INVESTMENT INCENTIVES IN ZAIRE

Bruce D. Fitzgerald

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ABSTRACT

Since September 1983, the Zairian government has made a number of basic economic and financial reforms to liberalize the economy and to facilitate growth and development. Two proposals — reform of the Investment Code and revaluation of assets — are being considered as further incentives to encourage new investments.

The Investment Code offers a series of tax concessions to domestic and foreign investors. It is administered on a case-by-case basis, with the Investment Commission charged to evaluate projects against an ill-defined and conflicting set of criteria. Benefits under the Code are unmeasured, uncontrolled, off-budget subsidies which have been disproportionately awarded to encourage investments in declining sectors. It is recommended that the Code be replaced by broad-based automatic incentives, administered through the tax code.

Zaire has permitted revaluation of assets to account for inflation on three occasions. The revaluations permitted firms to increase the book value of assets, thereby increasing depreciation allowances and reducing taxes. The system is asymmetric, as it adjusts the book value of assets but not liabilities. Firms which lose depreciation allowances to high inflation may have net gains if their liabilities are denominated at fixed levels. Further, the system, due to its retrospective nature, provides virtually no incentive for new investment. It is recommended that the present program not be continued beyond its scheduled termination at the end of the year.
INVESTMENT INCENTIVES IN ZAIRE

Bruce D. Fitzgerald
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Trade and Adjustment Policy Division

1. BACKGROUND

It is widely believed that industrial investment levels in Zaire have been inadequate to maintain the capital stock due to a climate which discouraged or prevented investments in productive activities. The economic mismanagement which led to this climate is detailed in the recent Zaire Economic Memorandum (Report No. 5417-ZR, March 29, 1985) and includes:

- The nationalization measures of 1973-4.
- Inflationary increases in the general price index averaging 57% annually during 1978-83.
- Average annual GDP growth rate of -.3%, 1977-82.
- A 54% decrease in real private bank credits outstanding between 1978 and 1983.
- Government controls on prices and foreign exchange.

In September, 1983 the government made a number of basic economic and financial reforms supported by a Stand-by Arrangement with the IMF. These reforms have subsequently reversed the negative trends. During 1984, GDP grew by 2.5%, inflation abated as the consumer price index in Kinshasa rose by only 17%, and for the first time in several years the rate of increase of credit to enterprises and households (49%) was higher than that to government (30%) 1/.

1/ It should be noted that credit to enterprises and households (US$95 million in December, 1984) is still only 28% of that to government.
In light of these developments, a Preparation Mission for an Industrial Sector Adjustment Credit visited Zaire, May 9-24, 1985. This paper summarizes investigations into the investment climate, evaluating critically two active proposals: reform of the Investment Code, and revaluation of assets. 1/

2. INTRODUCTION

The mission did not find adequate aggregate, sectoral, or firm-level data to evaluate the contention that industrial investment in Zaire has been below what it "should" have been or that it has been inadequate to maintain existing capacity. A survey had been proposed in connection with the appraisal of the development bank, Societe Financiere de Development (SOFIDE) (Marco), but it was never conducted.

Certainly during the period before the 1983 reforms, economic forces were at work to limit industrial investment. However, with the decline in manufacturing output of 28% between 1972 and 1983 (see Table 5) and with capacity utilization rates reported at 20-30%, it is not clear why industrial investment to maintain capacity was necessary.

Output of the manufacturing sector has begun to rise, along with the general economy. SOFIDE financing commitments are rising, and the mission's terms of reference called for an evaluation of possible remaining constraints to investment: price controls, availability of foreign exchange, trade regime, Investment Code, and revaluation of assets.

It was found that price controls have generally been abolished and that the remaining ex post profit controls do not presently constrain prices.

1/ Investigations were limited to existing data sets and English-language materials and interviews.
or investment. The mission concluded that they should be eliminated and the staff administering them should be redeployed.

Foreign exchange is available through official and parallel markets and the spread between the two rates is variously estimated between 10% and 20%. While Zaire has a floating rate, the official market requires a 100% deposit and a wait of three to six weeks, so that the true spread is less than these nominal estimates. Access to foreign exchange is not the binding constraint that it was before the devaluation and reforms.

The trade regime and its administration continue to favor imports over domestic production and to tax exports. A comprehensive study of protection is under way in Zaire, and the mission concluded that further reforms are advisable including more efficient collection of tariffs, elimination of export taxes, and rebate of taxes on imported inputs which go into export goods.

The foregoing recommendations are detailed in the reports of other mission participants. The present report focusses on analysis of the Investment Code (Section 3) and on revaluation of assets (Section 4). Some further considerations are discussed in Section 5.

3. INVESTMENT CODE

Zaire's current Investment Code was implemented in September 1979, to "encourage the investment of local and foreign capital, both private and public, in activities which by their nature contribute to the economic and social development of the country." 1/ The Code is administered by the

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1/ Investment Code, Article 2. While the Code does not specify what constitutes economic and social development, the criteria for project evaluation (discussed below) allow the Commission broad latitude in interpreting these objectives.
Investment Commission, reporting to the Commissioner of Planning, with
approvals granted through a joint decree by the Commissioners of Planning and
Finance. The Code replaces the 1969 Investment Code and offers a series of
assurances to foreign investors and, to foreign and domestic investors,
financial concessions and guarantees under three regimes:

A. General Regime. Applies to investments of at least 500,000 zaires
(currently equal to about $10,000). For investments by foreigners, 80% of the
project cost must come from abroad and not more than 70% of the financing may
be debt. The general regime includes exemption from:

   a) Ad valorem duty and fixed tax on capital of new companies.
   b) Tax on profits for up to five years.
   c) Tax on expatriates' salaries until "commercialization of production".
   d) Tax on dividends for up to five years.
   e) Tax on real property for up to five years.
   f) Import duties on machines, plant, and equipment (if local industry is
      unable to supply at same quality, price).

B. Partial Regime. Applies to investments to improve or expand an existing
investment. In addition to satisfying conditions under the General Regime,
the project must not, at the time of application, be benefitting under any
regime of the Investment Code and the enterprise must allocate profits from
the project in a reserve to expand or modernize the new project. The project
benefits from exemption from import duties for the investment goods and from a
50% reduction in taxes on the profits placed in reserve.

C. Conventional Regime. Investments which qualify under the General Regime
and which are of "exceptional magnitude" or "long-deferred profitability" may
negotiate with the Executive Council for additional concessions to reduce
operating and installation costs. These include modification of direct and indirect taxation and "stabilization of the fiscal system in force" for an appropriate duration. Conventions must be approved by Presidential Ordinance.

The Code specifies that all investment projects should be evaluated on the basis of economic and financial profitability including:

a) "magnitude of the amount of the investment;"
b) "repercussion on the price (of the product);"
c) "repercussion on the balance of payments;"
d) "number of jobs created;"
e) "transfer of technology: program for training of local personnel in specialized functions and in management;"
f) "place of investment;"
g) "repercussion of the investment on the social environment."

These criteria are ill-defined and provide no systematic guidance for evaluating projects. The seven criteria can all conflict with "economic and financial profitability," permitting the government to grant tax concessions capriciously to subsidize inefficient investment. While such criteria may have arisen under earlier regimes of price controls, foreign exchange controls, etc., they should be reexamined in light of recent economic liberalization. Further, the criteria ignore completely the other government programs to benefit investment such as tariff protection (Bond and Guisinger).

The best data that are available to measure the extent to which investments benefit under the Code are shown in Table 1. The first column displays data provided by the Ministry of Planning on investments approved under the Code. These data represent all projects approved under the Code, including those which may not actually have been implemented. The second
column is enterprise and private fixed investment reported by the Bank of Zaire. 1/

Since the investment data presumably include the large array of parastatal enterprises (e.g. GECAMINES, Air Zaire, ONATRA, CNCZ, etc.), it is impossible to estimate what percentage of private investment benefits from the Investment Code. It appears that the Code's administration over the years has been very irregular, whether measured in terms of current prices (Table 1), constant prices (Table 2), number of projects approved (Table 2), or percentage of investment favored (Table 1).

Table 2 summarizes the investment projects which have been granted benefits under the Code. These include all projects that have been approved under the Code, although not all may have actually been implemented. While some of the data are missing and others are questionable (see footnote to Table 2), projects costing a total of $803 million (in 1972 US$) have been favored under the Code. If we accept the data provided by the projects' sponsors, these projects have created 70,600 jobs at an average investment of US$11,400 per job. If the spurious or anomalous data points are ignored, the remaining 377 projects (US$665 million) created 53,000 jobs at an average investment of $12,600 per job.

These data do not permit a careful analysis of the Code's effects since they provide no information on the amount of benefits granted, whether the projects were implemented, the costs in tax revenues, the projects denied benefits, nor a basis to estimate the investment patterns which would have prevailed if the Code had not been in force. However, they do raise questions

1/ Zaire Economic Memorandum (Report No. 5417-ZR), p. 216, Table 2.11, line 114. It should be noted that these data are footnoted "figures on gross fixed capital formation should be used and interpreted with caution."
### TABLE 1: INVESTMENT CODE APPROVALS AS A PERCENTAGE OF TOTAL ENTERPRISE AND PRIVATE INVESTMENT (Millions of zaires)

<table>
<thead>
<tr>
<th>Year</th>
<th>Investments Under the Investment Code (A)</th>
<th>Total Enterprise &amp; Private Investment (B)</th>
<th>Percentage (A)/(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>46.3</td>
<td>305.4</td>
<td>15.2%</td>
</tr>
<tr>
<td>1973</td>
<td>5.4</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1974</td>
<td>70.9</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1975</td>
<td>3.6</td>
<td>430.6</td>
<td>0.8%</td>
</tr>
<tr>
<td>1976</td>
<td>10.7</td>
<td>452.1</td>
<td>2.4%</td>
</tr>
<tr>
<td>1977</td>
<td>2.8</td>
<td>1150.9</td>
<td>0.2%</td>
</tr>
<tr>
<td>1978</td>
<td>25.7</td>
<td>735.7</td>
<td>3.5%</td>
</tr>
<tr>
<td>1979</td>
<td>97.3</td>
<td>1085.8</td>
<td>9.0%</td>
</tr>
<tr>
<td>1980</td>
<td>360.4</td>
<td>2573.6</td>
<td>14.0%</td>
</tr>
<tr>
<td>1981</td>
<td>165.8</td>
<td>2868.6</td>
<td>5.8%</td>
</tr>
<tr>
<td>1982</td>
<td>512.5</td>
<td>4495.1</td>
<td>11.4%</td>
</tr>
</tbody>
</table>

Sources: Ministry of Planning, and Zaire Economic Memorandum (Report No. 5417-ZR).

10-Jul-85
TABLE 2. SUMMARY OF INVESTMENT PROJECTS QUALIFYING UNDER ZAIRE’S INVESTMENT CODE, 1969-84
(Shown in thousands of 1972 US$)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AGRICULTURE</th>
<th>EXTRACTIVE</th>
<th>MANUFACTURING</th>
<th>SERVICES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Projs Inv</td>
<td>Total Prjs Inv</td>
<td>Total Prjs Inv</td>
<td>Total Prjs Inv</td>
<td>Total Prjs Inv</td>
</tr>
<tr>
<td></td>
<td>Total Invat Jobs Avg Invat /Job</td>
<td>Total Invat Jobs Avg Invat /Job</td>
<td>Total Invat Jobs Avg Invat /Job</td>
<td>Total Invat Jobs Avg Invat /Job</td>
<td>Total Invat Jobs Avg Invat /Job</td>
</tr>
<tr>
<td>1969</td>
<td>3</td>
<td>$2,325</td>
<td>170</td>
<td>$775</td>
<td>$1.97</td>
</tr>
<tr>
<td>1970</td>
<td>4</td>
<td>$4,904</td>
<td>160</td>
<td>$31,722</td>
<td>$194.78</td>
</tr>
<tr>
<td>1971</td>
<td>25</td>
<td>$42,009</td>
<td>120</td>
<td>$2,112</td>
<td>$211.75</td>
</tr>
<tr>
<td>1972</td>
<td>16</td>
<td>$4,444</td>
<td>506</td>
<td>$48,016</td>
<td>$516.44</td>
</tr>
<tr>
<td>1973</td>
<td>10</td>
<td>$4,095</td>
<td>729</td>
<td>$670</td>
<td>$67.00</td>
</tr>
<tr>
<td>1974</td>
<td>10</td>
<td>$4,095</td>
<td>729</td>
<td>$670</td>
<td>$67.00</td>
</tr>
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<td>1975</td>
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<td>$4,095</td>
<td>729</td>
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</tr>
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<td>$4,095</td>
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<td>$670</td>
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</tr>
<tr>
<td>1983</td>
<td>4</td>
<td>$4,095</td>
<td>729</td>
<td>$670</td>
<td>$67.00</td>
</tr>
<tr>
<td>1984</td>
<td>4</td>
<td>$4,095</td>
<td>729</td>
<td>$670</td>
<td>$67.00</td>
</tr>
</tbody>
</table>

| TOTAL | 70 | $1,269,741 | 12248 | $1,011 | $10.35 |

| INDUSTRIAL | TOTAL | 69 | $89,779 | 12248 | $1,301 | $47.33 |

* Adjusted to eliminate agricultural project for 1974 and extractive project for 1981 (where data are incomplete) and extractive industry projects (1970, 1983) and service industry projects (1976, 1980) where anomalous investment/job ratios indicate possible data errors.

Source: Adjusted into constant US dollars from Ministry of Planning data in current US dollars.

08-Jul
<table>
<thead>
<tr>
<th>Sector</th>
<th>1972</th>
<th>1983</th>
<th>Annual Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>Percentage of GDP</td>
<td>Actual</td>
</tr>
<tr>
<td><strong>AGRICULTURE</strong></td>
<td>165.6</td>
<td>17.6%</td>
<td>197.1</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>84.2</td>
<td>8.9%</td>
<td>87.6</td>
</tr>
<tr>
<td>TRADITIONAL</td>
<td>81.4</td>
<td>8.6%</td>
<td>109.5</td>
</tr>
<tr>
<td><strong>MINING AND PROCESSING</strong></td>
<td>226.4</td>
<td>24.0%</td>
<td>238.9</td>
</tr>
<tr>
<td><strong>MANUFACTURING</strong></td>
<td>85.8</td>
<td>9.1%</td>
<td>61.4</td>
</tr>
<tr>
<td><strong>CONSTRUCTION</strong></td>
<td>46.0</td>
<td>4.9%</td>
<td>36.6</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>30.7</td>
<td>3.3%</td>
<td>24.4</td>
</tr>
<tr>
<td>TRADITIONAL</td>
<td>15.3</td>
<td>1.6%</td>
<td>12.2</td>
</tr>
<tr>
<td><strong>UTILITIES</strong></td>
<td>9.6</td>
<td>1.0%</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>NON-GOVNMT SERVICES</strong></td>
<td>298.1</td>
<td>31.7%</td>
<td>203.7</td>
</tr>
<tr>
<td>COMMERCE</td>
<td>121.7</td>
<td>12.9%</td>
<td>104.0</td>
</tr>
<tr>
<td>TRNSPRT &amp; TELECOMM</td>
<td>73.5</td>
<td>7.8%</td>
<td>65.3</td>
</tr>
<tr>
<td>OTHER</td>
<td>102.9</td>
<td>10.9%</td>
<td>34.4</td>
</tr>
<tr>
<td><strong>GOVERNMENT SERVICES</strong></td>
<td>110.0</td>
<td>11.7%</td>
<td>228.1</td>
</tr>
<tr>
<td><strong>GDP, FACTOR COST</strong></td>
<td>941.5</td>
<td>100.0%</td>
<td>977.8</td>
</tr>
</tbody>
</table>


*Imputed from 1982 actual data.
in light of Zaire's economic performance. Table 3 displays Zaire's GDP growth rates, by sector, for the period 1972-83. While the sectors may not align perfectly with those defined by the Planning Ministry for the Investment Code, Table 4 compares data from Tables 2 and 3.

**TABLE 4. SECTORAL GROWTH RATES (1972-83) AND INVESTMENT CODE PROJECTS (1969-84)**

<table>
<thead>
<tr>
<th>Sector</th>
<th>1983 Production Growth Rate (%)</th>
<th>1983 Annual Growth Rate (%)</th>
<th>Investments Receiving Code Benefits (1969-84)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>20.2%</td>
<td>1.6%</td>
<td>Projects: 69, Costs: $90m, Cost/Job: $7,300</td>
</tr>
<tr>
<td>Mining</td>
<td>24.4%</td>
<td>0.5%</td>
<td>Projects: 11, Costs: $28m, Cost/Job: $11,800</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>06.3%</td>
<td>-3.0%</td>
<td>Projects: 239, Costs: $390m, Cost/Job: $11,800</td>
</tr>
<tr>
<td>Services</td>
<td>20.8%</td>
<td>-3.4%</td>
<td>Projects: 58, Costs: $157m, Cost/Job: $31,600</td>
</tr>
</tbody>
</table>

It appears that during this period, the Investment Code approvals showed the following patterns:

- Projects in the declining sectors (manufacturing, services) were disproportionately favored (267 compared to 80) over those in the expanding sectors (agriculture, mining).

- US$390m in investments in the smallest sector (manufacturing, 6.3% of GDP) received benefits compared to US$275m in investments in the other three sectors (71.4% of GDP).

- The Code underrowed greater investment in the service sector than in the agricultural sector, where the investment cost per-job-created is the lowest.

While a thorough, project-by-project study could reveal otherwise, these data indicate that the Investment Code has been used to encourage disproportionately large investment in declining sectors. Some may argue this
is the purpose of the Code -- to make profitable those investments which would otherwise be uneconomic and thereby to increase total investment, and argue further that the Code is meant to serve a number of social objectives, beyond market efficiency. However, any investment can be made profitable given enough tax incentives, but the point is to establish a program which gives incentives to those projects with the highest economic rates of return. There are other instruments of tax policy such as depreciation rates or tax credits which, operating on broader ranges of investments, allow the market to determine which sectors and projects offer the most economic investments.

With regard to the other social objectives, the available data do not indicate that the Code is successful. For example, one criterion is spatial distribution. However, nearly 60% of the projects were in Kinshasa, which has less than 15% of the population. Another criterion is job creation, yet the Code benefited greater investment in the service sector than the agricultural sector where cost-per-job-created is 75% lower.

Another rationale cited for the Investment Code is that it is necessary for Zaire to compete for foreign investment against other nations. In this regard, the IMF Tax Mission urged minimizing and controlling benefits, suggesting that "As a general rule, countries fare better in the competition for investors by offering a reasonable, permanent tax regime than they do by offering excessive benefits to some investors, only to squeeze the rest of the few potential taxpayers even harder." (Muten, et al., p. 45)

To the extent that competition among nations in investment incentives is merely a competitive device to influence the location of economic activity among nations, they provides leverage for investors to minimize their taxation. While each country would appear to maximize its level of
investment, the competition may lead to a net transfer from developing to
developed nations without increasing total investment. An institution such as
the World Bank may wish to discourage such transfers.

The opposing view is that investment codes offer developing nations a
way to discriminate among foreign investors, establishing a tax regime which
maximizes the tax each pays. This would be true where a country has greater
"bargaining power" than the multinational corporate investors and where that
bargaining power is used effectively to benefit the treasury, however it is
unlikely that either of these conditions prevails in Zaire.

Assessment. Revision of the Investment Code has been cited as a method to
induce further investment, and staff members of The Planning Ministry are
evaluating alternatives. To the extent that revisions can increase the return
to investment, they should increase the quantity of eligible investment.

However, except for assurances to foreign investors (which hold little value
in light of Zaire's earlier nationalization of foreign-owned assets), the code
confers no benefits which are not offset by reduced government tax receipts:
every zaire of benefit is one less zaire of receipts, forcing the government
to reduce expenditures, increase taxes on other taxpayers, or increase the
deficit to compensate. These reduced receipts, sometimes termed "tax
expenditures," are unmeasured, uncontrolled, off-budget subsidies to investors
and should be evaluated against alternative systems of tax expenditure to find
a system which encourages the most efficient pattern of investment. 1/

It appears that the proposed Investment Code revisions will increase

1/ What is the "right" level of investment and why any "incentives" are
necessary to obtain it are not addressed here. David Lim argues that "tax
incentives cannot be expected to raise the overall investment ratio
significantly." (Lim, p. 185).
these tax expenditures and will lead to a decrease in the efficiency of investment. Proposed revisions include: Varying incentives by regions; Increasing incentives according to the number of jobs created or amount of local raw materials used; Exempting firms from local taxes and export duties; Offering further concessions for firms in the Inga industrial free zone. (Waldmeir)

Investment incentives may be general and automatic, applying through the tax code to all investors, or, as in Zaire's Investment Code, administered on a case-by-case basis to achieve selected economic and social objectives. The case-by-case review of projects is meant to deal with the redundancy issue (most beneficiaries are likely to invest without the incentives) by giving incentives only to the firms where incentives are necessary to make an investment profitable. However, Lim points out that economists do not have a satisfactory method to treat the redundancy problem (Lim, pp. 179-81) and under this case-by-case system it is simply impossible to determine which investments are made profitable only when given investment incentives. The existing procedure is capricious, costly, ineffective, and fraught with rent-seeking activities:

- One entrepreneur explained that he had not sought Investment Code benefits because obtaining them would have taken six months and could have cost him unpredictable sums to obtain unpredictable levels of benefit. It is thought by some observers that applications must be prepared by specific consulting firms and that benefits are determined more by side payments than by inherent merits of the proposals. This unpredictability compounds
investor uncertainty, adding to the risk confronting those contemplating investment.

- Some corporations granted exemptions under the Investment Code have complained to the IMF Tax Mission that they were effectively called on to pay the taxes in any case.

- It is costly to prepare and evaluate applications for Investment Code benefits. In a country with chronic budgetary deficits with a scarcity of managerial resources where the fastest growing sector is government services (Table 3), it makes little sense to pay some of the most skilled citizens to prepare applications for some of the most talented government staff to read. These resources could be applied to productive activities.

- Investment incentives change the composition of investment, shifting it from unfavored to favored sectors. Investment Code attempts to reward promising investment selectively, but it appears to channel resources to the wrong sectors at an undetermined social cost.

- Investment Code benefits are an uncontrolled drain on tax receipts. They are not coordinated with overall fiscal policy or with other programs to benefit industry (e.g., tariff protection).

The Investment Code offers unpredicatable benefits to selected investors at the implicit cost of taxing others more heavily. It should be evaluated not against alternative investment codes but against broad-based alternative incentives such as reductions in the profits tax rates, accelerated depreciation and/or investment tax credits.

Zaire uses straight-line depreciation over five to twenty years, depending on the class of the asset. Depreciation allowances could be accelerated either by shortening the recovery period or applying a principle
other than straight line depreciation. For example, with sum-of-years, an asset depreciated over \( n \) years would, in \( j \)th year be depreciated by 
\[
(\frac{n-j+1}{\sum_{i=1}^{n} i}) \times \text{percent of the depreciable cost.}
\]
For an asset with a twenty year depreciable life the allowance in year \( j \) would be \((21-j)/210 = 9.5\%\) in year 1, 5.2\% in year 10, and .5\% in year 20, instead of a straight 5\%. Such acceleration shortens the payback period and makes investment more profitable. It also reduces the inflationary risk inherent in investment (discussed in the next section).

Investment tax credits reduce an investor's taxes by a given percentage of annual investments. The benefits would accrue in the year of the investments to any profitable firm although investors can be permitted to defer the credits to a later year if profits are insufficient. Whereas depreciation allowance reduce the profits subject to taxation, tax credits operate directly to reduce the tax, although in Zaire, with a flat tax rate, this has no operational significance.

These approaches afford distinct advantages over the Code:

- They can be administered by the Ministry of Finance through the tax collection system at lower administrative and private costs, freeing government officials for other, more productive work.

- They offer investors predictable levels of benefits without costly applications, delays, and side payments.

- They eliminate one pocket of rent-seeking activity.

- They substitute market judgement of economic investments for the judgements of government planners.

- They afford greater governmental control over tax receipts than the present disjointed system.
Recommendation. To the extent that the Code offers assurances to foreign investors, these should be retained or, if possible, strengthened. 1/ To the extent that the Code is reducing government receipts, it should be replaced by broad-based, automatic incentives. The amount of tax reductions (tax expenditures) afforded under the Investment Code should be estimated, along with the costs (private and governmental) of administering the system. It may turn out that the magnitude of tax expenditures is small, in which case it raises the question of whether it justifies the social costs of administering such a system. However, if the expenditures are significant, they should be replaced by alternative incentives such as accelerated depreciation, investment tax credits, or reductions in corporate profits taxes.

4. REVALUATION OF ASSETS

Zaire experienced annual inflation rates for investment goods during 1970-82 which averaged 27% and ranged between 4.5% and 85.3%. The rates were particularly high in 1981-2 when the average increase was 73% (see Table 6). Throughout this period, actual rates exhibited a consistent pattern of rising above the historical experience. Column 4 of Table 5 shows the average rate

1/ David Lim argues that empirical studies show that the most important factors in foreign investment decisions are "establishment of, and adherence to, a national development program; favorable terms for the transfer of profits and repatriation of capital; nondiscrimination against foreign ownership and control; freedom from detailed and burden some regulations on organization, ownership, and management; and protection of their share of a domestic or export market. The emphasis that most host governments give to tax incentives is therefore misplaced." (Lim, pp. 175-6). Alice Galenson subsequently found that "All of the evidence appears to support the conclusion that while tariff protection may be an important investment incentive in some cases, other incentives are not a significant factor in investment decisions." (Galenson, p. 29).
which prevailed to each year from the beginning of the period (1970) and column 5 shows the rate from each year forward to the end of the period (1982). Investors who assumed that future inflation rates would approximate past rates were systematically mistaken by factors of two to four.

If asset depreciation allowances are based on acquisition costs, inflation can cause investors to pay higher taxes than would be required in an era of stable prices. As revenues rise with inflation, but depreciation allowances remain fixed at a proportion of the acquisition price, net receipts — and taxes — rise, reducing real after-tax profits. To the extent that an investor correctly anticipates the inflation rate, he will accurately forecast real depreciation allowances and thereby undertake only profitable investments. While the inflation would cause him to recover less in real depreciation allowances than the original cost of his investment, his accurate forecast of inflation would have resulted in his undertaking only those investments which were profitable at the lower level of recovery. To the extent that an investor is uncertain of his ability to predict inflation rates, he will compensate for the inflationary risk by limiting investments to those with higher rates of return, shorter cost recovery periods, and lower capital levels or capital/labor ratios.

The influence of inflation on investment decisions can be mitigated by a system in which assets are annually revalued for depreciation at current replacement cost. Appropriate indexing can permit depreciation allowances to
<table>
<thead>
<tr>
<th>Year</th>
<th>Deflator*</th>
<th>Current Year Percentage Increase</th>
<th>Average Annual Increase Since 1970</th>
<th>Average Annual Increase, Forward to 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972</td>
<td>119.5</td>
<td>-</td>
<td>9.3%</td>
<td>31.1%</td>
</tr>
<tr>
<td>1973</td>
<td>125.7</td>
<td>5.2%</td>
<td>7.9%</td>
<td>34.4%</td>
</tr>
<tr>
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<td>9.8%</td>
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<tr>
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<td>11.9%</td>
<td>39.4%</td>
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<tr>
<td>1976</td>
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<td>55.3%</td>
<td>18.2%</td>
<td>30.2%</td>
</tr>
<tr>
<td>1977</td>
<td>284.9</td>
<td>4.5%</td>
<td>16.1%</td>
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<tr>
<td>1978</td>
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<td>42.0%</td>
<td>19.1%</td>
<td>45.2%</td>
</tr>
<tr>
<td>1979</td>
<td>558.3</td>
<td>38.0%</td>
<td>21.1%</td>
<td>47.7%</td>
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<tr>
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<td>602.9</td>
<td>8.0%</td>
<td>19.7%</td>
<td>72.7%</td>
</tr>
<tr>
<td>1981</td>
<td>1117.3</td>
<td>85.3%</td>
<td>24.5%</td>
<td>60.9%</td>
</tr>
<tr>
<td>1982</td>
<td>1797.4</td>
<td>60.9%</td>
<td>27.2%</td>
<td>-</td>
</tr>
</tbody>
</table>

*(1970=100)*

keep pace with inflation to remove this element of risk from the investment decision. On three occasions, the Government of Zaire has permitted asset revaluations. Most recently, under Ordonnance-Loi No. 83.006 (February, 1983) firms were permitted a one-time revaluation of assets. The revaluation applies only to the financial year ended December 31, 1982 and must be completed by December 31, 1985. Any tax savings resulting from revaluation must be reinvested within five years, and a firm must pay a capital gains tax of 10% on the gains from revaluation. 1/ The tax cannot be deducted from the earnings subject to profits tax. The earlier revaluations were similar to this and all three represented less than full compensation for inflation.

With the revaluation provision expiring at the end of the year, the program is being reviewed by a consulting firm conducting an extensive survey. The consultant did not have any results available during the industrial sector mission in May, but projected completion of the study by September.

Businessmen interviewed during the mission reported favorable experience with asset revaluation, and firms which had not revalued stated that revaluation would be profitable, but they did not have sufficient liquidity to pay the 10% tax. (An alternative interpretation is that firms have more profitable investments for their liquid assets or investments with quicker paybacks). Zaire requires straight line depreciation at rates which range from 5% to 20%, and profit tax rates are 50%. Thus, the recovery period

1/ It should be noted that the gains from revaluation are not actually capital gains as the term is usually used. Some argue, therefore, that they should be taxed. However, they are windfall gains resulting from a change in law favorable to investors, and there is no a priori principle which restricts them from taxation.
for the revaluation tax is instantaneous to three years, 2/ assuming a firm's
profits are sufficient to benefit fully from the additional depreciation
allowances and inflation does not further erode the gains from revaluation.
No businessmen complained that the requirement for reinvestment posed a
constraint so, presumably the amount of reinvestment from the gains from
revaluation was less than or equal to what they would have invested anyway.

The 1982 IMF tax mission evaluated the corporate income tax and
determined that "the main issue for reform has to do with the adjustment of
book profits for inflation" (Muten, et al., p. 20). They reviewed critically
the two earlier revaluation programs and recommended that Zaire undertake a
study of inflation accounting to seek a systematic approach to adjustment
patterned on Latin American experience such as Brazil's or Chile's (Lent).

They point out that Zaire's approach is asymmetric as it applies only
to real assets, ignoring monetary assets and liabilities. Firms which lose
depreciation allowances to high inflation may have offsetting (or greater)
real gains if their assets are financed by liabilities denominated in
zaires. Applying revaluation only to the asset side of the balance sheet
represents overcompensation. Indeed, an asset which depreciates at a rate
faster than it is paid off benefits on balance from inflation. A complete
system should account for both inflationary losses and gains.

Assessment. Zaire's system of revaluation has provided virtually no
incentive to investment due to its retrospective — rather than prospective —
nature. The three revaluations have all applied after the fact to existing

2/ The gains in each year are $0.5dR$, where $d$ is the depreciation rate and $R$ is
the amount of revaluation. The tax is $0.1R$. Thus the tax will be
recovered after $1/0.5d - 1$ years (assuming the tax is paid simultaneously
with the first benefit from revaluation).
investments, and have done nothing for investors concerned with the uncertainty of inflation and the profitability of future investment. The revaluations have represented windfall gains to investors who made past investments, without regard to whether they had, on balance, gained or lost from inflation.

A comprehensive continuing system of inflation accounting, announced in advance, could reduce one element of uncertainty facing potential investors. However, its implementation would encounter a host of practical problems:

- Any depreciation schedule is an arbitrary construct, treating as equals diverse classes of assets which are used at varying intensities and inherently depreciate at different rates.
- Finding the "right" index to adjust for inflation adds another arbitrary element (although arguably less arbitrary than no index at all).
- Determining which assets and liabilities to include is not trivial, and administering the system introduces additional costs and complexities in a tax-collection system which is already burdened.

It is not surprising that Zaire in 1983 ignored the IMF's suggestions to study a more comprehensive system and implemented a partial revaluation program similar to the first two.

Revaluation has been popular because it is a voluntary program which appears to have made no one worse off. Criticism among businessmen in Zaire has focussed on reducing the tax on revaluation and thereby providing greater benefits. It is viewed by some as a way to relieve the adverse effects of tight credit. However this tax cut places money in the hands of investors
only by either increasing other taxes or raising the government deficit. In either case, the money placed in investors' accounts is identically offset by money removed from others' either through taxing or government borrowing so there is no net increase in liquidity. If the increased deficit were monetized — which would be difficult under the IMF program — there could be a transitory increase in liquidity but it would be nullified by inflation.

Recommendation. Proponents of revaluation have three distinct purposes in mind for the program:

- Reduce inflationary risk in investment decisions.
- Subsidize investment through the tax structure.
- Mitigate the liquidity shortage affecting investment.

Comprehensive inflation accounting can serve a legitimate function in an inflationary environment, however the three programs of revaluation which have been implemented in Zaire are not comprehensive (neglecting liabilities and monetary assets) and do not motivate new investment but reward past investment. The present program should not be continued beyond its scheduled termination at the end of the year. In light of Zaire's success in reducing inflation under the IMF program, the benefits of inflation accounting may have been eliminated.

As to the latter two objectives, revaluation is not a method to increase liquidity although it can redistribute it within society. However, any tax incentives for investment would accomplish the same thing, so it still remains to find the most efficient system, i.e., that which best redistributes liquidity to increase investment. The present consultant's study appears to focus only on the gains from asset revaluation and, if so, would produce a result biased in favor of further revaluation.
Finally, it is not apparent that revaluation is the best method for
government to subsidize investment. There are no estimates available of
the costs in foregone government revenues of alternative programs, and the
World Bank's consultant Brendan Horton believes that a further revaluation is
"likely to lead to considerable tax losses." (Horton, p. 25). Without
reliable estimates of these consequences it is impossible to evaluate
revaluation against alternatives such as investment tax credits or accelerated
depreciation. Both of these approaches have the advantage over revaluation
that they distribute benefits according to future rather than past investments
so that they should be more efficient incentives.

Without answers to these rather basic questions about the costs and
benefits of revaluation and its alternatives, the program should not be
supported.

5. FURTHER CONSIDERATIONS

The investment constraint most frequently cited in Zaire is
liquidity. Funds are not available at prevailing interest rates to undertake
profitable investments. According to the IMF, prior to 1984, there was little
competition in lending or deposit rates. The Bank of Zaire had imposed global
and sectoral credit ceilings, prior approval of credits not subject to the
ceilings, minimum reserve requirements and discount policy to control
credit. This control was used to increase the government's share of
credits. In 1978 enterprises and households had 40% as much credit as
government but by 1982 the percentage had declined to 25%.

The effect on commercial bank loans can be seen in Table 6. They
declined in real terms by 15% annually, and from 17% of the GDP to an amount less than 9% of GDP. While more recent data are unavailable, controls on credit have remained in force to check inflation under the Stand-by Arrangement with the IMF.

While commercial bank loans are not the only source of liquidity or investment funds, their decline has severely strained other sources and led to pressure for other forms of financing. Recent increases in Investment Code approvals (Section 3), and in SOFIDE commitments may in part be related to these pressures. Similarly, entrepreneurs' complaints about the asset revaluation program (Section 4) focus on the lack of liquidity to pay the 10% tax.

An industrial sector adjustment credit to Zaire could mitigate the current liquidity crisis and stimulate investment. If it is accompanied by an end to selective Investment Code benefits and discontinuation of revaluation adjustment (offset by revenue-neutral, broad-based tax incentives) it could ensure that the resulting investment flows to more productive applications. However, it has not been determined how much the adjustment credit should be, how it should be disbursed, and what restrictions should be placed on its use.

Total credit to enterprises and households in December, 1984 was US$95 million. If this credit is distributed in proportion to commercial bank loans (Table 1), only 21% ($20m) was in manufacturing, while 65% ($62m) was in agriculture, commerce and services. With another $13 million in mining, construction, utilities, transportation, and "all other", it is unclear how much new credit can be absorbed without inflationary consequences. This issue has not been addressed in the preparatory mission.
### TABLE 6A: COMMERCIAL BANK LOANS OUTSTANDING BY SECTOR, 1975-83
(Millions of zaires; end of period)

<table>
<thead>
<tr>
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<td>Agriculture</td>
<td>58.6</td>
<td>90.1</td>
<td>148.5</td>
<td>194.6</td>
<td>275.3</td>
<td>393.6</td>
<td>475.9</td>
<td>670.6</td>
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<td>Mining</td>
<td>2.9</td>
<td>7.8</td>
<td>30.3</td>
<td>26.7</td>
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<td>35.8</td>
<td>54.8</td>
<td>81.3</td>
<td>35.3</td>
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<tr>
<td>Manufacturing</td>
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<td>78.4</td>
<td>97.1</td>
<td>104.9</td>
<td>163.8</td>
<td>165.2</td>
<td>251.3</td>
<td>381.4</td>
<td>571.8</td>
</tr>
<tr>
<td>Construction</td>
<td>5.1</td>
<td>5.3</td>
<td>4.8</td>
<td>9.6</td>
<td>18.2</td>
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<td>0.8</td>
<td>3.4</td>
<td>7.3</td>
<td>1.7</td>
<td>7.8</td>
<td>27.0</td>
<td>12.9</td>
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<tr>
<td>Transp &amp; Telecom</td>
<td>24.0</td>
<td>25.2</td>
<td>22.4</td>
<td>36.6</td>
<td>46.7</td>
<td>26.0</td>
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<td>202.7</td>
<td>227.9</td>
<td>250.3</td>
<td>312.9</td>
<td>384.7</td>
<td>614.1</td>
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<td>Services</td>
<td>15.3</td>
<td>16.9</td>
<td>18.3</td>
<td>24.8</td>
<td>25.5</td>
<td>30.2</td>
<td>47.2</td>
<td>33.6</td>
<td>38.0</td>
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<tr>
<td>Other</td>
<td>51.2</td>
<td>32.8</td>
<td>49.7</td>
<td>37.7</td>
<td>28.3</td>
<td>29.5</td>
<td>54.3</td>
<td>90.8</td>
<td>110.6</td>
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<td><strong>TOTAL</strong></td>
<td>319.4</td>
<td>385.7</td>
<td>537.0</td>
<td>641.0</td>
<td>823.9</td>
<td>955.0</td>
<td>1259.4</td>
<td>1789.3</td>
<td>2757.8</td>
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### GDP INVESTMENT DEFLATOR
(1970=100)

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<td>GDP INVESTMT DEFLATOR</td>
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<td>575.3</td>
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<td>1757.5</td>
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<td>AVG ANNUAL GROWTH (1975-82)</td>
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<td>3182.1</td>
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</tr>
</tbody>
</table>


### TABLE 6B: COMMERCIAL BANK LOANS OUTSTANDING BY SECTOR, 1975-82
(Millions of zaires, deflated by investment deflator; end of period)

<table>
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<th></th>
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<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>32.2</td>
<td>31.5</td>
<td>37.8</td>
<td>33.8</td>
<td>23.7</td>
<td>22.4</td>
<td>20.1</td>
<td>21.1</td>
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<tr>
<td>Mining</td>
<td>1.6</td>
<td>2.7</td>
<td>7.7</td>
<td>4.6</td>
<td>2.7</td>
<td>2.0</td>
<td>2.3</td>
<td>2.6</td>
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<tr>
<td>Manufacturing</td>
<td>43.2</td>
<td>27.4</td>
<td>42.4</td>
<td>18.2</td>
<td>14.1</td>
<td>9.4</td>
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<td>Construction</td>
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<td>1.6</td>
<td>1.3</td>
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<td>0.2</td>
<td>0.6</td>
<td>0.6</td>
<td>0.1</td>
<td>0.3</td>
<td>0.8</td>
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<tr>
<td>Transp &amp; Telecom</td>
<td>13.2</td>
<td>8.8</td>
<td>5.7</td>
<td>6.4</td>
<td>4.0</td>
<td>1.5</td>
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<td>Commerce</td>
<td>46.0</td>
<td>44.8</td>
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<td>14.2</td>
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<td>12.1</td>
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<tr>
<td>Services</td>
<td>8.4</td>
<td>5.9</td>
<td>4.7</td>
<td>4.3</td>
<td>2.2</td>
<td>1.7</td>
<td>2.0</td>
<td>1.1</td>
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<tr>
<td>Other</td>
<td>28.1</td>
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<td>12.6</td>
<td>6.6</td>
<td>2.4</td>
<td>1.7</td>
<td>2.3</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>175.6</td>
<td>134.7</td>
<td>136.6</td>
<td>111.4</td>
<td>70.9</td>
<td>54.3</td>
<td>53.3</td>
<td>56.2</td>
</tr>
</tbody>
</table>

AVG ANNUAL GROWTH (1975-82) -5.9% 7.0% -16.7% -15.6% 47.8% 29.4% 25.7% 27.9% 

08-Jul-85
The problem of how to disburse the adjustment credit within Zaire revolves on whether the loan should be distributed through the development bank, SOFIDE, or through the commercial banking system. It should be noted that real commercial loans outstanding have declined by 68% between 1975 and 1982 (Table 6) while annual SOFIDE disbursements rose by 85% in the same period (Table 7). If SOFIDE loans have an average five-year repayment schedule, the outstanding credits at the end of 1982 would be nearly 18% of the outstanding commercial bank loans, compared to only 7% at the end of 1978. It is questionable whether this shift in the relative importance of commercial to governmental financing should be encouraged and whether it is the best way to promote economic growth. Discussions during the mission in Zaire suggest that the commercial banking system exercises greater control in project selection and disbursement of funds. There was some criticism that

<table>
<thead>
<tr>
<th>Year</th>
<th>Million zaires</th>
<th>Million zaires (deflated by investment deflator)</th>
</tr>
</thead>
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<tr>
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<td>1.9</td>
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<tr>
<td>1976</td>
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<tr>
<td>1981</td>
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<tr>
<td>1982</td>
<td>93.8</td>
<td>3.0</td>
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</tbody>
</table>

SOFIDE funds, once disbursed, do not always go for the productive investment that SOFIDE envisions, but are used for consumption by the loan recipients. The SOFIDE Evaluation Mission should be able to advise on whether further management control are necessary. On the other hand, there is some question about the degree of competition which exists within the commercial banking system and the extent to which it would efficiently disburse an adjustment credit. The IMF has pointed out that neither deposit nor loan rates are set at competitive levels. To the extent that new credit is channeled through the commercial banking system, policy changes should be sought to increase competition.

Finally, there is the issue of what restrictions should be placed on the credit. The credit was originally envisioned as a way to enable Zairian industries to purchase imported replacement parts and industrial inputs. While these may be the most profitable industrial investments, the mission could find no data to indicate this is the case. Further, to attempt to restrict the credit to such narrow applications could be difficult and undesirable:

- It is costly to set up a special facility or otherwise to monitor use of the credit to ensure that it is restricted to replacement parts and industrial inputs.
- Because credit is fungible, unless the credit is greater than the amount of economic investment in replacement parts and imported inputs, the credit would simply be used to finance investment which would otherwise take place. That is, while total investment could rise it would not follow that investment in this restricted class would increase.
- If the credit is restricted to replacement parts and imported inputs and
it exceeds the amount of economic investment, it can lead to additional investment of this type. In order to do so, this credit would have to be offered at rates or terms more favorable than are available to other classes (or sectors) of investment. The resulting skewed investment program would be weighted too heavily toward imported inputs and replacement parts at the expense of other, more profitable types of investment. For example, with the abundant, low-cost electrical supplies there may be profitable investments in converting from other energy sources which could be precluded.

In summation, if investment for replacement parts and imported inputs is large relative to the proposed industrial sector adjustment credit, it is costly and unnecessary to restrict its use. If, on the other hand, it is smaller than the credit, restrictions would lead to an uneconomic pattern of investment. Consequently, it is recommended that the use of the credit not be tightly restricted.
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