-lives.

The people concerned must consider this problem, too, because a long-term improvement, especially high-grade mechanization, cannot be accepted from the standpoint of a short-term planning.

2. On the organization of city-offices

First, in the organization of city-offices, except in some cities, the line departments, for example, the department of construction or of public welfare, which are directly connected with the lives of citizens have generally a much greater position than the staff departments, such as the department of statistics, of calculation, of systems and procedures and of planning.

Almost all staff departments as above-mentioned have recently been set up. They have not so-called time-honored traditions in local administrations.

Of course it must be recognized that the organization chart is individually
decided in accordance with the natures or the present-day tasks of each city, but from the viewpoint of the whole local administrations and from the viewpoint of the complete mechanization of their office-works the establishment of long-term plans of administration and the coordination of the resulting gap among individual interests of each department in the execution-process of the plans are very important.

We are certain that a more powerful department which would research, plan and coordinate for the improvement of the whole local administration from the long-term point of view must be established in all city-offices, and that a section of office management must be included in this department as an essential section.

Secondly, we doubt whether the significance of data processing or information processing in the local administrations is fully recognized or not.

Certainly the endeavor in each of the departments—for example, the departments related to window services, of taxes, of records and documents, and of receipts and disbursements etc.—are eagerly seeking a solution to the bottleneck in their works process.

But it seems to me that the solution still remains at the stage of individual or partial improvement.

To be sure it is impossible for the city-offices to take the approach of so-called Management Information System or Total System in their works. But individual or partial improvements which appear superficially in such special clerical works as the calculation of residence tax or the assessment of property tax must be directed and coordinated from the viewpoint of a long-term planning of the whole local administration and in connection with the whole organization of a city.

For example, we must start from a viewpoint that examines what influences the complete mechanization of office-works in regard to residence and property taxes has on the future administration for industrial development of the region through labor personnel saving and a more precise information processing, or in other words what form the mechanization of office-works must take in consideration of the future aspects of regional development or improvement of the physical environment of citizen-lives.

From such a long-term point of view, we are sure that the department of planning which includes the sections of office management and of statistics, and the department of data processing which has an EDPS as its central processor will have a much greater significance in the future organization of local administrations.

As we stated in the beginning of this report data or information processing
in the present administrative office-works seems to be so important that its significance must be defined from the viewpoint of the whole organization of city-office.

3. On the relation of the head-office with branch-offices

The relation of office-works in the head-office with that of their branch-offices is one of the most important problems in the administrative organization, which must be necessarily considered in the improvement process of office-works.

Because the integration of office-works at the windows or common works is closely connected with this relation, though the integration of office-works does not immediately mean the consolidation of branch-office with the head-office — as we can see in the plans of the city of Kumamoto which intends to make its branch-offices more powerful and at the same time to integrate office-works at the window.

However, on the whole the office-works of branches — except that part of works which is immediately in touch with citizens — is inclined to be consolidated with that in the head-office.

At least, to some extent, adjustment of fundamental documents in regard to the lives of citizens, preparation of all kinds of tax ledger calculations, preparations, mailings of written orders for payments of taxes etc., which can be processed by large-scale office-machines, cannot but be integrated.

Therefore it is of little worth to consider whether each city must integrate its branches’ office-works or not, if it intends to mechanize its office-works.

We must rather take into consideration the fact that the integration of the branch-office-works by large-scale office-machines should be consistent with services to citizens — for example, the delivery of a residence certificate or a tax-payment certificate and the acceptance of some kinds of payment or declaration — by some technical device such as the collation and the correction of ledgers by a television network.

The effects resulting from such an integration which consist of the promotion of rationalization or mechanization, labour-savings and cost reduction must not be acquired at the sacrifice of good services to citizens.

Generally speaking, the office-works of public welfare and of receipts are nearly all kept in the branch-offices.

Main items of office-works can be classified as follows:

The custody of official seals, registration of residence, census, foreign nationality and individual seals, clerical work of rationing, acceptance of payments of national health insurance premiums, of some kinds of pension premiums, of taxes, of rents from public dwellings and of dues of public health
maintenance, delivery of note-books for mothers and children and of several kinds of certificate, grants in regard to the burial of citizens, recruiting of soldiers and sailors, acceptance of subscriptions for emigration and of declaration of entrance into public schools or change of schools, etc.,

Formally the branch-offices belong to the department of general affairs or the department of citizens, but practically they have the character of being usher windows for each superintendent-department in the head-office, which usually communicates with the branches by a few mail-cars or some liaison men from one to four times per day in addition to telephones and usual mails.

And as above-mentioned, it is generally — though there are such few exceptional city-offices as the city of Kumamoto and the city of Ohtzu that plan to make the branches more powerful because of their topography or their populousness — recognized that the adjustment and integration of branch-office-works, even if it is partial, must be done in order to promote the mechanization and rationalization of the whole administrative office-works of a city.

The clerical works of taxes and national health insurances cannot but be mechanized and therefore be consolidated with those of the head-office on account of the expense involved.

Fundamental ledgers in regard to residents and some kinds of office-works at windows must be — wholly or partially — integrated and adjusted, if people intend to eliminate the duplication of office-work processes, the duplicate preparation of ledgers and the need for citizens to make repeated visits to the city-office.

In this case branch-offices, as they are at a distance, will have to collate their ledgers with those in the head-office and correct them by some technical device.

We must, however, pay attention to the fact that the integration of branch-office-works is not always decided only from the efficiency standpoint. That is, it is often decided by a political consideration stressing the feeling of citizens in individual areas, though we cannot say whether this political maneuver has a positive or a negative influence on the integration.

4. On the organization in charge of office-works improvement

Generally saying, in most of the city-offices, as the staff organization which directly belongs to the top-management, the committee for improvement of administrative office-works, which consists of a deputy mayor as the chairman and the chiefs of departments concerned as other members, investigates the rationalization or mechanization, submits a report on the matter and coordinates its execution.

On the other hand, the sections of office-works improvement or of office-
works efficiency which belong to one department — for example, the department of general affairs, the department of administration etc. — in the division of general affairs is in charge of the practical study, planning and guidance, though in many city-offices a special section is not always set up, but such sections as the documents and records section or the personnel section often take charge of the office-works improvement as an additional task.

The number of members is usually from ten to twenty in the committee and from three to seven in the section.

In addition to the committee and the section, the society for the study of office-works which is organized by the persons concerned in a city-office or among a few city-offices, even if informally, plays an important part in this matter.

Of course, it is the committee or the section such as above-mentioned that becomes the driving force in the promotion of the rationalization or mechanization of administrative office-works.

We are certain that in the future these organizations will become much more significant in both the quantity and the quality of their work. Since the rationalization or mechanization of administrative office-works is one of the most important tasks in present-day Japan, the work in this field seems to have increased more and more, and because of this the special section or the special department will have to more positively conduct research, planning and guiding the improvement, while at the same time the committee will have to investigate the plan, to superintend its execution and to coordinate the interests among divisions or departments concerned from the higher stand-point of the whole of local administrations.

Especially in the stage of higher mechanization dependent on an EDPS, the present-day section will need to become a special department which would include a section of system analysis, and it would have to be more closely connected with the department of EDPS or the department of centralized data processing.

However, it is more essential that the mayor, the deputy mayor, the revenue officer and the members of the municipal assembly, that is, the top-managements of local administrations clearly recognize the importance of office-works improvement and that a zealous man of ability has charge of it, rather than that a special section and a special committee are formally set up, though the arrangement of formal organizations will become more necessary in proportion to the scale of the city's growth.

In the fortyeight cities taken up in our research, we can find some cities which have acquired an excellent performance without any committee, and
at the same time there are a few cities in which the committees remain nominal consisting of many kinds of “chiefs”.

III

In this chapter, we will survey the actual states of mechanization in the fortyeight city-offices.

1. On machines which are used today in the city-offices

There are many kinds of office-machines used in the city-offices as follows; that is, EDPS, PCS, accounting machine, book-keeping machine, automatic calculator, handling calculator, adding machine, addressing machine, offset printing machine, copying press, typewriter (of both English and Japanese), cash register, shredder, belt-conveyor, automatic folder, automatic inserting and mailing machine, blue-printer, micro-film camera, etc.

Only two sets of EDPS (of Tosbac 4231 which is made by the Tokyo-Shibaura Electric Manufacturing Co. Ltd. in Japan) have been installed in the cities taken up in our research, that is, in the cities of Nishinomiya and Toyonaka, though other large-scale cities, especially the so-called big Six of Japan have each a EDPS.

Therefore, the main machines for data processing in the fortyeight city-offices are automatic accounting machines or automatic bookkeeping machines of NCR, Burroughs, RUF, Olivetti etc.

They are used in most of the city-offices except the city of Miyazaki and that of Fukushima. For example, at the minimum the cities of Tottori, Ohtzu, Hachinoe and Tokushima have each one automatic accounting machine, the city of Amagasaki has nine and at the maximum the city of Fukuoka has fourteen. On the average each of the cities has three to four automatic accounting machines of some type.

On the other hand, automatic or handling calculators and copying presses show a remarkable significance in quantity, among the office-machines of various kinds. As above-mentioned, the need of making clear copies, printing and copying, which is one of the most important fields in administrative office-works improvement, requires a large increase in copying presses in addition to typewriters and offset-printing machines.

Micro-film cameras are significant in the preservation or the efficient custody of documents and records, while cash registers and belt conveyors also play important parts in office-works improvement at the window.
2. On the main office-works mechanized

As the main objects of EDPS, PCS and automatic accounting machine we can show the office-works with regard to residence tax, property tax, national health insurance, and water and sewerage services, after which follow receipts and disbursements, budgeting, closing account, dues for public health rents from public dwellings, supplies for each department in city-office, public welfare and pensions as sub-objects.

In addition to these works, according to the character of each city, the sections of statistics, calculations for construction and public service corporations (for example, bus service and gas service) are under consideration for mechanization. The mechanization of copying must also be paid attention to as another important mechanization field though it does not call for using EDPS, PCS or accounting machines.

3. On the effects acquired by mechanization

The city-office which use the many kinds of machines as mentioned in the foregoing section show some effects of mechanization.

For example, immediate delivery of various certificates in the city of Hakodate; labor-savings, exact recognition of taxable objects, fair assessment of taxes and an increase of assessed amount in the city of Hirosaki; a reduction in payroll-working-hours in the city of Kanazawa; an increase of office-works efficiency and time saving in the city of Nara; the large increase of data processing speed, exactness and ability in the city of Toyonaka which installed an EDPS (Tosbac 4231); and labor-savings in the city of Matzuyama.

In short, we can show the effects of mechanization in the local administrations as follows: (1) reduction in quantity of office-works which must be manually dealt with, (2) application of labor and time savings acquired as a result to the works of appraisal, research and study, (3) speed up of office-works, (4) increase of accuracy in processing office-works, (5) development of ability to process more complicated works, (6) reduction in the cost of office-works by the labor saved or the drop-in of personnel increase.

Of course, the last or personnel problem is the most important in the mechanization of local administrative office-works. In regard to this effect, the research gave material for the table as follows (provided that the personnel expenditure is 300 thousand ~ 400 thousand yen and that the actual working hours is 1800 hours, for each person per year).

It is needless to say that we cannot attribute these effects only to EDPS, PCS and accounting machines. Correctly speaking, we must appraise the
effects from the viewpoint of the whole data processing system in each city-office which uses not only EDPS, PCS and accounting machines but various other equipments. However, here we are supposing that the main office machine and its quantity express the character of the whole system, from which we get the above table.

Though it may not always have generality because the data collected is limited to eleven city-offices, from the above table, we can infer that an accounting machine means a personnel expense savings of 300 thousand ~ 1000 thousand yen per year, and that the period of pay-off for the accounting machine expenditure is therefore three to ten years, or five or six years on the average, and that these facts seem to be a condition for the purchase of an accounting machine or another general office-machine, though logically we do not accept the pay-off period of five to six years.

These relations are considered to be acceptable also in the case of a PCS.

But in the case of an EDPS, its pay-off period is a little complicated though we must not jump to a conclusion because of the insufficiency of data. For

<table>
<thead>
<tr>
<th>city</th>
<th>main machine</th>
<th>office-works mechanized</th>
<th>number of personnel reduction</th>
<th>amount of personnel expenses reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2 accounting machines</td>
<td>payroll, tax</td>
<td>6.5</td>
<td>(¥1000) 2000 ~ 2600</td>
</tr>
<tr>
<td>B</td>
<td>3 accounting machines</td>
<td>payroll, tax</td>
<td>4</td>
<td>1200 ~ 1600</td>
</tr>
<tr>
<td>C</td>
<td>8 accounting machines and others</td>
<td>payroll, tax, water-service, service for residents</td>
<td>15</td>
<td>4500 ~ 6000</td>
</tr>
<tr>
<td>D</td>
<td>3 accounting machines</td>
<td>payroll</td>
<td>9</td>
<td>2700</td>
</tr>
<tr>
<td>E</td>
<td>1 set of PCS</td>
<td>payroll, receipts and disbursements, budgeting, national health insurance, tax, service for residents</td>
<td>15 ~ 20</td>
<td>4500 ~ 8000</td>
</tr>
<tr>
<td>F</td>
<td>1 accounting machine</td>
<td>tax</td>
<td>—</td>
<td>700</td>
</tr>
<tr>
<td>G</td>
<td>3 accounting machines, 2 addressing machines</td>
<td>tax, payroll, water service</td>
<td>15</td>
<td>4500 ~ 6000</td>
</tr>
<tr>
<td>H</td>
<td>2 accounting machines</td>
<td>tax</td>
<td>—</td>
<td>670</td>
</tr>
<tr>
<td>I</td>
<td>1 set of EDPS</td>
<td>the whole administrative office-works</td>
<td>50</td>
<td>15000 ~ 20000</td>
</tr>
<tr>
<td>J</td>
<td>3 accounting machines</td>
<td>tax, payroll, national health insurance</td>
<td>3.4</td>
<td>600</td>
</tr>
<tr>
<td>K</td>
<td>4 accounting machines</td>
<td>tax, payroll</td>
<td>—</td>
<td>4000</td>
</tr>
</tbody>
</table>
example, if at the price of sixty million yen a city-office purchases an EDPS
which can save twelve million yen or the personnel expenses of forty persons
a year the pay-off period is five years. And if it can only save six million yen
or the work of twenty persons, the period is ten years.

This personnel reduction or the amount of personnel expense reduction
is decided by the quantity of the city's main office-works, that is, the office-works
of residence tax, property tax, national health insurance, water-service, etc.
And the quantity is in turn decided by the scale of the city, especially its popula-
tion.

For a middle-scale EDPS at the price of fifty million yen, we infer that
the pay-off period will be five years on the average in cities with a population
of about 250 thousand, and that the period will be shorter in cities with greater
populations and longer in cities with smaller populations.

Therefore, in view of these facts, under the existing state of things, the
installation of a rental EDPS is very difficult in cities with a population under
300 thousand, as far as appraising the effects from the view-point of personnel
expense reduction is concerned.

In other words the reasons why an EDPS cannot be installed in middle-
scale city-offices are considered to be (1) that an EDPS is too expensive for them
to purchase, (2) that the peak of each office-work appears one above another
at the same time and that, as a result, on the average the rate of operation of
office-machines decreases, and (3) that the quantity of office-works which will
acquire a fair marginal efficiency by its mechanization is not so large as justifies
the installation of an EDPS.

4. On some problems in the office-works mechanization of local administ-
trations

The problems which were pointed out by persons in charge of office-works
improvement in each city are as follows, as placed in the order of their importance.

(1) In order to rationalize office-works the fundamental policies of the
central government authorities towards local administrations must be reformed.
(2) Funds for mechanization are insufficient.
(3) The peak of each office-work is about the same time, therefore clashes.
(4) The calculation-, assessment- and self-assessment-procedures of taxes
are too complicated.
(5) The top management, municipal assembly and general officials must
more firmly recognize the necessity of office-works mechanization.
(6) The department or section in charge of office-works improvement
must be given more power.
(7) Office-works in regard to property tax assessment considered to become more laborious in the future (because the procedure has been recently revised to be make more exact but very complicated while the assessment will be made once every two years though it has been once every three till now).

(8) Administrative office-works will find a greater shortage of hands, especially those of specially trained men.

(9) The arrangement and custody of documents and records will become more and more difficult because of their quantity.

(10) The data processing ability of office-machines is insufficient.

(11) Office-buildings are too small.

(12) Ledgers which must be prepared for each of the central government authorities concerned are too numerous.

The lack of knowledge of the central government authorities in regard to local administrations is one of the most fundamental problems in office-works improvement. Some substantial problems — for example, reformation of the provisions in the property tax law without regard to the increase of clerical works in local administrations, difficulty in unifying the fundamental ledgers for residents because of discrepancies among the provisions of each central government authority, duplication of works brought about as the result etc. — must be solved in agreement with the alteration of the central government authorities' policy.

These facts appear in some of the above-indicated points, that is, "duplication of peaks of works", "too complicated procedure for calculation or assessment" "too many ledgers for the central authorities concerned" etc. Especially the duplication of peaks makes the installation of an EDPS very difficult.

As regards this point, the city of Kawasaki insists on the alteration of the central authorities' policy towards local administrations as follows, that is, "The main items to be reformed are (1) arrangement of laws and provisions in relation to the residents, especially resident registrations, (2) adoption of more flexible policies of the central authorities concerned towards local administrations. (For example, the Ministry of Justice and the Ministry of Public Welfare should always take more practical measures respectively for each of the cities), (3) advancement of the date for cities to close their accounts to set up an appropriate time-lag from the central government, (4) consideration to distribute a well-balanced quantity of clerical works throughout the year, (5) examination of coding budget-subjects, and (6) planning of various necessary institutions by which the office-works mechanization of higher grade would be accomplished."

The cities of Amagasaki, Matsuyama and Ohmuta insist that the central government should set up a research and education institute for the improvement
of local administrative office-works, in order to examine the various laws and provisions in comparison with the real quantity of clerical works necessary to put them into effect, in order to standardize all kinds of forms which are used in the city-offices in Japan and in order to train the managements and specialists for local administrations.

It is pointed out, too, as one of the most fundamental problems that the top-management, municipal assembly and general officials have little understanding of the necessity to rationalize administrative office-works. This fact appears in some of the above-mentioned points, that is, "The insufficient funds for mechanization," "The necessity of a more powerful department in charge of office-works improvement," "The lack of hands in the city-offices" and "The insufficient data processing ability of office-machines."

The most important obstacle in the process of mechanizing office-works is the lack of funds, or the unreasonable requirement for personnel expense reduction. Though it must be recognized as very difficult for a city-office to install an EDPS, we feel that the top management should examine the mechanization of office-works from the viewpoint of a more long-range planning.

At the same time, the top-management, municipal assembly and officials in each city seem to be inclined to regard only the city's interest, and this is considered to make the standardization or simplification of office-works of all cities difficult. For example, the adherence to the so-called "right of independent taxation of a municipality" makes office-works very complicated.

The cities of Otaru, Utsunomiya, Yokkaichi and Kumamoto indicate that the understanding of the top-management, the enhancement of general officials' spirit and reformation of the organization of the city-office, are basic conditions for office-works rationalization.

IV

Last, in this fourth chapter, we shall consider the plan of office-works mechanization and the direction of its future development in each city.

Under present conditions each city positively endeavors to rationalize its office-works with various office-machines, especially automatic accounting machines with which we have already dealt.

As we surveyed in the beginning of this paper, the quantity of local administrative office-works is foreseen to increase greatly, and the quality is also expected to become more complicated in the future. Because the city-offices will have to bear much heavier burdens, that is, an increase in population, a greater charge of clerical works entrusted from the prefectures or the central government,
complication of taxation procedures, new institutions for social welfare, preparation of a master-plan for the regional development, etc.

Therefore, each of the city-offices plans to install new office-machines, to overcome the burden though there are some other problems to be examined.

1. On the increase of office-works in the future.

We are sure that the increase percentage of each of the main office-works in the future three to five years, on the average of twenty-two cities, will be as follows.

<table>
<thead>
<tr>
<th>office-work</th>
<th>in 3 years</th>
<th>in 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>service for residents</td>
<td>25 %</td>
<td>35 %</td>
</tr>
<tr>
<td>payroll</td>
<td>21 %</td>
<td>29 %</td>
</tr>
<tr>
<td>accounting</td>
<td>19 %</td>
<td>33 %</td>
</tr>
<tr>
<td>inventory</td>
<td>22 %</td>
<td>39 %</td>
</tr>
<tr>
<td>residence tax</td>
<td>18 %</td>
<td>26 %</td>
</tr>
<tr>
<td>property tax</td>
<td>21 %</td>
<td>30 %</td>
</tr>
<tr>
<td>national health insurance</td>
<td>12 %</td>
<td>18 %</td>
</tr>
<tr>
<td>social welfare</td>
<td>34 %</td>
<td>38 %</td>
</tr>
<tr>
<td>pensions</td>
<td>26 %</td>
<td>36 %</td>
</tr>
<tr>
<td>water service</td>
<td>21 %</td>
<td>34 %</td>
</tr>
<tr>
<td>statistics</td>
<td>37 %</td>
<td>56 %</td>
</tr>
</tbody>
</table>

It is evident that each city is considering how to overcome this heavier burden of office-works, though the general trend of all the cities' office-works should not be appraised only from this table because the real increase is to be decided by each city's individual condition such as the grade of its industrialization.

We must pay attention to the fact that the office-works in regard to social welfare, pension, service for residents and statistics are considered to increase sharply, contrary to our expectations, and the works of sewerage service and other kinds of taxation — though they are not shown in the above table — are expected to increase very much.

2. On the plan of office-works mechanization

Against the expected increase of office-works such as above-mentioned, each city has a plan to install new office-machines.

In eight city-offices, for example, the cities of Kawasaki, Nara, Hiroshima, Kochi, etc., they intend to install a small- or middle-scale EDPS within a few years.

And fifteen city-offices plan for each to purchase one to three accounting machines in a few years, for example, the city of Otaru intends to purchase two accounting machines, the city of Nagasaki three machines, the city of Kure one
In addition to the EDPS and accounting machines, MCP (multiple cards processors), automatic calculators, copying machines, cash registers, addressing machines, typewriters, belt conveyors, filing cabinets, shredders, automatic folders, micro-film cameras, etc. are included in the plans of mechanizing city-office. The increase of copy presses and offset printing machines are expected to be fairly remarkable.

The fields of office-works which are shown as objects of these various machines are placed in order of their importance as follows: They are office-works in regard to (1) residence tax, (2) making clear copies, printing and property tax, (3) payroll, (4) national health insurance, (5) public welfare, census registration and receipts, that is, clerical works at the window, (6) water service, (7) custody of documents and records, (8) statistics, (9) accounting, (10) pension, (11) public health.

Thus the high level of mechanization of works in regard to taxation, national health insurance, payroll, accounting and pension will be the most important task in city-offices.

The most immediate and main factor is taxation works, in which quality and quantity will decide the future state of the whole office-works mechanization in each of the cities.

On the other hand, works to make clear copies, the custody of documents and records, and works at the windows will be very positively mechanized, though they are not always connected with EDPS, PCS and accounting machines under present conditions.

Those fields which are to be rationalized by sub-office-machines will have to be investigated, as important elements, in relation to EDPS from the viewpoint of the whole data processing system.

3. On the possibility of using EDPS or PCS in city-offices

On the ground of our research we are certain that cities which have populations over 250 thousand and residence tax items over 70 thousand to deal with can economically — in the sense that its pay-off period is five to six years — use a PCS or a middle-scale EDPS.

Cities with populations of 200 ~ 250 thousand and with residence tax items of 60 ~ 70 thousand are considered to be still in such a stage that they cannot always economically install a PCS or a middle-scale EDPS, though accounting machines are insufficient to deal with their office works.

However even in the former cities, there are some obstacles in the way of installing a PCS or an EDPS. The obstacles to be eliminated are placed in the
order of their significance as follows.

1. EDPS or PCS is too expensive.
2. The city-office has not yet prepared its various internal conditions for receiving EDPS or PCS.
3. Lack of understanding of top-managements.
4. Preparation for installation is too complicated and laborious.
5. Some kinds of customs and laws make the installation difficult.
6. The quantity of office-works is too small to be processed by EDPS or PCS.
7. Exceptional office-works are too many to process the whole data by EDPS or PCS.
8. Lack of specialist.
9. After-service for the installation is uncertain.
10. In order to install PCS or EDPS, city-office buildings must be reconstructed.
11. The EDPS or PCS cannot print Japanese KANA letters with the same high speed as alphabetical letters.
12. A well-balanced quantity of office-works cannot be distributed throughout each season of the year.

"The EDPS is too expensive", "Poor economy of EDPS", "Insufficient preparation for the installation" and "Lack of top-management understanding" mean that the top management and general officials of city-offices do not understand the correct significance of EDPS or PCS in administrative office-works improvement.

As above-stated, in the near future, city-offices of certain scales are considered to be able to use a middle-scale EDPS economically. But the lack of understanding of this fact — in other words, the lack of understanding of the whole of administrative office-works or the lack of logical examination of the economy of EDPS — brings about the lack of funds, and criticisms that the EDPS is too expensive.

We must first regard that there are some cases in which the demand of the EDPS's economic effect is too serious to be met. That is, people appraise the effect by the immediate amount of personnel expense reduction only from the short-range viewpoint while disregarding the theoretical examination of its economic effect, ignoring the quality of persons who can be applied to other works by office-mechanization and evaluating lightly the improved service as the result of the installation.

Second, we can point out that the lack of understanding of the central government authorities is one of the reasons for the expensiveness of EDPS.
As we stated above, it decreases the rate of operation of EDPS — in other words, it increases the cost of the electronic data processing — in that the peaks of many kinds of office-works appear at the same time at certain seasons of the year.

The policies, laws and provisions which the central government authorities make in disregard to their influences on actual office-works increase the expensiveness of EDPS and make its installation very difficult.

If the office-works of each city are appropriately assorted in quality and distributed in a well-balanced quantity in each season of the year, the rate of operation of EDPS and also the savings would naturally increase. In other words, if the entire quantity of office-works in a year is the same, even an EDPS which is smaller and therefore cheaper can deal with the office-works. Therefore its installation will also become much easier.

Other problems indicated, for example "Obstacles resulting from customs," "Difficulty brought about by exceptional works" and "Decrease of printing speed by use of Japanese KANA letters " are considered to be able to be solved technically. They are not substantial factors in promoting office-works mechanization.

4. On a city-office's sharing of a data processing system with others, or entrusting its data processing to a center.

At present, some offices of satellite cities around the city of Osaka plan to build an electronic data processing system to share; the city of Sapporo and Hokkaido Prefecture similarly intend to install an EDPS in co-operation; and the city of Himeji used to entrust a part of its data processing to the IBM data processing center in Osaka. So, sharing a data processing system or entrusting data processing to a center becomes an important factor in city-office works.

The city-offices taken up as our research object have not yet experienced such sharing or entrusting. But several city-offices have interest in this problem and have examined the possibilities because sharing an EDPS with others is considered to reduce the cost of data processing.

However, here also, the greatest obstacle is that the peaks of office-works of each city appear at the same time in certain seasons of the year, so that, the data processing center is considered not to be able to operate efficiently, because of the great discrepancy of office-works between the peaks and off-peaks.

If each city insists on receiving sufficient service from the center, a large-scale expensive EDPS must be installed. If the center can install only a middle-scale EDPS, each city cannot receive sufficient service.

So, in the sharing of a data processing system, the city-offices must each ad-
just its peak of office-works so that they do not coincide. Therefore, in order to make the adjustment possible, the laws, provisions and each city's relation with the central authorities should be reformed, or at least must be examined once more from the viewpoint of such a form of office-works mechanization.

On the other hand, it is considered that there will be much profit if some cities should build an independent data processing organization which would not be restricted by various laws such as the Labor Standard Law or the law of public official's wage system.

The adoption of two shifts or three shifts can make the rate of operation of the EDPS increase and a high salary system can attract specialists of data processing.

5. On the possibility of integrating the ledgers of residents and other materials for administration into punched cards, magnetic tapes and other magnetic memories.

If the records of resident registration, ledgers for properties and for various taxes, that is, the data in regard to individual residents, factories, shops, farms, forests, etc. can be all stored on punched cards, or magnetic tapes, or other magnetic memories, and if they can be immediately updated, and are at the service of citizens and other administrative works, the administration of cities will be much improved in efficiency.

In our research, thirty-two cities stated that they will have to develop such a system which uses an EDPS of fairly high grade as the central processor, though in the process to install the highest EDPS they will have to go through various steps, that is, (1) integration of various ledgers, (2) conversion of integrated ledgers to visible cards which can be hand-sorted, (3) mechanization of sorting, matching and retrieval of visible cards, (4) conversion of integrated ledgers to punched cards, and use of a PCS or an EDPS, (5) installation of an EDPS and conversion of the integrated ledgers to magnetic tapes, (6) addition of some kinds of random access memory etc.

(1963. 12. 19)
DIE GESCHICHTE DER PRIVATISIERUNG

Masaya Okada

I

Die Geschichte der heutigen Privatisierungsbestrebungen reicht weit in die Vergangenheit zurück; denn seit es öffentliche Wirtschaft gibt, gibt es auch Kritik an ihr.

Hier sollen im wesentlichen die letzten Jahre behandelt, für die ältere Vergangenheit aber auch einige Hinweise ausführlich gemacht werden.

Nun was ist Privatisierung? Die Antwort erscheint leicht: die Überführung von Vermögen der öffentlichen Hand in private Hand\(^{(1)}\). Aber erst in den letzten Jahren ist ein anderer Sinn allmählich im Wort Privatisierung enthalten. Die Privatisierungsforderung hat ein größeres Gewicht durch die These der Eigentumsstreuung erhalten, so daß die alte Privatisierung konnte die neue Privatisierung ersetzt werden.

Man kann einige große Abschnitte der Privatisierungsstrebungen unterscheiden. Hier sollen sie nach der Reihe behandelt werden.

II

Läßt man frühere Jahrhunderte außer Betracht, so kann der ersten Periode die Zeit vor 1914 zugerechnet werden.

In ihr war die deutsche Wirtschaft in ständigem Ausbau begriffen. Sie forderte und enthielt vom Staat kräftige Unterstützung. In jenen Jahren wurde das System der Handelsverträge und der Schützzölle auf- und ausgebaut, der Außenhandel floriente, die Industrialisierung schritt lebhaft voran.

In jener Zeit gibt es auch Kritik an der erwerbswirtschaftlichen Betätigung des Staates. Als Beispiel dafür sei erwähnt, daß der 10 Deutsche Handwerks- und Gewerbekammertag im Jahre 1909 die Fragen des Wettbewerbs durch staatliche und städtische Betriebe behandelte und in einer Resolution die "mögliche Einschränkung der Regiebetriebe" forderte\(^{(2)}\). Aber diese Kritik wuchs sich nicht zu Privatisierungsforderungen von der Art aus, wie sie heute erhoben

werden.

Es braucht hier nur an die Ausdehnung der Versorgungsunternehmen (Gas, Wasser, Elektrizität usw.) in Ländern und Gemeinden und der wirtschaftlichen Betätigung des Staates (an die damalige Verstaatlichung von wichtigen Unternehmen und Wirtschaftszweigen) erinnert zu werden.

III

Die zweite Periode des Privatisierungsgeschichte kann die Zeit nach dem Zusammenbruch des Wilhelminischen Kaiserreiches 1918 zugerechnet werden.


Und aus der Arbeiterbewegung erscholl der Ruf nach Sozialisierung. In der Sozialisierung der volkswirtschaftlich entscheidenden Wirtschaftszweige erblickten Millionen von Menschen das Mittel, nicht nur die durch Krieg, Zusammenbruch, Kontributionen und Reparationen hervorgerufene Not zu überwinden, sondern auch zu einer besseren Gesellschaftsordnung zu gelangen. Das Schicksal der damaligen Sozialisierungsforderungen ist bekannt(3).

Nun sobald Ende 1923 mit der Stabilisierung der Mark der Schlußstrich unter Inflation gezogen war, sobald sich erwies, daß die in jenen Jahren mit vieler Mühe und großem Kapitalaufwand neu geordnete öffentliche Wirtschaft gesund und einträglich war, wandte sich das Unternehmertum mit zunehmender Kritik gegen die öffentliche wirtschaftliche Betätigung. Die damaligen Vorstöße richteten sich unter anderem gegen die Reichsbahn und Reichspost und hatten bereits den Teilerfolg, daß beide aus dem Reichshaushalt gelöst und zu selbständigen Unternehmen gemacht wurden. Da die Erträge der Reichsbahn in der Folgezeit für Reparationszahlungen verpfändet werden mußten, wurde das Unternehmen verblieb im Reichseigentum(4). Um so stärker wurden allmählich die Vorstöße gegen die Wirtschaftsunternehmen der Länder und vor allem der Kommunen. Wortführer dieser Forderungen waren die Verbände der privaten Wirtschaft, insbesondere der Reichsverband der Industrie und Hansebund. Vornehmlich auf ihr Betreiben fanden sich die damaligen Spitzenverbände der Wirtschaft am 10. November 1926 zu einer Kundgebung zusammen,

(4) Reichsgesetz über die Deutsche Reichsbahn-Gesellschaft (Reichsbahngesetz) vom 30. August 1924.
in der gegen das "Eindringen der öffentlichen Hand in die private Wirtschaft" protestiert wurde(6).


Träger dieser Kundgebung und der auf ihr geäußerten Entschließung waren:

schaft Terrain verloren\(^{(7)}\).

Den Einbußen steht sogar auf wichtigen Gebieten ein weiteres Vordringen der öffentlichen Wirtschaft gegenüber, so z.B. die Einflußnahme der Preußischen Elektrizitäts AG auf die Thüringer Gas AG, den Erwerb von Erdölfeldern in deutschen Erdölgebieten durch die Preußische Bergbau- und Hütten-AG und die Beteiligung der Viag an dem wichtigen ostdeutschen Braunkohlenbergbauunternehmen der Ilse-Bergbau AG\(^{(8)}\).


Wenn es in jenen Jahren dennoch nicht zu größeren Einbußen der öffentlichen Wirtschaft kam, so ist dies auf die 1930 hereinbrechende große Weltwirtschaftskrise zurückzuführen\(^{(10)}\). Und nochmals wenige Jahre danach begann das nationalsozialistische Reich, in dem die Privatisierungsforderungen vollständig verschwunden waren. Und nach einiger Zeit verging das Nazireich.

IV


Nun der Warenhunger und der Nachholbedarf der deutschen Bevölkerung sind riesengroß. Auch in den übrigen Ländern der Welt werden Industriewaren, Maschinen und Ausrüstungen aller Art verlangt, da die großen Welthandelssvölker unter Rüstungslasten seufzen, die Märkte noch nicht voll versorgen

\(^{(7)}\) Handbuch der öffentlichen Wirtschaft, S. 644.
\(^{(8)}\) Handbuch der öffentlichen Wirtschaft, S. 645.
\(^{(9)}\) Handbuch der öffentlichen Wirtschaft, S. 647.


(12) Grundgesetz für die Bundesrepublik Deutschland (Bonner Grundgesetz) vom 23. Mai 1949.
einer allgemeinen Bewegung gegen die öffentliche Wirtschaft gesprochen werden(13).


Das Wort "Privatisierung" ist hier noch nicht gefallen, man spricht nur davon, die bestehenden öffentlichen Betriebe einer allgemeinen Überprüfung zu unterwerfen und sie gegebenenfalls abzubauen.

Und am 28. April 1953 spricht der Präsident des Landesverbandes der Bayerischen Industrie, Generaldirektor Dr. Otto Seeling, auf einer Tagung des Verbandes Pfälzischer Unternehmer in Bad Dürkheim. Er spricht: Der Staat verliert an Ansehen und Autorität, wenn er sich den Tages- und Straßenkampf des wirtschaftlichen Wettbewerbs begibt. Will er dem ausweichen, so bleibt ihm kein anderer Weg übrig, als ins Monopol zu gehen. Er tut dann etwas, was seinen Bürgern verboten ist. Die Zusammenballung wirtschaftlicher Macht

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Von Mitte 1953 ab kann der Beginn einer von den verschiedensten Seiten gesteuerten und aus mehreren Quellen genährten Privatisierungsbewegung detiert werden. Es ist die Periode, in der die verschiedensten Pläne aufgestellt

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und in der auch einige kleinere Privatisierungen — sozusagen als Abschlagzahlung — vorgenommen und bekanntgegeben werden.


Nach diesem Entwurf sollte gesetzlich festgelegt werden, daß alle wirtschaftlichen Unternehmen und Regiebetriebe der öffentlichen Hand (also nicht nur die des Bundes, sondern auch der Länder, Gemeinden und Gemeindever-

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V I

Mit der Volksaktie beginnt die fünfte Periode der Privatisierungsgeschichte, die vom Frühjahr 1957 bis in die Gegenwart reicht. Diese Periode ist die Periode der Verwirklichung.


Nun unter Leitung des CDU-Abgeordneten Dr. Hermann Lindrath wurde ein besonderes Privatisierungsinministerium geschaffen. Von diesem neuen "Bundesministerium für wirtschaftlichen Besitz des Bundes" ist nach einer

gewissen Anlaufzeit eine rege Tätigkeit entfaltet worden(27).


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(29) Preußische Bergwerks- und Hütten AG.
RECENT TRENDS IN THE BALANCE OF PAYMENTS OF JAPAN

Fukuo Kawata

I

The purpose of this article is to make a survey of the trends in the balance of payments of Japan in recent years. A nation's balance of payments account is usually divided into current account and capital account. The former is subdivided into visible and invisible trade accounts and the latter into long-term capital and short-term capital accounts.

The recent figures of our balance of payments and our foreign exchange reserves are shown in the following table. (See Table 1.)

Table 1. Japan's Balance of Payments in Recent Years

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Current Account</th>
<th>Capital Account</th>
<th>Errors and Omissions</th>
<th>Overall Balance</th>
<th>Foreign Exchange Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Visible Trade</td>
<td>Invisible Trade</td>
<td>Long-term Capital</td>
<td>Short-term Capital</td>
<td>Balance</td>
</tr>
<tr>
<td>1957</td>
<td>-235</td>
<td>145</td>
<td>-10</td>
<td>-84</td>
<td>-94</td>
</tr>
<tr>
<td>1958</td>
<td>369</td>
<td>131</td>
<td>90</td>
<td>-125</td>
<td>-35</td>
</tr>
<tr>
<td>1959</td>
<td>155</td>
<td>38</td>
<td>-27</td>
<td>182</td>
<td>155</td>
</tr>
<tr>
<td>1960</td>
<td>3</td>
<td>-73</td>
<td>1</td>
<td>676</td>
<td>677</td>
</tr>
<tr>
<td>1962</td>
<td>292</td>
<td>-225</td>
<td>297</td>
<td>29</td>
<td>326</td>
</tr>
<tr>
<td>*1962</td>
<td>241</td>
<td>-204</td>
<td>262</td>
<td>172</td>
<td>434</td>
</tr>
<tr>
<td>(Jan.-Dec.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*1963</td>
<td>-207</td>
<td>-365</td>
<td>471</td>
<td>184</td>
<td>655</td>
</tr>
<tr>
<td>(Jan.-Dec.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The fiscal year begins in April and ends in March of the following year.

* Calendar year.


Table 1 shows the following facts:

1) Balance of visible trade fluctuates very widely.

2) Balance of invisible trade has turned negative since 1960 and the amount of deficit tends to increase year after year.

3) The net receipt of long-term capital has been growing larger and larger year by year.
(4) The balance of short-term capital was highest in 1960, and thereafter it has been decreasing.

(5) Overall balance registered negative in 1957 and in 1961, but in other years it was positive.

(6) Our foreign exchange reserves showed a remarkable increase, trebling their amount from 629 million dollars at the end of fiscal year 1957 (that is in March 1958) to 1878 million dollars in December 1963.

II

As shown in Table 1, our visible trade balance makes wide fluctuations. This is chiefly attributed to changes in imports. Table 2 shows the movement of our export, import and balance of trade since 1951.

Table 2. Japan's Export, Import and Balance of Trade
(in millions of U.S. dollars)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Export</th>
<th>Import</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>920</td>
<td>962</td>
<td>-42</td>
</tr>
<tr>
<td>1951</td>
<td>1,405</td>
<td>1,658</td>
<td>-253</td>
</tr>
<tr>
<td>1952</td>
<td>1,168</td>
<td>1,790</td>
<td>-622</td>
</tr>
<tr>
<td>1953</td>
<td>1,245</td>
<td>2,243</td>
<td>-998</td>
</tr>
<tr>
<td>1954</td>
<td>1,601</td>
<td>1,767</td>
<td>-166</td>
</tr>
<tr>
<td>1955</td>
<td>2,095</td>
<td>1,956</td>
<td>139</td>
</tr>
<tr>
<td>1956</td>
<td>2,494</td>
<td>2,782</td>
<td>-288</td>
</tr>
<tr>
<td>1957</td>
<td>2,951</td>
<td>3,146</td>
<td>-235</td>
</tr>
<tr>
<td>1958</td>
<td>2,849</td>
<td>2,480</td>
<td>369</td>
</tr>
<tr>
<td>1959</td>
<td>3,425</td>
<td>3,270</td>
<td>155</td>
</tr>
<tr>
<td>1960</td>
<td>3,920</td>
<td>3,917</td>
<td>3</td>
</tr>
<tr>
<td>1961</td>
<td>4,123</td>
<td>4,987</td>
<td>-864</td>
</tr>
<tr>
<td>1962</td>
<td>4,824</td>
<td>4,587</td>
<td>292</td>
</tr>
<tr>
<td>1962 (Jan.–Dec.)</td>
<td>4,787</td>
<td>4,546</td>
<td>241</td>
</tr>
<tr>
<td>1963 (Jan.–Dec.)</td>
<td>5,358</td>
<td>5,565</td>
<td>-207</td>
</tr>
</tbody>
</table>


Table 2 has made it clear that our exports have generally made a steady growth year by year, although they declined a little in 1952, and in 1958, whereas our imports rose heavily every four years, that is in 1953, in 1957 and in 1961, bringing about a large deficit in the balance of trade. This is explained by our trade cycle. As Japan is poorly endowed with natural resources, her economic expansion depends greatly upon the import of foreign resources. It is, there-
fore, quite natural that in a boom period her imports should rise considerably, causing her foreign exchange reserves to dwindle. To check the outflow of our foreign exchange reserves, the government takes a tight money policy, thus restricting imports. In addition to these general causes, the crop failure of rice made our food import expand in 1953, and the Suez issue in 1957 considerably raised the value of our imports.

It is very interesting to note that in the year when import becomes so large that our balance of payments shows a remarkable deficit, the rate of growth of our economy in the following year is also reduced to a very low level. Table 2-1 shows the correlation between the large deficits in the balance of trade (in 1953, 1957 and 1961) and the fall in the rate of growth of our economy in the following years (for example, 1954, 1958 and 1962.) (See Table 2-1.)

Table 2-1. Deficits in the Balance of Trade and Change of G.N.P. over Previous Year

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Deficits in the Balance of Trade (in millions of U.S. dollars)</th>
<th>Change of G.N.P. Over Previous Year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>-998</td>
<td>17.0*</td>
</tr>
<tr>
<td>1954</td>
<td>-166</td>
<td>3.3</td>
</tr>
<tr>
<td>1955</td>
<td>139</td>
<td>10.3</td>
</tr>
<tr>
<td>1956</td>
<td>-288</td>
<td>9.0</td>
</tr>
<tr>
<td>1957</td>
<td>-235</td>
<td>7.9</td>
</tr>
<tr>
<td>1958</td>
<td>369</td>
<td>3.2</td>
</tr>
<tr>
<td>1959</td>
<td>155</td>
<td>17.9</td>
</tr>
<tr>
<td>1960</td>
<td>3</td>
<td>13.2</td>
</tr>
<tr>
<td>1961</td>
<td>-864</td>
<td>14.0</td>
</tr>
<tr>
<td>1962</td>
<td>292</td>
<td>5.1</td>
</tr>
</tbody>
</table>

* Calendar year.

III

Our invisible trade had registered a positive balance before 1960, and had usually offset the negative balance of visible trade, turning the balance of current account into surplus except in 1953 and in 1957. However, since 1960 the balance of invisible trade has turned negative and the amount of deficit has still been increasing. Table 3 shows our balance of invisible trade.

Why in recent years has our balance of invisible trade become negative and been deteriorating? We could mention the following reasons:

(1) As to our invisible trade situation, please refer to my article: F. Kawata, "A Study on Japan's Invisible Trade," in Kobe Economic and Business Review, No. 9, 1962.
Table 3. Balance of Invisible Trade of Japan
(in millions of U.S. dollars)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Receipt</th>
<th>Receipt from Foreign Military Expenditures</th>
<th>Payment</th>
<th>Balance</th>
<th>Except Receipt from Foreign Military Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>1,003</td>
<td>(677)</td>
<td>185</td>
<td>918</td>
<td>(241)</td>
</tr>
<tr>
<td>1952</td>
<td>939</td>
<td>(801)</td>
<td>224</td>
<td>715</td>
<td>(−86)</td>
</tr>
<tr>
<td>1953</td>
<td>917</td>
<td>(761)</td>
<td>232</td>
<td>685</td>
<td>(−76)</td>
</tr>
<tr>
<td>1954</td>
<td>764</td>
<td>(598)</td>
<td>255</td>
<td>509</td>
<td>(−89)</td>
</tr>
<tr>
<td>1955</td>
<td>745</td>
<td>(570)</td>
<td>348</td>
<td>210</td>
<td>(−360)</td>
</tr>
<tr>
<td>1956</td>
<td>842</td>
<td>(587)</td>
<td>516</td>
<td>326</td>
<td>(−261)</td>
</tr>
<tr>
<td>1957</td>
<td>660</td>
<td>(398)</td>
<td>515</td>
<td>145</td>
<td>(−253)</td>
</tr>
<tr>
<td>1958</td>
<td>608</td>
<td>(374)</td>
<td>477</td>
<td>131</td>
<td>(−243)</td>
</tr>
<tr>
<td>1959</td>
<td>651</td>
<td>(349)</td>
<td>613</td>
<td>38</td>
<td>(−311)</td>
</tr>
<tr>
<td>1960</td>
<td>723</td>
<td>(402)</td>
<td>796</td>
<td>−73</td>
<td>(−475)</td>
</tr>
<tr>
<td>1961</td>
<td>804</td>
<td>(375)</td>
<td>943</td>
<td>−139</td>
<td>(−512)</td>
</tr>
<tr>
<td>1962</td>
<td>826</td>
<td>(363)</td>
<td>1,051</td>
<td>−225</td>
<td>(−588)</td>
</tr>
<tr>
<td>1962 (Jan.–Dec.)</td>
<td>813</td>
<td>(366)</td>
<td>1,017</td>
<td>−204</td>
<td>(−570)</td>
</tr>
<tr>
<td>1963 (Jan.–Dec.)</td>
<td>883</td>
<td>(345)</td>
<td>1,243</td>
<td>−365</td>
<td>(−710)</td>
</tr>
</tbody>
</table>


(1) In accordance with the expansion of our foreign trade, the expenditures incidental to foreign trade, such as freight, insurance, port disbursement, agent commission, and so on — have also increased.

(2) As the result of the increasing induction of foreign capital and technical know-how, the payments of investment income, such as interests and dividends, and of patent royalties have also been increasing.

(3) With the progress of foreign exchange liberalization, payments for foreign travel, office expenses and miscellaneous remittances have increased.

(4) The receipts from foreign military expenditures, which had taken up a greater part of our invisible trade receipts, have recently been decreasing.

Now let us examine the balances of our main invisible trade items.

(1) Transportation

The balances of the transportation account have shown deficits every year in the post-war period, and the amount has been growing larger and larger, while in pre-war days (for example, in 1936), our transportation account registered a large surplus. (See Table 3–1)

Then, what are the causes for the deficits in our transportation account? One of the most important causes is the shortage of our vessels owing to war
Table 3-1. Transportation Account (millions of U.S. dollars) (Fiscal Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt</td>
<td></td>
<td>97</td>
<td>69</td>
<td>84</td>
<td>62</td>
<td>82</td>
<td>80</td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td>196</td>
<td>139</td>
<td>192</td>
<td>169</td>
<td>180</td>
<td>143</td>
</tr>
<tr>
<td>Balance</td>
<td></td>
<td>−99</td>
<td>−70</td>
<td>−104</td>
<td>−107</td>
<td>−98</td>
<td>−63</td>
</tr>
<tr>
<td>Port Disbursement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt</td>
<td></td>
<td>24</td>
<td>20</td>
<td>26</td>
<td>30</td>
<td>48</td>
<td>37</td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td>44</td>
<td>42</td>
<td>40</td>
<td>95</td>
<td>113</td>
<td>126</td>
</tr>
<tr>
<td>Balance</td>
<td></td>
<td>−20</td>
<td>−22</td>
<td>−14</td>
<td>−65</td>
<td>−65</td>
<td>−189</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt</td>
<td></td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td>37</td>
<td>17</td>
<td>31</td>
<td>57</td>
<td>84</td>
<td>82</td>
</tr>
<tr>
<td>Balance</td>
<td></td>
<td>−34</td>
<td>−13</td>
<td>−26</td>
<td>−52</td>
<td>−76</td>
<td>−62</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>136*</td>
<td>124</td>
<td>93</td>
<td>114</td>
<td>97</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td></td>
<td>68*</td>
<td>278</td>
<td>199</td>
<td>263</td>
<td>321</td>
<td>377</td>
</tr>
<tr>
<td></td>
<td></td>
<td>68*</td>
<td>−154</td>
<td>−106</td>
<td>−149</td>
<td>−224</td>
<td>−239</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The amount includes insurance.

damages. The expansion of our foreign trade has been so remarkable that it far surpassed the increase in the tonnage of our merchant fleet. The recent ratios of goods carried by Japanese vessels have been very low compared with pre-war days. (See Table 3-2.)

Table 3-2. Ratios of Goods Carried by Japanese Vessels (%)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Export</th>
<th>Import</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1934</td>
<td>72.3</td>
<td>65.2</td>
<td>—</td>
</tr>
<tr>
<td>1957</td>
<td>54.0</td>
<td>42.8</td>
<td>44.1</td>
</tr>
<tr>
<td>1958</td>
<td>60.5</td>
<td>57.4</td>
<td>57.8</td>
</tr>
<tr>
<td>1959</td>
<td>57.8</td>
<td>53.9</td>
<td>54.3</td>
</tr>
<tr>
<td>1960</td>
<td>54.5</td>
<td>47.5</td>
<td>48.2</td>
</tr>
<tr>
<td>1961</td>
<td>53.7</td>
<td>41.3</td>
<td>42.3</td>
</tr>
<tr>
<td>1962</td>
<td>52.4</td>
<td>45.6</td>
<td>46.3</td>
</tr>
</tbody>
</table>


As to port disbursements, one of the main factors for the deficit of this account is bunker oil. When foreign vessels fill their tanks with oil in Japanese ports, they use the oil stored in bond by foreign companies, and pay the price of the oil in foreign currency outside Japan. On the other hand, Japanese ships also use the oil stored in bond by foreign firms, both in foreign and in
domestic ports, paying the price in foreign currency. This is the reason why bunker oil is one of the most important elements for deficits in port disbursements.

Port disbursement items other than bunker oil, are wharfage, buoy charges, pilot charges, and so on. These charges are so low in Japan as compared with those of foreign countries that our port disbursement account always shows a deficit. Port charges and loading and unloading expenses in various ports of the world are shown in Table 3-3.

Table 3-3. Comparison of Port Charges and Expenses for Loading and Unloading.

<table>
<thead>
<tr>
<th>Port</th>
<th>Port Charges (per vessel)</th>
<th>Unloading Expenses (per ton)</th>
<th>Loading Expenses (per ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yokohama</td>
<td>492</td>
<td>1.33</td>
<td>1.34</td>
</tr>
<tr>
<td>Kobe</td>
<td>515</td>
<td>1.59</td>
<td>1.62</td>
</tr>
<tr>
<td>New York</td>
<td>1,315</td>
<td>8.50</td>
<td>9.50</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>1,041</td>
<td>8.85</td>
<td>10.92</td>
</tr>
<tr>
<td>London</td>
<td>4,771</td>
<td>4.50</td>
<td>2.80</td>
</tr>
<tr>
<td>Hamburg</td>
<td>2,117</td>
<td>3.83</td>
<td>3.56</td>
</tr>
<tr>
<td>Rotterdam</td>
<td>1,048</td>
<td>3.68</td>
<td>2.96</td>
</tr>
<tr>
<td>Bombay</td>
<td>947</td>
<td>1.66</td>
<td>1.51</td>
</tr>
<tr>
<td>Bangkok</td>
<td>835</td>
<td>0.76</td>
<td>0.96</td>
</tr>
<tr>
<td>Singapore</td>
<td>808</td>
<td>2.43</td>
<td>2.03</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>232</td>
<td>0.99</td>
<td>1.02</td>
</tr>
<tr>
<td>Sydney</td>
<td>1,800</td>
<td>6.87</td>
<td>17.26</td>
</tr>
</tbody>
</table>

Source: Mr. N. Matsuo, ibid.

(2) Foreign Travel

The balance of foreign travel account had been positive in pre-war years, for example in 1936, and also in post-war days before 1959, but in 1960 it turned negative owing to the relaxation of restrictions for travel abroad. (See Table 3-4.) In 1961, the government tightened the regulations for foreign travel as a measure for the improvement of our balance of payments. This restriction was effective in balancing the account that year. It is, however, expected that

Table 3-4. Foreign Travel Account

<table>
<thead>
<tr>
<th>Year</th>
<th>Receipt</th>
<th>Payment</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1936</td>
<td>25</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>1957</td>
<td>23</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>1958</td>
<td>29</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>1959</td>
<td>38</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>1960</td>
<td>47</td>
<td>51</td>
<td>-4</td>
</tr>
<tr>
<td>1961</td>
<td>59</td>
<td>59</td>
<td>0</td>
</tr>
<tr>
<td>1962</td>
<td>59</td>
<td>61</td>
<td>-2</td>
</tr>
</tbody>
</table>
after the liberalization of foreign travel in the spring of 1964, this account may register an increasing negative balance.

(3) Investment Income

The balance of investment income account had been positive in the pre-war period, (for example in 1936), but in post-war days it turned negative. The amount of net deficits has been increasing since 1960. (See Table 3-5.) This is due to the large scale induction of foreign long-term capital. The negative balance of this account is expected to grow larger.

Table 3-5. Investment Income Account (in millions of U.S. dollars) (Fiscal Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt</td>
<td>93</td>
<td>23</td>
<td>23</td>
<td>43</td>
<td>58</td>
<td>64</td>
<td>66</td>
</tr>
<tr>
<td>Payment</td>
<td>43</td>
<td>48</td>
<td>50</td>
<td>61</td>
<td>69</td>
<td>90</td>
<td>118</td>
</tr>
<tr>
<td>Balance</td>
<td>50</td>
<td>-25</td>
<td>-27</td>
<td>-18</td>
<td>-11</td>
<td>-26</td>
<td>-52</td>
</tr>
</tbody>
</table>

(4) Patent Royalties

The balance of patent royalties account has been overwhelmingly negative. This is because of the induction of foreign industrial techniques. Although such an induction is a factor in foreign exchange payments, it may largely contribute toward the innovation in Japanese industry and the promotion of her exports, and thus to the improvement of her international balance of payments. (See Table 3-6.)

Table 3-6. Patent Royalties Account (in millions of U.S. dollars) (Fiscal Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Payment</td>
<td>40</td>
<td>46</td>
<td>60</td>
<td>94</td>
<td>111</td>
<td>113</td>
</tr>
</tbody>
</table>

(5) Commission

The balance of the commission account has been negative; although the amount of receipts has been increasing, still the amount of payment has grown

Table 3-7. Commission Account (in millions of U.S. dollars) (Fiscal Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipt</td>
<td>13</td>
<td>12</td>
<td>15</td>
<td>20</td>
<td>36</td>
<td>44</td>
</tr>
<tr>
<td>Payment</td>
<td>24</td>
<td>26</td>
<td>34</td>
<td>49</td>
<td>86</td>
<td>118</td>
</tr>
<tr>
<td>Balance</td>
<td>-11</td>
<td>-14</td>
<td>-19</td>
<td>-29</td>
<td>-50</td>
<td>-74</td>
</tr>
</tbody>
</table>
faster. With the growth and development of our foreign trade, expenditures will also increase. But these expenditures may be regarded as necessary expenses for the expansion of our trade.

(6) Receipts from Foreign Military Expenditures

It is true, our receipts from foreign military expenditures have largely contributed toward the improvement of our balance of payments. But since the end of the Korean Conflict, the amount of receipts has gradually been decreasing, and especially, since the end of 1960, when the dollar defence policy was enforced.

Table 3-8. Receipts from Foreign Military Expenditures
(millions of U.S. dollars) (Fiscal Year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yen Sales</td>
<td>273</td>
<td>277</td>
<td>241</td>
<td>207</td>
<td>210</td>
<td>213</td>
<td>185</td>
<td>201</td>
</tr>
<tr>
<td>Limited Depository Account of U.S. Forces</td>
<td>202</td>
<td>172</td>
<td>156</td>
<td>159</td>
<td>127</td>
<td>189</td>
<td>188</td>
<td>162</td>
</tr>
<tr>
<td>Others</td>
<td>16</td>
<td>12</td>
<td>1</td>
<td>8</td>
<td>12</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>491</td>
<td>461</td>
<td>398</td>
<td>374</td>
<td>349</td>
<td>402</td>
<td>373</td>
<td>363</td>
</tr>
</tbody>
</table>


IV

The balance of capital transactions has been positive, and this contributes largely toward making our overall balance of payments positive. The balance

Table 4-1. Balance of Capital Account
(in millions of U.S. dollars) (Fiscal year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipt</td>
<td>43</td>
<td>149</td>
<td>132</td>
<td>156</td>
<td>384</td>
<td>476</td>
<td>458</td>
<td>751</td>
</tr>
<tr>
<td>Payment</td>
<td>53</td>
<td>59</td>
<td>159</td>
<td>155</td>
<td>211</td>
<td>179</td>
<td>196</td>
<td>280</td>
</tr>
<tr>
<td>Balance</td>
<td>-10</td>
<td>90</td>
<td>-27</td>
<td>1</td>
<td>173</td>
<td>297</td>
<td>262</td>
<td>471</td>
</tr>
<tr>
<td>Balance of Short-term Capital</td>
<td>-84</td>
<td>-125</td>
<td>182</td>
<td>676</td>
<td>456</td>
<td>29</td>
<td>172</td>
<td>184</td>
</tr>
<tr>
<td>Balance of Capital Account</td>
<td>-94</td>
<td>-35</td>
<td>155</td>
<td>677</td>
<td>629</td>
<td>326</td>
<td>434</td>
<td>655</td>
</tr>
<tr>
<td>Overall Balance of Payments</td>
<td>-109</td>
<td>345</td>
<td>387</td>
<td>636</td>
<td>436</td>
<td>302</td>
<td>355</td>
<td>37</td>
</tr>
</tbody>
</table>

of the short-term capital account fluctuates so widely that it is impossible to foretell how it will move. But the balance of the long-term capital account has been positive since 1960. It is generally believed that the balance of the long-term capital account will become the most important item in covering the deficit of our current balances of payments.

\[ \text{V} \]

As stated above, our current account tends to register negative balances, especially owing to the increase in payments and decrease in receipts of the invisible trade.

The negative balance of our invisible trade seems to have now become chronic, and it may be difficult to reverse this trend. But we should try to strengthen the international competitive power of our shipping industry to increase our traffic revenues. As to port disbursements, those charges, which are too low compared with the international level, should be raised.

As to foreign travel, we should try to attract foreign tourists on one hand, and to refrain from wasting our foreign exchange on the other hand.

With regard to patent royalties we should endeavour to develop a new industrial technique of our own, and try to export our technique. At any rate, it seems to be difficult to realize a positive balance in our invisible trade within a short period, but we should try to improve the balance gradually.

The net receipt of long-term capital, as we have mentioned above, has recently been the main item to keep positive our overall balance of payments. It is, however, questionable to expect the increasing net inflow of foreign long-term capital for two reasons. In the first place, the tempo of its inflow has been declining since July 1963, when President Kennedy proposed the adoption of the interest equalization tax.

Secondly, the outflow of long-term capital has recently been growing, chiefly owing to the repayment of foreign capital which has become due. Although we may expect a fairly large inflow of long-term capital even if the interest equalization tax should be enforced, yet the net receipt may not reach so high a level as before, taking the outflow into account.

After all, the most proper way, to improve our balance of payments is to expand our export so large as to offset the chronic deficits in our invisible trade, by establishing a long-term policy for export promotion.
Our long-term financial institutions had been given special character in the pre-war capitalistic economic development and still more during World War II had an abnormal function to perform under the war-economy system.

Meanwhile, the Occupation Army after our surrender on August 15, 1945 tried to democratize our political and economic system at once. As the monetary and banking policies were also included in these measures, G. H. Q. was about to reform our long-term financial institutions based on the American Banking system. Thus, Japan's extremely controlled long-term financial institutions had to be modelled along American long-term financial institutions, but it was these organizations that peaked the securities market. Post-war reforms in our money and banking system were very drastic. The features of the pre-war long-term financial institutions were as follows:— (1) They depended greatly upon banks and financial institutions, above all, there was a very high reliance on the zaibatsu banks, (2) They helped the underdeveloped securities market, (3) Special banks (especially bond debenture issued banks) played a very large role. Therefore, the pre-war supply system of long-term equipment funds in big enterprises corresponded to 60% of the purchased amount of stocks and shares, corporate bonds and debentures. As the greater part of these securities were indirect investments (circuit investments) by holding companies, life-insurance companies, non-life-insurance companies, the special banks (investment bank) supplemented the deficits. By the weakening of the zaibatsu banks through the dissolution of zaibatsu and the abolition of special banks there undoubtedly had to be plans for their reform.

In the course of the severe fluctuation, our economy started again as a capitalistic economy from the so-called "second original accumulation of capital period," but the reorganization course for long-term financial institutions for vast demands for equipment funds changed from the post-combinations (monopolistic large enterprise → zaibatsu bank → special bank → national capital or treasury loan) to new combinations (monopolistic large enterprise → big bank → long-term credit bank → securities market → trust bank → life insurance
companies, non-life-insurance companies) and added a powerful or supplementary national or treasury loan.

The reconstruction process of our post-war economy was brought about by the reestablishment of bank capital first of all, and afterwards of our industrial capital. As Japanese capitalism finished its abnormal development after this war, our abnormal long-term finance existed where the rate of economic growth was high and our normal long-term finance appeared in the case of a low rate of economic growth.

Still, the method of raising enterprise capital in the pre-war period was as follows: own capital 84%, stocks and shares 34%, depreciation 24%, reserve fund 25%, borrowing fund or debt 16.4%, reliance (degree) on corporation bond debenture 1.1% in 1935, but each parameter changed in 1960 to the following: 41.5%, 10.5%, 16%, 15%, 51%, 6.8%.

As for recent shipbuilding and ship mortgage finances, we find that there were a high reliance upon long-term financial institutions and huge city banks. Moreover, 55 important corporations had the following debts in March 1963: a borrowing balance (debt) for equipment funds which was a treasury loan, 184.8 billion yen and private funds (city bank loan) of 124.1 billion yen, the total amounting to 308.9 billion yen, and arrears for the principal (capital) being 96.1 billion yen (in detail, treasury loan 42.5 billion yen and private bank loan 53.6 billion yen). In other words, they had difficulties of which the shortage in amount of repayment was about 100 billion yen with actually the same amount in arrears, their own capital ratio shows 19.7%, the interest ratio in total expenditures 10.5%.

II

During these ten years, our economy has reached the pre-war level and greatly out-distanced it. Especially, the high rate of growth since 1951, has shown an average pace of over 9 per cent per year, and has won the glorious admiration “consider Japan” from all over the world. “A Survey by the (London) Economist, September 1, 1962,” is a remarkable instance of this case. As the result of the Pacific War, we lost about 45% of our territory, the national wealth of remaining Japan proper was decreased by 40%, while the decrease of industrial capacity was estimated at over 40%. From the monetary aspect, we had to pay huge amounts for military expenditures for the Occupation Army, and the amount went on increasing in order to conduct all sorts of postwar-affairs which after all raised prices. In other words, this expenditure called “Post-war affairs management expenditure” (Shōsen-shorihi), occupied an important
and large part of our yearly budget, until the peace treaty was concluded in September 1950.

In addition to these huge expenditures, a reconstruction fund was needed for our economy under the control of the Supreme Commander of the Allied Powers (SCAP) or General Headquarters (GHQ), with General McArthur at its head.

In spite of the extraordinary demand for current funds, no longer could savings be expected from incomes, for unemployment had increased drastically and there was an extreme shortage of food, resulting in black marketeers and raising of black market prices, while bank deposits decreased and the level of production was only 15% of the pre-war level in February 1946, half a year after the surrender. The concentrated expression of these worst post-war economic conditions can be observed in the confusion of the severe inflation of this country. The first stage of the controlling policies by G. H. Q. aimed to disband Japanese military powers and to democratize the political and economical institutions. The authorities of G. H. Q. planned for the dissolution of the Zaibatsu, reformation of agricultural land property, social reforms, and other economic evolutions. They thought it was possible for a direct and quick reestablishment and reconstruction of this economy.

We must recognize the actual economic ability or real activity by the military rate of exchange (this was fixed arbitrarily between the American dollar and yen) and the change of the official price of gold.

### Table 1. Military Rate and Price of Gold

<table>
<thead>
<tr>
<th>Date</th>
<th>Military Rate</th>
<th>Date</th>
<th>Official Price of Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31, 1945</td>
<td>$1 = ¥ 15</td>
<td>June 22, 1933</td>
<td>1 g = ¥ 8.05</td>
</tr>
<tr>
<td>Mar. 11, 1947</td>
<td>$1 = ¥ 50</td>
<td>Apr. 6, 1934</td>
<td>1 g = ¥ 2.95</td>
</tr>
<tr>
<td>Mar. 12, 1947</td>
<td>¥ 1 = $ 250</td>
<td>Jan. 11, 1935</td>
<td>1 g = ¥ 3.09</td>
</tr>
<tr>
<td>July 6, 1948</td>
<td>¥ 1 = $ 270</td>
<td>May 2, 1938</td>
<td>1 g = ¥ 3.85</td>
</tr>
<tr>
<td>Jan. 8, 1949</td>
<td>¥ 1 = $ 350</td>
<td>Jan. 20, 1946</td>
<td>1 g = ¥ 3.85</td>
</tr>
<tr>
<td>Apr. 25, 1953</td>
<td>¥ 1 = $ 360</td>
<td>July 17, 1947</td>
<td>1 g = ¥ 75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sept. 25, 1947</td>
<td>1 g = ¥ 150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aug. 13, 1948</td>
<td>1 g = ¥ 326</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 22, 1949</td>
<td>1 g = ¥ 385</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mar. 1, 1950</td>
<td>1 g = ¥ 401.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feb. 2, 1953</td>
<td>1 g = ¥ 405</td>
</tr>
</tbody>
</table>


In those days, our exchange rate system was based on both the military rate and multiple exchange system at the same time. But our system was a proper monetary and exchange policy which was controlled by G. H. Q., differing from the system which Latin-American countries had adopted after the
world crisis. We can call it the "Price Ratio System (P. R. S.)", the rate of conversion being fixed for each commodity or commodity group calculated conversely from the rate of the domestic price versus the international price (American price) of commodities, on the foundation of past government trade experience up to that date. The purpose of adopting this system was to connect our closed and separated economy with that of international economy. As shown in the next table, the general trend was the establishment of the yen rate reflecting the unbalanced condition, the low rate for imports and high rate for exports. As a whole, the rates for import goods were cheap, while the rates for export goods were high, for they were derived from the remarkable inflation of our economy. Moreover, they implied that imports to Japan during the inflation were necessarily overvalued in yen, while it was vice versa for exports, that is undervalued in yen. For instance, the past fixed price for cotton and wool was cheap (cotton: ¥80, wool: ¥120), because these goods were not obtainable at home and had to be imported as raw materials.

Table 2. Multiple Rates of Exchange
(on Jan. 31, 1949. unit=yen)

<table>
<thead>
<tr>
<th>Import Rate</th>
<th>Export Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cotton</strong></td>
<td></td>
</tr>
<tr>
<td>Domestic Use</td>
<td>80</td>
</tr>
<tr>
<td>Export Use</td>
<td>250</td>
</tr>
<tr>
<td>Pig-Iron</td>
<td>67</td>
</tr>
<tr>
<td>Iron Ore and Concentrates</td>
<td>125</td>
</tr>
<tr>
<td>Coking Coal</td>
<td>178</td>
</tr>
<tr>
<td>Steel</td>
<td>147</td>
</tr>
<tr>
<td>Rock-Phosphate</td>
<td>154</td>
</tr>
<tr>
<td>Bauxite</td>
<td>158</td>
</tr>
<tr>
<td>Potassium</td>
<td>82</td>
</tr>
<tr>
<td>Crude Petroleum</td>
<td>284</td>
</tr>
<tr>
<td>Crude (Raw) Rubber</td>
<td>154</td>
</tr>
<tr>
<td>Hides and Skins (Pelt)</td>
<td>120</td>
</tr>
<tr>
<td>Chemicals</td>
<td>200–350</td>
</tr>
<tr>
<td>Salt</td>
<td>103</td>
</tr>
<tr>
<td>Sugar</td>
<td>177</td>
</tr>
<tr>
<td>Wheat</td>
<td>165</td>
</tr>
<tr>
<td>Wool</td>
<td>120–140</td>
</tr>
<tr>
<td><strong>Export Rate</strong></td>
<td></td>
</tr>
<tr>
<td>Cotton</td>
<td></td>
</tr>
<tr>
<td>Yarn</td>
<td>259</td>
</tr>
<tr>
<td>Cloth</td>
<td>250–420</td>
</tr>
<tr>
<td>Silk Fabrics</td>
<td></td>
</tr>
<tr>
<td>Staple Fibers</td>
<td>300</td>
</tr>
<tr>
<td>Rayon Goods</td>
<td>300</td>
</tr>
<tr>
<td>Wollen Goods</td>
<td>350</td>
</tr>
<tr>
<td>Wollen Yarn</td>
<td>300</td>
</tr>
<tr>
<td>Bar Steel</td>
<td>240</td>
</tr>
<tr>
<td>Steel Ship</td>
<td>500</td>
</tr>
<tr>
<td>Thin Board</td>
<td>340–380</td>
</tr>
<tr>
<td>Zin Plate</td>
<td>390–400</td>
</tr>
<tr>
<td>Locomotives</td>
<td>300</td>
</tr>
<tr>
<td>Motor-Car</td>
<td>430</td>
</tr>
<tr>
<td>Raw Silk</td>
<td>420</td>
</tr>
<tr>
<td>Bicycle</td>
<td>510</td>
</tr>
<tr>
<td>Tinned Goods</td>
<td>300</td>
</tr>
<tr>
<td>Wood</td>
<td>320–420</td>
</tr>
<tr>
<td>Ceramic Ware</td>
<td>600</td>
</tr>
</tbody>
</table>

Source: Asahi Year-Book, 1951.

Therefore, the fear of inflation after this second war was intensified as the purchasing power which had been frozen in compulsory savings during the war poured out. Still worse, in the past without an exchange control, specula-
tion in foreign exchange used to be a marked cause for the rate of exchange to fall drastically. The so-called hyperinflation in our economy after the war, had exhaustively destroyed and crushed Japan’s credit organization.

On February 16, 1946 the so-called “Kinyū-Kinkyū-Sochi” (Monetary Emergency Measures) was put in force, and there was a compulsory exchange of circulating back notes (over 10 yen notes) for new ones (after March 7, the old notes were prohibited from circulation) and a freezing of all deposits in all kinds of banks over and above a certain amount. The drawable amount from deposits was determined as ¥100 per person a month for living costs, the rest

Table 3. Issue of the Bank Note and Price Index

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1937 = 100</td>
<td>1945, July = 100</td>
<td>1945, Sept. = 100</td>
<td></td>
</tr>
<tr>
<td>1945, July</td>
<td>28,456</td>
<td>258.6</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>42,300</td>
<td>266.4</td>
<td>102.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>55,440</td>
<td>531.5</td>
<td>268.6</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>1946, Jan.</td>
<td>58,565</td>
<td>629.3</td>
<td>243.2</td>
<td>169</td>
<td>140</td>
</tr>
<tr>
<td>Feb.</td>
<td>61,824</td>
<td>688.0</td>
<td>265.9</td>
<td>191</td>
<td></td>
</tr>
<tr>
<td>Mar. 12</td>
<td>15,204</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>93,397</td>
<td>1,784.3</td>
<td>689.4</td>
<td>223</td>
<td></td>
</tr>
<tr>
<td>1947, Jan.</td>
<td>100,040</td>
<td>1,844.9</td>
<td>713.1</td>
<td>254</td>
<td>176</td>
</tr>
<tr>
<td>May</td>
<td>129,685</td>
<td>2,518.2</td>
<td>973.3</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>150,683</td>
<td>4,746.0</td>
<td>1,831.6</td>
<td>452</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>219,414</td>
<td>6,611.3</td>
<td>2,550.2</td>
<td>558</td>
<td></td>
</tr>
<tr>
<td>1948, May</td>
<td>223,498</td>
<td>6,988.4</td>
<td>2,701.5</td>
<td>710</td>
<td></td>
</tr>
<tr>
<td>Aug.</td>
<td>254,209</td>
<td>12,492.8</td>
<td>4,829.4</td>
<td>744</td>
<td></td>
</tr>
<tr>
<td>Dec.</td>
<td>355,280</td>
<td>14,847.0</td>
<td>5,739.5</td>
<td>769</td>
<td></td>
</tr>
<tr>
<td>1949, Aug.</td>
<td>298,201</td>
<td>16,897.7</td>
<td>6,532.1</td>
<td>765</td>
<td>177</td>
</tr>
<tr>
<td>Dec.</td>
<td>320,397</td>
<td>17,356.4</td>
<td>6,709.5</td>
<td>655</td>
<td>175</td>
</tr>
<tr>
<td>1950, Jan.</td>
<td>320,397</td>
<td>18,104.3</td>
<td>6,998.9</td>
<td>625</td>
<td>176</td>
</tr>
<tr>
<td>Sept.</td>
<td>328,781</td>
<td>20,681.9</td>
<td>7,995.0</td>
<td>550</td>
<td>196</td>
</tr>
<tr>
<td>Dec.</td>
<td>422,063</td>
<td>22,550.5</td>
<td>8,717.4</td>
<td>580</td>
<td>203</td>
</tr>
<tr>
<td>1951, May</td>
<td>399,332</td>
<td>27,704.2</td>
<td>10,709.6</td>
<td>678</td>
<td>212</td>
</tr>
<tr>
<td>Aug.</td>
<td>414,705</td>
<td>27,616.1</td>
<td>10,675.1</td>
<td>630</td>
<td>206</td>
</tr>
<tr>
<td>Dec.</td>
<td>506,385</td>
<td>28,250.6</td>
<td>10,901.5</td>
<td>638</td>
<td>208</td>
</tr>
<tr>
<td>1952, May</td>
<td>444,002</td>
<td>27,589.2</td>
<td>10,671.3</td>
<td>—</td>
<td>204</td>
</tr>
<tr>
<td>Aug.</td>
<td>464,223</td>
<td>27,620.9</td>
<td>10,683.6</td>
<td>—</td>
<td>204</td>
</tr>
<tr>
<td>Dec.</td>
<td>576,431</td>
<td>28,153.0</td>
<td>10,496.6</td>
<td>—</td>
<td>201</td>
</tr>
<tr>
<td>1953, May</td>
<td>501,136</td>
<td>27,787.4</td>
<td>10,741.8</td>
<td>—</td>
<td>201</td>
</tr>
<tr>
<td>June</td>
<td>516,352</td>
<td>27,917.5</td>
<td>10,790.2</td>
<td>—</td>
<td>201</td>
</tr>
</tbody>
</table>

of purchasing power was frozen, and the capital supply for business enterprises was limited in separate deposit accounts. Besides, the general economic policy was a strong anti-inflationary policy calling for a contracted monetary policy, a disclosing policy bringing out hidden merchandises for speculative purposes, and property tax policy. These policies filled Japan's budgetary gap and the vast sum of bank-notes issued (Nichi-Gin-Ken: note of the Bank of Japan) shrank rapidly and showed clearly the efficiency of the series of the monetary emergency measures.

Economic Stabilization Board was established in August 1946, and later the Reconstruction Finance Corporation (Fukkō-Kinyū-Kinko) in January 1947 which began to lend and finance key-industries to raise the production of coal, iron, electricity, shipbuilding fertilizer, textile, etc. Although taking these measures, they caused the prices very soon to rise again so that the amount of the Bank of Japan notes which once contracted to 15.2 million yen on March 12 from 61.8 million yen on February 18, increased again to the starting level of 60 million yen in September. At the end of 1946, the circulation of notes amounted to 93.4 million and all efforts concentrated in these monetary measures were in vain.

### Table 4. National Budget (million yen)

<table>
<thead>
<tr>
<th>Year</th>
<th>G. N. P. (A)</th>
<th>Revenue</th>
<th>Expenditure</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>General (B)</td>
<td>Special a/c</td>
<td>General (C)</td>
</tr>
<tr>
<td>1946</td>
<td>379,109</td>
<td>118.9</td>
<td>190.8</td>
<td>115.2</td>
</tr>
<tr>
<td>1947</td>
<td>1,128,700</td>
<td>214.5</td>
<td>419.1</td>
<td>205.2</td>
</tr>
<tr>
<td>1948</td>
<td>2,165,300</td>
<td>508.0</td>
<td>1,144.3</td>
<td>462.0</td>
</tr>
<tr>
<td>1949</td>
<td>2,737,253</td>
<td>758.6</td>
<td>1,839.5</td>
<td>699.4</td>
</tr>
<tr>
<td>1950</td>
<td>3,361,048</td>
<td>716.8</td>
<td>2,092.1</td>
<td>633.3</td>
</tr>
<tr>
<td>1951</td>
<td>4,535,319</td>
<td>895.5</td>
<td>1,400.1</td>
<td>749.8</td>
</tr>
<tr>
<td>1952</td>
<td>5,195,355</td>
<td>1,078.8</td>
<td>1,350.0</td>
<td>873.9</td>
</tr>
<tr>
<td>1953</td>
<td>5,964,897</td>
<td>1,219.0</td>
<td>1,481.5</td>
<td>1,017.2</td>
</tr>
<tr>
<td>1954</td>
<td>6,197,000</td>
<td>1,185.1</td>
<td>1,660.1</td>
<td>1,040.8</td>
</tr>
<tr>
<td>1955</td>
<td>8,230,669</td>
<td>1,126.4</td>
<td>1,879.9</td>
<td>1,018.2</td>
</tr>
<tr>
<td>1956</td>
<td>9,272,278</td>
<td>1,232.5</td>
<td>2,231.5</td>
<td>1,069.2</td>
</tr>
<tr>
<td>1957</td>
<td>10,017,000</td>
<td>1,399.9</td>
<td>2,376.3</td>
<td>1,187.7</td>
</tr>
<tr>
<td>1958</td>
<td>10,394,700</td>
<td>1,453.7</td>
<td>3,058.5</td>
<td>1,331.6</td>
</tr>
<tr>
<td>1959</td>
<td>12,572,500</td>
<td>1,597.2</td>
<td>3,411.9</td>
<td>1,495.0</td>
</tr>
<tr>
<td>1960</td>
<td>14,664,800</td>
<td>1,888.2</td>
<td>3,964.5</td>
<td>1,784.9</td>
</tr>
<tr>
<td>1961</td>
<td>17,740,500</td>
<td>2,515.9</td>
<td>2,965.8</td>
<td>2,063.4</td>
</tr>
<tr>
<td>1962</td>
<td>19,315,200</td>
<td>2,487.0</td>
<td>3,048.0</td>
<td>2,174.0</td>
</tr>
<tr>
<td>1963</td>
<td>21,950,000</td>
<td>3,019.0</td>
<td>3,595.0</td>
<td>2,723.0</td>
</tr>
</tbody>
</table>

* Preliminary

Then, as mentioned above, our government could not help taking a long-
run anti-inflationary policy.

On the contrary, against the remarkable economic growth of today's pros-
perity since 1951, "the so-called Dodge Stabilization" has given rise to a mone-
tary distortion, known as "over-loan" and a continuous inflationary process. Com-
mercial banks (especially big city banks) have been forced to rely on the
Bank of Japan all the time, as a result of increasing their loans and investment
in excess of deposits. However, at the same time, the increasing basic demand
for reconstruction funds which completely crushed Japan's capitalism by this
surrender had to be started again as soon as possible to finance enormous amounts
for equipment investment funds to key-industries through long-term financial
institutes and intermediaries (i.e. special banks) rather than through big commer-
cial bank loans.

Post-war inflation continued until 1949, when on April 25, a single rate of
exchange $1 = ¥360 was fixed and our economy started again to be independent
and have its voluntary behavior in world economy. This moment was also
commemoratively epochal in developing and expanding our economy. As soon
as the conflict started in Korea on June 15, our market suddenly was enlarged
to a world-wide scale. In those days, the export trade of Japan was still only
30% of the pre-war level. So the home market was quickly overflooded. The
special procurement demands of the U.S. Army of Japan jumped to meet this
country's economic situation. As the result of the Korean War, the price
of commodities rose in all countries: the United States 14%, Germany 23%,
England 25%, France 29%. Above all, our price rise of 45% was the highest.

Table 5. The Rate of Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Japan</th>
<th>U. S. A.</th>
<th>U. K.</th>
<th>Germany</th>
<th>France</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>10.9</td>
<td>(15.3)</td>
<td>3.5</td>
<td>(5.5)</td>
<td>0.2</td>
<td>(8.2)</td>
</tr>
<tr>
<td>1953</td>
<td>16.5</td>
<td>4.4</td>
<td>(5.3)</td>
<td>4.2</td>
<td>(6.9)</td>
<td>7.5</td>
</tr>
<tr>
<td>1954</td>
<td>3.2</td>
<td>(7.7)</td>
<td>-1.6</td>
<td>(0.6)</td>
<td>4.4</td>
<td>(5.9)</td>
</tr>
<tr>
<td>1955</td>
<td>11.2</td>
<td>(10.7)</td>
<td>8.2</td>
<td>(9.5)</td>
<td>2.5</td>
<td>(7.2)</td>
</tr>
<tr>
<td>1956</td>
<td>7.3</td>
<td>(10.1)</td>
<td>2.1</td>
<td>(5.5)</td>
<td>2.8</td>
<td>(7.8)</td>
</tr>
<tr>
<td>1957</td>
<td>9.4</td>
<td>(12.5)</td>
<td>1.9</td>
<td>(5.6)</td>
<td>2.9</td>
<td>(5.8)</td>
</tr>
<tr>
<td>1958</td>
<td>-0.1</td>
<td>-1.5</td>
<td>-1.8</td>
<td>(0.4)</td>
<td>0.1</td>
<td>(4.5)</td>
</tr>
<tr>
<td>1959</td>
<td>18.3</td>
<td>(20.7)</td>
<td>6.8</td>
<td>(8.6)</td>
<td>2.9</td>
<td>(3.9)</td>
</tr>
<tr>
<td>1960</td>
<td>13.0</td>
<td>(16.0)</td>
<td>2.9</td>
<td>(4.5)</td>
<td>4.1</td>
<td>(5.4)</td>
</tr>
<tr>
<td>1961</td>
<td>15.2</td>
<td>(21.8)</td>
<td>2.9</td>
<td>(3.4)</td>
<td>2.9</td>
<td>(5.7)</td>
</tr>
<tr>
<td>1962</td>
<td>5.9</td>
<td>(8.9)</td>
<td>6.1</td>
<td>(6.4)</td>
<td>-0.3</td>
<td>(4.4)</td>
</tr>
</tbody>
</table>

But, the production index for 1952 showed an increase of 26% and exceeded the pre-war level (1934-36) by 34%. The wholesale price rise was 5.7% in one year from March 1951.

Thus, our wonderful economic development after the Korean War was defined as "the so-called Korean Boom", and after this turning point in our economic activities at large it went on expanding. So, today's splendid rate of growth was realized and there was even Kanetsu Keiki (an excessive prosperity) as we have rarely experienced in our history which finally began to sound a warning rather than admiration for the expansion of economy without price rises.

We shall divide into five periods this economic expansion after the Korean War as follows:

1. The post-war inflation period and later contraction put into effect by the Dodge Plan. (1945–1949)
2. The boom period caused by the Korean War ensuring a reactionary contraction. (1950–1951)
3. The expansion policy taken after the conclusion of the peace treaty and the resulting contraction. (1952–1953)
4. The expansion in the period of the so-called "Sûryô-Keiki" (Quantity prosperity) and the contraction to check its over-heating (excessive prosperity). (1954–1955)
5. The Boom period brought forward by the remarkable increase of exports and the contraction to repress over-investments. (1956–1961 and after)

Our economic success was estimated by overseas economists as follows: One of them was the case in the article titled "Consider Japan" in "The London Economist" September 1, 1962 (which contains 15 pages) and September 8, 1962 (which was 11 pages), the total pages of the former and the latter being 26 pages. In this work, they pointed out the Japan's remarkable merit and success by her non-orthodox measures in two chapters of which one was "The Most Exciting Example" and the other, "Not So Exceptional Case". The measures most enumerated as concrete plans appeared in "Easy Budget", "But Tight Money", "The Planning of Exports", and "Can It Last?" Perhaps, they may have regarded "easy budget" as an "easy money" policy and similarly had better have considered "easy" as "stimulating". As the result of the high pace of economic growth in Japan and the over-heating prosperity, Japan suffered from a crisis of foreign currency and was forced to take a "Tight Money" policy or contraction policy. However, this "Tight Money" policy was very effective in Japan, because her monetary circumstance was the so-called "over-loan". The "London Economist" analysed the possibility of the application of Japan's successful experience as a policy for underdeveloped areas. This was contained in
### Table 6. Bank Lending (¥ million)

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of Banks</th>
<th>Deposits</th>
<th>Call Money</th>
<th>Total</th>
<th>Discount</th>
<th>Borrowing from the Bank of Japan</th>
<th>Investments in Securities</th>
<th>Debentures Issued</th>
<th>Loans &amp; Discounts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Total of Accounts</td>
<td>Checking a/c</td>
<td>Time Deposit</td>
<td>from Bank</td>
<td>Money</td>
<td>Total</td>
<td>Discount</td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>69</td>
<td>119,829</td>
<td>10,804</td>
<td>35,152</td>
<td>12,973</td>
<td>—</td>
<td>518</td>
<td>97,621</td>
<td>2,854</td>
</tr>
<tr>
<td>1946</td>
<td>69</td>
<td>144,868</td>
<td>32,527</td>
<td>29,279</td>
<td>13,809</td>
<td>—</td>
<td>968</td>
<td>146,406</td>
<td>7,735</td>
</tr>
<tr>
<td>1947</td>
<td>69</td>
<td>234,375</td>
<td>63,049</td>
<td>34,050</td>
<td>14,940</td>
<td>—</td>
<td>502</td>
<td>168,243</td>
<td>6,766</td>
</tr>
<tr>
<td>1948</td>
<td>75</td>
<td>50,5349</td>
<td>147,580</td>
<td>73,419</td>
<td>8,785</td>
<td>48,666</td>
<td>3,542</td>
<td>381,347</td>
<td>57,281</td>
</tr>
<tr>
<td>1949</td>
<td>74</td>
<td>729,018</td>
<td>208,674</td>
<td>189,006</td>
<td>22,918</td>
<td>85,499</td>
<td>4,818</td>
<td>679,051</td>
<td>156,747</td>
</tr>
<tr>
<td>1950</td>
<td>76</td>
<td>1,048,566</td>
<td>275,571</td>
<td>290,820</td>
<td>48,838</td>
<td>135,421</td>
<td>4,285</td>
<td>994,746</td>
<td>290,019</td>
</tr>
<tr>
<td>1951</td>
<td>80</td>
<td>1,506,308</td>
<td>356,794</td>
<td>496,592</td>
<td>94,872</td>
<td>203,258</td>
<td>12,885</td>
<td>1,517,813</td>
<td>523,074</td>
</tr>
<tr>
<td>1953</td>
<td>86</td>
<td>2,707,612</td>
<td>557,664</td>
<td>1,040,315</td>
<td>202,828</td>
<td>288,986</td>
<td>47,477</td>
<td>2,671,286</td>
<td>970,710</td>
</tr>
<tr>
<td>1954</td>
<td>87</td>
<td>3,036,687</td>
<td>561,035</td>
<td>1,272,958</td>
<td>242,782</td>
<td>232,491</td>
<td>63,304</td>
<td>2,991,968</td>
<td>976,737</td>
</tr>
<tr>
<td>1955</td>
<td>86</td>
<td>3,724,382</td>
<td>697,058</td>
<td>1,562,191</td>
<td>286,187</td>
<td>29,673</td>
<td>83,711</td>
<td>3,195,818</td>
<td>1,103,562</td>
</tr>
<tr>
<td>1956</td>
<td>86</td>
<td>4,764,265</td>
<td>997,099</td>
<td>2,002,697</td>
<td>333,407</td>
<td>127,079</td>
<td>120,074</td>
<td>4,066,199</td>
<td>1,354,319</td>
</tr>
<tr>
<td>1957</td>
<td>87</td>
<td>5,504,847</td>
<td>1,134,236</td>
<td>2,501,913</td>
<td>397,554</td>
<td>542,003</td>
<td>181,313</td>
<td>5,024,456</td>
<td>1,592,228</td>
</tr>
<tr>
<td>1958</td>
<td>86</td>
<td>6,484,025</td>
<td>1,217,701</td>
<td>3,133,889</td>
<td>530,606</td>
<td>352,483</td>
<td>235,939</td>
<td>5,812,942</td>
<td>1,734,126</td>
</tr>
<tr>
<td>1959</td>
<td>87</td>
<td>7,413,694</td>
<td>1,125,570</td>
<td>3,825,308</td>
<td>685,576</td>
<td>305,154</td>
<td>269,156</td>
<td>6,802,811</td>
<td>2,159,215</td>
</tr>
<tr>
<td>1960</td>
<td>87</td>
<td>8,892,212</td>
<td>1,336,441</td>
<td>4,596,475</td>
<td>880,908</td>
<td>454,200</td>
<td>276,839</td>
<td>8,182,698</td>
<td>2,656,896</td>
</tr>
<tr>
<td>1961</td>
<td>87</td>
<td>10,332,426</td>
<td>1,591,002</td>
<td>5,346,702</td>
<td>1,054,768</td>
<td>1,244,759</td>
<td>284,807</td>
<td>9,770,119</td>
<td>3,263,946</td>
</tr>
<tr>
<td>1962</td>
<td>88</td>
<td>12,118,745</td>
<td>1,676,718</td>
<td>6,335,556</td>
<td>1,257,238</td>
<td>1,208,700</td>
<td>459,619</td>
<td>11,494,604</td>
<td>3,743,842</td>
</tr>
</tbody>
</table>

the following chapters “Lessons for Developers?” and “The Front Runners”, but the answer was negative. In other pages, they studied the peculiarity of Japanese Economy from the viewpoint of “Unions, Management, Competition,” “Technicians and Trouble-Makers,” and “South Seas Shuffe” and added “Jobs for a Lifetime,” “Living Standard”, “After the Zaibatsu,” and “Savers like the Swiss?”

So, we must examine this high accumulation of capital and extraordinary rate of growth of Japan after our surrender. These sources, as mentioned, above were the various successful measures taken including the appropriate monetary policies by the Bank of Japan and leading commercial banks, especially long-term credit institutions.

III

The reconstruction and consolidation process of our post-war long-term credit and financial intermediaries may be divided into the four stages as follows:

(1) The confusion and reconstruction, consolidation period of long-term banks or financial institutions. (1945-1947)

(2) The fluctuation period of private banks or financial institutions and the effective functioning period of the Reconstruction Finance Corporation (Fukkō-Kinyû-Kinkô). (1947-1948)

(3) The consolidation period of the long-term banking system. (1949-1951)

(4) The reorganization period of the long-term banking system — the significance in the enactment by law of the long-term credit bank. (1952-)

The reform direction of the post-war long-term banking system aimed to correct the pre-war special distortion and to return to a normal economy (or peace-time economy) from the war-economy or that controlled by the military fund supplying system. There was controversy in the investigatory commission for the money and banking system (Kinyû-Seido-Chôsakai) which announced two separate reports. The former report in 1946 implied the reestablishment method of centering securities market by the Occupation Army and the latter report in 1947 was of dual form, that is, the traditional long-term finance method or the bond and debenture issue banking method which was added newly to the securities market as the capital procurement market, but both were in opposition with a basic difference between the adoption of the bond, debenture issuing, and long-term finance.

The weight of the zaibatsu banks on pre-war private banks was overwhelming. On the paid-up capital side, the big four zaibatsu banks occupied 48% of
all banks, the big six zaibatsu banks were 2.4%, the big ten zaibatsu banks
50.4%. The reestablishment process after this world war was as follows: the
dissolution of the zaibatsu banks → the financial panic confusion after our
surrender → “Kinyū-Kinkyū-Sochi-Rei” (Regulation of Monetary Emergency
Measures) → reestablishment and consolidation of money and banking institutes
→ 74 private banks started again as reestablishment banks from October 1, 1948.

Owing to the dull securities market and difficult liquidation of deposits,
industrial capitalists required increasing bank loans, but when the reconstruc-
tion and consolidation of the banking system was finished, our private banking
systems, which topped the zaibatsu banks fulfilled their self-capital by increas-
ing their capital and were at last able to play a leading part in the accumulation
of capital aspects.

Thus, the monetary aspect in the accumulation of capital is as follows: on
the Keynesian model used

\[ Y = C + I \]

so, \( S = I \)

in this case, \( Y, C, I, S \) imply national income, consumption, investment,
saving, the rate of capital accumulation in relation to gross national products
and private capital formation, government investment is \( I = S \) (ex-post), as \( \frac{I}{Y} \),
remarkable point is national saving \( S \) as for \( \frac{S}{Y} \) industrial fund supply \( I \)
as for \( \frac{I}{Y} \), if we consider the financial assets and financial transaction

\[ M = L(r, Y) \]

\[ Y = C(c, Y) + I(r, Y) \]

\( (M = \text{money, } L = \text{liquidity preference, } Y = \text{national income, } r = \text{rate of interest,}
C = \text{consumption, } c = \text{propensity to consume, } I = \text{investment}) \)

if the accumulation process develops and the reproduction scale expands

\[ I + M_1 + A = S + M_2 + B \quad (I \equiv S) \]

\( (I = \text{investment, } S = \text{saving, } A = \text{advance or loan, } B = \text{borrowing, } M_1 = \text{net increase of}
holding in money, \text{cash deposit}, M_2 = \text{net creation of fund or money, } M_1, A = \text{financial assets,}
M_2, B = \text{financial liabilities (debts)}) \)

therefore, \( I - S \equiv (B - A) + (M_2 + M_1) \)

In these aspects, \( M_2 + M_1 \) is the banking and financial institutes sides.

Though the abolishment and reform of the special banks were one of the
most difficult occupation policies, the Japan Hypothetic Bank (Nippon Kwangyo
Ginkô) was converted from an ordinary commercial bank by the military financial intermediaries in March 1950, also the Japan Industrial Bank (Nippon-Kógyô-Ginkô), which was in charge of the working funds side in the war economy task on another character by the end of 1948. This implied the starting of the Reconstruction Finance Corporation (Fukko-Kinyû-Kinkô) by new debentures issued by long-term financial intermediaries as a government institute, so other special banks — Hokkaido Development Bank (Hokkaido-Takushoku-Ginkô), Yokohama Specie Bank (Yokohama-Shôkin-Ginkô), Taiwan Bank, Korean Bank (Chôsen-Ginkô) and Korean Colonial Industrial Bank (Chôsen-Shokusan-Ginkô) — were completely abolished by March 1946. However, of these special banks, the Yokohama Specie Bank was coverted into the Tokyo Bank as an ordinary commercial bank in 1946 and similarly was the Hokkaido Development Bank in 1948.

Thus, the Reconstruction Finance Corporation was established as the only industrial fund supply bank under the selective Production Encouragement Method (Keisha-Seisan-Hôshiki) on January 24, 1947.

With the completion of reconstruction and consolidation in the form of the Reconstruction Finance Section (Fukkin-bu) of the Japanese government which was given the chief function in managing government funds, the Japan Industrial Bank was reestablished as a bond-issued long-term financial institution and took the place of the Reconstruction Finance Corporation at the end of 1948.

Table 7. The Final Loan Balance of the Section of Reconstruction Finance (in Japan Industrial Bank) Jan. 24, 1947. (unit= ¥1000)

<table>
<thead>
<tr>
<th>Chief Industry</th>
<th>Amount of Loan</th>
<th>Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Fund</td>
<td>1,379,534</td>
<td>33.5</td>
</tr>
<tr>
<td>Working Fund</td>
<td>2,738,045</td>
<td>66.5</td>
</tr>
<tr>
<td>Total</td>
<td>4,117,579</td>
<td>100.0</td>
</tr>
<tr>
<td>Mining Industry</td>
<td>1,732,385</td>
<td>42.1</td>
</tr>
<tr>
<td>Chemical Industry</td>
<td>755,314</td>
<td>18.3</td>
</tr>
<tr>
<td>Machinery Industry</td>
<td>513,106</td>
<td>12.5</td>
</tr>
<tr>
<td>Marine Products Industry</td>
<td>207,725</td>
<td>5.0</td>
</tr>
<tr>
<td>Metal Industry</td>
<td>92,713</td>
<td>2.3</td>
</tr>
<tr>
<td>Electricity and Gas Industry</td>
<td>40,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Communication and Transportation Industry</td>
<td>36,976</td>
<td>0.9</td>
</tr>
<tr>
<td>Ceramic Industry</td>
<td>30,270</td>
<td>0.7</td>
</tr>
<tr>
<td>Foodstuffs Industry</td>
<td>21,070</td>
<td>0.5</td>
</tr>
<tr>
<td>Textile Industry</td>
<td>20,762</td>
<td>0.5</td>
</tr>
<tr>
<td>Others</td>
<td>667,260</td>
<td>16.2</td>
</tr>
</tbody>
</table>

As for the supplying side of the industrial equipment fund in those days, the private banks financed about 9% of all bank loans in 1947, 17% in 1948, but the part of the Reconstruction Finance Corporation finance was about 72% in 1947 and 60% in 1948.

Even if the fund supplying root could have been possible to be amply met by the private banking systems, in this case, it was undesirable. And the cause existed in the fact that Japanese economy in the recovering period had to give preponderantly large industrial loans to only exceptionally huge enterprises under the Selective Production Encouragement Method, and the financing of the Reconstruction Finance Corporation was concentrated on important or key industries by the creation of the Treasury Fund. Therefore, the supplying weight of the Reconstruction Finance Corporation is shown as having an overwhelmingly high position in our financial and banking circles of those days. As the result, the treasury fund more and more strengthened our big enterprises, and our private banks were very busy among themselves trying to get established as strong commercial banks. Similarly our securities market found it impossible to throw off easily the confusion surrounding it after this war.

As a matter of course, the position of our private banking system seemed to be declining rapidly as the supplying long-term equipment funds. Apparently these conditions made the Reconstruction Finance Corporation our only powerful fund organ from the monetary aspect in the Selective Production Encourage-

Table 8–1. Holding of the Bond of the Reconstruction Finance Corporation by Banking and Financial Intermediaries. (March 1948) (unit = ¥ million)

<table>
<thead>
<tr>
<th>Banking Institutes</th>
<th>Holding</th>
<th>Ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bank of Japan</td>
<td>70,304</td>
<td>64.0</td>
</tr>
<tr>
<td>Others</td>
<td>38,795</td>
<td>36.0</td>
</tr>
<tr>
<td>Banks</td>
<td>30,350</td>
<td>28.0</td>
</tr>
<tr>
<td>Deposit Section of Treasury</td>
<td>4,300</td>
<td>4.0</td>
</tr>
<tr>
<td>Central Cooperative Bank of Agriculture and Forestry</td>
<td>3,816</td>
<td>3.5</td>
</tr>
<tr>
<td>Trust Bank</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>Peoples Finance Corporation</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mutual Saving Bank</td>
<td>17</td>
<td>0.5</td>
</tr>
<tr>
<td>Insurance Company</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Credit Associations</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>109,097</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 8-2. The Reconstruction Finance Corporation Bond and the Increasing Issue of Currency (million yen)

<table>
<thead>
<tr>
<th></th>
<th>Issued Bank Note</th>
<th>Increased (A)</th>
<th>Fukkin (R. F. C.) Bond Holding by the Bank of Japan</th>
<th>Increased (B)</th>
<th>B_A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1947</td>
<td>100,040</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Mar. 1947</td>
<td>115,726</td>
<td>15,686</td>
<td>2,824</td>
<td>2,824</td>
<td>18.1</td>
</tr>
<tr>
<td>Mar. 1948</td>
<td>218,775</td>
<td>103,046</td>
<td>42,463</td>
<td>39,639</td>
<td>38.5</td>
</tr>
<tr>
<td>Mar. 1949</td>
<td>312,547</td>
<td>93,772</td>
<td>70,305</td>
<td>27,842</td>
<td>29.7</td>
</tr>
<tr>
<td>Jan. 1947</td>
<td>100,040</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Mar. 1949</td>
<td>312,547</td>
<td>212,507</td>
<td>70,305</td>
<td>70,305</td>
<td>33.1</td>
</tr>
</tbody>
</table>

Source: Asahi Economic Year-Book, 1949, p. 188.

ment Method. Accordingly, to start this system, our bad economic crisis had to be improved from the severe situation in which the production of coal increased only by one million tons in November from 16.4 million in March and steel was showing only a 20–30 thousand-ton monthly increase, while electricity was also extremely short and without these raw materials the increase of industrial output could not be expected.

Due to the establishment of the Reconstruction Finance Corporation, it was given priority in receiving financing from this system and funds for this corporation were raised by issuing debentures which, however, were difficult of being absorbed by savings, so two-thirds had to be undertaken by the Bank of Japan in the middle of 1948.

Doubtlessly the Reconstruction Finance Corporation played an important function as the reestablishment base-maker of Japanese capitalism by helping in the recovery of productivity in key-industries, in other words, coal, iron, electricity, shipbuilding, fertilizer, textile industry.

Table 9-1. The Reconstruction Finance Corporation Loan (unit = ¥ million)

<table>
<thead>
<tr>
<th>Industry</th>
<th>1946</th>
<th>1947</th>
<th>1948</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loan (%)</td>
<td>Loan (%)</td>
<td>Loan (%)</td>
</tr>
<tr>
<td>Coal</td>
<td>1,036 17.3</td>
<td>19,874 33.3</td>
<td>47,519 36.0</td>
</tr>
<tr>
<td>Steel</td>
<td>291 4.8</td>
<td>1,856 3.1</td>
<td>3,526 2.6</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>561 9.4</td>
<td>3,751 6.3</td>
<td>6,030 4.5</td>
</tr>
<tr>
<td>Electricity</td>
<td>302 5.1</td>
<td>1,166 4.7</td>
<td>22,400 17.0</td>
</tr>
<tr>
<td>Middle and Small Scale</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Enterprise</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Public Corporation</td>
<td>—</td>
<td>18,199 30.6</td>
<td>18,181 13.7</td>
</tr>
<tr>
<td>Total</td>
<td>5,986</td>
<td>59,463</td>
<td>131,965</td>
</tr>
</tbody>
</table>

Table 9-2. The Reconstruction Finance Corporation Loans and of All Banks at the End of 1949. (unit=million yen)

<table>
<thead>
<tr>
<th></th>
<th>All Banks (A)</th>
<th>R. F. C. (B)</th>
<th>B/A (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment Fund (1)</td>
<td>33,877</td>
<td>33,424</td>
<td>98.1</td>
</tr>
<tr>
<td>Working Fund (2)</td>
<td>33,373</td>
<td>13,903</td>
<td>41.7</td>
</tr>
<tr>
<td>Total (3)</td>
<td>67,251</td>
<td>47,328</td>
<td>70.4</td>
</tr>
<tr>
<td>Steel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>2,821</td>
<td>2,071</td>
<td>73.4</td>
</tr>
<tr>
<td>(2)</td>
<td>19,110</td>
<td>1,608</td>
<td>8.4</td>
</tr>
<tr>
<td>(3)</td>
<td>21,931</td>
<td>3,680</td>
<td>16.8</td>
</tr>
<tr>
<td>Fertilizer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>7,113</td>
<td>4,555</td>
<td>64.0</td>
</tr>
<tr>
<td>(2)</td>
<td>9,030</td>
<td>1,564</td>
<td>17.3</td>
</tr>
<tr>
<td>(3)</td>
<td>16,143</td>
<td>6,119</td>
<td>37.9</td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>20,580</td>
<td>19,125</td>
<td>92.9</td>
</tr>
<tr>
<td>(2)</td>
<td>4,842</td>
<td>3,270</td>
<td>67.5</td>
</tr>
<tr>
<td>(3)</td>
<td>25,422</td>
<td>22,395</td>
<td>88.1</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>15,569</td>
<td>13,079</td>
<td>84.0</td>
</tr>
<tr>
<td>(2)</td>
<td>5,009</td>
<td>156</td>
<td>3.1</td>
</tr>
<tr>
<td>(3)</td>
<td>20,578</td>
<td>13,235</td>
<td>64.3</td>
</tr>
<tr>
<td>Textile</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>11,088</td>
<td>4,975</td>
<td>44.9</td>
</tr>
<tr>
<td>(2)</td>
<td>58,778</td>
<td>20</td>
<td>0.03</td>
</tr>
<tr>
<td>(3)</td>
<td>69,866</td>
<td>4,995</td>
<td>7.1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1)</td>
<td>127,380</td>
<td>94,341</td>
<td>74.1</td>
</tr>
<tr>
<td>(2)</td>
<td>438,738</td>
<td>37,623</td>
<td>8.6</td>
</tr>
<tr>
<td>(3)</td>
<td>566,118</td>
<td>131,965</td>
<td>23.3</td>
</tr>
<tr>
<td>Gross Equipment Fund</td>
<td>28,720 (7%)</td>
<td>85,616 (75%)</td>
<td>298%</td>
</tr>
<tr>
<td>Gross Working Fund</td>
<td>379,526 (93%)</td>
<td>28,167 (25%)</td>
<td>7%</td>
</tr>
<tr>
<td>Gross Total</td>
<td>408,246</td>
<td>113,783</td>
<td></td>
</tr>
</tbody>
</table>

Of course, this function of the Reconstruction Finance Corporation was appreciated fairly by most specialists in this country. However, with the increasing demand for equipment funds, this corporation was forced to issue more and more debentures in the form of additional credit and this brought into being the “Fukkin-inflation” phenomenon at last.

The Fukkin debenture, thus, supplied long-term funds in spite of the reduction in special bank debentures issued during the period when the forced accumulation of capital by national authorities or government was the only policy. However, this method was not a normal or sound form of accumulation of capital, so the private savings centred method was to become the true policy.

In order to respond to the urgent wish in which saving funds were desirous of being absorbed into the authentic banking foundation, a private bank method in which the accumulation of capital did not depend upon the creation of credit was started under the Dodge Plan. According to this method, investment by treasury loans and governmental funds changed positions with private banks, being changed from the leading role to a supplementary part.

Afterwards, the zaibatsu banks were revived again. Huge banks became overwhelming forces in the money market and three special banks whose debentures-issuing privilege had once been abolished started to redevelop by “the law of debentures-issuing of bank and financial institutes” in 1952. Furthermore, the securities market was renewed through three post-war reforms or democratization that the Securities Coordinating Liquidation Committee—S.C.L.C.—established in June 1947 and which legislated the Law of Stock Exchange in April 1948 and reopened the Stock Exchange in April 1949. Though this policy was the most effective counter-plot for loosening the tightness of money, there was still great dependence upon the banks and other financial institutions.

Meanwhile, the accumulation of capital in our reconstruction days had the same features as the pre-war method and was returned again as a function of big banks and special debentures-issued banks. It is true that this is a Japanese character for long-term finance or in other words, we shall call it the historical feature of long-term finance in Japan.

Owing to the rapid increase of equipment funds after the Korean War, “over-loan” was inevitable, so ordinary commercial banks had to take charge of both long-term and short-term finances. In accordance with these circumstances, the government attempted to establish a special long-term bank on account of wanting to separate long-term and short-term finances in commercial banks, so the Nippon-Chōki-Shinyo-Ginkō (Japan Long-Term Credit Bank) started into business under this plan in June 1952.
Generally speaking, this bank was established as the only special long-term financial institution to dissolve "over-loan" or "over-borrowing." Moreover, it has the following various functions:—(1) to promote the growth, to rear, and to strengthen the securities market, (2) to fill up insufficient vacancies in internal reserves, (3) to separate into both long-term and short-term finances, (4) to intervene in the systematic function of both the monetary and fiscal systems.

Though the post-war securities market had great weight in long-term money markets, its pre-war position in the money market was as an organ for investment by corporations whose debenture and stock securities were of the greater part. On the other hand, the post-war direction was to absorb popular saving funds; the pre-war combination being — big bank ∪ special bank which was reorganized into a new combination in the post-war period of — the long-term credit bank ∪ the securities market, and here we are also able to point out the features of this country.

IV

Now, our modern long-term financial system has changed with our recent remarkable economic growth. After World War II days, direct investments increased more than indirect investments and the rate of increase ran parallel. It is clear that these tendencies in economic growth and investment seemed equivalently to be observed in both our economic growth period and super economic expansion period. We can divide into three periods our wonderful growth in economy which realized the highest rate of economic growth in the world.

The first period is the reconstruction time (1946–1952), the second is the transitional stage of our economic expansion (1952–1960) and the third is the super expansion days headed by the machinery industry (1961–1963). Furthermore, the first period is divided into the following three detailed stages. (1) from the confusion after the surrender to the Selective Production Encouragement Method (1946–1949), (2) from the Dodge Plan to the occurrence of the Korean War (1949–1950), (3) aftermath of the Korean War (1950–1952). During these seven years there was the reconstruction and consolidation of our long-term banking system. The second period was the starting point of the Japan Long-term Credit Bank. On the contrary the third period can be divided into four more stages as follows:— (1) Investment prosperity period (April 1956 — April 1957), (2) recessional stage (April 1957 — June 1958), (3) reconstruction and expansion stage (July 1958 — June 1959), (4) super-expansion stage (July 1959 — 1963). First of all, we must analyse the super-expansion
period in our post-war economic growth process. Its direction will be the studying of the relation between our high economic growth and our long-term finance structure which is connected with the securities market and Japan Long-term Bank Loan, equipment fund raising by other financial institutions and banks, additional credit by the Bank of Japan, and increasing personal savings.

Our wonderful economic growth was remarkable in the steel, shipbuilding, construction and machinery production process, and especially during the super-expansion period by the increased domestic demand (1956–1957) which continued from the expansion of productivity on which our increased exports is based. During this period, the first stage was the gradually increased demand of steel, shipbuilding, and machinery construction sections; the next stage was the rapidly increased demand for the steel and shipbuilding fields while the demand for the construction and machinery section expanded only gradually. However, in the middle of 1957, the productivity in each of the sections leveled down while production in the shipbuilding section especially declined on account of the depression.

The rate of production growth had its turning point and converted the tempo of the rate. Still, the industrial cycle, the alternative development and recession phenomena in this country had four stages — (1) expansion of production and gradual reduction in stock stage (January 1956 — October 1956), (2) our production developing by leaps and bounds period and increasing gradually stock stage (November 1956 — June 1957), (3) the rapid decline of production and the sudden rise of stock stage (July 1957 — February 1958), (4) the rising curve stage of production and prosperity (since March 1956).

The first stage gradually increased the demand for ordinary steel in the steel, shipbuilding, construction, and machinery sections; in the second stage there was a rapid increase in demand in the steel, and shipbuilding section and a relative increase in the construction and machinery section; in the third stage the demand declined in the shipbuilding and steel section; and in the fourth stage the export demand for ordinary steel suddenly increased while the demand from each of the domestic industrial sections expanded by degrees.

As the result, equipment investments by the first and second relationalization plans were extended and the character of the equipment investments supplying structure did not imply an “over-loan” by the banking system. However, the increasing tendency for a long-term fund supply is due to be examined by our monetary economist as an emergency task. (to be continued)
Bibliography

Mitsuhaya Kajinishi, Showa-Keizaishi (Economic History in the Showa Era)
Jiro Yao, Shihon-Chikuseki-no-Kinyûtetsu-Sokumen (Monetary Aspects in the Accumulation of Capital), Banking 107, 1956.
Toshihiko Yoshino, En-no-Rekishi (History of the Yen), 1955.
Takao Tsuchiya, Showa Kinyûushi (History of Banking in the Showa Era), 1955.
Torajiro Takagaki, Kindai-Nippon-Kinyûushi (History of Money and Banking in Modern Japan), 1955.
Tokihiro Katô, Hompo-Ginko-Shiron (On the Banking History in Japan), 1957.
Teruo Akashi and Norihisa Suzuki, Nihon-Kinyû-Shi (History of Money and Banking in Japan), Part III, 1961.
A CHRONOLOGICAL TABLE OF MODERN JAPANESE SHIPPING — NO. 1; 1600~1799

Seiji Sasaki

In order to introduce the history of modern Japanese shipping the author is attempting a chronological table in English. This article is of the former half from 1600 to 1799. Since 1543 — in this year a Portuguese vessel came to the Island of Tanega — modern Europeans began to visit Japan actively, while on the other hand many progressive Japanese began navigating to South East Asia. However, Iemitsu Tokugawa, the third Shogun, closed the country in the thirtieth of the 17th century. Japanese vessels were not permitted to navigate abroad and only chartered ships of two foreign countries, Holland and China, were allowed to enter Nagasaki, the only open port of the country, for more than two hundred years. This isolation stopped in 1858.

The first plan of the author was to treat the entire period of the isolation till 1858, i.e. all shipping affairs during the two centuries and a half, in this article, No. 1, but it was regrettably impossible for the reason that there is a limit to the number of pages. Leaving out the last fifty or sixty years, this article will deal with the event of two hundred years.

(1) Almost all the names of foreign visitors and ships were recorded only in the Japanese letter. So, when translated they may be spelled wrongly. On this point the author welcomes any advice.

(2) Dates are based upon the lunar calendar that was in use in Japan at that time, except in a few special cases where the dates were clearly recognized in the solar calendar.

(3) The year-name put in parentheses following the Christian era is the name of the Japanese era.

(4) To old unfamiliar Japanese place-names are added their present prefecture-names (or popular local names) in brackets.

(5) To compare with European shipping history some important chronological event are added separately in main countries. (Marked by dotted lines).

(6) Both names of foreign vessels and their captains are almost all uncertain in popular Japanese historical books. The author will make an effort to look them up in other records hereafter, whenever possible.
1600 (Keicho-5)
Mar. 16 (Apr. 19 in the solar calendar) The Dutch ship, “Liefde,” was cast up on the coast of Bungo [Kyushu].
May 12 William Adams, English, the captain of the above-mentioned ship, and Jan Yorce, Dutch, met Ieyasu Tokugawa in Osaka Castle. Jan Yorce became a naturalized subject, and was called Anjin Miura. (–Apr. 14, 1620).
...... (U. K.); Establishment of the East India Company.

1601 (Keicho-6)

1602 (Keicho-7)
June A Cochin China ship came to Hizen [Kyushu].
Aug. Mutual navigation was made between Japan and Malay or the Philippines.
...... (Holland); Establishment of the East India Company.

1603 (Keicho-8)
Jan. Mutual navigation was allowed between Japan and Cambodia or the Philippines.

1604 (Keicho-9)
Aug. An Annan ship came to Japan.

1606 (Keicho-11)
Permission for trade with Siam.

1607 (Keicho-12)
Mar. Ryo Suminokura opened a route on the Fuji River.

1608 (Keicho-13)
A Dutch ship came to Hirato [Kyushu].
The port of Uraga (Kanagawa Pref.) was opened for Spanish ships engaging in the Philippines-Mexico line.

1609 (Keicho-14)
Feb. Harunobu Arima sent an exploring party to Formosa.
July 25 Chaksul Winheike, Dutch merchant, received the red-stamp
(chartered letter) for trade.

Aug. 15 (S.C. Sept. 13) A Dutch mercantile house was built in Hirato.
Jacques Specx took office as the first representative (Chairman; “opperhoofd”).

Sept. 3 A Spanish ship ran up on rocks in Iwawada [Kazusa=Chiba Pref.] Don Rodorigo, the Governor of the Philippines, was in this ship.

Nov. 12 H. Arima attacked an early European vessel (so-called “Nanban-sen”) in the Port of Nagasaki.

1610 (Keicho-15)
June 13 Katsusuke Tanaka and others set sail from Uraga for Mexico across the Pacific Ocean on a new ship of 120 tons, which W. Adams built as well as another ship of 80 tons. They arrived at Acapulco in the middle of September.

1611 (Keicho-16)
May 1 The Spanish ship, “San Francisco,” — commander; Viscayno — put into Uraga. K. Tanaka and 21 Japanese came back to Japan by this ship.
Nov. 28 Permission for trade was given to Chinese merchants.

1612 (Keicho-17)
Prohibition of Christianity.

1613 (Keicho-18)
Sept. 1 An English ship whose commander was John Saris, came to Hirato and received permission for trade.
(Establishment of an English mercantile house in Hirato.)
Sept. 15 Tsunenaga R. Hazekura set sail from Tsukino-ura [Mutsu= Miyagi Pref.] for Italy as the envoy of Masamune Date. Viscayno, the above-mentioned Spanish commander, returned to Mexico by this ship. This Japanese ship navigated back and forth between Italy (Rome) and Japan via Mexico and Madrid. It was the first crossing of the Atlantic by the Japanese ship, and came home in 1620.

1615 (Keicho-20 & Genna 1)
May The fall of Osaka Castle and of the Toyotomi-family.
Sept. 9 Limitation of chartered ships (red-stamp ships, or “(Go)—Shuin-Sen”).

1616 (Genna-2)
Jan. 29 The chief magistrate of Nagasaki sent an exploring party to Formosa.
Aug. 8 Foreign ships were limited to visit only Nagasaki and Hirato except for Chinese ships, and large-sized galleons were prohibited from entering any Japanese port.
Aug. M. Date sent Shogen Yokoi to the South.

1617 (Genna-3)
Aug. 16 Dutch merchants received the chartered-letter (red-stamp) and were permitted to continue trading.
Aug. 26 The Korean envoy met the Shogun.

1618 (Genna-4)
Aug. Permission for trade was given to English ships.
...... (Europe); Opening of the Thirty-Years’ War.

1619 (Genna-5)
Origin of the “Higaki-Kaisen”; the first liner service between Edo [Tokyo] and Kamigata [Osaka].

1620 (Genna-6)
Aug. 26 T. Hazekura, M. Date’s envoy, came back to Japan from Rome.

1621 (Genna-7)
A Siamese ship requested trade rights and was given Permission.

1623 (Genna-9)
July English merchants closed their Hirato mercantile house and went home.

1624 (Kanei-1)
Mar. Rejection of the Spanish request for trade.
...... (Holland); The Dutch occupied Formosa.
1626 (Kanei-3)
...... (Spain); The Spanish occupied Kilun [Formosa].

1628 (Kanei-5)
June Yahei Hamada and his friends attacked Formosa and blew up the Dutch forces.

1631 (Kanei-8)
June 20 Restriction of Japanese ocean-going vessels; They had to receive another special permission letter “Hôsho” from the Nagasaki chief magistrate in addition to the traditional “red-stamp”.

1633 (Kanei-10)
Feb. 28 Prohibition of ocean navigation except for the “Hosho-sen” (above-mentioned chartered ships).
The Japanese abroad were prohibited from coming home.

1635 (Kanei-12)
Mar. 1 The Dutch representative met the Shogun.
May 20 Nagasaki was designated as the trade market and foreign ships were permitted to enter only this port.
June Completion of a large-sized ship the “Ataka-maru”; length 38-ken, width 18-ken, two hundred oars, two rowers per oar, a total of 400 rowers. (Shogun Iemitsu T. changed her name to “Tenka-maru.”)
Sept. 7 Repeated prohibition of the Christian religion.
Prohibition of building large ships over 500-koku.

1636 (Kanei-13)
Mar. 28 The Dutch representative met the Shogun.
May 19 General prohibition of oversea navigation by Japanese ships.

1637 (Kanei-14)
Nov. 9 The Shimabara Revolt.
China forced Korea to surrender.

1638 (Kanei-15)
Merchant ships were excluded from the prohibition against building large-sized ships.
1639 (Kanei-16)
  May 1  The Dutch representative, Nicolace Koekevakel, met the Shogun.
  July 4  The expulsion of Portuguese from Nagasaki.
        Portuguese ships were prohibited from entering any Japanese port.

1640 (Kanei-17)
  June 16  The Nagasaki chief magistrate burnt a Macao ship and punished
            the Portuguese belonging to the ship.
  Sept. 26  Fraosi Calon, the Dutch representative in Hirato, was ordered
            to destroy their warehouse as it had the mark of the Christian era.

1641 (Kanei-18)
  April 2  Maximiliaen le Maire, the Dutch representative who met the
            Shogun was ordered to move the Dutch mercantile house from Hirato
            to Nagasaki and was told that Dutch ships hereafter could only enter
            into the Port of Nagasaki.
  June 17  The Dutch left Hirato and reached Nagasaki.
  Dec. 21  Jan van Elserack, the new representative of the Dutch mercan-
            tile house in Nagasaki, met the Shogun.

1642 (Kanei-19)
  Sept. 4  The Dutch drove the Spanish out of Formosa.
            Prohibition of foreign trade except with Holland, China and Korea.

1643 (Kanei-20)
  June 14  The Dutch ship, "Breskens" came to Yamato-no-ura [Iwate
            Pref.]. The captain, Hendrick Corneliszoon Schaep, and his crew
            were sent to Edo.
  Dec.  The above-mentioned captain and crew were handed over to J. v.
            Elserack.

1644 (Shoho-1)
  Dec. 28  J. v. Elserack met the Shogun.

1644—47. The appearance of the "Taru-kaisen"; mainly used to transport
          "Nada-wine" for Edo.

1647 (Shoho-4)
  Jan. 6  Willem Verstehen, the new Dutch representative met the Shogun.
June 24 Two Portuguese ships came to Nagasaki and asked permission to reopen commercial relations, but were refused.

1648 (Keian-1)
Jan. Frederick Coyet, the new Dutch representative, came to Edo, but had no reception with the Shogun.
...... (Europe); The end of the Thirty Year's War.

1649 (Keian-2)
Oct. 28 Andries Frisius, the Dutch special envoy, came to Edo and apologized for the "Bresken's fault".

1651 (Keian-4)
Feb. 3 Pieter Stertemius, the new Dutch representative, came to Edo.
...... (U. K.); Cromwell's Act.

1652 (Shoo-1)
Feb. 7 (Keian-4 Dec. 28) Adrian van der Burg, the 12th representative of the Dutch mercantile house, met the Shogun. (After this year the Dutch representatives came to Edo every year to meet the Shogun, but their names are omitted.)

1656 (Meireki 2)
May 17 A Siamese ship came to Nagasaki and asked permission to reopen commercial relations, but was refused.

1661 (Kanbun 1)
Dec. 3 The Dutch laid down C. Chong's arms and evacuated south Formosa.

1663 (Kanbun-3)
The Dutch attacked Formosa in league with China.

1664 (Kanbun-4)
...... (France); Establishment of the East India Company.

1668 (Kanbun-8)
Mar. 9 Reform of foreign trade-goods.
May Prohibition of export of silver coins by Dutch ships; changed to
gold coins.
Withdrawal of the Dutch from Formosa.

1670 (Kanbun-10)
Apr. 17 Heizo Suetsugu built a large ship in imitation of Dutch style vessel and brought her to Shinagawa [Edo].
Zuiken Kawamura endeavored to open the coastal routes for transporting Ōu-grown rice (rice from Ōu district); the eastbound and westbound routes.

1672 (Kanbun-12)
Mar. 28 Designation of the special period for Sakai [near Osaka] merchants to engage in Nagasaki-trade.
May 25 The English ship, "Return" came to Nagasaki and asked permission to reopen commercial relations, but was refused.

1682 (Tenwa-2)
Sept. 18 Destruction of the "Ataka-maru" (Tenka-maru).

1683 (Tenwa-3)
Feb. 3 Designation of contrabands in Nagasaki-trade.
June 23 Z. Kawamura was ordered to inspect the route of the Yoda River.
July 27 Formosa submitted to China.

1685 (Teikyo-2)
June 2 A Macao ship came to Nagasaki for the purpose of delivering Japanese castaways, but received no permission to visit in the future.
Aug. Regulation of the annual amount of Nagasaki-trade, 6,000-kan of silver for Chinese ships and 3,000-kan of silver for Dutch ships.

1686 (Teikyo-3)
Aug. 9 Regulation of the annual amount of trade for Korea, 18,000-ryo.
Dec. 15 Regulation of the annual amount of trade for Okinawa, 2,000-ryo.

1687 (Teikyo-4)
Dec. Prohibition order for navigating abroad and exporting arms.
1688 (Teikyo-5 & Genroku-1)
Limitation of the number of Chinese ships allowed to enter, 70 vessels a year.
...... (U. K.); The Glorious Revolution.

1689 (Genroku-2)
Mar. 15 Remodeling of approval stamp for river-ships.
Apr. Completion of Foreigner's-House in Nagasaki (so-called "Dejima Tojin Yashiki").

1690 (Genroku-3)
Aug. 16 Dr. Kempel of Germany, came to Nagasaki as the physician of Foreigner's-House. (-Sept. 22, 1962)

1696 (Genroku-9)
Mar. 29 Enactment of provisions for river-ships in the Kanto district.

1701 (Genroku-14)
Limitation of the number of Dutch ships to 4 or 5 ships a year. (There is another opinion that Chinese ships were reduced to 8 ships and Dutch ships to 5 in 1700)
...... (Spain); The War of succession to the Spanish throne. (-1714)

1703 (Genroku-16)
Oct. 28 Dredging of the Yamato River (Osaka).

1708 (Hoei-5)
Aug. 28. Joan Bopchista Shidoti, Italian, came to the Island of Yaku. (He died on the 21st of October, 1714).

1710 (Hoei-7)
Mar. 4 Regulation of trade by Dutch ships; it was prohibited to have commercial relations with other Christian countries and to take any Christians on board.

1712 (Shotoku-2)
1715 (Shotoku-5)
Jan. 2 A new regulation order for Nagasaki-trade; it prescribed an annual trade-scale as follows, 30 ships and 6,000-kan of silver for Chinese ships, and 2 ships and 3,000-kan of silver for Dutch ships.

1718 (Kyoho-3)
June 29 Prohibition of smuggling with foreign ships in Nagasaki.

1720 (Kyoho-5)
Dec. 25 The Shimoda magistrate’s office moved to Uraga.

1721 (Kyoho-6)

1725 (Kyoho-10)
A Dutch ship first imported five European horses into Japan.
(The order was given in 1723).

1727 (Kyoho-12)
July 26 A Cambodia ship came to Nagasaki and requested to opening commercial relations, but was refused.

1733 (Kyoho-18)
Apr. A tax reduction ordinance on the basis of decline of Nagasaki-trade.
Sept. Limitation of Nagasaki-trade, after the following year Chinese ships were to be decreased to 29 vessels, and the amount of Dutch trade to 1,100-kan of silver.

1736 (Kyoho-21 & Genbun-1)
June Limitation of Chinese ships, from 29 to 25 vessels.

1756 (Horeki-6)
Feb. 14 Imposition of “Koku-sen” (tonnage due) for all ships entering Osaka to dredge the mouth of the river.

1764 (Horeki-14 & Meiwa 1)
...... (Russia); Creation of the Japan Navigation School in Irkutsk.
1765 (Meiwa-2)
The first import of Dutch gold and silver coins.

1768 (Meiwa-5)
...... (Russia); Creation of the Japanese Language School in Irkutsk.

1769 (Meiwa-6)
...... (U. K.); Invention of the steam engine by Watt.

1775 (Anei-4)
July 19 Zunberry, Swedish, came to Japan. (-13 Oct., 1776) He was the author of "Explanatory Diagram of Japanese Plants".
A Dutch ship imported a mummy.
...... (U. S. A.); The declaration of independence.

1778 (Anei-7)
June 9 A Russian ship came to Hokkaido and requested opening commercial relations with the Matsumae-han.

1779 (Anei-8)
Aug. 7 The Matsumae-han refused to open commercial relations with Russia.
Captain Cook navigated along the east coast of Japan.

1781 (Anei-10 & Tenmei-1)
...... (U. K. & Holland) The British-Netherland War (-1783)

1782 (Tenmei-2)
Dutch ships did not come during this year.

1783 (Tenmei-3)
July 20 The captain of the Japanese ship, Kôdayu, and his crew were cast up at Kamchatka and were sent to Irkutsk.

1786 (Tenmei-6)
Exploration of the Islands of Chishima by Tokunai Mogami.

1790 (Kansei-2)
Limitation of Dutch trade, one ship and 700-kan of silver a year. And
after this year the Dutch representative met the Shogun once every five years.

1791 (Kansei-3)
Sept. 1 Provisions for measures when a foreign ship came to Japan, so-called “repulse order against foreign ships.

1792 (Kansei-4)
Sept. 3 Laxman, the Russian envoy, came to Nemuro [Hokkaido] for the purpose of delivering Japanese castaways and requested opening commercial relations.

1795 (Kansei-5)
June 27 Tadafusa Ishikawa, the Tokugawa Shogunate’s envoy, met Laxman in Nemuro and gave him a permission letter to enter Nagasaki.

1797 (Kaisei-7)
May 29 Russians came to Hokkaido and robbed a Japanese ship and her cargoes.

1796 (Kansei-8)
Aug. Browton, an English captain, came to Muroran [Hokkaido] for the purpose of making a marine chart and anchored there for about two weeks.
Dispatch of a Japanese exploration party to the South Sea Islands.

1797 (Kansei-9)
July 7 Browton explored the mouth of Tokyo Bay and again returned to Muroran.
Nov. Foreign ships appeared frequently near Tsushima.
Nov. Russians landed on the Island of Etorofu.

1798 (Kansei-10)
Mar. 6 Fire of Nagasaki-Dejima.
Morishige Kondo set up a national mark, the pillar inscribed “Dai-nippon Etorofu”.
...... (France); Napoleon’s expedition to Egypt.

1799 (Kansei-11)
Kaehei Takadaya opened a regular service to Etorofu.
THE CONTINUOUS EMPLOYMENT OF SEAMEN IN AMERICAN SHIPPING INDUSTRY

Hiromasa YAMAMOTO

I

The life and working conditions of seamen are in many ways different from those of workers on land. In the case of a worker on land, once he has finished his job, he has usually no farther contact with his companions or employer and can spend his leisure hours at home or in other places as he likes. In contrast a seaman on board ship is almost always confined to his vessel, consequently he has no chance to enjoy home life and to spend his leisure hours on land so long as he engages in his job. The vessel is not only the work place for a seaman but is also the place where he has to lodge and spend his free hours during voyages. When a seaman has finished his voyage or voyages after several months, he has to leave his ship if he desires to rest and regain contact with his family and society on land. Therefore seamen are traditionally employed on a round-trip basis according to their contract of engagement. Under this employment system a seaman ordinarily changes his employer and vessel, and he often has to suffer from the unstableness of his employment and earning due to its intermittent character. On the other hand there is no assurance for the shipowner to be able to select and employ desirable seamen.

During the prewar period, Japanese shipowners also employed their crew on a round-trip basis. But after World War II all Japanese shipowners who operate ocean-going vessels have employed their crew as permanent employees. The introduction of the permanent employment system into Japanese shipping industry may be considered as reflecting the wish of shipowners to employ desirable seamen continuously, though the adoption of this system might be also due in part to demand of the seamen's union to secure stability in employment and earning. Japanese shipowners expressed their view that to employ officers and unlicensed personnel continuously was indispensable in order to foster the crew's loyalty to the company and to improve the efficiency of vessel

(1) He may find a similar case in the Company Service Contract in the Merchant Navy Established Service Scheme, which has been enforced in the United Kingdom since 1947, though in this contract the employment relation between shipowner and seamen is limited to two years.
operation. From that point of view, Japanese shipowners stood against the Joint Employment Pool Program proposed by the seamen's union in 1958.\(^2\)

In order to encourage the continuous employment of seamen, Japanese shipowners provide special measures. As for wages all shipping companies adopt a continuous service bonus system under which a seaman will be provided with higher wages according to the length of his service in the company. Though all Japanese ocean-going vessel operators conclude a trade agreement with the All Japan Seamen's Union, most of them provide their employees with various company welfare plans other than determined by trade agreement. The employers prefer to employ fresh men who leave marine academies or training courses and will seldom hire seamen who have been employed by other companies.\(^3\)

Then, in the case of shipowners of other countries, do they admit the necessity for the seamen of continuous employment? Is there any measure to secure the continuous employment of seamen? If they do not find the necessity for continuous employment, why do they not? As a step in answering these questions, the writer will try to survey opinions of American shipowners regarding continuous employment.

II

In the United States, for the most part, licensed seamen and unlicensed seamen belong to several national or international unions which maintain collective bargaining respectively with shipowners on a coastwide basis, and they are despatched through union hiring halls to the vessels which are operated by the companies concluding trade agreements with the union.\(^4\) In the United States seamen are employed basically on a single round-trip basis, but there is no legal or contractual hindrance against continuous employment of seamen, so long as the employer and the employees desire such employment to continue.

Then, what is the opinion of American shipowners regarding the continuous employment of seamen? In order to examine the company policy regarding continuous employment of seamen the writer distributed a questionnaire on the employment system to 131 United States shipowners in 1963. As the subject of

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\(^2\) As the most preferable employment system the All Japan Seamen's Union proposed a joint employment pool from which individual shipowners could hire employees.


this research all shipping companies which own and operate U. S. flag vessels were selected from among the directory of shipowners of the *Shipping World Yearbook* and *Who’s Who*, 1963, excluding agents, ferry boat operators and shipowners who own only vessels of foreign registry.

Among the 131 shipping companies to which the questionnaire was distributed thirty-four companies answered while sixteen other companies informed the writer that it was not possible to answer because of the dissolution of the company or because the company was engaged in only agent business or employed only foreign seamen. The above-mentioned thirty-four companies include twenty-five shipping companies which are composed of seventeen cargo boat operators, eight tanker operators, and nine industrial carriers such as oil companies or manufacturing companies. However, among them the fleets of two tanker companies are operated under the complete control of some oil company, and these three companies answered the questionnaire on the same sheet. Therefore they are dealt with here as one oil company. Thus the research covers thirty-two companies.

Because the answers were obtained from thirty-four ship operators who constitute about a third of the whole of ship operators employing American seamen, and it is uncertain whether these thirty-four companies represent an adequate sample of U. S. ship operators, we can not draw up a complete picture of the whole of U. S. ship operators regarding the employment system of American seamen. However, our research may be helpful in the approach to the employment system of U. S. seamen.

The hiring method of seafarers in each company is determined by the trade agreements between the company and the unions of unlicensed seamen and licensed personnel. Therefore, for the purpose of understanding the hiring method of seamen it is necessary to know with what unions the companies conclude trade contracts. Among the thirty-two ship operators who answered the questionnaire, all shipping companies (twenty-three companies) with few exceptions conclude trade contracts with national or international unions of seafarers (hereafter mentioned as national unions) which are composed of respectively unlicensed seamen or licensed personnel. With regard to collective bargaining and trade contracts, industrial carriers are divided into three groups; three companies concluding trade contracts with national unions of both unlicensed seamen and licensed personnel; three companies concluding trade contracts with respective

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(5) Among them four subsidized liner operators and two Great Lakes operators are included.
(6) One tanker operator seems to have no union contract with unlicensed seamen's union. This company did not give the name of the seamen's union, and employed no unlicensed seamen while it employed licensed personnel.
independent unions of unlicensed seamen and licensed personnel whose members are composed solely of company employees\(^{(7)}\); three companies having trade contracts with a national union of unlicensed seamen while employing licensed personnel of non-union members.

Companies which have collective bargaining with national unions hire their licensed personnel and unlicensed seamen through respective union hiring halls.\(^{(8)}\) Each company having collective bargaining with independent unions whose members are solely employees of the company hire their crew directly through the personnel department of the company or company office in their home port. Companies employing licensed personnel of non-union members, of course, hire them through the personnel department of the company.

As for the necessity of continuous employment, all companies which answered the questionnaire admitted the necessity of continuous employment for licensed personnel of supervisory positions such as captains, chief engineers, chief mates, first assistant engineers. As for other licensed personnel not mentioned above, twenty-one companies admitted the necessity of their continuous employment while ten companies did not. As for unlicensed seamen ten companies felt the necessity of continuous employment and seven companies answered that only seamen of key jobs such as stewards, bo's'ns, or pumpmen, etc. were wanted on a continuous employment basis or that their continuous employment was desirable but not necessary, while fourteen companies did not feel the necessity for their continuous employment. Grouping of the companies according to the types of vessel operation does not result in any admissible difference of opinion for continuous employment among groups with one exception, that all oil companies find continuous employment necessary for both licensed and unlicensed seamen.

Companies which find the necessity of continuous employment pointed out the following reasons for their necessity. The reasons common to both licensed and unlicensed seamen are; that continuous employees, having more interest and pride in their job, understand their job better and are more reliable; that a ship will be operated more efficiently and decrease the accident potential with men trained for a particular vessel, trade routes and port conditions; that continuous employees create more stability in the industry and additional good-will.

\(^{(7)}\) However, regarding radio operators one company of this group concludes a trade contract with a national union.

\(^{(8)}\) One company informed that it hires unlicensed seamen mainly through union hiring halls, but some are hired through the company office if an applicant holds a license. This company hires licensed seamen primarily through promotion from unlicensed ranks though it concludes a trade agreement with an independent licensed officers' union.
among employees and employers; and that a high ratio of continuous employees among the crew reduces the cost of hiring, examining and discharging. The reasons stressed for licensed seamen are; that continuous employees are more familiar with the company policy and procedures relative to the upkeep of the vessel, handling of men, and efficiency in the operation of the vessel; and that it is easy for the company to gain data for promotion and selection of men for supervisory positions. However, it was interesting to the researcher to note that a cargo vessel operator expressed in his opinion that continuous employment of seamen was beneficial but not necessary.

Then, what measures are adopted by ship operators to encourage the continuous employment of seamen? Twenty-nine companies answered this question, among which twenty-three admitted the adoption of measures to encourage continuous employment while six companies denied such measures. Among the companies which did not adopt measures to encourage continuous employment, one company did not answer the question regarding the necessity of continuous employment while two other companies admitted the necessity of continuous employment for supervisory licensed personnel and the remaining three companies felt the necessity of continuous employment for all seamen. Therefore it may be estimated that the last three are dissatisfied with trade agreements with seamen's unions in relation to the hiring method of seamen. In reality one company answered that under the present union hiring hall system and union rules there is no room for encouraging continuous employment.

To classify measures to encourage continuous employment by American ship operators, companies should be divided into two categories; one for companies concluding trade agreements with national unions, the other for companies concluding trade agreements with unions of company employees and companies which employ licensed personnel of non-union members. At first we shall describe answers which were obtained from the first group.

Five companies answered that measures to encourage continuous employment of both licensed and unlicensed seamen were vacations and/or welfare and pension plans in union contracts or that the measures were provided in union contracts. Three other companies answered with such measures as vacations, welfare and pension plans which were not certain as to whether they would be provided with union contracts or company administered. If these answers refer to welfare plans, etc., which are provided by union contracts the number of companies amounts to eight. However, these plans are administered on a coast-wide or industry-wide basis by respective union-contracts, and all seamen's unions do not provide more advantageous terms in their plans for union members who remain with the same employer, with the exception of vacation plans which pro-
vide better terms for continuous employees. Therefore these fringe benefits may be useful in preventing seamen from leaving the shipping industry as a whole while they are not considered as measures to encourage continuous employment in specific vessels or companies. In addition, though vacation plans may be useful in inducing seamen to remain with some employer, they do not result in the seamen’s preference for a specified employer.

Two companies mentioned for such measures, high wages and good working conditions such as good meals, good room facilities and time-off in ports, but it is uncertain whether these companies provide better working conditions than those determined by trade agreements while the wages of seamen employed by these companies are the same as given in the union contract.

As a measure for encouraging continuous employment of licensed seamen four companies enforced their specific employment policy or welfare plan in which service bonuses for key personnel, a company stock purchase plan, employee dividends and longevity pay were included. Promotion among continuous employees were mentioned as a means for encouraging continuous employment by six companies.

The measures widely adopted to encourage continuous employment by the second group are continuous service bonuses based on years of service in addition to various company welfare plans. Among six companies belonging to this group four companies provide continuous service bonuses for licensed personnel and two companies provide it also for unlicensed seamen. All companies provide various welfare plans.

Whether companies belonging to this group provide higher wages, better fringe benefits, and better working conditions become key points for seamen to remain under the same employer. But it is uncertain whether companies of this group as a whole provide better wages and better working conditions than companies of the first group. One company provides better wages, working conditions and welfare plans than those provided by trade agreements of national-wide unions, while other company provides similar wages and working condition as provided by trade agreements with national-wide unions.

In addition to the above mentioned measures some companies of the second group enforce other characteristic measures to encourage continuous employment. One company, adopting a policy to promote from within, permits its crew to take correspondence courses for upgrading and also grant them time off with full pay to take courses and examinations. The company will also pay 75

per cent of the cost of any approved courses they satisfactorily complete. The other company spends a considerable amount of time for training both licensed and unlicensed seamen and provide them with various company benefit plans, expecting the employees in their fleet to remain in their jobs as permanent employees. If the seamen do not intend to become permanent employees, the company will not rehire them.

We asked each company in the questionnaire the number of seamen employed in their fleet at that time and also the number of seamen who had worked continuously in the company for the last two years, including vacation periods. If we show the ratio of the number of continuous employees of each company against the number of jobs in their fleet which are represented by the number of seamen employed by the company, the result is as follows:

<table>
<thead>
<tr>
<th>ratio of continuous employees among employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>licensed seamen</td>
</tr>
<tr>
<td>companies concluding trade agreements with national unions</td>
</tr>
<tr>
<td>%</td>
</tr>
<tr>
<td>80 ~ 100</td>
</tr>
<tr>
<td>60 ~ 80</td>
</tr>
<tr>
<td>40 ~ 60</td>
</tr>
<tr>
<td>20 ~ 40</td>
</tr>
<tr>
<td>0 ~ 20</td>
</tr>
</tbody>
</table>

As shown in the table, the ratio of continuous employment of licensed seamen is much higher than that of unlicensed seamen. In twenty companies out of thirty the continuous employees among licensed seamen were eighty per cent and over, in contrast, regarding unlicensed seamen in six companies the continuous employees were eighty per cent and over, while in sixteen companies the continuous employees were under forty per cent among unlicensed seamen. In the companies which conclude trade agreements with independent unions of licensed or unlicensed seamen, regarding both licensed and unlicensed seamen the continuous employees shared a higher ratio among the crew.

In addition, there is no meaningful difference in the ratio of continuous employees among the crew between companies which answered having measures to encourage continuous employment and companies which denied the existence of such measures, though we do not show the results here. This result may be partly due to the fact that as measures to encourage continuous employment
many companies pointed out welfare and pension plans which are administrated on a coastwide or industry-wide basis according to trade agreements, and which are also applied to the employees of companies that denied the existence of measures to encourage continuous employment.

In treating the results of the ratio of continuous employees among seamen employed by individual companies, it should be kept in mind they show considerable difference with findings of the survey enforced by the Department of Labor. According to the survey, in relation to the employment pattern of seamen during the period from July 1956 to June 1957, with the exception of some licensed personnel and a few unlicensed seamen on passenger ships, seamen typically worked on two or more ships, and when a seamen changed ships, he generally also changed employers. During the one year of the survey all licensed seamen changed employer on the average 1.6 times and all unlicensed seamen averaged 2.2 employers. This finding suggests that the ratio of continuous employees among the crew during 1956 to 1957 was much lower than our result for the last two years. But we should reserve concluding that continuous employees have increased during the last several years. For our findings depend solely upon the answers of shipowners and the answers were obtained from only a part of all shipping companies.

If we compare the answers of the questionnaire with the employment system of the Japanese shipping industry, the following points can be mentioned as characteristics of personnel administration and labor-management relations in American shipping companies. All Japanese shipping companies feel that the continuous employment of seamen is necessary so as to increase their loyalty to the company, and employ not only licensed seamen but unlicensed seamen as permanent employees. In contrast, though all American shipping companies admit the necessity of the continuous employment of licensed personnel of supervisory positions, a third do not admit the necessity for other licensed personnel and two thirds deny the necessity of continuous employment for unlicensed seamen. Especially, most shipping companies concluding trade agreements with other than independent unions of unlicensed seamen do not find the necessity of continuous employment for them.

Moreover, with the exception of private carriers who conclude trade agreements with independent seamen’s unions, most American ship operators who admit the necessity of continuous employment provide for continuous employees with no special benefit other than promotion, though a few provide for continuous

employees of licensed personnel with their own company fringe benefits. For most of the American shipping companies measures to encourage continuous employment are to observe union contracts, in which sufficient measures are, from their point of view, provided so as to make it possible for seamen to remain in the same vessel or company. At least there is no marked tendency among American shipping companies to hire seamen as permanent employees. In the opinion of most American shipping companies it is considered that in order to secure necessary seamen for their fleet wages and workings conditions should be determined in detail by trade agreements with unions and the company should observe union contracts strictly.

III

As mentioned above, many American shipping companies do not need the continuous employment of unlicensed seamen and also in the case of some shipping companies which admit the necessity of continuous employment many of them have no special measures to encourage continuous employment of unlicensed seamen. In relation to the continuous employment of licensed seamen other than men of supervisory positions they show a more or less similar attitude with the exception that they may use promotion as a stimulus for seamen to remain in their fleet. In addition, though American shipping companies are allowed to employ seamen continuously by union contracts for unlicensed seamen, they have only a passive chance to select their employees. In other words, they can not select the most desirable seamen among the applicants and employ them continuously, but they have to hire union members who are dispatched in rotation from union hiring halls. Of course it is widely admitted that the selection of employees and increase in their morale are very important phases of personnel management. However, American shipping companies do not show any wish to change their hiring method of seamen and they seem to be satisfied with the present employment conditions.

In the past American shipping companies were against union hiring halls. As is well known, in the thirties the greatest problem to be settled in collective bargaining of the American shipping industry was the union hiring hall system. In the hearings of 1947 the representative of the Pacific coast shipping companies expressed their objection to union hiring halls. "We should have the right to employ and select our employees and use them continually under the same operation and develop their skills, ... (however) we do not get that under the hiring hall system". (11)

Why did the attitude of shipping companies change from a position which demanded absolute right to select and employ seamen continuously to a position which admits the necessity of continuous employment only for supervisory or highly skilled jobs? Why did the attitude of shipping companies change from anti to pro union hiring halls?

Generally speaking, there are no great differences in the mechanics of vessels and technics needed for vessel operation among shipping companies or their fleet. Consequently qualified seamen for some job in one vessel may work on a similar job in another vessel without any training with the exception of certain supervisory, highly skilled or key ratings, such as captains, chief mates, chief engineers for licensed personnel, and chief stewards, electricians and operators of self unloaders in collier or pumpmen of tankers for unlicensed personnel. Therefore if shipping companies neglect or put little stress on the effect of continuous employment of seamen upon their loyalty to the company, the company need not employ most of the seamen continuously so long as enough members of qualified personnel can be hired to operate their vessels without stoppage.

With the development of unionism among seamen, especially among unlicensed seamen, after the thirties and by the enforcement of the Merchant Shipping Act of 1936 which included provisions for the qualification of seamen, the labor market of American shipping industry has gradually been filled with a stable and qualified labor force. The growth of a stable and reliable workforce in the American merchant marine may be indicated by several facts. During the twenties alien seamen filled 40 to 50 per cent of the jobs on American-flag vessels. The report of the Maritime Commission of 1937 pointed out that during the early thirties almost all seamen did not regard their jobs as worth remaining with for a long time and they often changed their jobs. But the citizenship restrictions and the increased requirements for specialist ratings had an impact upon the composition of seamen, and alien seamen have been displaced by American citizens. Improved wages and working conditions gained by seamen’s unions during the past twenty years have attracted a new and reliable work force into the American merchant marine, resulting in the increase in the number of industry-connected seamen and also of married seamen. Therefore, American shipowners have found less necessity than before to select qualified personnel among applicants and employ them continuously.

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(14) Goldberg, op. cit. p. 293.
It is quite important for shipping companies to operate vessels, their largest capital assets, without disturbances as far as possible, and from that point of view they are required to have a labor pool of qualified seamen and adequate facilities for job exchange services in order to fill with qualified seamen the posts of seamen who leave the vessels due to vacations or pay offs. Union hiring halls have provided ship operators with an adequate and constant labor pool from which they may draw necessary replacements at no expense.

So long as the union hiring hall system has been useful in maintaining an adequate labor pool of qualified seamen, from the viewpoint of efficient vessel operation ship operators do not necessarily need to select and employ seamen continuously except in the case of supervisory personnel or in some highly skilled jobs. However, from another viewpoint ship operators may be required to select and employ seamen continuously. Attention should be paid to the meaning of the union hiring hall system in relation to the labor-management relation. The success of seamen’s unions to obtain union hiring halls in the later thirties has been effective for the unions in controlling the labor market and strengthening their position in collective bargaining. That has resulted for ship operators in high labor costs. In contrast, if ship operators had absolute rights in selecting seamen and in employing them continuously, it would be useful in increasing their loyalty to the company on the one hand and also useful in strengthening the ship operators’ position in collective bargaining. When ship operators had an anti-union attitude, their proposition for absolute right to select and employ seamen continuously might be considered to be based on their intention to weaken unions. From the later thirties to the immediate end of the war ship operators took a clearly anti-union position.

But after the strike of 1948, American ship operators changed their attitude from that of anti-union to co-operation with unions so as to maintain stable labor-management relations and to prevent work stoppage. Seamen’s unions also corresponded with co-operation. Then ship operators were led to require the right to select and employ seamen continuously only from the viewpoint of efficient ship operation, without any consideration for labor-management relations. With the maturity of collective bargaining shipping companies rather chose to develop a grievance machinery and to determine desirable rules in trade agreements for the operation of union hiring halls rather than to take a severe stand against the union hiring hall system. Thus, with regard to certain supervisory, highly skilled or key ratings to which shipowners need to select qualified

personnel and to employ them continuously trade agreements include reservation to union hiring halls as the sole source of seamen. For example, masters, chief mates, chief engineers and first assistant engineers are excluded from the hall provisions and all licensed officers may be employed continuously by the company. Unlicensed seamen's union agreements also permit the companies to obtain chief stewards, electricians and plumbers from within or without the union if qualified personnel can not be found in the hall, and they allow individual employees to remain in continuous employment if both employer and employee agree mutually.

In conclusion, the continuous employment of seamen may be adopted by ship operators from two different intentions; one is to improve the efficiency of vessel operations, and another is to weaken the union's position in collective bargaining. In the United States ship operators seem to deal with continuous employment mainly from the former viewpoint.
SOME PROBLEMS OF THE BRAZILIAN ECONOMIC DEVELOPMENT PLAN (1963–1965)

Yoshiaki NISHIMUKAI

I

The background of the triennial plan of economic development

In January 1963, the Brazilian Government published a synthesis of the triennial plan of economic development (O Plan Trienal de Desenvolvimento Econômico e Social). The concrete economic policies based on the fundamental principles of this synthesis are to be carried out during the three years, 1963–65. As a systematic development plan, President Kubitschek's economic development plan (Programa de Metas), which had already been put into practice from 1956 to 1960 can be mentioned, but this triennial plan is noteworthy in respect to its new fundamental principles which differ from those of the former. The most important point is that this Plan aims to accomplish the development with stabilization as its fundamental object, that is, to maintain the high rate of economic development, recently registered in Brazil, obtaining concomitantly control of their inflation.

In Latin America, the so-called “structuralist” theory on inflation, which originated from Chilean Osvaldo Sunkel's thesis published in 1958, was unfolded, and a public debate has been carried on in regard to the relations between inflation and economic development. In Brazil, too, we can remember that in the acrimonious debate between the “ECLA (CEPAL)” school and the “orthodox” school headed by Eugênio Gudin, which was concerned, above all, with the “Program of Monetary Stabilization” (Programa de Estabilização Monetária) in 1958, the problems concerning the compatibility of stabilization with development, were discussed, and that in this respect, João Paulo de Almeida Magalhães published some noteworthy studies. But according to the “structuralist” view of the ECLA which had played an important role in Brazilian economic policies, they could not but conclude that inflation would be inevitable in the process of economic development, and there remain various questions concerning

(2) One of his representative works is Uma Nova Formulação Teórica para o Desenvolvimento Econômico Brasileiro, Rio de Janeiro, 1961.
Magalhães's model in which he intended to manifest the possibility of economic stabilization with development.\(^{(3)}\) Therefore, in spite of the still remaining many theoretical problems in regard to the possibility of economic stabilization with development in Latin America, the fact that the Brazilian Government aims to achieve simultaneously price stability and economic development, seems to show us that Brazil has impending reasons to take up such a policy. Such being the case, this triennial plan offers us significant material to study the recent Brazilian economic situation, while it is itself theoretically an interesting problem, too. We shall begin by considering the background of this Plan.

From the macro-economic point of view, post-war Brazilian economy can be characterized by its rapid development and chronic inflation. During the post-war period, Brazilian economy maintained a high rate of growth, and the gross domestic product increased, between 1947 and 1961, at the annual rate of 5.8\%, which was equivalent, in per capita terms, to 3\% per annum. For these five years, it is estimated as 3.9\%. Taking into consideration the fact that the per capita rate of growth of the countries, which constitute the EEC, during the period 1950–61, was 4\% and that of other Latin American countries 1\%, we can easily understand the rapid economic development of Brazil. But, on the other hand, the general level of prices has risen at the average rate per annum of 16.5\% during the 1947–61 period, which corresponds to a rate three times as high as that of the real income. For these five years it has been accelerated to about 24\%.

These tendencies have changed and show unfavorable signs since the second half of 1961. The triennial plan confirms that the rate of growth declined from 7.7\% in 1961 to 6.0\% in 1962 and that of the per capita rate from 4.6\% to 2.9\%. These are the lowest rates that Brazilian economy has experienced since 1956. It is estimated that the increase of the Gross National Product fell from 7.6\% in 1961 to 3.02\% in 1962.\(^{(4)}\) On the other hand, the wholesale prices showed a rise of 50\% in 1962, while in 1961, it was by 43.1\%. Moreover, in 1962 the index of the cost of living rose to 46\% in Rio de Janeiro and 55\% in São Paulo, while in 1961 they were 38.5\% and 40.2\% respectively.\(^{(5)}\) These data mean that in the past, in spite of the rapid inflation, Brazilian economy had been keeping its high rate of growth to a sufficient extent, but since last year it has come to experience a decline in its growth rate and the acceleration of inflation. It

\(^{(3)}\) In regard to the debate on the inflation in Latin America and its examination, see Yoshiaki Nishimukai, “Brazilian Economy and Inflation (I)”, *Annual Report on Economics and Business Administration*, 14(1), 1963.


is often said that these economic trends are the results of the unfavorable effects of the recent political instability which was caused by the collapse of Janio Quadros's Government, which took place only seven months after its birth in 1961, and continued to the restoration of presidentialism (presidencialismo) which was established at the beginning of this year through the efforts of Goulart's Government since the end of August of last year. Indeed this view is reasonable for a short term, but it is difficult to explain the recent tendencies of Brazilian economy merely by its political instability. We can not neglect the important economic aspects lying in the background, among which we can mention the gradually accelerated increase of domestic prices and the accumulation of deficits in the balance of payments which have been followed by rapid industrialization. The inflation is putting greater and greater pressure upon the life of the people, and the difficulties of the balance of payments tend to aggravate it. The triennial plan judges the rate of economic growth as sufficient, but on the other hand it recognizes regional and sectional inequality in respect to the distribution of the fruits of development. Therefore, to adjust these inequalities, the Plan brings out such fundamental principles as the control of inflation, the intensification of governmental activities in the fields of education, public sanitation, and the elevation of productivity in agriculture. As we can easily understand by the facts mentioned above, the triennial plan is a logical one, which would have been naturally needed sooner or later in order to remove the barriers which Brazilian economy faced, even if there had not been political instability. The industrialization of Brazil had been promoted under the support of a planned policy by Kubitschek's Government for the first time, but one of its important defects was the acceleration of inflation. It is, therefore, reasonable that as the second plan following the former by Kubitschek, this triennial plan should take up the stabilization of their economy as one of its important objects. Hence, it is more adequate to conclude that the distortion caused by the rapid industrialization policy in the past, is one of the factors of the recent social and political instability, rather than to think that the political instability itself is a factor of the recent economic stagnation.

This triennial plan handed to the President under the date of the end of last year by Celso Furtado, Minister of Planning and Development, was made public as the political principles of Goulart's Government for the coming three years before the plebiscite, which took place on the 6th of January of this year, to choose either presidentialism or parliamentarism. The fact that the plebiscite was to restore presidentialism signifies at the same time that the people supported the triennial plan. But, because only a synthesis of the Plan had been published as described above, it is another problem as to what attitude the Brazilian
people will assume toward each concrete economic policy in the future. Unfortunately we are not sufficiently informed of the subsequent progress of the Plan, but we consider it significant to point out the basic objectives of the Plan and some problems.

II

Outline of the triennial plan

For convenience of description, the contents of the triennial plan can be divided roughly into four parts such as the general plan, sectional plan, regional plan, and administrative reform. In the first place, we shall refer to the objects and the means of the general plan.

The fundamental principle of the general Plan is to maintain the growth rate of 7% per capita for the next three years, and to increase the per capita income from the 323 dollars in 1962 to 363 dollars in 1965, that is, to elevate it by 3.9% per annum on the average. To maintain the rate of 7% which is equal to the average of the 1957–61 period, it is enough to keep the previous rate of investment which the Plan estimates as 18.25% of the GNP, which amounts to 3,500 billion cruzeiros (at the 1962 price) or 7,600 million dollars for three years.

Another fundamental object is to limit the price increases within 25% in 1963, 18% (estimated) in 1964, and 10% in 1965. To obtain this result for 1963, the Plan presumes to limit the increase of the means of payment to 34%. As this increase results from an excess of emission, and has its origin in the great deficits of the budget, principal efforts must be concentrated in the reduction of the budgetary deficit. The potential deficit for 1963 is estimated as 774.9 billion cruzeiros, and to reduce it, the Plan proposes a plan of curtailment to the amount of 260 billion cruzeiros, based on the budget law which permits a reduction of variable expenditures up to 45%. Adding to this the carrying-over of expenses, the budgetary curtailment will be about 475 billion cruzeiros, and consequently the budgetary deficits will be within 300 billion cruzeiros. To reduce the deficit, the abolition of the subsidies for wheat and oil products was put into practice and the adjustment of the prices of public works are also under consideration. The deficit will be partly financed by 140 billion cruzeiros supplied by the compulsory deposit system in case of the selling of bills and partly by other financial resources, restraining additional emission to about 110 billion cruzeiros. This is the reason why the Plan estimates the price increases in 1963 as about 25%.

In regard to the credit policy, the Plan is aiming at not putting pressure
upon the private section in order to achieve the planned rate of growth. Loans by monetary authorities to this section are expected to increase from 363 billion cruzeiros in 1962 to 479 billion cruzeiros in 1963, and those by commercial banks from 830 billion cruzeiros to 1,108.4 billion cruzeiros, that is, increases of 32% and 33% respectively. These are the rates capable of covering an increase of 7% of the real product and price increases of 25%.

One of the main motives which stimulated this triennial plan consisted in difficulties of foreign trade and the balance of payments. In fact, Brazil must resolve the problem caused by the necessity of repaying 1,285 million dollars and 500 million dollars in interests, profits, and dividends in the near future. As seen in Table 2-1, the deficits in the balance of payments during the next three years is estimated as 1,830 million dollars, and to meet them, the inflow of foreign capital to the amount of 1,270 million dollars and the “refinanciamentos” of 116 million dollars are being planned. Nevertheless, deficits of 444 million dollars still remain in balance and the Government has to find supplementary resources to fill them.

Table 2-1. Projections of the Balance of Payments. (million dollars)

<table>
<thead>
<tr>
<th></th>
<th>1963</th>
<th>1964</th>
<th>1965</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>current transactions</td>
<td>−203</td>
<td>−183</td>
<td>−159</td>
<td>−545</td>
</tr>
<tr>
<td>debts of capital</td>
<td>−465</td>
<td>−465</td>
<td>−355</td>
<td>−1,285</td>
</tr>
<tr>
<td>total</td>
<td>−668</td>
<td>−648</td>
<td>−514</td>
<td>−1,830</td>
</tr>
<tr>
<td>loans and financing</td>
<td>305</td>
<td>320</td>
<td>335</td>
<td>960</td>
</tr>
<tr>
<td>direct investment</td>
<td>100</td>
<td>100</td>
<td>110</td>
<td>310</td>
</tr>
<tr>
<td>refinanciamentos</td>
<td>63</td>
<td>33</td>
<td>20</td>
<td>116</td>
</tr>
<tr>
<td>not covered</td>
<td>200</td>
<td>195</td>
<td>49</td>
<td>444</td>
</tr>
<tr>
<td>total</td>
<td>668</td>
<td>648</td>
<td>514</td>
<td>1,830</td>
</tr>
</tbody>
</table>

(Source) O Plano Trienal, Quadro XIX.

Table 2-2. Projections of Exports during 1963–65. (million dollars)

<table>
<thead>
<tr>
<th></th>
<th>1963</th>
<th>1964</th>
<th>1965</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>coffee</td>
<td>702</td>
<td>713</td>
<td>723</td>
<td>2,138</td>
</tr>
<tr>
<td>cotton</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>cocoa</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>210</td>
</tr>
<tr>
<td>sugar</td>
<td>60</td>
<td>60</td>
<td>60</td>
<td>180</td>
</tr>
<tr>
<td>wood</td>
<td>50</td>
<td>50</td>
<td>45</td>
<td>145</td>
</tr>
<tr>
<td>iron ore</td>
<td>120</td>
<td>144</td>
<td>168</td>
<td>432</td>
</tr>
<tr>
<td>others</td>
<td>300</td>
<td>320</td>
<td>340</td>
<td>960</td>
</tr>
<tr>
<td>total</td>
<td>1,397</td>
<td>1,457</td>
<td>1,511</td>
<td>4,365</td>
</tr>
</tbody>
</table>

(Source) O Plano Trienal, Quadro XXII.
In regard to foreign trade, it is proposed to increase exports from 1,397 million dollars in 1963 to 1,511 million dollars in 1965 (Table 2-2). On the other hand, there is no notable increase in imports (Table 2-3).

<table>
<thead>
<tr>
<th></th>
<th>1963</th>
<th>1964</th>
<th>1965</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>petroleum and derivatives</td>
<td>180</td>
<td>193</td>
<td>207</td>
<td>580</td>
</tr>
<tr>
<td>wheat</td>
<td>155</td>
<td>160</td>
<td>165</td>
<td>580</td>
</tr>
<tr>
<td>machine and equipment</td>
<td>376</td>
<td>372</td>
<td>354</td>
<td>1,102</td>
</tr>
<tr>
<td>manufactures</td>
<td>148</td>
<td>135</td>
<td>124</td>
<td>407</td>
</tr>
<tr>
<td>chemical products and medicines</td>
<td>136</td>
<td>136</td>
<td>137</td>
<td>409</td>
</tr>
<tr>
<td>metal used in metallurgy</td>
<td>67</td>
<td>72</td>
<td>82</td>
<td>221</td>
</tr>
<tr>
<td>others</td>
<td>138</td>
<td>152</td>
<td>181</td>
<td>471</td>
</tr>
<tr>
<td>total</td>
<td>1,200</td>
<td>1,220</td>
<td>1,250</td>
<td>3,670</td>
</tr>
</tbody>
</table>

(Source) O Plano Trienal, Quadro XXIV.

Secondly, we refer to the sectional plan. The development of industry continues to maintain its predominance, occupying 18.6% of the total amount of investment. This predominance is necessary, particularly in the industry of capital goods. For the coming three years the increase of industrial production is expected to reach 37%, that is, an increase of 11% per annum. And about 70% of the equipment required for this purpose is to be supplied by domestic production. In the mining industry, too, exploitation of iron ore is projected in order to promote exports.

In the agricultural section, the increase of production is estimated as 7% and principal efforts are to be made in the direction of increasing food production, which is expected to rise 2.6% per capita annually. There is no plan for the expansion of production in agriculture for export, but there is consideration of correcting the overproduction of coffee by such means as cutting down 2 billion old coffee trees with low productivity, the planting of 500 million new trees during 1963, and establishing an individual quota system in production and transplantation for the remaining coffee plantations.

As seen in table 2-4, investments in basic industries like electric power and transportation are strongly stressed. The backwardness in the basic industries becomes notable with the progress of industrialization, and the Plan points out necessary measures by which the progress of basic industries will be able to meet the development of other industries. Referring to electric power, the necessity for the integration of the systems of transmission lines is proposed. Financial resources for education and sanitation are greatly increased. With respect to education, it is planned to carry out National Plan of Education...
(Plano Nacional de Educação) which aims at promoting the progress of middle and high school education as well as expanding the term of compulsory education to six years in the cities and four in rural regions.

Thirdly, in regard to the regional plan, the most important projects are concerned with Northeast (Nordeste), which still remains the greatest regional problem in Brazil. The triennial plan shows that the relative position of Nordeste, in terms of participation in the GNP, has been improved between 1955 and 1960. The investments of Petrobras and the impact given by SUDENE, are the causes for this phenomenon. The observations of the Plan on Nordeste problems are optimistic. The general projects to correct regional disparities are, (1) to increase investments in order to investigate and develop the natural resources in the regions with particularly little productivity, (2) to intensify investments to improve the human factor especially for the benefit of under-developed regions, and (3) to continue the preferential policy to stimulate private investments directed to the under-developed regions.

Finally, regarding the basic reforms, we can take up the reform of the administration before everything. Along these lines, the former Ministry of Traffic has already been divided into the Ministry of Transports and the Ministry of Communication, while the Ministry of Planning and Development has been created to control the various organizations for development. Moreover, reforms in the banking system are proposed, the most notable one being that of establishing a central bank by means of the incorporation of the present SUMOC (Superintendência da Moeda e do Crédito) with the Re-discount Bureau of the Bank of Brazil and the Bureau of Mobilization, giving the future central bank the function of controlling foreign exchange. Besides, the necessity for fiscal and agrarian reforms is indicated, and practical bills are now under deliberation.

### Table 2-4. Projections of Sectional Investments (billion cruzeiros)

<table>
<thead>
<tr>
<th>Section</th>
<th>Equipment</th>
<th>Construction</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Capital</td>
<td>1,636</td>
<td>1,367</td>
<td>3,003</td>
<td>100.0</td>
</tr>
<tr>
<td>agriculture</td>
<td>168</td>
<td>84</td>
<td>252</td>
<td>8.4</td>
</tr>
<tr>
<td>industry</td>
<td>419</td>
<td>140</td>
<td>559</td>
<td>18.6</td>
</tr>
<tr>
<td>electric power</td>
<td>206</td>
<td>205</td>
<td>411</td>
<td>13.7</td>
</tr>
<tr>
<td>petroleum</td>
<td>138</td>
<td>92</td>
<td>230</td>
<td>7.6</td>
</tr>
<tr>
<td>transports</td>
<td>578</td>
<td>289</td>
<td>867</td>
<td>29.0</td>
</tr>
<tr>
<td>construction of residence</td>
<td>—</td>
<td>373</td>
<td>373</td>
<td>12.4</td>
</tr>
<tr>
<td>others (services)</td>
<td>127</td>
<td>184</td>
<td>311</td>
<td>10.3</td>
</tr>
<tr>
<td>Increase of Stocks</td>
<td>—</td>
<td>—</td>
<td>499</td>
<td>—</td>
</tr>
<tr>
<td>total</td>
<td>—</td>
<td>—</td>
<td>3,502</td>
<td>—</td>
</tr>
</tbody>
</table>

(Source) O Plano Trienal, Quadro XIII.
In regard to the outline of the triennial plan so far mentioned, the most remarkable point is that the Plan is aimed at controlling inflation while keeping the rate of economic growth. As previously described, this is a discussible problem to which we shall refer later. Here, it is sufficient to say that the Plan is characterized by the abandoning of the "orthodox" concept of stabilization and only intends to reduce gradually the rate of inflation during the next three years. In other words, it does not intend to stabilize prices at any cost. We can deduce this from the fact that the Plan foresees a rise in price by 10% even in 1965.

In the sectional plan, there is no clear relation as verified in the case of the general plan. For example, it is questionable whether the resources dedicated to education and sanitation can be integrally maintained under the curtailment plan in 1963, and whether the funds by National Bank of Economic Development (BNDE) are sufficient to sustain governmental responsibility in the development of various basic industries. Moreover, many other problems will occur in the future with progress in the realization of each sectional development plan. It can, however, be pointed out that all the propositions in this part of the Plan are in line with a concrete orientation, and there are no formal contradictions among them. Another observation referred to in the sectional analysis is that the Plan merely shows vague principles and means for each of the sections, and urgently requires more detailed projects. The group for planning itself recognized this fault and added the word "síntese" (syntheses) to the title of the Plan. But as far as they use that word, there must be plans peculiar to each section. If they do not exist, the sectional plan should be called "diretrizes" (fundamental direction) rather than "síntese". This is the reason why future projects must be watched with keen interest.

Throughout the triennial plan, the regional plan is the part most roughly described. The geographic structure of Brazilian economy offers several particular problems with relation to its economic development, and these problems are of great importance. So we are well convinced that this Plan should contain the regional plan. But the problematic point is that it is not clear whether or not the Plan is based on not only the recovery of the level of development in the under-developed regions but also on regionalization and specialization of the means of development. The regional problems exist not only in Nordeste but in the advanced regions. For example, there are many problems: what influences the industries of capital goods concentrated in São Paulo will have on industrial centers such as Guanabara and Rio Grande do Sul; what economic

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results will take place by the political separation between Guanabara and its adjacent economic areas; and further, if the role of Brasilia in the Westward Movement will be able to remove unfavorable consequences in the future, etc. What Brazil needs is a policy of development combined with a spatial policy. This can be coordinated by a series of regional organizations, such as SUDENE, which are modified to meet the different levels of development and to other characteristics of each region.

III

Some problems of the triennial plan

To ally the control of inflation with the maintenance of the rate of growth, it is necessary for the monetary policy not to diminish public and private investments. In regard to the former, it will be enough to totally preserve it in the program of public expenditures, while, as to the latter, it is proposed that loans to the private section by monetary authorities and commercial banks be increased, in proportion to the rate of growth and the price increase of 25% estimated for 1963. On the other hand, the inflow of foreign capital is proposed in order to make necessary imports possible. Thus, there is no divergence of opinions in regard to the consistency and the steadiness of the Plan. But there arise various problems with respect to the possibility of its execution.

Let us begin by studying some aspects of their public finance. As previously stated, including the curtailment plan of 260 billion cruzeiros, the total curtailment of expenditures by 475 billion cruzeiros is under plan for 1963, by which the initial potential deficit of 775 billion cruzeiros will be decreased to 300 billion cruzeiros. One third of the remaining deficit is to be covered by additional issues of currency, and the rest by anti-inflationary measures such as the increase of the rate of compulsory deposits for the realization of imports. On the other hand, as a decrease in the coffee harvest for 1963-64 is expected, it will be possible for the government to reduce the purchase of coffee and to obtain a substantial amount of the resources from the export section. This is one of the most favorable aspects for the execution of an anti-inflationary policy. But there are many opinions opposed to measures for the reduction of coffee production and also to the establishment of an individual quota system, so it is worth noticing to what degree the deeply-rooted political influences of the coffee producers can be checked. Moreover, it is an important matter to be

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considered in view of the experiences of Brazilian economy whether the Plan is sufficient in controlling the social tensions which newly rise from the rapid increase of prices in the initial stage of the anti-inflationary policy. For instance, under the new exchange system established by Instruction 204 promulgated in March 1961, which aimed to alleviate the financial burden caused both by imports at the cost of exchange (custo de câmbio) under a unrealistic basis and by the fixation of the auction price of exchange bills, the rapid price increases of wheat, petroleum and fertilizer extended over the general level of prices, and this became one of the causes for the resignation of President Quadros. Subsequently, the preferential rate was again applied to imports of wheat and oil products. But owing to this preferential rate, the subsidy for these commodities amounted to 60 billion cruzeiros for 1962, and if the rate is still effective in 1963, it is estimated in the Plan that the expenditure of the national treasury will amount to 70 billion cruzeiros for wheat, and the reduction of the tax levied on oil products to 80 billion cruzeiros, and the decrease of the revenue of Petrobrás to 40 billion cruzeiros. Based on the principal lines of the Plan, the subsidy for consumption had already been abolished from January of this year, and the rate of exchange for imports of these commodities was readjusted from the rate of one dollar to 318 cruzeiros which had been set in February 1962, to that of one dollar to 475 cruzeiros which was based on the free market rate. This, in principle, coincides with anti-inflationary measures adopted by Instruction 204. It had been expected that the price of oil products would consequently rise to 70%, raising the cost of living from 5–10%, and that the rise in prices resulting from these revisions could be controlled within four months. But, confronted with social tensions owing to the rapid price increases caused by the abolition of the subsidy, the government was obliged to offer the subsidy again in May, and had to adopt the former rate of exchange of one dollar to 475 cruzeiros, putting an end to the market rate of one dollar to 620 cruzeiros.

It is true that the abolition of the subsidy was enforced in line with the fundamental principles of the triennial plan, differing from the case of Instruction 204 of the SUMOC, but we can see, as clearly shown in the former experience, that the government had not sufficient conditions to overcome the initial difficulties which were caused by the anti-inflationary policy. Thus, the fundamental principle of the triennial plan in this aspect was upset very quickly. This surely has an important influence on the execution of the Plan.

Secondly, we must point out the problems in connection with the balance of payments. As shown in Table 2–1, the increase of foreign debts during 1963–65 is estimated at 1,830 million dollars. During the same period, Brazil has to repay about 1,662 million dollars, consisting of 1,285 million dollars for
repayment and 377 million dollars for interests. Therefore, there will be no significant change in the debtor position of Brazil. In other words, the Plan only pretends to postpone the payment of foreign debts. The necessary procurement of foreign currency amounts to 1,714 million dollars, except for the 116 million dollars whose carrying-over payment has already been settled. Even if its procurement is possible, only a little part of this amount will be able to be used for the increase of their productive capacity. In other words, the increase of Brazilian productive capacity which corresponded to the debts to be repayed in the next three years was already realized in the past, and it was one of the causes which enabled the rate of growth of 7% per annum. On the other hand, if the postponement is a difficult process, Brazil will be compelled to hold back her imports, resulting in lowering the efficiency of national productive activities. Therefore, the situation of the balance of payments is extraordinarily serious and foreign aids are important to keep the rate of growth of 7%. However, the standpoint of the triennial plan is fairly optimistic. In regard to the possibility of procuring necessary foreign currency, the following observation is interesting: President Goulart had to be supported by the leftists elements in order to manipulate the National Congress and to attain the political objects he desired, creating a disposition which is now largely independent of his will and has conditions of imposing on him certain decisions. Thus, to what extent necessary foreign aids for the realization of the Plan can be gained from the free nations depends on to what degree President Goulart can exclude the influences of the leftists. However, there is little possibility that the President in case of the execution of the Plan would resolve on the fatal contradiction of excluding his friends in the stage of planning, and of approaching his enemy of yesterday.\(^8\) Adding to this political background, we must take account of the effect the law of limitation of the remittance of profits will have on the induction of foreign capital. The Brazilian policy in regard to foreign capital had hitherto allowed it extremely free activity, but it is now sure that the restrictions imposed by this law will have disadvantageous effects on the induction of foreign capital. And we have information that symptoms have begun to appear actually.\(^9\) Judging from the considerations as hitherto shown, we can not help concluding that the procurement of foreign capital required for the effective realization of the Plan is far from reassuring.

In regard to foreign trade, too, there remain many problems in the optimistic attitude of the Plan. As shown in Tables 3-1 and 2-1, the Plan foresees an


increase of exports by 157 million dollars in the first year (1963), by 60 million dollars in the second, and by 54 million dollars in the last. As to the reason why such a notable increase of exports is projected in the first year, the Plan only explains that the year 1962 was abnormal in which various pressures, including repeated political crises, had influence on the system of foreign exchange. It is true that in 1962 the export of coffee marked the lowest record since 1957, but it is not reasonable to consider that 1962 was an abnormal year on the whole and that the political crises were the main causes for the decrease of exports. Carefully considering Table 3-1, we can say that it is more reasonable to judge that the year 1961 was abnormal. The projects of the exports of coffee foresee a great increase in the first year and thereafter a successive steady increase. But the Plan explains these increases only by the abnormal character of 1962. And the Plan does not refer to the policy of prices for the overproduction of coffee.

Table 3-1. Brazilian Exports (million dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>coffee</td>
<td>845.6</td>
<td>687.5</td>
<td>733.0</td>
<td>712.7</td>
<td>710.4</td>
<td>650.0</td>
</tr>
<tr>
<td>cotton</td>
<td>44.2</td>
<td>24.8</td>
<td>35.5</td>
<td>45.6</td>
<td>109.7</td>
<td>95.0</td>
</tr>
<tr>
<td>cocoa</td>
<td>91.6</td>
<td>117.8</td>
<td>91.7</td>
<td>98.6</td>
<td>60.8</td>
<td>60.0</td>
</tr>
<tr>
<td>sugar</td>
<td>45.9</td>
<td>57.4</td>
<td>42.8</td>
<td>57.8</td>
<td>65.6</td>
<td>50.0</td>
</tr>
<tr>
<td>wood</td>
<td>63.8</td>
<td>51.5</td>
<td>37.8</td>
<td>42.1</td>
<td>46.8</td>
<td>45.0</td>
</tr>
<tr>
<td>mineral</td>
<td>89.8</td>
<td>73.9</td>
<td>77.5</td>
<td>87.9</td>
<td>95.3</td>
<td>95.0</td>
</tr>
<tr>
<td>others</td>
<td>210.8</td>
<td>230.1</td>
<td>263.7</td>
<td>224.1</td>
<td>314.4</td>
<td>245.0</td>
</tr>
<tr>
<td>total</td>
<td>1,391.6</td>
<td>1,243.0</td>
<td>1,282.0</td>
<td>1,268.8</td>
<td>1,403.0</td>
<td>1,240.0</td>
</tr>
</tbody>
</table>

* provisory

Apart from the possibility of an international coffee agreement, including the importing countries, which is thought to be necessary, a fall in the coffee price will be inevitable under the existing circumstances. The increase of exports to new markets is necessary to cover this fall, but the Plan has no clear estimate concerning it. Indeed, it is true that the increase of exports to new areas represents still too little a part to serve as a factor to equilibrate the balance of payments. Nevertheless, we can not agree with the Plan in which an increase of exports coffee and even that of total exports are expected without taking other factors into consideration. Analyzing each market for exports, the Plan concludes that the American market is the most promising, and with respect to commodities, the export of iron ore is expected to increase. Relating to the American market the Plan considers the diversification of exports and the growing penetration of semimanufactured and of manufactured goods. We can
not deny that Brazil has the possibility to diversify their exports, above all, depending on manufactured goods on a long term basis. We can not, however, recognize that short term factors are able to contribute to the expectation of an increase in exports. On the other hand, granted that the American market is the most promising, exports to America are far from reassuring when the recent situation of the balance of payments of the U. S. A. and the so-called dollar defending policy are considered. Similarly, the reason is not clear why the Plan counts America and West Europe as promising export markets of iron ore. After all, what is required for the triennial plan is that it shows a policy for promoting exports in appropriate forms. For example, it is necessary for the Plan to show a solution for the maintenance of the coffee price through an international coffee agreement and a way to correct its overproduction, and also a solution for the reciprocal trade agreement with socialist countries to which Brazil records an export surplus.

The projects of imports are based on the average imports of 1,251 million dollars during 1957–61, and so far there arises no problem. But the Plan does not examine closely the relation of imports to domestic demands and the national productive capacity. The Plan can not abandon such principal objects as the absorption of the deficit and the repayment of foreign debts. As these are the basic motives of the triennial plan, it is natural that the Brazilian Government should require them. But the Plan should examine more closely whether the proposed imports would be enough for the maintenance of the growth rate of 7% per annum. For instance, the import of 1,1 billion dollars worth of equipments is projected for the next three years, the sectional structure of which is shown in Table 3–2. The expected import of equipments worth 368 million dollars per annum is approximately equal to the recent results and can be compatible with the expected capacity to import. But there appears a significant

<table>
<thead>
<tr>
<th></th>
<th>imports of equipments (million dollars)</th>
<th>% of the supply of equipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>agriculture</td>
<td>124</td>
<td>33</td>
</tr>
<tr>
<td>industry</td>
<td>375</td>
<td>40</td>
</tr>
<tr>
<td>electric power</td>
<td>180</td>
<td>39</td>
</tr>
<tr>
<td>petroleum</td>
<td>180</td>
<td>40</td>
</tr>
<tr>
<td>transports</td>
<td>204</td>
<td>16</td>
</tr>
<tr>
<td>others</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>total</td>
<td>1,103</td>
<td>27</td>
</tr>
</tbody>
</table>

(Source) O Plano Trienal, Quadro XII e XIV.
change in the structure of imports. Especially in such sections as agriculture, industry, and transports, it is admitted that the participation of imports in the total supply of equipments is reduced remarkably. This is based on the premise that the process of substitution has considerably developed in this country. It is, however, doubtful if the premise is valid to such an extent. We consider that the problem of investments and of the substitution of imports is appreciated with excessive optimism which characterizes almost all aspects of the Plan.

We have pointed out that there were some problems in the possibility of the conditions of stabilization in regard to public finance and the balance of payments. Adding to this, we should notice the inelasticity of the food supply which the "structuralist group" often takes up as a structural factor of inflation. In such a country as Brazil where arable land is not still fully occupied and where the alternatives of production are various, the elasticity of supply of agricultural products may not be considered as low compared with that of other countries. Even if the supply is inelastic, it is licit to suppose that this has a regional character, rather than a national one. For example, this affirmation is valid to Nordeste but not to the southern areas.\(^{(10)}\) Therefore, more detailed verifications are necessary for examining the elasticity of the agricultural supply. Nevertheless, the Plan judges it as inelastic merely because the price increase of agricultural products is much greater than that of industrial products. In any case, it is doubtless that a shortage in the supply of agricultural products, above all, of food products, really exists compelling a wage rise in the cities and operating as one of the inflationary pressures. The statistics in regard to these last eight years show that only two years were marked by a sufficient increase in food production. The eight years as a whole suffered from a striking shortage of supply. As the projected rate of growth is 7% and the population grows at the rate of 3.1% per annum, it signifies that the per capita increase of production is about 3.9%. As the income elasticity of food products is estimated at 0.66 according to the Plan, the increase of the demand of foods will be by 2.6%. Thus, the agricultural production during the coming three years must be increased at the rate of 5.7% per annum. This rate is higher than the average registered during these last eight years. If this rate is achieved, the inflationary pressure from this section can be avoided. But we must not be optimistic when we consider the following factors which characterize the agriculture for food; (1) irregularity of production caused by natural conditions, (2) deficiency of a distribution mechanism with greater risk of loss and accumulation of taxes which

\(^{(10)}\) According to the statistics given by the Confederação Nacional da Indústria, the prices of foods increase more rapidly than the general level of prices in such cities as Recife, Salvador and Belo Horizonte. But this relation is contrary in the southern cities.
are imposed, in the end, by the consumer, (3) shortage of warehouses, (4) insufficiency of agricultural credit, and (5) insufficiency of specialized farms for food production. Though the Programa de Metas of the Kubitschek’s Government tried to solve the food problem, it could hardly bring about remarkable results. That is evident to show how difficult the solution of the food problem is. This triennial plan represents, indeed, a progress in the sense that it made more detailed analyses than the former and that it pointed out various measures to expand food production. But the expansion of cultivated lands and the rise of productivity projected in the Plan depend upon the extent with which the control of coffee production can be successfully pushed forward, and on the other hand, upon the control of the rapid rise in the prices of fertilizer that took place after the promulgation of Instruction 204 of the SUMOC, and furthermore basically upon the prevalence of education in the rural areas.

So far we have listed some considerations in conformity with the fundamental conditions for economic stabilization shown by the triennial plan. But, observing the Plan from the theoretical point of view, we have to point out another defect, that there are no clear references to a wage policy. The wage policy has close relations with the rate of saving which is necessary for the maintenance of the rate of growth of 7% per capita. The view of the Plan concerning this can be found in the following description: “A taxa de crescimento da economia brasileira, no futuro próximo, dependerá principalmente da intensidade com que se utilize a capacidade produtiva já instalada no País e, em menor escala, da evolução da relação de preços do intercâmbio com o exterior e da entrada líquida de recursos externos. A taxa de poupança, fator importante na formação da taxa de crescimento, dependerá em boa medida do nível geral de atividade econômica, ou seja do grau de utilização da capacidade produtiva.”(11) Here, we find the Keynesian view in respect to the formation of saving, the view in which the insufficiency of aggregate demand is predominant. This predominance is very natural in countries confronted with cyclical depressions, but it does not fit totally the Brazilian economy in which violent inflationary processes are going on. In regard to the wage problem which is one of the important factors to determine the rate of saving of Brazilian economy, the triennial plan merely affirms that wages must increase, supplementing the adjustments due to the rise of the cost of living, in proportion to the rate of increase in productivity of the economy as a whole. This affirmation is very vague under inflationary circumstances. It is necessary to make precise the intervals of adjustments and, before everything, to settle the bases of readjust-

(11) O Plano Trienal, Texto, 2.1.1, primeiro parágrafo.
ments. As real wages have fluctuated with the continuous rise of prices and the intermittent revisions of nominal wages, those bases as implicit in the Plan are not acceptable. From the Plan nothing can be deduced in regard to the participation proposed for laborers in the national product. In view of the fact that this participation is one of the determinants in the rate of saving, the omission must be considered as a grave defect in the scheme of development.

Finally, we shall point out a problem with respect to the determination of investments. The Plan, based on recent statistics, calculates the ratio of capital/product as 2.61, and estimates the amount of necessary investments as 3,500 billion cruzeiros. First, it must be noticed that this relation is made exceptionally favorable by the recent economic conditions to which the Plan maker no reference. On the other hand, it is clear that the relation was fairly improved, in the years anterior to 1960, by the policy of subsidy to imports of equipment and by the development of various sections with a low ratio of capital/product. It is doubtful if this relation can be maintained in the near future. The economic sections do not develop in the same proportion, nor will the relation between the price of consumer goods and that of capital goods be necessarily maintained on the same level as that of the last several years. The conditions of external economies are not necessarily identical. Therefore, we can not but conclude that it is not reasonable to determine the necessary amount of investments by estimating the ratio of capital/product at 2.61.

**IV**

**Conclusion**

Concluding, we must repeat that the various defects as mentioned above are not fatal to the triennial plan, and that the significance of this Plan is not completely injured because of them. In regard to this point, let us observe the following description in the introductory parts of the Plan. “A experiência de outros países tem indicado que são necessários alguns anos para alcançar uma razoável eficácia na execução de um plano bem concebido. Mas, exatamente porque o planejamento é um processo contínuo, que se introduz por etapas e se aperfeiçoa na dedida em que é implantado, o mais importante é iniciá-lo. Seria erro preparar um plano bem elaborado e completo para iniciar de uma vez a sua execução. Também seria erro pensar em introduzir todas as reformas institucionais e administrativas, necessárias à plena eficácia do planejamento, para somente então tratar deste último. No planejamento, como na cartografia, o mais prático é iniciar o trabalho com uma escala pequena, capaz de proporcionar facilmente uma visão de conjunto. Esta visão é que permite relacionar os problemas
em função de sua complexidade, de forma a que a solução de um venha a facilitar a dos demais. O que se objetiva de imediato com o planejamento, no Brasil, é essa hierarquização de problemas, a fim de criar condições para que, dentro de uns poucos anos, possam ser introduzidas técnicas mais eficazes de coordenação das decisões. Trata-se, portanto, de um esforço de transição, em busca de um conhecimento mais sistematico da realidade econômica e de uma maior eficácia na capacidade de decisão. Alcançados esses objectivos, será então possível dar maior profundidade à ação de planejamento.”

These words of the Plan constitute a recognition that the Plan is the first vision of the problem which is to be specialized and embodied afterwards. That is to say, a number of the problems which we have pointed out will be possibly solved in the course of the planning of practical policies in the future. But some of these problems are connected with the possibility in realizing the fundamental objects of the Plan. Therefore, the true test for the planning group is in its capacity to embody the Plan with respect to concrete objects and measures. It is, however, more important whether the government can put them into practice. As previously pointed out, the abolition of the subsidy for consumption, which the Plan had taken up as a measure for balancing public finance, met with frustration after less than four months. Moreover, it is remarked that the prices rose by 9.7% only in March and when the rises in the previous two months were added to it, it already reached 16%. The price increases expected during the first half of 1963 by the Plan are about 15% at the worst. Therefore, under the existing circumstances, it is difficult to control the price increases to within about 25% in 1963. Indeed, the price increases till March of this year were caused by revisions of rates of public utilities and by the rises of controlled prices, but the inflationary pressure since last year must not be overlooked. Therefore, we can not conclude that it is only because the policy to control the inflation based on the Plan was weak. However, the present price increases have unfavorable effects on the anti-inflation policy. For example, a groups of producers came to manifest a strong discontent with the restrictions of credit, earlier than expected. The credit policy of the Plan in itself does not signify strict restrictions of credit, but price increases higher than expected bring about, as a matter of course, pressure which requires expansion of credit. If monetary authorities do not permit expansion, it will be difficult to keep the rate of growth of 7% per annum. Thus, the triennial plan whose fundamental object is the control of inflation with a

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(12) O Plano Trienal, Texto II-II, segundo e terceiro paragrafos.
(14) Ibid., p. 4.
maintenance of the rate of growth, is suffering from grave difficulties, and is present to choose between stabilization or development alternatively. Recently Carvalho Pinto task office as the Minister of Finance, and much is expected of him in the light of his achievements in executing the development plan of São Paulo (Plano de Ação). But the solution of these problems does not consist merely in the ability of the person who is in charge of the administration. We desire to observe how the integration of the conquest of the structural factors of inflation and of the policy of monetary stabilization will be realized in the future.

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HISTORICAL SKETCH

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 “Juyo Keizai Tokei” monthly and “Sekai Boeki Tokei” 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.
In 1944, Kobe University of Commerce changed its name to Kobe University of Economics. After the war, however, the University was consolidated with three other colleges in Hyogo Prefecture to become Kobe University. With this development, the two Institutes were also amalgamated into the Research Institute for Economics and Business Administration, Kobe University. At present, the Institute, with its eighteen full-time professional staff members, carries on studies and investigations in international economy, business administration, and business mechanization in Japan.

LOCATION AND BUILDINGS

The Research Institute for Economics and Business Administration is located on the campus of Kobe University, Rokko, Kobe. It is a three-story building named the Kanematsu Kinenkan and has a floor space of about 2,900 square meters, which includes a president's room, forty-one offices, six rooms used as a library, a room for statistics, three conference rooms, etc. Adjoining is a one-story building recently built to install business machines.

ORGANIZATION

Under the directorship of a president, the Institute operates with two research groups one of which consists of five sections while the other has four sections. Each research group and its sections are as follows:

A  Group of International Economy  
(1) International Trade  
(2) Economy of Latin-America  
(3) Marine Economy  
(4) International Finance  
(5) International Law of Economy

B  Group of Business Administration  
(1) Business Administration and Business Mechanization  
(2) Accounting  
(3) International Management  
(4) Labor Problems

Besides the regular work of the Institute organized in this manner, research committees may be created to carry on any special work requiring the joint study of academic and business circles. At present, there are three committees, that is, the Asian Economy Committee, Latin-America Committee, and Accounting Committee.

For convenience and greater efficiency in carrying out its research activities, the Institute has a general office which is responsible for, (1) the collection and preservation of a comprehensive collection of books, periodicals, pamphlets, and original records and data of finance, trade, commerce, industry and business generally; (2) the classification, cataloguing, indexing, arranging, annotation and compilation of these research materials; and (3) the formulation and publication of the results of the investigations and studies accomplished by the professional staff members of the Institute.
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