Multinational Enterprises Programme
Working Papers
Research on Employment Effects
of Multinational Enterprises

Working Paper No. 8

Employment effects of multinational enterprises:

A case study of Kenya

by

by R. Kaplinsky,
Institute of Development Studies,
University of Sussex.

Copyright (c) International Labour Organisation, 1979

This is one of the working papers prepared for an ILO research project on the Employment Effects of Multinational Enterprises in Home and Host Countries, undertaken in the 1978/79 biennium by the ILO's Multinational Enterprise Programme. Responsibility for the opinions expressed in the working papers rests solely with their authors and the release of the working papers does not constitute an endorsement by the ILO of the opinions expressed in them. The working papers are intended to provide elements for further discussion of the subjects treated in them.

The research project benefited from financial support of the Government of the Netherlands, the Central Union of Swiss Employers' Associations and the International Confederation of Free Trade Unions which is, herewith, gratefully acknowledged.
I HISTORICAL BACKGROUND AND OVERVIEW

Kenya has a long history of trading relationships with the external world. Indeed the much vaunted Portuguese 'discovery' of the sea-route to the East was made possible only by the skills of an indigenous pilot who negotiated the crossing from Malindi (on the Kenyan coast) to India. This 'external trade' was supplemented and to some extent supported by 'internal trade' within the interior and that between the interior and the coastal areas\(^{(1)}\).

Foreign investment in production (as opposed to trade) followed the arrival of British settlers who began to move into the interior in the late nineteenth century. Almost without exception early manufacturing arose out of the entrepreneurial activities and British and Asian settlers, (rather than foreign firms) beginning with basic products such as timber, flour milling and construction. But with the increasing role being played by commodity production in agriculture, foreign investment (that is outside of established trading companies\(^{(2)}\)) made its entry into

---

\(^{(1)}\) There are numerous sources for these trade patterns. For a description of internal trade see P. Marris and A. Somerset, *African Businessmen*, (Nairobi, East African Publishing House, 1971).

production in the primary sector, accounting for increasingly significant shares in tea and coffee production and in wattle processing.

But as Swainson\textsuperscript{(1)} points out, British capital (the most likely source of foreign investment during the Colonial period) was reluctant to invest in production in East Africa, which was seen primarily as a captive market and a source of raw materials. Moreover, as Brett\textsuperscript{(2)}, shows the Colonial state was inhibited by the Imperial state from supporting the growth of processing and manufacturing activities in the E. African colonies.

This policy was undermined by two events. The first, a familiar pattern for much of the Third World, was the growth of local manufacturing during the Second World War in response to the breakdown of established international trading channels. The second, allied in part to the growth of local manufacturing, was the emergence of a local accumulating class which although almost entirely of immigrant origin, was increasingly successful in persuading the colonial state to support domestic accumulation.

\textsuperscript{(1)} N. Swainson, \textit{op. cit.}

Supplementing these domestic pressures for local accumulation in processing and industry was the growing presence of foreign capital. Predominantly British in origin, this foreign capital entered the Kenyan economy with the specific aim of protecting captive markets from competition by imports from the Far East and America\(^{(1)}\). Thus in this post-war period of primarily import-substituting-industrialisation\(^{(2)}\), foreign (predominantly British) and domestic capital were in a close alliance of interests to further local production. But this largely occurred in relation to products protected by the 'natural barriers' of transport costs and product life (e.g. processed foods, some construction materials, glass bottles, etc.)

By Independence in 1963, Kenya was relatively industrialised compared to its neighbours; and foreign investment, particularly that by British firms, was predominant. Thus in 1967, for example, a census of Industrial Production estimated that predominantly or totally foreign-owned subsidiaries accounted for 71% of value-added in large scale manufacturing. The OECD estimated that this, almost 80% of all foreign investment was British-based, and almost half the remainder was of American origin.\(^{(3)}\)

---

(1) See N. Swainson, \textit{op. cit.}.

(2) Although to some extent foreign and domestic capital invested in Kenya to serve the East African market, thus leading to some 'exports' to surrounding countries most of whom were also British colonies.

(3) See the introductory chapter to R. Kaplinsky, 1978, \textit{op. cit.}. 
Independence, following as it did a period of armed struggle which was characterised by the settlers as being primarily 'primitive' and xenophobic\(^1\), was followed by a deliberately 'compliant' policy by the incoming independent state which emphasized its desire for continuity in Kenya's relationship to foreign capital.\(^2\) The basis for this continued relationship was defined by the Foreign Investment Protection Act of 1964 which gave comprehensive guarantees on profit remission and against expropriation. Although this 'open door policy' was modified in later years by controls on employment of foreign nationals (the 1967 Immigration Act which established the Kenyanization of Personnel Bureau and a system of work permits), and on foreign exchange dealings and local credit (the 1971 Exchange Control Act) it has set the framework for a largely harmonious relationship between national capital, the State and foreign capital.\(^3\)

---

\(^1\) A description which subsequent studies have consistently shown to be deliberately fabricated and inaccurate. See, for example, C. G. Rosberg and J. Nottingham, *The Myth of Mau Mau: Nationalism in Kenya*, (Nairobi, East African Publishing House, 1966).


\(^3\) There is increasing dissension amongst academic observers with regard to the harmoniousness of this relationship. Leys ('Capital Accumulation, Class Formation and Dependency: The Significance of the Kenyan Case', *Socialist Register*, 1978) has come to question his earlier analysis and has been challenged by other observers amongst which is R. Kaplinsky, 'Capitalist Accumulation at the Periphery: The Kenyan Case Reexamined', (Mimeo, 1979).
These policies set the scene for a decade of increased import-substituting foreign investment, aided by tariff protection against imports. Largely oligopolistic in nature (that is, market-entry and oligopolistic reaction\(^1\)), the consequence has been a marked diversification of the sources of foreign investment\(^2\). This decade was marked by a decline of foreign investment in the agricultural sector, the breaking-up of settler estates into smallholdings, and a consequent growth in agricultural productivity which provided the impetus for a sustained growth in real per capita incomes.

The oil crisis in 1973, coinciding as it did with a significant decline in the growth of agricultural productivity and the 'filling-in' of the easy stages of import substitution, brought this process to an end\(^3\). Per capita incomes (except during the short lived coffee boom of 1976-7) have remained static, the balance of payments

---


(2) See R. Kaplinsky, Ownership and Equity in Kenya, 1966-1976, (Nairobi, NCCK, forthcoming), which estimates that the share of British foreign investment stood at only 32.4% in 1976 compared to 47% in 1966. Other major changes were Germany (up from 2.1% to 10.9%), Switzerland (down from 11.3% to 3.9%), France (down from 11.9% to 3.9%) and Bermuda (up from 4.1% to 18.5%).

(3) Ibid.
has moved sharply into the red and the entry of foreign
capital in this recent period has slowed(1). Significantly
its character has changed so that increasingly consortiums
of foreign investment have invested in joint ventures with
parastatals, each member of the foreign consortium insuring
its returns in various ways (e.g. machinery sales, manage-
ment fees, etc.)(2)

II FOREIGN INVESTMENT IN KENYA

Only limited evidence exists on the extent of foreign
ownership of the Kenyan economy. In agriculture most of
the large settler estates (including some owned by
naturalised Kenyan citizens) has now been taken over by
indigenous Kenyans and much of this prime land has been
subdivided into small-holdings. Foreign investment remains
in tea and coffee estates but here, too, there has been a
period of disinvestment in recent years.(3) Only pineapple
growing and processing(4) is still dominated by foreign

(1) The net inflow of private long-term capital fell from £31.3m
in 1973 and £41.6m in 1974 to £15.3m in 1975, £23.1m in 1976
and £30.8m in 1977.

(2) For example the new furfural plant being established in
Eldoret.

(3) Some foreign firms, foreseeing the decline of coffee prices
after the 1975 Brazilian frost, sold their estates at in-
flated prices in 1977 and 1978 before the declining global
coffee prices had worked their way through to farm-gate prices.

(4) See R. Kaplinsky, Exported Oriented Growth: A Large Inter-
national Firm in a Small Developing Country, World Development,
forthcoming.
investment. In the service sector, with the possible exception of tourism) foreign investment has lost its dominance. Similarly foreign trading companies which failed to move into manufacturing have also been taken over by local capital.

It is in the manufacturing sector that foreign investment maintains its dominant position. Moreover some detailed data on foreign investment is now available. Small scale manufacturing (i.e. those firms employing less than fifty workers, the definition adopted by the Kenya Central Bureau of Statistics) remains largely unnumerated and can be broken down into three types of enterprises.

(i) Small scale, petty manufacturing, 'informal sector' plants almost entirely owned by indigenous citizens.

(ii) Larger scale 'modern' small industry (as in the various industrial estates dotted through the country) predominantly owned by indigenous Kenyans, often materially assisted by state finance and extension services.

(iii) Other small industries owned by non-indigenous Kenyans (of European or Asian descent) or by Kenyan resident foreign nationals.
While little is known at a detailed, comprehensive level, it can be assumed that the third group will increasingly be taken over by indigenous Kenyans, particularly where such enterprises are not protected by a monopoly over technology or skills. At any rate, insofar, as the country of residence defines the 'nationality' of investment (as is usually the case), even this third category can be considered as Kenya. As the level of generalisation, therefore, it can be stated that small-industry is almost entirely locally owned.

Foreign investment is overwhelmingly concentrated in large scale manufacturing and here we have access to a study undertaken on the ownership of all large scale manufacturing and all tourist firms (large and small) in 1966 and 1976.(1) This allows for a detailed examination of a sector of activity where foreign investment is concentrated.

In table 1 below we can see the share of this foreign investment and how it changed in the period between 1966 and 1976. The 285 firms operating in 1966 and 421 firms

(1) R. Kaplinsky, NCCK, forthcoming, op. cit.
Table 1

Foreign ownership of a large scale manufacturing and of all tourist firms, 1966-76

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of foreign ownership</td>
<td>Total</td>
<td>% of foreign ownership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>foreign</td>
<td>owned</td>
<td>foreign</td>
<td>owned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>issued</td>
<td>capital</td>
<td>issued</td>
<td>capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>KE</td>
<td>KE</td>
<td>KE</td>
<td>KE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) By Industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, beverages</td>
<td>14,876,072</td>
<td>7,250,520</td>
<td>48.7</td>
<td>45,863,454</td>
<td>13,233,442</td>
<td>28.9</td>
<td>508</td>
</tr>
<tr>
<td>Textiles, leather</td>
<td>2,150,727</td>
<td>1,223,597</td>
<td>56.9</td>
<td>14,849,560</td>
<td>8,303,968</td>
<td>56.5</td>
<td>690</td>
</tr>
<tr>
<td>Wood, furniture</td>
<td>435,660</td>
<td>5,000</td>
<td>1.2</td>
<td>1,264,697</td>
<td>189,546</td>
<td>15.1</td>
<td>290</td>
</tr>
<tr>
<td>Paper, printing</td>
<td>528,486</td>
<td>5,291</td>
<td>1.0</td>
<td>8,104,734</td>
<td>3,279,144</td>
<td>40.5</td>
<td>1,534</td>
</tr>
<tr>
<td>Chemicals, rubber</td>
<td>8,628,935</td>
<td>7,698,132</td>
<td>89.2</td>
<td>19,121,916</td>
<td>13,607,520</td>
<td>71.2</td>
<td>222</td>
</tr>
<tr>
<td>Pottery, glass</td>
<td>2,241,450</td>
<td>1,126,352</td>
<td>50.3</td>
<td>2,337,000</td>
<td>1,036,980</td>
<td>44.4</td>
<td>104</td>
</tr>
<tr>
<td>Basic metals</td>
<td>300,004</td>
<td>100,003</td>
<td>33.3</td>
<td>2,100,000</td>
<td>571,725</td>
<td>27.2</td>
<td>700</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td>1,814,776</td>
<td>1,154,340</td>
<td>63.6</td>
<td>3,713,201</td>
<td>4,428,560</td>
<td>50.9</td>
<td>480</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>103,770</td>
<td>73,614</td>
<td>70.9</td>
<td>443,008</td>
<td>143,459</td>
<td>32.4</td>
<td>427</td>
</tr>
<tr>
<td>Total manufacturing</td>
<td>31,079,540</td>
<td>18,638,831</td>
<td>60</td>
<td>44,914,116</td>
<td>19,627,468</td>
<td>43.7</td>
<td>331</td>
</tr>
<tr>
<td>Large tourist</td>
<td>785,190</td>
<td>13,181</td>
<td>1.7</td>
<td>7,709,327</td>
<td>2,017,287</td>
<td>26.2</td>
<td>982</td>
</tr>
<tr>
<td>Small tourist</td>
<td>51,015</td>
<td>NA</td>
<td>NA</td>
<td>1,366,281</td>
<td>2</td>
<td>0</td>
<td>2,678</td>
</tr>
<tr>
<td>(b) By size of issued capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31,439,046</td>
<td>18,650,000</td>
<td>59.3</td>
<td>111,872,750</td>
<td>46,931,312</td>
<td>42</td>
<td>355.8</td>
</tr>
</tbody>
</table>

Source: Kenya Central Bureau of Statistics
operating in 1976\(^{(1)}\) are in each case divided into two different categories for analytical purposes - by sector and by size of issued capital. While the share of foreign investment in total equity varies over time and by sector and size group, the most striking observation is that the share of total equity owned by foreign capital declined from 59.3\% in 1966 to 42\% in 1976.

However this cannot be taken as evidence that foreign investment has seen a dilution of its control in large scale manufacturing and tourism. For when subject to more detailed scrutiny\(^{(2)}\), it appears that

- a large proportion of this dilution was explained by a marked tendency of foreign firms to sell off a minority of their holdings. Whereas 7.5\% of foreign investment in 1966 was in firms controlled more than 50\% by Kenyan residents, this actually fell slightly to 6.4\% by 1976.

---

\(^{(1)}\) Which comprises of almost all large scale manufacturing firms enumerated by The Central Bureau of Statistics and all tourist firms listed by industry associations.

\(^{(2)}\) See R. Kaplinsky, 1979, *op. cit.* for a brief discussion of these tendencies and R. Kaplinsky, forthcoming, NCCK, *op. cit.* for a more detailed discussion of the methodology followed, the data and the specific trends.
- a large proportion of this local ownership was accounted for by parastatals entering into joint ventures with foreign capital (see below).

- an additional proportion of increased Kenyan ownership was accounted for by the growth of new, wholly Kenyan-owned firms.

- In fact, if only the 263 firms which operated both in 1966 and 1976 are considered, the proportion which were majority foreign controlled actually rose from 31.2% in 1966 to 35.4% in 1976.

We might conclude therefore by noting that foreign investment in Kenya is largely centered in large-scale manufacturing, tourism and the service sector (particularly the banking and professional service). In these sectors foreign capital is dominant and despite the growth of smaller, indigenously-owned firms, there is little evidence that the dominant position of foreign investment was eroded in the first 13 years after independence.

As we have seen at an aggregate level the proportion of total issued capital owned by foreign resident companies and individuals fell from 60% in 1966 to 42% in 1976. Much of this was accounted for by increased investment by parastatals in joint ventures with foreign firms, as is evident from table 2 below. It is clear that during this period parastatals expanded their activities into ventures where foreign capital had a minority stake at a much greater rate than in those where foreign capital held the majority of equity. (1)

(1) Clearly, however, the degree of ownership does not reflect that of control. Thus for example in the mid 1970's when the average rate to return in Kenya was between 12 and 25%, the rate of return on state investments in joint ventures was only 5%. 
Table 2 Distribution of parastatal involvement by ownership

<table>
<thead>
<tr>
<th></th>
<th>1966 (£000)</th>
<th>$</th>
<th>1976 (£000)</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total parastatal involvement</td>
<td>3,688</td>
<td>100</td>
<td>83,722</td>
<td>100</td>
</tr>
<tr>
<td>Parastatal involvement in companies with:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) majority shareholding by foreign company</td>
<td>1,797</td>
<td>48.7</td>
<td>9,006</td>
<td>10.6</td>
</tr>
<tr>
<td>b) minority shareholding by foreign company</td>
<td>1,163</td>
<td>31.5</td>
<td>50,105</td>
<td>59.8</td>
</tr>
<tr>
<td>c) majority shareholding by locally resident Europeans</td>
<td>516</td>
<td>14.0</td>
<td>2,176</td>
<td>2.6</td>
</tr>
<tr>
<td>d) minority shareholding by locally resident Europeans</td>
<td></td>
<td>4.7</td>
<td>3,651</td>
<td>4.4</td>
</tr>
<tr>
<td>e) majority shareholding by locally resident Asians</td>
<td>143</td>
<td>3.9</td>
<td>6,331</td>
<td>7.6</td>
</tr>
<tr>
<td>f) minority shareholding by locally resident Asians</td>
<td></td>
<td></td>
<td>2,290</td>
<td>2.7</td>
</tr>
<tr>
<td>g) majority shareholding by Kenyan Africans</td>
<td>5</td>
<td>0.1</td>
<td>2,168</td>
<td>2.6</td>
</tr>
<tr>
<td>h) minority shareholding by Kenyan Africans</td>
<td>4</td>
<td>0.1</td>
<td>15,263</td>
<td>18.2</td>
</tr>
</tbody>
</table>


III CHARACTERISTICS OF FOREIGN INVESTMENT

Before we pass on to the employment characteristics of foreign investment in Kenya, it is desirable to describe its nature in relation to its sectoral and size distribution, the extent of equity control it exercises, its use of local loans and its impact upon the balance of payments.
(a) Sectoral distribution

In table 3 below we can see how the proportion of foreign investment varied between different manufacturing sectors and tourism in 1966 and 1976. Most strikingly it is evident that in the earlier period foreign investment was heavily concentrated in just two sectors - food and beverages and chemicals and rubber. While these two sectors maintained their preeminence over the following decade, new foreign investment moved into the textiles and leather, fabricated metal products and tourist sectors.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Year</th>
<th>1966</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, beverages</td>
<td></td>
<td>38.9</td>
<td>28.2</td>
</tr>
<tr>
<td>Textiles, leather</td>
<td></td>
<td>6.6</td>
<td>17.9</td>
</tr>
<tr>
<td>Wood, furniture</td>
<td></td>
<td>.03</td>
<td>.4</td>
</tr>
<tr>
<td>Paper, printing</td>
<td></td>
<td>.03</td>
<td>7</td>
</tr>
<tr>
<td>Chemicals, rubber</td>
<td></td>
<td>41.3</td>
<td>29</td>
</tr>
<tr>
<td>Pottery, glass</td>
<td></td>
<td>6.0</td>
<td>2.2</td>
</tr>
<tr>
<td>Basic metals</td>
<td></td>
<td>.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td></td>
<td>6.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td></td>
<td>.4</td>
<td>1</td>
</tr>
<tr>
<td>Total manufacturing</td>
<td></td>
<td>99.9</td>
<td>95.7</td>
</tr>
<tr>
<td>Tourism</td>
<td></td>
<td>.1</td>
<td>4.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
(b) Size distribution

In both time periods foreign investment has been concentrated in larger firms, that is those with paid-up equity capital of more than $500,000. Had there been no inflow of new investments, we might have expected a drift towards the larger size groupings reflecting both the absolute growth of firms and inflation. The fact that the proportion of total foreign investment in the $1.5m - $2.5m group actually rose at the same rate as the largest size grouping (see table 4) suggests the inflow of intermediate-sized investments probably of the oligopolistic-reaction type mentioned in Section I above.

Table 4 Distribution of foreign investment in different sized firms in large scale manufacturing and tourism (%)

<table>
<thead>
<tr>
<th>Size of issued capital ($)</th>
<th>Year</th>
<th>1966</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-250</td>
<td></td>
<td>negligible</td>
<td>negligible</td>
</tr>
<tr>
<td>250-2,500</td>
<td></td>
<td>.005</td>
<td>.001</td>
</tr>
<tr>
<td>2,500-25,000</td>
<td></td>
<td>.16</td>
<td>.06</td>
</tr>
<tr>
<td>25,000-125,000</td>
<td></td>
<td>2.6</td>
<td>.82</td>
</tr>
<tr>
<td>125,000-500,000</td>
<td></td>
<td>14</td>
<td>9.1</td>
</tr>
<tr>
<td>500,000-2,500,000</td>
<td></td>
<td>29.9</td>
<td>32.8</td>
</tr>
<tr>
<td>Over 2,500,000</td>
<td></td>
<td>53.3</td>
<td>57.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
(c) Proportion of foreign ownership

Table 5(a) below breaks down total foreign equity by the proportion of equity control held by foreign investment in individual firms. The results confirm our earlier observation that the increased share of indigenous investment in total equity is largely reflected by a tendency of foreign firms to sell off a minority of their holdings - while the proportion of foreign equity in the wholly owned category (95%-100%) fell from 76.3% to 45.4% between 1966 and 1976, the proportion in the majority-owned category (50-95%) rose correspondingly from 16.2% to 48%.

Table 5(a) Proportion of total foreign equity in firms considered by degree of foreign ownership in large scale manufacturing and tourism (%)

<table>
<thead>
<tr>
<th>% share of foreign investment</th>
<th>Year</th>
<th>1966</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0-10</td>
<td></td>
<td>.2</td>
<td>.5</td>
</tr>
<tr>
<td>10-25</td>
<td></td>
<td>.5</td>
<td>1</td>
</tr>
<tr>
<td>25-50</td>
<td></td>
<td>6.8</td>
<td>4.9</td>
</tr>
<tr>
<td>50-95</td>
<td></td>
<td>16.2</td>
<td>48</td>
</tr>
<tr>
<td>95-100</td>
<td></td>
<td>76.3</td>
<td>45.4</td>
</tr>
</tbody>
</table>
(d) Local borrowing

Since the introduction of the Exchange Control Act in 1971 the Central Bank has consistently tried to limit the degree of local borrowing from commercial banks by foreign investors. In an attempt both to increase the inflow of foreign exchange and to encourage the sale of equity of local shareholders, the extent of permissible local borrowing has been directly related (at a policy level, as exemplified in the various Exchange Control Circulars) to the share of equity held by foreign investors\(^1\). In reality, however, as can be seen from table 5(b), such policies have not been successful - regression analysis\(^2\) in fact showed that the gearing ratio of wholly foreign owned firms (i.e. over 95%) were significantly higher than average.

Two factors explain this divergence between (admirable) policies and practice. Firstly in many cases exemptions were given to specific firms which presented their case to the Central Bank, sometimes with the support of individual ministries.

\(^1\) Occasionally, and for limited periods, the extent of permissible borrowing has also been varied by the sector, with foreign exchange earning enterprises (e.g. tourism and export-industries) being favoured.

\(^2\) The full results are given in R. Kaplinsky, NCCK forthcoming, op. cit.
Table 5(b) Debt/Equity ratios of foreign investment in large scale manufacturing and tourism

<table>
<thead>
<tr>
<th>% share of foreign investment</th>
<th>Year</th>
<th>1966</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>142.2</td>
<td>2.6</td>
</tr>
<tr>
<td>0-10</td>
<td></td>
<td>1.7</td>
<td>2.1</td>
</tr>
<tr>
<td>10-25</td>
<td></td>
<td>.03</td>
<td>3.3</td>
</tr>
<tr>
<td>25-50</td>
<td></td>
<td>.3</td>
<td>146.5</td>
</tr>
<tr>
<td>50-95</td>
<td></td>
<td>1.7</td>
<td>1.2</td>
</tr>
<tr>
<td>95-100</td>
<td></td>
<td>6.9</td>
<td>123</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>74.6</td>
<td>34</td>
</tr>
</tbody>
</table>

And, secondly, when blocked from further access to commercial bank loans, foreign firms have turned to parastatals (loans from which were not subject to Central Bank controls) who have lent extensively on request.

(e) Profitability, reinvestment and growth

Various studies have confirmed the relative profitability of foreign investment. Langdon(1) compared the declared profit of the subsidiaries of 29 import-substituting multinationals in Kenya with that of their parent companies and

found that the average profitability of these subsidiaries (post-tax profit on capital employed) was substantially higher than that of their parents). To some extent this reflected the higher rate of profit in Kenya, but even then, the evidence suggests that the profitability of foreign subsidiaries in Kenya consistently exceeded that of local companies quoted on the Nairobi Stock Exchange.\(^1\) Langdon found also that foreign investors in Kenya tended to reinvest a lower proportion of their profits than did their parent companies (65% versus 44.2\(^2\)) as well as when compared to locally owned companies in Kenya.\(^3\)\(^4\)

---

\(^1\) Authors calculation based on data from Central Bank and annual report of the Nairobi Stock Exchange.

\(^2\) passim

\(^3\) The evidence available (see R. Kaplinsky, NCCK forthcoming, \textit{op. cit.}) is derived from data on capitalisation of revenue and capital reserves.

\(^4\) This together with balance of payments constraints could be regarded as a potential restraint to growth (and hence employment) of MNEs operating in the country.
IV EMPLOYMENT AND FOREIGN INVESTMENT

In looking at the employment implications of foreign investment it is important to differentiate between direct and indirect employment creation and (within the direct-employment group), between employment in core and peripheral activities. Before we proceed to discuss these distinctions in a little more detail, particularly when comparing foreign to local investment, it is as well to have some overall figures in mind.

(a) Direct employment by foreign investment

(i) An overall view

Fairly comprehensive data exists on total employment and wage bills in industry, particularly in large scale enterprises\(^1\). However published data draws no distinction between the nationality of investor and it is therefore impossible on the basis of this data to estimate the employment generated by foreign investment. Using the data-base (described earlier) which we have on ownership patterns in large scale industry and all tourism, it is possible to estimate the numbers employed in different types of firms by incorporating published data from the Central Bureau of Statistics concerning the broad size grouping of each firm. These distinguish

\(^{1}\) As recorded in the annual Statistical Abstracts published by the Central Bureau of Statistics.
four size categories, namely these firms employing between

50 and 99 employees
100 and 199 employees
200 and 499 "
Over 500 employees

In combining these two sets of data we make the assumption that
an average, firms in the first size-grouping employ 75 workers,
firms in the second grouping employ 150 workers, those in the
third grouping employ 350 workers and those in the very largest
size grouping employ 800 workers. Our estimate of average
employment in firms with varying degrees of foreign equity
control, is given in table 7 below(1).

(1) The data available on the size categories of employment by the
Central Bureau of Statistics is incomplete. On the basis of
the assumptions made above we obtain a figure for total employ-
ment of 47,125 which is only 52% of the figure for large scale
manufacturing firms (90,394) provided by the CBS (Statistical
Abstract 1978, table 79b). It is best therefore to view the
figures in table 7 as a sample in which we have no reason to
believe that there is systematic bias in omission. The
figures on average employment are therefore probably broadly
correct. Those on total employment need to be approximately
doubled. More detailed figures on employment by different
foreign ownership groupings in different sectors are given in
the table in the appendix.
Table 7. Estimate of employment in firms with varying degrees of foreign ownership, 1976 (large scale industry and all tourism only).

<table>
<thead>
<tr>
<th>% share of foreign ownership</th>
<th>Total Employment (a)</th>
<th>Average number of employees per firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>19,575</td>
<td>136</td>
</tr>
<tr>
<td>0-10</td>
<td>1,575</td>
<td>175</td>
</tr>
<tr>
<td>10-25</td>
<td>3,125</td>
<td>446</td>
</tr>
<tr>
<td>25-50</td>
<td>4,550</td>
<td>325</td>
</tr>
<tr>
<td>50-95</td>
<td>9,100</td>
<td>379</td>
</tr>
<tr>
<td>95-100</td>
<td>9,200</td>
<td>188</td>
</tr>
<tr>
<td>Total</td>
<td>47,125</td>
<td>191</td>
</tr>
</tbody>
</table>

(a) see footnote on p. 21.

It is evident from this table that the largest sized firms (that is in terms of employment) are the joint ventures between foreign and domestic capital. The foreign owned subsidiaries (more than 95%) and the locally owned firms (less than 10% foreign owned) tend to be of smaller size. Regressing(1) employment against the different foreign ownership groupings gave a total $R^2$ of .18, with average employment in the 10-25%, 25-50% and 50-95% foreign ownership groupings being significantly

(1) In both these regressions account was taken of the age of the firm.
higher than in wholly locally owned firms (at the less than 1% level).

Interpretation of these results needs some care however since this reasonably high $R^2$ might be influenced by the type of industrial activity involved. Ideally it would have been desireable to regress employment against foreign ownership grouping and industrial activity (at a four digit level), but the small size of the sample (254 firms), made this impractical. Therefore the regression was run at the two digit level, providing an $R^2$ of .22. The greater share of this (i.e. .127) was accounted for by foreign ownership group and moreover it is possible to see a causal relationship between the degree of foreign ownership and sectoral activity. We can conclude with some confidence therefore that foreign investment in joint ventures is more likely to be in larger firms (considered by employed) than either predominantly locally or foreign owned firms, even where they operate in the same branch of industry.(1)

(ii) Choice of technology and products and their employment effects.

The size of firms (in terms of the number of employees) may bear no systematic relationship to the labour-intensity of production technology utilised. But concern with the "employment problem" inevitably raises the question of the nature of technology chosen.

(1) But since we are working only at the 2 digit level, this does not necessarily mean that they produce the same products. The importance of this distinction can be seen from the ensuing discussion on product choice and choice of technique (pp. 23-30).
Various studies on the choice of technology in Kenyan industry have concluded that foreign owned subsidiaries tend generally to be more capital-intensive than their locally-owned counterparts. For example the ILO Report on Kenya (1) estimated that depreciation per worker (one proxy for capital intensity) was £80 in foreign subsidiaries in 1971 and only £60 in locally-owned firms; with gross product per worker being £720 and £590 respectively. However, the Report noted also that comparisons of aggregates are potentially misleading and suggested that in sectors where both local and foreign firms co-exist, foreign enterprises may be less investment-intensive than locally-owned counterparts. (2)

Langdon (3) comes to similar conclusions, drawing particularly pointed observations on the shoe and the soap industries. In the latter industry the capital employed per worker was $5853 in the MNC subsidiaries compared with $4848 in the mechanised local firms and $3550 in the non-mechanised local firms.

However there is some suggestion that the higher capital intensity of foreign-owned subsidiaries is a reflection of the sectors in which they predominate. If comparison is made

---


(3) See S. Langdon, 1975, op. cit.
between local firms and foreign subsidiaries in the same branch of industry. So some observers have concluded that foreign-owned subsidiaries make use of more labour-intensive techniques. This conclusion is drawn independently by both the ILO Report\(^1\) and Pack\(^2\) who concludes:

"Perhaps surprisingly, in view of the conventional wisdom that foreign owned firms (or those employing western trained technicians) will duplicate western methods, it was typically a subsidiary of a foreign firm which carried out labour-intensive adaptations and was more willing to use older equipment."

Two sets of explanations have been adduced to explain this phenomenon. The first, and more tentative, is that of the ILO Report\(^3\) which offered the hypothesis that foreign firms generated better supervisory skills which enabled them to use labour-intensive, man-paced techniques. Pack offers a different explanation. He distinguishes between managers with a technical training who will be aware of the range of alternative techniques, particularly in peripheral subprocesses (such as handling and packaging), and managers who have 'graduated' from trading activities and who rely on consultants or machinery suppliers to specify their technology. The technically trained managers, suggests Pack, 

---

(1) Passim.


(3) ibid., Technical Paper 16.
are predominantly employed by foreign subsidiaries - where they existed in locally-owned firms he visited, they made greater use of labour-intensive alternatives than their untrained counterparts.

But the data on which these two studies are based are not strong enough to allow determinate conclusions to be drawn. Indeed one may equally be drawn to an opposite conclusion. For example, in his comprehensive study of foreign owned subsidiaries, Langdon\(^1\) repeatedly observed that MNC managers were induced into inappropriate capital intensity by head-office policies centralising machinery purchases and choices, maximising intra-firm machinery sales and specifying particular 'quality' standards which often bore only a tenuous relationship to the needs of consumers in the context of an underdeveloped economy.\(^2\)

Nevertheless despite this divergence of view, at an overall level the various studies are unanimous in concluding that foreign-owned subsidiaries are more capital-intensive than their locally-owned counterparts and that this is largely explained by the sector of their operation.

\(^1\) S. Langdon, 1975, *op. cit.*

\(^2\) For example the use of foil strip packaging of tablets entailed the use of more capital intensive machinery than that of paper-based wrappers, without providing any improvement in product quality.
Langdon in his various studies goes a step further in the explanation of these phenomena and in illuminating the restricted impact of foreign investment on the creation of jobs. He begins by pointing to the very strong links between product choice and choice of production technology, providing numerous examples from the various industries he visited. Drawing on Stewart (1) and Lancaster's (2) work he distinguishes between high-income and low-income products and notes that in general high-income products necessitate the use of capital-intensive techniques. Thus, to the extent that foreign-owned subsidiaries rely on their parents' portfolio of high-income goods (which he shows to be overwhelmingly the case), they are forced to utilise capital-intensive techniques. Tendencies of such subsidiaries to use more labour-intensive techniques than their locally-owned counterparts making similar products are swamped by the overall nature of the product choice and consequent sectoral activity of foreign-owned subsidiaries.

A highly significant part of this tendency to produce


high-income products with capital-intensive techniques is the systematic attempt which foreign-owned subsidiaries make to influence consumer taste preferences towards the choice of such products. Langdon offers some limited evidence to support this argument, but since then a comprehensive listing of all advertising expenditure in various media has become available. (1) Analysis of this data shows that of the 100 most advertised products in 1976, only 14 were produced by majority locally-owned firms, and some of these were manufactured under licence from foreign firms (2). Before extending this discussion to the indirect employment impact of foreign investment it is important to note that


(2) Moreover of the top ten most advertised products, all were produced by foreign owned subsidiaries and six were produced by the Unilever Subsidiary. Of these six, three were differentiated forms of the same product (i.e. cooking fat).
this tendency of foreign owned subsidiaries to produce high income products with capital-intensive techniques is having an important impact on locally-owned industry. In his study on the soap industry Langdon found that the locally-owned firms were being forced into replicating the products and production techniques of the foreign owned subsidiaries. In another sector, breakfast foods, the emerging market for high-income products (actively reinforced by advertising) has led two local firms to produce under licence products which entail the choice of imported capital-intensive techniques. Thus while an equivalent expenditure on machinery to manufacture traditional breakfast foods would provide 600 jobs producing a domestic value added of $3.6m, a production of high income breakfast cereals created only 15 jobs with a domestic value added of only $325,000. (1) It must be noted, however, that the degree of capital intensity of production is not the only determinant of the total direct employment effect. Another important factor is the growth rate of production. As we do not dispose of such data by ownership of enterprises, our analysis of the direct employment implication of multinational enterprises remains by necessity a partial one. We have undertaken an estimate of the share of employment in multinational enterprises based on minimum and maximum assumptions regarding their presence in different size groups of enterprises (See table in Appendix). From these calculations it can be estimated that the share of multinational enterprises in total manufacturing employment is in the nature of 30-35% (1976), which is

certainly an important volume. The data base is too insecure to allow the calculation of the variation of this share over time.

(b) Indirect employment effects of foreign investment

In fully assessing the indirect employment effect of foreign investment it would be necessary to address a very broad range of issues. The data required to make such reasoned assessments is however not available. For example, if it were true (and this is merely an assertion) that the presence of foreign investment contributed to increasing the growth rate of the economy, then it may, (depending upon the sector, the products demanded and the techniques utilised) make a substantial contribution to the indirect generation of jobs in other sectors.

Because of the non-availability of such data and prior analyses, the discussion of indirect job creation is confined
to an estimation of the backward and forward linkages generated by foreign-owned subsidiaries. To begin with the information at hand, only two published studies\(^{(1)}\) have addressed themselves specifically to the linkages generated by foreign owned subsidiaries.

Forward linkages are difficult to assess under the best of circumstances. But as most foreign (and also, but to a lesser extent, domestic) investment has been in import substitution of final consumer products, the forward linkages generated by foreign owned subsidiaries have been limited.

Since the rationale of an import substituting industrialisation policy is that it generates further industrialisation through backward linkages, it is here that the real indirect employment creating characteristics of foreign investment must be judged. Both the studies mentioned earlier found rather limited

---

evidence of backward linkages. In his sample of import substituting firms Langdon found that

97.9 per cent imported more than 70 per cent of their machinery

79.2 per cent imported more than 95 per cent of their machinery

68.8 per cent imported more than 70 per cent of their raw materials

He concludes that these are small backward linkages into the capital goods sector. (1)

This evidence in itself is not sufficient to allow for a judgement that foreign-owned subsidiaries tend to generate fewer backward linkages (and hence jobs) than only locally operating firms. However, this seems the case for two

(1) S. Langdon, 1975, op. cit., p. 213
reasons. Firstly, on a priori grounds, and on the basis of relevant general studies on multinational enterprises(1) we can assume that multinational firms which optimise at the global level do so in large part through intra-firm trade. Hence the subsidiaries of foreign-owned firms in Kenya are likely to purchase less inputs from domestic firms than do their locally-owned counterparts. Secondly there is enterprise-level data to support such a conclusion. For example both Kaplinsky and Langdon found firms in the pharmaceutical and food processing industry importing sugar rather than using locally produce sugar, and the pineapple-canning subsidiary even purchased its labels from the parent firm rather than from the Kenyan suppliers used by their locally owned counterparts.(2)

Once again, as with the discussion on the choice of technology, it is possible to relate the input purchase of foreign-owned subsidiaries to the nature of the products they produced.

Thus the subsidiaries imported sugar because the locally-produced sugar was not quite as highly refined as the imported equivalent and therefore slightly discoloured the final product; cosmetic firms imported bottles rather than using local glass containers, because of a desire to replicate

(1) Evidence that such a process occurs in widespread. See for example C. Vaitos, "Power, Knowledge and Development Policy; Relations between Transnational Enterprises and Developing Countries", in G.K. Helleiner, A World Divided: The Less Developed Countries in the International Economy, Cambridge Univ. Press, 1976.

the product differentiating patterns of their parent firms; and so on. (1)

Associated with the link between product specificity and choice of technology is Langdon's observation that where linkages were stimulated, they were invariably with subsidiaries of other foreign firms which were able to produce inputs of sufficient specification to satisfy the users. This has led to a chain-effect when the final product attractiveness to higher-income consumers necessitates the use of capital intensive production techniques as well as specific inputs which themselves require the use of capital intensive techniques. For the most, 'links' of this 'chain' incidental evidence suggests that these tendencies are more marked in foreign-owned firms than local ones.

While it is therefore impossible to quantify the indirect employment effects of foreign investment, it is possible to judge that these tend to be more limited, in general, than those of locally-owned firms, (2) and where they occurred, to require the use of more capital intensive production techniques. It can also be concluded that there is potential for greater indirect employment effects of multinational enterprises through modification of product specifications so as to allow for increased purchase of local inputs.

(1) Langdon found that in aggregate the foreign owned soap firms imported 75-90% of their raw material inputs while the local firms only imported between 40-50%.

(2) The available data do not allow for a numerical assessment of this difference. Also relevant for the total indirect employment effect are the respective rates of growth in domestic and foreign enterprises (as in the case of the direct employment effect) for which we have no data.
(c) Employment conditions in foreign-owned subsidiaries

Concern with relative wage rates has many dimensions. On the one hand there are those who argue that wage rates should be related to the profit rates in particular enterprises and consequently it is appropriate that profitable foreign-owned subsidiaries should pay higher wages. Other sources (as for example the ILO Report on Kenya) contain negative indications for enclave situations possibly created by multinational enterprises for the goals of national incomes and employment policies. (1)

It is frequently asserted both in regard to Kenya and other developing countries that real wages in the formal sector exceed earnings in the informal sector and in agriculture. (2) Amongst the reasons given to explain this divergence is the capital-intensity of the formal sector (where wages are a relatively small share of unit prices), the market power of such

(1) Although Pack (1972) argued that in the enterprises he visited such events would only occur with wage rates 2 to 3 times greater than those which ruled.

(2) But note that by one estimate the cost of living in Kenyan urban areas was about 60 per cent higher than that in rural areas. See M.F. Scott, J.D. MacArthur and D.M.G. Newberry, Project Appraisal in Practice, (London, Heinemann, 1976), p. 174.
enterprises (which allows them to pass on increased costs to
the consumers), their higher rates of profitability (which make
higher wages possible) and trade union influence. Insofar as
the earlier discussion pointed to the greater capital intensity
of foreign owned subsidiaries, their market power and their
greater profitability it might be expected such patterns do
occur with respective to relative wages.

The evidence which is available appears to corroborate
this conclusion. Langdon\(^{(1)}\) repeatedly found that Kenyan
executives were given salaries based upon the global intra-
corporation salary scales, rather than on Kenyan per capita
incomes. He also found that wages were higher in foreign-
owned soap subsidiaries than in their locally-owned counter-
parts ($73 per month versus $36 per month, in 1972).

In a study of wages levels of different types of workers,
Henley and House\(^{(2)}\) attempted to explain differences in
earnings between different types of enterprises on the basis
of their size (number of employees), their 'ability to pay'
(through the proxy measure of their productivity of labour),
their market power (as reflected in the three plant employ-
ment concentration index), their location (either of the two


\[2\] J. S. Henley and W. J. House, *The Changing Fortunes of an
Aristocracy Determinants of Wages and Conditions of Employ-
main cities) and their foreign ownership (the criterion for which is not clear). Their conclusions, which are summarised for foreign ownership in table 9, are that location and foreign-ownership (in that order) were the major determinants of wage levels.

Table 9  Wages levels in various grades of work in foreign-owned subsidiaries and locally-owned firms.

<table>
<thead>
<tr>
<th>Type of job</th>
<th>Average monthly wage for total sample ($)</th>
<th>Wage premium in subsidiaries ($)</th>
<th>Level of Statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>unskilled</td>
<td>25.6</td>
<td>5.5</td>
<td>*</td>
</tr>
<tr>
<td>semi-skilled</td>
<td>31.8</td>
<td>8.8</td>
<td>*</td>
</tr>
<tr>
<td>junior-clerks</td>
<td>27.2</td>
<td>8.2</td>
<td>**</td>
</tr>
<tr>
<td>copy-typists</td>
<td>38.3</td>
<td>3.14</td>
<td>NS</td>
</tr>
</tbody>
</table>

* significant at 1% level
** " " 5% "
NS not significant

Source: Henley and House, op. cit.

Evidence of non-wage incomes and of relationships to trade unions is more fragmentary. One study(1) of four firms,

two of which were locally-owned, the third was a subsidiary of a British firm and the fourth was an American subsidiary, found that while wages in the subsidiaries were higher than in the local firms, their ratio of maximum to minimum wages was higher, and unlike the local firms, they did not provide free housing or held negative attitudes towards trade union organisation. (1) Henley ascribes particular attitudes to unions to their foreign ownership and parent policies towards labour. Thus some evidence exists to suggest that foreign-owned subsidiaries pay higher wages than their local counterparts. But, aside from Henley's conclusions on the four firms he described, it is not clear whether such behaviour is explained by their 'foreignness', or their sector of economic activity, a variable not considered in the statistical analysis undertaken by Henley and House. It is still an open question whether locally-owned and foreign-owned firms producing the same commodities have differential wage-rates.

(1) Even if this conclusion could be generalised it would not imply that foreign owned firms would have lower wage rates for W. J. House and H. Rempel ('The impact of unionization on negotiated wages in the manufacturing sector in Kenya', Oxford Bulletin of Economics and Statistics, May 1976) found no significant relationship between unionisation and wages.
V. EMPLOYMENT EFFECTS OF FOREIGN INVESTMENT

To summarise the main lines of argument so far. Prior to the last war, foreign investment predominated in commodity production, moving to limited import substitution in the pre-independence period. Post independence until 1973 the sources of foreign investment were diversified, and import-substituting industrialisation was extended. But after 1973, lower economic growth rates and more limited investment opportunities lowered the rate of growth of foreign investment which increasingly took the form of joint ventures with parastatals.

By 1976 the proportion of local ownership had grown predominately through parastatal investments and new, small indigenously owned firms. Local capital has squeezed-out foreign capital in most of agriculture, trading, services and small-scale industry. Foreign ownership and control of the major industrial investments barely diminished.

Focussing specifically on the employment effects of multinational enterprises it is possible to note that at an overall level foreign owned subsidiaries use more capital intensive technology and that this is directly related to their production of high income consumer goods and affects their employment level. Other factors determining the direct employment input of multinational enterprises are their share in total production and their rates of growth. Not all these factors could be fully evaluated in the present study. According to our admittedly rough model calculations, the share of multinational enterprises in total industrial employment is about 30-35% (1976) as already mentioned. The derived market power, associated with higher profitability
and smaller unit labour costs apparently allows them to pay higher wages than their locally owned counterparts.

The described 'chain link' effect (1) through consumption patterns and through the various rounds of backward linkages have an overall dampening effect on indirect employment creation by multinational enterprises, although it is difficult to place any numbers on these indirect employment impacts (2) and there are other factors, in particular the growth rate, which in the final analysis would also need to be taken into account.

Having assessed the nature of past and present dominance by foreign investment in large scale manufacturing and its implications for employment, we are inevitably drawn to the future. Some observers, notably Leys (3), argue that as local capital has supplanted foreign capital in the agricultural sector in the past, a similar tendency may occur with respect to large scale manufacturing. Others (4) point to the overwhelming technological and market power of multinational enterprise and argue that although some Kenyan industrialists and the state may wish to supplant foreign capital, the room for such trends in the large scale manufacturing is (unlike in agriculture) limited.

(1) That is through the links between product specifications and technical choice.

(2) However numbers have been generated for the direct employment impact (Table 7), broken down further by sector in appendix 1.


(4) R. Kaplinsky, 'Capitalist Accumulation ..., op. cit.'
Appendix - An estimate of direct employment creation in different sectors of large scale manufacturing by foreign investment (1976)

An estimate can be made of aggregate employment in different sectors by different foreign ownership groupings, the results of which are given in the table below. The data base for these estimates, as mentioned on p. 20, is derived from combining information of ownership in large scale industry with the firm size groupings as published by The Central Bureau of Statistics.(1)

In combining this data and estimating total direct employment we have had to make two assumptions. The first concerns the average employment in the four different employment categories listed by The Central Bureau of Statistics, notably that average employment in

<table>
<thead>
<tr>
<th>Category</th>
<th>is</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>75</td>
</tr>
<tr>
<td>D</td>
<td>150</td>
</tr>
<tr>
<td>E</td>
<td>350</td>
</tr>
<tr>
<td>F</td>
<td>800</td>
</tr>
</tbody>
</table>

Secondly we assume that there is no systematic bias of omission between our sample of firms and that used by the Central Bureau of Statistics in calculating aggregate employment(2). Here we are puzzled by the fact that the total


employment figures given in the Statistical Abstract are so much higher than our own calculation despite the fact that we have used the CBS's own listing of large firms and employment size groupings.

In the accompanying table, therefore, we estimate total employment by sector and foreign ownership grouping by grossing up all of our calculations by a raising factor of 1.918 (that is \( \frac{90,394}{47,127} \)).

**Estimate of total employment in large scale manufacturing by sector and foreign ownership groupings (1976)**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Foreign ownership grouping (%)</th>
<th>0</th>
<th>1-10</th>
<th>10-25</th>
<th>25-50</th>
<th>50-95</th>
<th>95-100</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food, beverages</td>
<td>31</td>
<td>10,501</td>
<td>1,391</td>
<td>3,213</td>
<td>288</td>
<td>4,795</td>
<td>4,747</td>
<td>24,924</td>
</tr>
<tr>
<td>Textiles, leather</td>
<td>32</td>
<td>7,049</td>
<td>815</td>
<td>1,534</td>
<td>1,822</td>
<td>7,384</td>
<td>3,213</td>
<td>21,817</td>
</tr>
<tr>
<td>Wood, furniture</td>
<td>33</td>
<td>6,713</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>719</td>
<td>7,432</td>
</tr>
<tr>
<td>Paper, printing</td>
<td>34</td>
<td>3,932</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,534</td>
<td>432</td>
<td>5,898</td>
</tr>
<tr>
<td>Chemicals, rubber</td>
<td>35</td>
<td>1,439</td>
<td>671</td>
<td>288</td>
<td>1,103</td>
<td>1,247</td>
<td>5,610</td>
<td>10,357</td>
</tr>
<tr>
<td>Pottery, glass</td>
<td>36</td>
<td>2,014</td>
<td>144</td>
<td>288</td>
<td>1,534</td>
<td>2,206</td>
<td>0</td>
<td>6,186</td>
</tr>
<tr>
<td>Basic metals</td>
<td>37</td>
<td>575</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>575</td>
<td>1,151</td>
</tr>
<tr>
<td>Fabricated metal products</td>
<td>38</td>
<td>4,747</td>
<td>0</td>
<td>350</td>
<td>3,836</td>
<td>288</td>
<td>2,350</td>
<td>11,892</td>
</tr>
<tr>
<td>Other manufacturing</td>
<td>39</td>
<td>575</td>
<td>0</td>
<td>144</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>719</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>37,545</td>
<td>3,021</td>
<td>5,994</td>
<td>8,727</td>
<td>17,454</td>
<td>17,646</td>
<td>90,386</td>
</tr>
</tbody>
</table>