University of the Philippines
SCHOOL OF ECONOMICS

Discussion Paper 8113 October 1981

Some Aspects of Japanese Investments in the Philippines

by

Florian A. Albero

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ABSTRACT

The paper describes the pattern of Japanese private investment in the Philippines, reviews the analytical aspects of private foreign investment in general and how Japanese investments fit in that framework and suggest directions for policy and research analysis.

Philippine exposure to Japanese investments is slight though not insignificant compared with the rest of the ASEAN countries and in terms of growth rates in the seventies. There has been a noticeable surge however relative to the sixties.

Japanese investments are analyzed (using available aggregate data) in terms of determinants and impact. It is shown that the behavior of Japanese investments in the Philippines follows the patterns in other empirical studies of foreign investments in general. The more important question in assessing investments is in regard to their replacement by indigenous capital and resources. This is likewise analyzed in the paper.

Some implications are drawn with respect to investments policies and areas for further research.
SOME ASPECTS OF JAPANESE INVESTMENTS IN
THE PHILIPPINES

Florian A. Alburo*

This paper is an attempt to (a) describe the pattern of Japanese private investment in the Philippines in the absolute and relative to ASEAN during the period of the seventies, (b) review the analytical aspects of private foreign investment in general and in particular how the Japanese investment fits in this context, and (c) suggest directions for policy and research analysis looking into Philippine-Japanese investment relations. Heavy reliance is made in this paper on existing knowledge base in the Philippines and much of the foregoing analysis is based on indicative data rather than a more rigorous research frame and methodology.

Section One provides the macroeconomic perspective of Japanese private foreign investment in the Philippines during the seventies emphasizing the magnitude involved in the ASEAN and world context. A second section reviews the analytics of foreign investment and explores these within the frame of Japanese investments. Finally, some directions for both policy discussion and research analyses are given.

*Associate Professor, School of Economics. This paper is part of a collaborative work with Professor Loretta M. Sicat on Philippine-Japan Economic Relations receiving support from the Philippine Social Science Council (through a grant from the Japan Center for International Exchange).
I. JAPANESE PRIVATE FOREIGN INVESTMENT

There has been a substantial increase in Japanese private foreign investment worldwide especially in the decade of the seventies compared with the sixties. Until the end of 1969, the accumulated Japanese foreign investments abroad amounted to $2.6 billion U.S. dollars. Yet the balance in 1980 (ending June) amounted to $28.0 billion U.S. dollars or a 10.7-fold increase in the seventies.¹ More significantly, while the growth rate of Japanese private foreign investment between 1961-1969 was around 19 percent per year, in the seventies the average yearly growth rate was 29 percent. Both these growth rates are much higher than the growth of foreign private investment flows to developing countries in the sixties (4 percent in real terms) or seventies (16 percent in nominal terms and 1970-77).²

In terms of geographical distribution, the breadth of Japanese investments seem to have remained the same. In particular, the share of Asia which stood at 21 percent in the previous decade rose slightly to 28 percent in the seventies. Of course, during the two decades the Japanese has continued to be an important source of foreign investment along with the United States, United Kingdom, France and the Federal Republic of Germany altogether accounting for more than 80 percent of all flows.³
With respect to the Japanese private foreign investment in ASEAN, its rate of growth has been greater than the growth rate of all investments i.e. 35.5 percent.


Table 2 shows the yearly fluctuations in the flow of investments in ASEAN. Over two-thirds are in Indonesia, followed distantly by Singapore (10.2 percent), the Philippines (8.6 percent), Malaysia (8.1 percent), and Thailand (5.7 percent). Data are not available to assess this distribution relative to the sixties; but it is obvious that foreign investment in Indonesia and Singapore had a higher than average growth rate (41 and 43 percent, respectively) while Malaysia, Philippines and Thailand experienced lower than average growth rates (33, 25 and 17 percent respectively).

Average yearly investment in ASEAN for the seventies is around $1.74 million U.S. dollars based on the number of cases (see Table 2). All countries in ASEAN except Indonesia had a lower average investment rate.
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>242</td>
<td>354</td>
<td>472</td>
<td>814</td>
<td>1,190</td>
<td>1,775</td>
<td>2,703</td>
<td>3,128</td>
<td>3,766</td>
</tr>
<tr>
<td>Malaysia</td>
<td>50</td>
<td>62</td>
<td>75</td>
<td>201</td>
<td>250</td>
<td>302</td>
<td>353</td>
<td>425</td>
<td>482</td>
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<td>Philippines</td>
<td>74</td>
<td>78</td>
<td>67</td>
<td>130</td>
<td>190</td>
<td>339</td>
<td>354</td>
<td>381</td>
<td>451</td>
</tr>
<tr>
<td>Singapore</td>
<td>33</td>
<td>48</td>
<td>89</td>
<td>174</td>
<td>226</td>
<td>178</td>
<td>305</td>
<td>370</td>
<td>569</td>
</tr>
<tr>
<td>Thailand</td>
<td>91</td>
<td>99</td>
<td>129</td>
<td>163</td>
<td>194</td>
<td>208</td>
<td>228</td>
<td>277</td>
<td>318</td>
</tr>
<tr>
<td>ASEAN</td>
<td>490</td>
<td>641</td>
<td>852</td>
<td>1,482</td>
<td>2,050</td>
<td>2,902</td>
<td>3,943</td>
<td>4,581</td>
<td>5,586</td>
</tr>
<tr>
<td>WORLD</td>
<td>3,595</td>
<td>4,479</td>
<td>6,773</td>
<td>10,270</td>
<td>12,666</td>
<td>15,943</td>
<td>19,650</td>
<td>22,211</td>
<td>28,014</td>
</tr>
</tbody>
</table>

Source: Approved Performance of Overseas Investment, Bank of Japan.
# Table 2
Japanese Direct Foreign Investment in ASEAN
(Million U.S. Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>ASEAN</th>
<th>INDONESIA</th>
<th>MALAYSIA</th>
<th>PHILIPPINES</th>
<th>SINGAPORE</th>
<th>THAILAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Cases</td>
<td>Value</td>
<td>No. of Cases</td>
<td>Value</td>
<td>No. of Cases</td>
<td>Value</td>
<td>No. of Cases</td>
</tr>
<tr>
<td>1951 - 1969</td>
<td>482</td>
<td>377</td>
<td>44</td>
<td>194</td>
<td>84</td>
<td>36</td>
<td>61</td>
</tr>
<tr>
<td>1970</td>
<td>125</td>
<td>114</td>
<td>34</td>
<td>49</td>
<td>33</td>
<td>14</td>
<td>11</td>
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<tr>
<td>1971</td>
<td>163</td>
<td>153</td>
<td>48</td>
<td>112</td>
<td>17</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>1972</td>
<td>263</td>
<td>213</td>
<td>61</td>
<td>118</td>
<td>45</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>1973</td>
<td>492</td>
<td>625</td>
<td>143</td>
<td>341</td>
<td>117</td>
<td>126</td>
<td>74</td>
</tr>
<tr>
<td>1974</td>
<td>361</td>
<td>565</td>
<td>113</td>
<td>376</td>
<td>78</td>
<td>48</td>
<td>55</td>
</tr>
<tr>
<td>1975</td>
<td>319</td>
<td>855</td>
<td>118</td>
<td>588</td>
<td>45</td>
<td>52</td>
<td>66</td>
</tr>
<tr>
<td>1976</td>
<td>281</td>
<td>1,044</td>
<td>84</td>
<td>929</td>
<td>37</td>
<td>54</td>
<td>50</td>
</tr>
<tr>
<td>1977</td>
<td>301</td>
<td>635</td>
<td>83</td>
<td>425</td>
<td>33</td>
<td>69</td>
<td>58</td>
</tr>
<tr>
<td>1978</td>
<td>169</td>
<td>917</td>
<td>84</td>
<td>610</td>
<td>30</td>
<td>48</td>
<td>44</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3,554</td>
<td>5,498</td>
<td>812</td>
<td>3,739</td>
<td>519</td>
<td>472</td>
<td>459</td>
</tr>
</tbody>
</table>

Source: Approved Performance of Overseas Investment, Bank of Japan.
Looking at Japanese foreign investment in a Philippine context, it appears that the country's exposure is slight, though not insignificant. This is especially appreciated when compared with Indonesia. In fact the Philippines has just about the same exposure as Thailand, Malaysia and Singapore.

The manner of Japanese foreign investment in developing countries shows that in the sixties around 31 percent were for equity participation. Foreign investment on ASEAN countries consisted of 28 percent equity while loans shared 71 percent. Table 3 presents data for 1979.

Japanese private foreign investments in the Philippines in the seventies pictured above can be summarized as follows: (1) investments have increased by 33 percent per year, lower than the growth rate of Japanese investments in ASEAN, (2) average yearly investment rates amounted to less than a million U.S. dollars, (3) investments in the Philippines are a small share of the world (1.7 percent) and ASEAN (10.2 percent) and (4) the type of investments is quite evenly distributed between equity participation (51.4 percent) and loans (47.4 percent) with the rest into acquisition of properties and establishment of branches.
<table>
<thead>
<tr>
<th>COUNTRIES</th>
<th>EQUITY</th>
<th>LOANS</th>
<th>PROPERTIES</th>
<th>ESTABLISHMENT OF BRANCHES</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Cases</td>
<td>Value (US $ Mil)</td>
<td>No. of Cases</td>
<td>Value (US $ Mil)</td>
<td>No. of Cases</td>
</tr>
<tr>
<td>Indonesia</td>
<td>247</td>
<td>513</td>
<td>546</td>
<td>3,246</td>
<td>31</td>
</tr>
<tr>
<td>Malaysia</td>
<td>316</td>
<td>267</td>
<td>177</td>
<td>209</td>
<td>14</td>
</tr>
<tr>
<td>Philippines</td>
<td>299</td>
<td>232</td>
<td>141</td>
<td>214</td>
<td>4</td>
</tr>
<tr>
<td>Singapore</td>
<td>537</td>
<td>375</td>
<td>176</td>
<td>163</td>
<td>22</td>
</tr>
<tr>
<td>Thailand</td>
<td>418</td>
<td>176</td>
<td>173</td>
<td>138</td>
<td>5</td>
</tr>
<tr>
<td>ASEAN - TOTAL</td>
<td>1,817</td>
<td>1,563</td>
<td>1,212</td>
<td>3,970</td>
<td>76</td>
</tr>
<tr>
<td>ASIA - TOTAL</td>
<td>4,534</td>
<td>3,265</td>
<td>1,702</td>
<td>4,494</td>
<td>124</td>
</tr>
<tr>
<td>WORLD - TOTAL</td>
<td>11,298</td>
<td>12,800</td>
<td>5,387</td>
<td>12,554</td>
<td>1,990</td>
</tr>
</tbody>
</table>

Source: Approved Performance of Overseas Investment, Bank of Japan.
II. THE ANALYTICS OF PRIVATE FOREIGN INVESTMENT

There is a dearth of technical studies and literature in the Philippines on the analytical aspects of direct foreign investment in general and of Japanese private foreign investment. The analytics of private foreign investment addresses at least two basic questions: (1) what determines investment flows? and (2) what are the impacts of foreign investment? The presumption however seems to be that private foreign investment (PFI) endows some net benefit to the host country and thus should be stimulated and encouraged.

Foreign Investment Policy

In the Philippines, the role and participation of PFI in the economy is not a recent phenomenon. As early as the Spanish colonial era, traces of "multinationals" operating in the country could already be found. During the American regime beginning in the twentieth century, American investment was widespread in public utilities and agricultural trade. In fact trade with the United States flourished as a result of preferential treatment.

The pattern of foreign investment after independence in 1946 was largely conditioned by economic policies adopted at that time -- controls, tax incentives, national treatment for Americans, peso
overvaluation -- which spawned finishing goods industries and assembly factories.

The more systematic means of streamlining and rationalizing foreign investments policy in the Philippines is embodied in a series of laws that began with Republic Act (R.A.) No. 5186 known as the Investment Incentives Act. This Act defined investment areas and simultaneously created the Board of Investments (BOI) to carry out and implement its provisions.6

R.A. 5186 specified the extent of foreign participation in investment areas, itemized incentives, and set time limits. The Act indicated preferred areas of investment which could be pioneer or non-pioneer.

Pioneer areas are generally industries in the intermediate fields "...such as the smelting of ores, refining of metal,... petroleum and salt-based chemicals,...pulping and integrated pulp and paper."7 Under the pioneer preferred areas, foreign participation can be up to 100 percent equity. In the non-pioneer preferred areas, foreign capital may participate up to 40 percent.

Foreign investment as well as Filipino owned industries registered with BOI under this Act are provided with a range of incentives in addition to whatever structural distortions the economy
may have that affect it. This includes the right to repatriate investments and remit earnings, freedom from expropriation of investment, exemption from capital gains tax, accelerated depreciation, carry-over of losses, exemption from tariffs and compensating taxes on machinery and equipment importations, right to employ foreign nationals (within 5 years of registration), anti-dumping protection and protection from government competition. For non-pioneer preferred areas, the incentives are just about the same.  

Subsequent investments policies were meant to complement the basic Act. For example, R.A. No. 5455 in 1968 provided for the entry of foreign capital in areas not covered by R.A. No. 5186 as long as participation does not exceed 30 percent. Republic Act No. 6135 or the Export Incentives Act was passed in 1970 to encourage export development especially of manufactured products. After 1972, several presidential decrees (P.D.) amended or changed the provisions of R.A. 5185, 5455 or 6135. For instance, P.D. 92 and P.D. 485 liberalized earlier incentives granted, and abolished some deductions from computations for net income.

In summary, there have been an array of laws defining foreign investments policies but R.A. No. 5186 seems to be the critical threshold in formulating the boundaries for the entry in and participation of foreign investment.
Analytics of Foreign Investment: Determinants

PFI, especially on developing countries, is considered important in the sense that it provides a foreign exchange source and fills a savings-investment gap. Institutional factors are therefore partly used in order to affect its flow. Clearly, however, PFI is not in the same category as official development assistance or aid.

The search for the determinants of private foreign investment will allow a more systematic explanation of changes in flows but more critically a prediction of what may happen given certain conditions. Both aggregate and micro-analytic studies have been employed to understand what may explain PFI.

Generally, it is argued that industry profitability influences the rate of PFI flows across nations, where PFI can be equity (plus management) participation. Other factors include the market structure, general economic growth, tariff rates, and political factors.

In one review of past studies, it was noted that there was no consistent ranking of the various determinants though profit motives seemed to predominate. Individual host country studies also show the strength of profitability as influencing foreign investment but with a wider range of other factors, including the environment.
While the rate of return in an industry may reflect profitability, it somehow proxies for other economic aspects. In Hymer's formulation, it is advanced that foreign investment flows occur in industries which are characterized by monopoly or monopolistic competition. The implication made is that private foreign investment is related to the theory of the firm rather than capital movements. The point however is that profitability may be conditioned by other economic distortions. For example and especially in developing countries, it is not unusual to find a close degree of association between industry profitability and protection.

The trade-off between the establishment of an overseas firm or continued final product exportation seems to be conditioned by the market structure, market size, and systems of protection or trade barriers. Decisions regarding foreign investment and its in-country distribution hinge on relative profitability. Besides an even more important step is a country's relative profitability vis-a-vis other countries.

Market size is often considered separately though as pointed out previously it is associated with measures of profitability. Somewhat along this line, a catch-all is growth of GNP. All these are consistent with the so-called global profitability maximization hypothesis.
In Cohen's summary, the element of uncertainty is introduced for at least two reasons. The first is that there is hardly any perfect information on the part of a foreign investing firm. The second is that decisions to invest internationally may dictate a portfolio wherein cross-country correlation of profitability is low. This allows risk to be minimized and reduces overall profitability fluctuations.

One of the seminal works on PFI in the Philippines argues on the importance of the rate of return determining investment flows especially of American direct investments. In the same specification, political factors are seen as impinging on PFI. These are shifts in behavior during election years and control periods of the Philippine economy. An a priori hypothesis is set out indicating the influence of nominal tariffs, wage differentials and interest rate spreads, but empirical results which include them are not reported.

An interesting aspect of what stimulates PFI concerns how an ASEAN grouping might affect it. The Scaperlanda and Mauer study, as adjusted and reformulated by Sicat, indicates that the formation of the European Economic Community increased American foreign investment.

The few studies that have attempted to more rigorously delineate variables affecting PFI point to profitability, market structure,
market size, tariff rate, and risk as determining investment flow. In the Philippines significant shifts in PFI behavior follow with changes in political environment (e.g. elections) and economic controls.

Looking now into Philippine-Japan investment relations, any assessment of the Japanese PFI determinants at this cursory level would be fraught with some problems. In the first instance, there is paucity of data especially of actual investment flows in the Philippines. There is a closer monitoring of investments availing of incentives under various acts or decrees but not quite so with small participation in newly registered businesses. Then there is the growing importance of distinguishing the forms of Japanese PFI which imply that their determinants may be different from each other. Finally, there may be broader aspects determining PFI that can not be captured through host country studies.

Figure 1 below shows the yearly Japanese investments in the Philippines as reported in Table 2 in the previous section. In a comprehensive study of Japanese-Filipino joint ventures, Tsuda has implicitly argued that the 1974 ratification of the Treaty of Amity, Commerce, and Navigation may have signalled a new wave of Japanese investments. Technically, this means a shift of a Japanese PFI function. However, Figure 2 indicates that while there was a
GROWTH OF JAPANESE FOREIGN INVESTMENTS IN THE PHILIPPINES (1970-1979)

Source: Table 2
very high investment level in 1975, this does not appear to have been sustained.

It is difficult to match PFI data from one source with another source. The following characteristics are worth noting of Japanese investments: (1) the direction of Japanese investments follow other foreign investments in general, as revealed in capital participation of foreigners in newly registered business organizations (see Table 4); (2) Japanese investments registered with BOI are mostly in chemical-based and metal-based manufacturing industries. Table 5 sets data on Japanese investments during the 3 year period of 1976-1978; (3) the accumulated balance (as of March 1980) of Japanese foreign investment in the Philippines shows 82 percent going into the manufacturing and mining industries. This latter classification may shade mining into metal processing in the Philippine data system, which is part of the manufacturing sector. See Table 6.

Short of constructing a model to investigate underlying determinants of Japanese PFI, it is possible to sketch out from fragmentary data how Japanese investments fit in the analytics of foreign investment.
<table>
<thead>
<tr>
<th>Year and kind of business</th>
<th>Total</th>
<th>Filipinos</th>
<th>Chinese</th>
<th>Americans</th>
<th>Japanese</th>
<th>German</th>
<th>British</th>
<th>Spanish</th>
<th>Australian</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>2,931,858</td>
<td>2,887,287</td>
<td>24,149</td>
<td>3,308</td>
<td>3,255</td>
<td>743</td>
<td>1,903</td>
<td>54</td>
<td>630</td>
<td>10,529</td>
</tr>
<tr>
<td>Mining and Quarrying</td>
<td>81,581</td>
<td>80,881</td>
<td>248</td>
<td>101</td>
<td>127</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>206</td>
<td>18</td>
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<tr>
<td>Manufacturing</td>
<td>495,346</td>
<td>475,665</td>
<td>11,990</td>
<td>1,421</td>
<td>1,483</td>
<td>630</td>
<td>379</td>
<td>3</td>
<td>174</td>
<td>3,596</td>
</tr>
<tr>
<td>Construction</td>
<td>422,941</td>
<td>420,449</td>
<td>-</td>
<td>29</td>
<td>170</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>1</td>
<td>700</td>
</tr>
<tr>
<td>Electricity, gas and water</td>
<td>2,760</td>
<td>2,751</td>
<td>-</td>
<td>9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>620,876</td>
<td>611,066</td>
<td>4,899</td>
<td>1,035</td>
<td>1,314</td>
<td>39</td>
<td>52</td>
<td>44</td>
<td>123</td>
<td>2,364</td>
</tr>
<tr>
<td>Financing, real estate, insurance and business services</td>
<td>773,159</td>
<td>767,139</td>
<td>3,747</td>
<td>497</td>
<td>-</td>
<td>45</td>
<td>325</td>
<td>3</td>
<td>84</td>
<td>1,319</td>
</tr>
<tr>
<td>Transportation, Storage &amp; Communication</td>
<td>157,700</td>
<td>156,915</td>
<td>263</td>
<td>70</td>
<td>110</td>
<td>-</td>
<td>113</td>
<td>-</td>
<td>-</td>
<td>229</td>
</tr>
<tr>
<td>Community, social and personal services</td>
<td>334,745</td>
<td>330,829</td>
<td>1,276</td>
<td>134</td>
<td>46</td>
<td>29</td>
<td>22</td>
<td>4</td>
<td>42</td>
<td>2,363</td>
</tr>
</tbody>
</table>


*January-November
### TABLE 5

Total Amount of Japanese Investment of Projects Approved by the BOI Under R.A. 5186, 6135, FD 1159 and R.A. 5455 with Foreign Equity, 1976-1978 (thousand pesos)

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>1976</th>
<th>1977</th>
<th>1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agro-Based</td>
<td>28,591</td>
<td>322</td>
<td>8,292</td>
</tr>
<tr>
<td>Mining &amp; Mineral processing</td>
<td>2,550</td>
<td>-</td>
<td>19,840</td>
</tr>
<tr>
<td>Metal based</td>
<td>41,774</td>
<td>61,520</td>
<td>28,830</td>
</tr>
<tr>
<td>Chemical-based</td>
<td>18,987</td>
<td>135</td>
<td>41,308</td>
</tr>
<tr>
<td>Other products</td>
<td>-</td>
<td>-</td>
<td>60</td>
</tr>
<tr>
<td>Others</td>
<td>10,082</td>
<td>6,025</td>
<td>4,711</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>101,984</td>
<td>68,002</td>
<td>103,041</td>
</tr>
</tbody>
</table>

Source: 1980 Pocketbook of Philippine Statistics NEDA.
TABLE 6

Japanese Foreign Investment in the Philippines
(Accumulated Balance at end of March 1980)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of Cases</th>
<th>Value (Million US Dollars)</th>
<th>Share (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>211</td>
<td>188</td>
<td>35.0</td>
</tr>
<tr>
<td>Agriculture, forestry and fisheries</td>
<td>93</td>
<td>33</td>
<td>6.1</td>
</tr>
<tr>
<td>Mining</td>
<td>38</td>
<td>254</td>
<td>47.3</td>
</tr>
<tr>
<td>Commerce</td>
<td>71</td>
<td>20</td>
<td>3.7</td>
</tr>
<tr>
<td>Others</td>
<td>87</td>
<td>42</td>
<td>7.8</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>537</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Japan.
First, there seems to be a high association between Japanese investments and relative rates of returns among industries as indicated in Table 4. While returns on investments are crudely calculated, its pattern seems to be related to the industrial pattern of Japanese investments in the Philippines.

Second, within manufacturing industry, the distribution of investments (for 1975) appear to be in industries where value added has been growing faster, and where concentration ratios are found to be high. Tsuda's data indicated nearly 85 percent of Japanese subscribed capital in all joint ventures are in Foods (ISIC No. 20), textiles, (23) basic metals (33) and transport equipment (34). On the other hand, calculations made by Lindsey suggest that with the exception of foods, there is a high value added concentration ratio for these industries. Of course the comparative data are for different years.

Finally, the effective protection rates (EPR) of industries show that metal-based and chemical-based industries are accorded the highest EPR's. The subsidies provided by BOI, when included in the measures of protection, are only slight. However when coupled with the quite insignificant difference between the 1965 and 1974 EPR's, it would seem that profitabilities have remained the same in relative terms and may in fact have increased.
All these suggest the strength of the profitability hypothesis determining PFI. One can further advance that with the protective structure remaining basically the same in the decade of the sixties and the seventies, the investment incentives have been able to stimulate an increasing rate of foreign investment. 27

Analytics of Foreign Investment: Impact

An even more important aspect of foreign investment is its effect on the economy and society at large. Whether actual or perceived, the impact of foreign investment on economic and social concerns will influence not only policy but individual or corporate behavior.

There are two problems however with understanding the impact of PFI. The first is that PFI, especially in the late sixties and seventies has taken on a more sophisticated character than depicted in standard neoclassical theory. 28 It follows that studying its impact requires separating its different forms.

The second concerns a more technical question. Being able to trace the effects of PFI on a number of variables does not necessarily imply a definite conclusion regarding impact. Any effect or impact needs to be evaluated with the alternative situation without the PFI. Obviously, without the PFI, the host country's economy would not likely remain static.
Considerations of alternatives without PFI indicate there could be a number of possible situations which must be accounted for to measure impact. In other words, impact could have a wide range in view of this problem.

One strong argument says that PFI directly affects the balance of payments. Through the inflow of investments, the balance of payments is immediately improved. On the other hand, should the production induced by PFI lead to reductions in imports, the balance of payments is again affected in a positive sense. Negative possibilities include PFI-induced income which spills into imports, repatriation, and liquidation of investments.

Another strong argument points out the implied transfer of technology that goes with PFI. The know-how inherent in research-and knowledge-intensive industries (where a large number of PFI is) is argued to redound to the benefit of the indigenous industries. One school suggests that even in these industries PFI is associated with resource adaptation and consequently will use resource intensities that reflect comparative advantage. There is however no agreement here with respect to research results on the transfer of technology impact.

A third effect is the generation of additional government revenue that comes with operations arising from PFI. Since PFI flows are determined by profitability the tax base would generally
be large and thus revenue accruing to the host government. This does not seem to be an important contribution since the argument is often heard that multinationals and the establishment of subsidiaries allow profits to be absorbed through transfer pricing. In fact, a study of Japanese PFI reported unusually large losses in what may appear to be profitable ventures. 31

Then there is the impact on efficiency or productivity that PFI brings. While there are findings that multinational enterprises (MNE) are more efficient than domestic firms in the same industries, Parry 32 concludes that evidence is not conclusive since more often MNE's are larger thus in part explaining efficiency differences.

PFI also affects employment, income and income distribution. But these are somewhat derivable from the initial and direct effects of investments.

All these forms of impact must be gauged not in their absolute terms or even incremental values but compared with the alternative values without PFI. For example, without PFI all its products would be imported. PFI in this case creates a larger impact than otherwise. But an alternative situation where local firms would evolve and produce the output of PFI is equally a reasonable scenario. Measuring impact is therefore quite difficult.
Studies on the impact of PFI in the Philippines are scarce and each of limited scope. Dasari\textsuperscript{33} concentrates on the balance of payments, Mason on factor use and technology transfer, Bos\textsuperscript{34} on income, balance of payments, government taxes and private savings, and Tsuda\textsuperscript{35} on interlocking directorates and the preservation of Filipino and Japanese holdings.

Philippine data are difficult to assemble much more model them into a framework measuring impact. Dasari's specification, based on a survey of 17 firms in the manufacturing industry, is limited to balance of payments effects. Here the finding is that the "higher the degree of replacement of the foreign firm by imports... the higher can be said to be the positive contribution of foreign investment. In other words, the lower the degree of replacement potential of the local firm, the higher can be said to be the positive contribution of the foreign firm."\textsuperscript{36} The firms in Dasari's sample are mostly American PFI firms.

How one determines replacement potential can be partially discerned from industry characteristics, degree of use of imported inputs, and eventual export penetration.

In the Bos study of the Philippines,\textsuperscript{37} a large number of effects are recognized but only a few marginal effects are explored. These are income effects attributable to PFI (directly and indirectly),
balance of payments effects, public savings effects, and private savings. The results vary according to the manufacturing subsector. For example for the whole sector income effect is about 9 percent of PPI value added, the balance of payments effect is modest, and there is low public and private savings.

For chemical and allied products industries, the marginal income effect is higher (than average), while the balance of payments effect is a surplus and both public and private savings are about the average.

Mason compared certain plant characteristics among local and foreign (mainly Americans) firms in the same industry and found that foreign firms employ just about the same capital per worker than local firms in the same industry.

Tsuda's research work has traces of both determinants and impact. The social implications of what he finds seem to be the more critical point. For example, much of Japanese investments in the Philippines originate from operations of Kigyo-Shudan or "big business" and modern zaibatsu's or "financial and industrial combines". Furthermore Tsuda also traces the interlocking nature of Japanese investments and the exclusive nature of Japanese foreign investors. From the host country's point of view, Tsuda finds that there are parallels of the
Japanese kigyo-shudan and modern zajibatsu in terms of family controlled groups. One immediate conclusion is that Japanese PFI benefits a small core group of Filipino corporate giants. A more rigorous framework however has to be pursued along Tsuda's look in order to establish causal linkages.

It is not possible in this paper to directly discern the range of impacts that Japanese foreign investments bring into the Philippines. However given some caveats and data on the location of Japanese PFI, one can allude to some of the impacts. When viewed against what knowledge is known from the sparse literature briefly reviewed, broad orders of impact can be described.

Table 7 below shows some of the characteristics of the industries where most of the Filipino-Japanese joint ventures are located.

The capital intensities of industries where most Filipino-Japanese joint ventures are higher than the average for all manufacturing. Basic metals and transport equipment industries have high capital labor ratios compared with food and textile industries among the four major industries. Given the earlier results of Mason's study and assuming Japanese firms' characteristics follow typical PFI characteristics in the Philippines it would seem that Japanese investments affect and raise average capital intensities. Conversely the amount of employment
TABLE 7
Industry Characteristics of Major Filipino-Japanese Joint Ventures
1977$^P$ (pesos)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Capital Intensity</th>
<th>Value Added Per Worker</th>
<th>Wage Per Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food (ISIC 20)</td>
<td>30,796</td>
<td>13,845</td>
<td>6,637</td>
</tr>
<tr>
<td>Textile (ISIC 23)</td>
<td>27,543</td>
<td>7,400</td>
<td>5,631</td>
</tr>
<tr>
<td>Basic Metals (ISIC 33)</td>
<td>37,400</td>
<td>37,243</td>
<td>9,709</td>
</tr>
<tr>
<td>Transport Equipment (ISIC 34)</td>
<td>30,705</td>
<td>30,705</td>
<td>9,424</td>
</tr>
<tr>
<td>All Manufacturing</td>
<td>25,287</td>
<td>16,128</td>
<td>6,753</td>
</tr>
</tbody>
</table>


P - preliminary

a - value of fixed assets per total employment

b - worker includes paid and unpaid employees

c - total payroll for paid employees divided by total paid employees
generated per unit of Japanese capital invested in Philippine manufacturing is much lower than the average.

In terms of value added, food and textile industries have lower than-average value added per worker while the opposite is true of basic metals and transport equipment. The measure of value added, especially for joint ventures, is quite ambiguous if transfer pricing is positive. This will be reflected in (abnormally) high cost of materials and contract work and/or lower value of gross output. If an argument is made that Japanese PFI carry with it better technology than prevalent in the industry, its efficiency would be much higher. Of course this can only be known with direct knowledge of PFI value added, and industry value added is a poor indicator of its effects.

Except for textile, compensation per employee is significantly higher than industry averages, at least for 1977. Relative to the wage situation in the overall manufacturing industry, wages are higher in industries where the Japanese capital are located. Again this apparent positive contribution needs to be qualified in the context of wage payments that are part of contractual work between branches and home offices of multinational corporations as vehicles of PFI.

What seems to be striking is the observation implied in Table 7 that wage as a proportion of value added is lowest where average compensation is highest and quite high (76 percent of value added for
textile industries) for the rest where average compensation is about the same as all of manufacturing.

In the final analysis, the question of impact must be raised relative to effective replacement by indigenous firms and capital. Here what might be independent factors are the technological intensity of industries, the constraint of trade-mark licensing, capital intensity, skill-intensive indigenous employment, and raw materials supply. First of all, it is not clear whether capital flows would have occurred in the absence of Japanese PFI. However, given the surge of international loans through syndication in world capital markets in the seventies, one can argue that private loans could equally have been secured. Loan syndication (e.g. Eurodollar market loans) depend more generally on broad economic and political conditions as well as peace and order which were conducive for financial flows. Thus this point does not seem to be unique with Japanese PFI.

Secondly, there is the question of technological advances brought about by direct foreign investment. This may vary industry by industry in manufacturing and indeed for some industries the technological requirements may be quite large. But in the industries where the major Filipino-Japanese joint ventures are, technological intensity does not seem as strong as, say, industrial chemicals, petroleum or plastic products industry.
Third, the impact on employment must be assessed in the light of (a) the rate of employment without the PFI and (b) the incremental employment caused by the foreign investment. It seems that evaluating alternative employment levels without PFI is more of a general equilibrium nature and difficult to arrive at anything definite whether positive or negative. However what does appear to be a clue is that if investments would have been forthcoming anyhow employment impact would be the same and even greater if the alternative investment were in industries with higher labor absorption.

Finally, even if alternative private foreign investments were forthcoming; what may be constraining is associated trademark licensing agreements from foreign firms. Loans may not become realized investments because a manufacturing process is patented. Thus imports will still take place. In a one sense though this seems to be more of a social problem (i.e. redirecting demand to close substitutes of the product requiring a different process) than an economic one. Obviously, patents of processes are instruments of foreign participation in investments.
Analytics of Foreign Investments: Trade and Investment

In an interesting comparison of Japanese and American direct foreign investment, Kojima has hypothesized that Japanese PFI is "trade-oriented" in comparison with American PFI which is "anti-trade oriented". The basis seems to be the observation that the industries where Japanese PFI are in developing countries are those for which Japan is losing comparative advantage (and the developing countries gaining) such as textile and clothing, motor vehicle assembly and electrical machinery. On the other hand, American PFI is argued to be carried by oligopolistic firms in new and emerging industries. One implication of this idea is that trade balances with Japan for those industries where there are Japanese investments would result in a surplus.

Before assessing the relation between trade and investment, it might be useful to consider three related points. First, it seems that the direction of Japanese PFI in host country industries is not inconsistent with a dynamic view of PFI flows. There is a substantial lag of Japanese PFI relative to American PFI and thus it can be expected that the former PFI flows are in import-substitution industries. Over time however the pace will follow mature PFI's.
Second, protection of markets is a strong rationale for substituting PFI in the face of heavy protection of domestic industries.

Finally, it is not at all clear how direction of investments can indicate the comparative advantage of a host country unless world competitive conditions are allowed to dictate its directions.

At the aggregate level, it seems that Japanese private investment flows in the Philippines lead trade balances by about 2 years, especially in the decade of the seventies. This intuition is more apparent if one realizes that some requirements must be met before foreign investments are allowed (cf. Table 8 with Figure 1).

Following the earlier identification of four sectors as comprising the bulk of Filipino-Japanese joint ventures it is possible to extrapolate trade flows with Japan for items within these sectors. As pointed out, one implication is the expectation of surplus trade balances for these sectors if the trade orientation of Japanese PFI is true. However, with the exception of food, for all sectors experienced heavy trade deficits for the year 1978.

It does not also appear to be true, as argued by Kojima, that American investments are in highly concentrated industries and Japanese investments are not. It was argued previously that indeed Japanese investments are also predominantly in concentrated industries.
### TABLE 8

Philippine Trade Patterns with Japan (by trade balance)  
(f.o.b. value in thousand U.S. dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>Imports</th>
<th>Trade Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>420,753</td>
<td>344,879</td>
<td>75,874</td>
</tr>
<tr>
<td>1971</td>
<td>398,570</td>
<td>359,100</td>
<td>39,470</td>
</tr>
<tr>
<td>1972</td>
<td>373,449</td>
<td>390,785</td>
<td>(17,336)</td>
</tr>
<tr>
<td>1973</td>
<td>674,523</td>
<td>518,519</td>
<td>156,004</td>
</tr>
<tr>
<td>1974</td>
<td>949,207</td>
<td>864,596</td>
<td>84,611</td>
</tr>
<tr>
<td>1975</td>
<td>864,997</td>
<td>966,291</td>
<td>(101,294)</td>
</tr>
<tr>
<td>1976</td>
<td>621,455</td>
<td>976,416</td>
<td>(354,961)</td>
</tr>
<tr>
<td>1977</td>
<td>726,568</td>
<td>975,300</td>
<td>(240,732)</td>
</tr>
<tr>
<td>1978</td>
<td>818,381</td>
<td>1,285,105</td>
<td>(466,724)</td>
</tr>
</tbody>
</table>

Much of trade and investment relationships explored in this sub-section are at best cursory. A greater amount of rigorous and finer work is needed to be able to explain Japanese foreign investment in terms of trade investments.

III. CONCLUSIONS, POLICY AND RESEARCH DIRECTIONS

This paper has reviewed Philippine-Japan economic relations in terms of investment flows. In this context, investments policies to attract foreign capital were also reviewed.

The surge of Japanese investments worldwide draws concern to some quarters and this is no exception for the Philippines. Although it is evident that the country's exposure to Japanese capital is slight, there is no doubt that in the seventies the rate of investment flows has been quite high despite little changes in investment location and form.

The dearth of studies that specifically look at Japanese investments in the Philippines precludes concrete conclusions to be drawn on such questions as determinants, impact and relationship to trade. What has been done here has been to rely on technical works that investigate aggregate foreign investments and then rely on a strong assumption that Japanese investments are no different from the overall picture.
On the basis of this track some tentative conclusions may be drawn. First, profitability seems to be a strong determinant of foreign investment, and there is no evidence that this is not true of Japanese PFI. One hypothesis explored is the influence of protection on the distribution of PFI. Japanese PFI in the seventies seem to have concentrated on industries with relatively high protection rates. Second, saying something definite about impact much more measuring it is difficult. A strong argument is made however that the impact of Japanese PFI may have been slight and may even be negative. Third, on the aggregate there seem to be some positive relationship between trade balance and Japanese PFI. On a quite superficial level, it is difficult to substantiate some of the explanations for the trade and investment relationship.

A brief historical account of the policy environment for PFI was summarized. What needs to be answered however is what the impact is of the host of policies and incentives on the flow of PFI in the Philippines. This seems to be a prior question before evaluating PFI behavior.

One observation with regards to international capital flows in the seventies is that most developing countries institute a host of investments programs aimed for PFI. And the form magnitude and manner seem to be similar across countries trying to attract PFI. Consequently,
a strong argument can be made that the impact of investment packages on PFI flows is somewhat neutral. Thus internal economic, social and political factors ultimately determine PFI flows. If so, there is an implication that dismantling incentives will not necessarily reduce foreign investment and may in fact correct economic distortions. Thus other than standard provisions (e.g. property rights, repatriation) the costs of incentives will be minimized.

The move towards greater trade liberalization ultimately affects the pace and pattern of PFI. For example, with dismantling of protection walls, some of the influences of PFI may assume a form reflecting comparative advantage potentials in a world market rather than concentration on domestic markets.

A more systematic study needs to be done with regard to this latter point. And if liberalization is pursued across countries the international flow of PFI is bound to be determined by market forces and international specialization.

Within the realm of Japanese PFI a more thorough fact-finding research is necessary. The work done in this paper is only a partial attempt. More importantly, a structural study of Japanese PFI will yield useful insights on the real contribution of foreign investments.
Research should cover determinants, impact and trade interactions. Only with a more systematic frame can one be able to cast concrete judgments about private foreign investments.
The source of data in this paper comes from Japanese sources. It is possible (and should be pursued at a later point in this research) to compile the data from Philippine sources. However this would be subject to more vagaries. For one, there would be several sources for monitoring Japanese PFI. For another the source in Japan would reflect more of actual flows than in the Philippines which would be on an approved basis.


Ibid.


The implementation of investments is carried through an Investments Priorities Plan. 1980 had the Thirteenth Investment Priorities Plan.

Cesar Virata, "Foreign Investment in Developing Countries: The Philippines'" in Peter Drysdale (editor), Direct Foreign Investment in Asia and the Pacific (Toronto: University of Toronto Press, 1972), p. 261.


Sec 2b of the Act.


13 C.T. Subido, *op. cit.*

14 *Idem*, "Determinants of Direct Foreign Investments", *Philippine Economic Journal* (Third Trimester, 1974). It is argued that a change in administration, effected through elections, cast risk and uncertainty over PFI (e.g. fear of expropriation).


17 In the neoclassical formulation, private foreign investment took the simple form of a loan which moves in consonance with interest rates. More modern forms include equity participation, management contribution, technology etc.


19 What is responsible for the surge is a singular investment in 1975 amounting to $478.6 million made by Kawasaki Steel Corporation of Japan.


22 M. Tsuda, *op. cit.*
23. C.W. Lindsey, op. cit., p. 298.

24. Tsuda's data are for 1975 whereas Lindsey's measures are for 1970.


26. Ibid.

27. Assuming the independent effect of general economic growth is constant.

28. See Footnote 17.

29. See B.J. Cohen, op. cit.

30. Ibid.


34. H.C. Bos, Martin Sanders, and Carlo Specchi, Private Foreign Investment in Developing Countries (Holland: Reidel, 1974), Part III, VI.


37. H.C. Bos and others, op. cit.


41. The food sector in the Standard International Trade Classification (SITC) combines processed and unprocessed items and thus not easily comparable with the food sector of the manufacturing industry under International Standard Industrial Classification (ISIC).

42. K. Kojima, op. cit.