

Quantitative Information on Foreign Multinationals in Hawaii

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1. Introduction

This paper examines the quantitative information that is available on foreign multinational firms in Hawaii in recent years. The primary purpose of the paper is a very mundane one, to arrange quantitative information on foreign multinationals in Hawaii in a logical and economically meaningful manner so that policy makers can make better informed decisions. In this respect, it is important to note that some of the quantitative information that has heretofore been relied on by policy makers in Hawaii (e.g., State of Hawaii 1995a) is seriously flawed. Namely, quantitative information underlying the estimates in State of Hawaii (1995a) are compiled from published accounts. Consequently, both sampling techniques and the definition of investment employed in the collection of quantitative information are not standard or uniform. This makes the figures that have been published on foreign investment in this publication highly questionable.¹

There are at least two sources of quantitative information which do not have these sampling and/or definitional problems. In this respect, by far the most comprehensive and standardized sources of quantitative information on foreign multinationals in the state is a set of reports based on surveys of foreign multinationals that are conducted and published by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce in Washington. These surveys are comprehensive in coverage (they are mandatory for foreign multinationals above a certain size) and use standard definitions for quantitative information. Thus, the sampling and definitional problems present in the quantitative information in State of Hawaii (1995a) are

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¹It should be emphasized that these criticisms apply solely to the quantitative information presented in State of Hawaii (1995a), as the qualitative information provided in the publication is extremely valuable.

generally not present in the BEA surveys.

There are two types of survey information published by the BEA. First the BEA has conducted its own annual surveys of affiliates of foreign multinationals and published the results all years since 1977 (U.S. Department of Commerce 1990, 1995, various years). It is important to emphasize that these surveys and related data are compiled by enterprise (i.e., firm), not by establishment (i.e., factory). Since these data are published annually, they by far the most useful data for general analysis of how activities of foreign multinationals in Hawaii have changed over time. Indicators from this compilation are presented and discussed in section 3 of this paper. Second, for 1987 and 1992 economic censuses, the BEA has used information collected in its annual surveys to identify foreign-owned establishments that are covered in the economic censuses that are conducted by the Bureau of Census every five years. The data from the economic censuses are then reclassified by various foreign ownership categories. Here it is important to emphasize that these data may display very different trends or patterns than the annual survey data because they are compiled by establishment, not by enterprise. Indicators from this compilation are presented and discussed in section 4 of this paper.

There is another source which uses relatively standardized definitions to compile information on sales and employment in large firms in Hawaii, including foreign multinationals, Hawaii Business (various years). Although this source uses relatively standardized definitions for the indicators collected, the samples are not comprehensive, even for large firms, as it is impossible to gather indicators for some firms. Nonetheless, these samples appear to cover most large foreign multinationals for many years and it is thus instructive to look at these data as well. This data set is the subject of section 5.

Finally, the major conclusions of the analysis are summarized and recommendations for the State of Hawaii's maintenance of quantitative information on foreign multinationals are made in the last section. However, before turning to the details on the quantitative data, it is also helpful to get some idea of why economists are interested in foreign multinationals. This is the subject of section 2.

2. Why are Economists Interested in Foreign Multinationals?²

Much of the interest in the activities of foreign multinationals derives from political considerations. These concerns range from valid national security concerns to unwarranted attempts to make foreigners scapegoats for the problems created by U.S. citizens. Despite the high profile sometimes accorded such politically-based concerns, the focus here is on a set of generally much less conspicuous economic problems. These economic problems are sometimes related to politically-based concerns, but it is important for the reader to understand that the following discussion focuses on the economist's perspective and largely ignores political concerns.

The first step here is to clearly define what is meant by a multinational corporation (referred to as an MNC below). For the purposes of this chapter an MNC is defined as a firm with operations in two or more countries. Statistically, a foreign MNC is a company with a foreign ownership share that exceeds a given threshold. This definition can be ambiguous in important respects. For example, ownership cutoffs differ among reporting economies and even among different data sources for one reporting economy. In the United States, a cutoff of 10 percent is generally used. When joint ventures (firms with more than one owner) are involved, especially when no one owner has majority control, any ownership criterion can become ambiguous, especially when trying to distinguish among groups of foreign owners. In addition, some firms classified as foreign MNCs may actually be better classified as local firms as their only operations may be in the local economy (e.g., a British national may own a company in the United States but have no business interests outside the United States). Moreover, this definition of an MNC does not distinguish between types of MNCs, nor does it encompass the vast array of non-ownership based international relationships (e.g., international subcontracting of various types) that exist among firms. Correspondingly, there may be important distinctions between affiliates of MNCs established through mergers and acquisitions and affiliates formed through the formation of new affiliates, between investments in expanding the operation of previously existing affiliates and investments in the establishment of new affiliates, or between wholly-foreign owned affiliates and joint ventures. It is important to note that the vast majority of quantitative information on foreign MNCs in the United States says nothing about these differences. In short, what is of most interest here, and what is of most

²This section is heavily based on Ramstetter (1998, pp. 187-190).

fundamental importance to the economic analysis of MNCs, is the distinction between whether a firm has operations in one economy or whether it has operations in two or more economies.

Correspondingly, the economic theory of the multinational corporation focuses first and foremost on the question of why a firm chooses to become a multinational and incur costs of cross-border operations not incurred by non-MNCs. Very simply put, the answer to this question is commonly thought to lie in identifying the advantages that MNCs have that allow them to overcome the disadvantages presented by the incurrence of additional costs of operating across international borders. The interested reader is encouraged to see more comprehensive surveys of this literature (e.g., Caves 1996 and Dunning 1993) but here I will try to summarize the three sets of advantages are often hypothesized in this regard.

The first set consists of advantages accruing from exploitation of assets that belong to a given firm. These assets are often called firm-specific assets and advantages accruing from the possession of such assets are called ownership advantages. Important examples of such firm-specific assets are patents, in-house research capability, and exclusive marketing networks. The intangible nature of such assets is often emphasized in comparison to the tangible nature of fixed assets (e.g., buildings, machinery).

The second set of advantages are advantages accruing from the internalization of economic transactions within a single firm unit. These advantages are called internalization advantages. For example, a firm can often reduce costs associated with a given transaction when uncertainty makes inter-firm transactions risky and thus costly. A good example of this is to suppose that a firm develops a very advanced semiconductor that can greatly improve the performance of a personal computer. However, in such cases there is often a problem of asymmetric information, namely that the firm developing the semiconductor will know far more about its capabilities than any perspective buyer. This will lead to a tendency for the perspective buyer to undervalue the semiconductor from the perspective of the developer and create a motive for the developer to also produce personal computers using the semiconductor in an attempt to extract (what the developer perceives as) the full value from its development efforts. Another example is the problem of lemons in subcontracting, when quality is very important to a final goods producer (e.g., a personal computer company). The final goods producer will be very reluctant to purchase an intermediate goods supplier (e.g., a subcontractor), unless it is assured that its concerns about quality control will be addressed by the supplier. Moreover, the firm producing the intermediate good may have a smaller incentive to emphasize quality than the final good producer. If this is

the case, the final good producer may have to produce the intermediate good itself rather than buying that it from a supplier. Both of these are examples where transactions that would take place in arms-length markets may end up internalized within a single firm. The existence such internalization advantages is often thought to be a major reason for the existence of MNCs.

The third set consists of advantages accrue from operating in a specific location or locational advantages. Traditional examples of locational advantages are reductions in the costs of serving markets when firms are faced with high levels of trade protection in the target market and reductions in production costs afforded by increased access to lower cost factors of production (e.g., labor and natural resources).

Together these elements comprise Dunning's OLI (ownership-location-internalization) paradigm (e.g., Dunning 1993). There is an extensive theoretical debate over whether all of these advantages are a necessary condition for a firm to become a multinational (and thus for FDI to occur) with some arguing that internalization advantages alone are sufficient to explain the existence of the multinational firm (e.g., Buckley and Casson 1991, Rugman 1985). However, from an empirical point of view, I think the general agreement that MNCs tend to possess a distinctive set of firm-specific, intangible assets is important, whether or not such assets are necessary for a firm to become a multinational. The possession of distinctive firm-specific, intangible assets is important because it implies that behavior of MNCs differs systematically from the behavior of non-MNCs. More specifically, there are at least three interrelated sets of firm-specific, intangible assets that foreign firms are thought to possess in relatively large amounts, production technology, marketing networks, and management know-how.

The possession of superior production technology (and superior management know-how) implies that MNCs tend to be more efficient than non-MNCs. One simple example lending support to this proposition is the casual observation that foreign MNC shares of host country of production in developing economies, where there are relatively few home-based MNCs, often tend to be larger than corresponding shares of employment. In other words, the average product of labor (=production per worker) often tends to be relatively high in foreign MNCs in these economies. In addition, the relatively sophisticated marketing networks of MNCs, particularly those related to international trade, also lead to the expectation that MNCs will be more dependent on trade than non-MNCs. This proposition is again supported by the casual observation that foreign MNC shares of host country exports often tend to be much larger than shares of production and employment in

developing economies, or in other words, that trade propensities (e.g., export-sales ratios or ratios of imports to total inputs) are higher in foreign MNCs than in local firms in these economies. These are of course only two dimensions of possible comparisons and there are many more.

Comparing foreign MNCs and local firms in Hawaii is potentially more complex because a more sophisticated economy such as Hawaii (or other U.S. states) is likely to have a relatively large number of home-based MNCs itself. Hence a simple comparison of foreign MNCs and local-based firms may reveal relatively few differences. In this respect, it is important to emphasize that more important economic distinction is between MNCs and non-MNCs, not between foreign firms and local firms. In other words, nationality is in and of itself of less economic concern than whether a firm operates in more than one economy. Of course the two issues are often related and nationality is often of paramount political importance as noted above. However, it is worth reemphasizing that nationality generally of secondary economic importance in that a local MNC is much more likely to resemble a foreign MNC than a local non-MNC. Similarly one would expect that differences among different nationalities of foreign MNCs would be less pervasive than differences between MNCs and non-MNCs.

Moreover, before one can embark on the task of comparing foreign MNCs and local firms it is first necessary to measure activities of both the foreign MNCs and local firms in a consistent manner. Hence, the following sections outline quantitative measures of economic performance available for foreign MNCs in Hawaii.

3. Nonbank Affiliates of Foreign Multinationals Classified by Enterprise, 1977-1995

As indicated in the introduction the annual enterprise-based (firm-based) compilations of the BEA surveys are the sources of the most comprehensive information on foreign MNCs in Hawaii available in time series. However, this does not mean that these data are not subject to shortcomings. First, the major drawback is that the surveys only include two major indicators disaggregated by state, gross property, plant, and equipment (i.e., a measure of fixed capital) and employment, as well as the underlying sample sizes. Second, the data are slow to be published as preliminary estimates from the surveys only become available in the summer two calendar years after the year for which data refers (e.g., preliminary 1995 data became available in

July 1997), and it is necessary to wait yet another year for revised estimates. It is also important to note that the revisions are sometimes substantial. Third, as with any survey, there are important changes in format over time, with the biggest changes in this case coming with the benchmark survey in 1987. Hence there are important differences in classifications by country and industry for 1977-1986 and for 1987-1995.³ Fourth, it is perhaps most important to emphasize that these surveys use the enterprise (i.e., the firm) as the basic accounting unit. This means that large diversified firms must be classified in one particular industry even though that firm may be engaged in activities in several industries. Accordingly, there are often large differences between this firm-based industry classification and industry classifications that use the enterprise (i.e., the plant) as the basic accounting unit (e.g., the economic census).⁴ Finally, there are two more minor drawbacks in that the data cover only nonbank affiliates and that data for categories with small numbers of affiliates are often suppressed.

Tables 1-2 summarize the most basic information available on gross property, plant, and equipment (referred to as GPPE below) and employment classified by industry of affiliate. In the case of GPPE, both the total stock and the flow (i.e., the first difference) are presented in Table 1. Here it should be emphasized that these figures refer to gross book values, not to more commonly used measures of fixed capital stocks in current or real values. Moreover, in that these numbers refer to the asset side of a corporate balance sheet, they bear no direct relationship to the stocks or flows of foreign direct investment, which is a liability-based concept.⁵

Looking first at the aggregate trends over time, it is first seen that trends in GPPE stocks, GPPE flows, and employment can all be divided into three roughly equivalent periods (Tables 1-2). The first period is 1977-1986, a period that was characterized by relatively low, but steadily increasing levels of GPPE stocks and

³From Hawaii's point of view the most important change was the addition of a services category from 1987 forward. For previous years, services was combined with other industries. Another important change was in the presentation of data for Australia and New Zealand. For 1986 and previous years data for these two countries were combined with data for South Africa. From 1987 forward, Australia is listed separately but New Zealand is included in Other Asia and Pacific.

⁴It should be noted that industry distributions for most tables are in the annual surveys are based on the industry that the affiliate has the largest sales in. However, state distributions differ in that they are based on data reported for each state individually.

⁵More specifically, the stock of foreign direct investment consists of equity, loans from related companies, and reinvested earnings, and typically accounts for one-fourth to one-half of the total liabilities of a firm. The stock of GPPE is an item that typically accounts for one-fourth to one-half of the total assets of a firm. Although total assets and total liabilities are equal on a corporate balance sheet, it is important to note that changes in foreign direct investment stocks are often not accompanied by changes in GPPE or other production-related variables (e.g., Ramstetter 1998). Furthermore, since foreign direct investment is a balance of payments concept, data on foreign direct investment do not exist at the state level.

employment, though there were apparently some more pronounced fluctuations in GPPE flows.⁶ Over the period, GPPE stocks increased 3-fold, from \$0.67 billion in 1977 to \$2.01 billion in 1986 and employment increased 1.6-fold, from 11 thousand to 18 thousand. The second period, 1986-1991/92 was one of rapid increases in both GPPE stocks and employment. GPPE stocks increased 7.7-fold between 1986 and 1992 reaching \$15.4 billion in the latter year. Employment peaked a year earlier in 1991 at 56 thousand, representing a 3-fold increase over 1986. As will be shown in section 5 below, much of this unusually large increase apparently resulted from foreign buyouts of large U.S. firms in Hawaii during this period. The third period, 1991/92-1995, is one of stagnation and decline in foreign MNC activity in Hawaii. During 1992-1995, the stock of GPPE increased only 4 percent for the whole period, and the flow of GPPE may have been negative in 1995, though some caution is necessary here as the 1995 figure is still preliminary. Employment in foreign MNCs fell 11 percent between 1991 and 1995 to slightly under 50 thousand in the latter year.

By industry, it should come as no surprise that the vast majority of GPPE stocks have been concentrated in industries with strong ties to tourism in the state, namely services and real estate (Tables 1-2). In terms of GPPE stocks, real estate and services were apparently of similar size in 1977-1986. However, services became much larger in subsequent years, the vast majority of this activity apparently in the hotel industry (c.f., section 4 below). Petroleum was very small before 1989, but apparently became the third largest industry in terms of GPPE stocks in 1989 and thereafter due to the Australian takeover of an oil refinery (see section 5). Retail trade was the third largest industry before this takeover and the fourth largest thereafter, followed by wholesale trade and manufacturing. In terms of employment, services is again by far the largest industry. However, due to relatively small labor requirements, real estate and petroleum are much smaller in terms of employment than in terms of GPPE. Correspondingly, retail trade is the second largest industry in terms of employment followed by wholesale trade, manufacturing, or real estate, depending on the year.

In addition to presenting information for Hawaii, Tables 1-2 also present similar information for three West Coast states, California, Oregon, and Washington, and the United States as a whole. A number of interesting contrasts can be observed. First, the shares of services in Hawaii (e.g., 55 percent in terms of GPPE stocks and 49 percent in terms of employment in 1995), are much larger than corresponding shares in these

⁶It is difficult to tell exactly how large these fluctuations were due to the suppression of data in the early 1980s.

other states or the country as a whole (e.g., 5-11 terms of GPPE stocks and 8-21 percent in terms of employment in 1995). Second, the shares of manufacturing and petroleum are much smaller in Hawaii than in these other states or the nation as a whole (e.g., 5 percent versus 34-46 percent in terms of employment and 2 percent versus 28-52 percent in terms of GPPE stocks in 1995). Another important characteristic shared by Hawaii, Oregon, and Washington is the relatively small share of GPPE stocks in petroleum compared to California and the country as a whole.

Partially as a result of the low shares of petroleum and manufacturing and the large share of services, the industrial structure of foreign MNC activity in Hawaii changed relatively little over time. For example, nationwide the combined share of petroleum and manufacturing in employment fell from 64 percent in 1977 to 48 percent in 1995, while the share of services and other rose from 8 percent to 23 percent. In Hawaii, the latter share also rose some, from 51 percent in 1982 (the first year for which data are disclosed) to 62 percent in 1995, but the scope of the rise was much smaller. In other words, while the rest of the country was experiencing a marked shift in foreign MNC activity from petroleum and manufacturing to services, this change was much less pronounced in Hawaii, largely because the share of services was very large in Hawaii from very early on.

Another marked contrast between Hawaii and the rest of the country is the extent to which Japanese firms dominate the activities of foreign MNCs in Hawaii (Tables 3-4). For example, Japanese owners accounted for 56 percent of all GPPE stocks in 1977 and 84 percent in 1995 but corresponding shares for the country as a whole were only 4 percent and 21 percent, respectively.⁷ In terms of employment, Japanese shares in Hawaii were 64 percent in 1977 and 71 percent in 1995, compared to 6 percent and 15 percent, respectively, for the country as a whole. Thus, like the industry-wise distribution, the country-wise distribution also changed relatively little in Hawaii over time, largely because the share of Japan was very large in Hawaii very early on. Correspondingly, Hawaii has always accounted for relatively large shares of Japanese MNC activity in the United States, for example 4.7 percent in terms of employment and 8.2 percent in terms GPPE stocks in 1995.

⁷Note that all compilations of U.S. data by country are classified by country of ultimate beneficial owner, not country of capital source, that is an investment by a Japanese-owned company located in Hong Kong is counted as investment from Japan, not Hong Kong. Note also that these two classifications can be quite different.

Both of these shares are 9-fold or more larger than Hawaii's share of the country's gross domestic product.⁸ Conversely, while Japan's shares were unusually large in Hawaii, the shares of the two other major inward investors in the United States, Canada and Europe, were unusually low.

Tables 5-6 then show the samples of firms underlying the GPPE and employment data by size of affiliate. Here it is important to note that large size in terms of employment per firm and large size in terms of GPPE per firm do not necessarily correlate. It is also important to note that there are changes in the definitions of the size criteria between 1977-1986 and 1987-1995 as noted in the tables, with changes in the cutoffs for medium-large and large firms in terms of GPPE being relatively large. Moreover, there are a large number of foreign MNCs that report GPPE but have zero employees, mainly real estate investors. In 1995, 32 percent of the foreign MNCs in Hawaii fell into this category compared to a 23 percent for the United States as a whole.

Despite these differences in size distributions and coverage, the two tables reveal a couple of important, similar characteristics with respect to Hawaii. First, the majority of foreign MNCs in Hawaii fall into the small or small-medium groups. Second, there has been a trend toward larger firms with particularly notable growth in the medium-large and large groups through the early 1990s. Conversely, the declines in foreign MNC activity in the mid-1990s appear to have been concentrated in these groups as well.

The final piece of information that has been compiled from the annual BEA surveys is a disaggregation of GPPE stocks into commercial property, that is land and most commercial buildings outside the manufacturing sector (see Table 7 for precise definition) and other items. This table reveals that the over two-thirds of the GPPE stocks in foreign MNCs in Hawaii has been commercial property in the 1987-1995 period. This contrasts starkly with the country as a whole where corresponding shares never exceeded 26 percent during this period. It is somewhat interesting that the ratio of commercial property to total GPPE is also relatively high in California at something over one-third.

4. All Affiliates of Foreign Multinationals Classified by Establishment, 1987 and 1992

⁸By contrast Hawaii's gross state product in 1994 was only \$32 billion (State of Hawaii 1995b) or less than 0.5 percent of the nation's gross domestic product for 1994 (\$6,947 billion; see *Survey of Current Business*, August 1997).

One of the major limitations of the annual surveys of foreign MNCs is the fact that they are compiled at the firm level and thus are not directly comparable with data from the economic censuses conducted every five years and related annual surveys which are compiled at the establishment level. In an effort to synchronize these two important data sets, the BEA and the Bureau of the Census have cooperated in efforts to make data from these two sources consistent for years in which the economic census and the benchmark surveys of foreign MNCs are conducted. This project basically involves a recompilation of data from the benchmark survey of foreign MNCs at the establishment level. Data from these compilations are valuable because they allow a direct comparison of data for establishments controlled by foreign MNCs (from the benchmark surveys) and data for all establishments. Furthermore, the publications of these establishment-level data provide far more detail at the state level. First, there is much greater industry-wise detail as well as information simultaneously disaggregated by industry and country of owner for major investors (e.g., Japan, Canada, and major European investors such as the France, Germany, the Netherlands and the United Kingdom). Second, a greater number of indicators, the number of establishments, employment, payroll, and sales, are available.

Tables 8-12 summarize these data for Hawaii in 1987 and 1992, showing the number of establishments, the number of employees, the number of employees per establishment, payroll and payroll per employee, and sales and sales per employee, respectively. Data are shown for most two-digit categories in the Standard Industrial Classification (SIC) and well as three- and four-digit categories for most listed industries in which foreign MNCs were active in Hawaii. Data are also given for all foreign MNCs and Japanese MNCs to the extent available. Moreover, shares of foreign MNCs in all establishments as well as comparisons of foreign establishments and U.S. establishments are also made. Some of the more interesting patterns emerging from these data are summarized below.

First, foreign MNCs accounted for relative small shares of the number of establishments in the state, though there was a rapid increase in the foreign share of all establishments from 1.7 percent in 1987 to 3.6 percent in 1992 (Table 8). As indicated by the data in the previous section, the number of Japanese establishments grew even faster during this period, the Japanese share of all foreign establishments growing from 45 percent to 55 percent during this period. Although the shares of foreign establishments in all establishments were relatively small overall, these shares were relatively large for both years in a number of individual industries, for example land subdividers and developers, manufacturing of stone, clay and glass,

wholesale trade of electrical appliances, etc., luggage and luggage goods stores, hotels and motels, and public golf courses. Of these categories, the last one, hotels and motels, had by far the largest absolute number of foreign establishments. Eating places and a number of other retail trade industries also had a large number of foreign establishments but foreign shares of all establishments were generally smaller. In addition, there were also a large number of industries which had large foreign shares in one of the two years, for example, mining, tour operators, wholesale trade of hardware, etc., chemicals, and petroleum, etc., department stores, miscellaneous general merchandise stores, gas stations, fire, marine, and casualty insurance, subdividers & developers, membership sports and recreation clubs.

Shares of the number of establishments is not a very good indicator of how important foreign MNCs are to the local economy because MNCs often tend to be relatively large compared to non-MNCs. For example, the shares of foreign MNCs in total employment were a good deal larger than corresponding shares of establishments at 7.2 percent in 1987 and 13.1 percent in 1992 (Table 9). Correspondingly, foreign establishments had an average of 52-58 employees per establishment in these two years, compared to 13 employees per employee in both years in U.S. establishments (Table 10). Japanese establishments also accounted for relatively large shares of employment, 70 percent in 1987 and 68 percent in 1992. There were thus 89 employees per Japanese establishment in 1987 and 65 employees per Japanese establishment in 1992. The hotel and motel industry is by far the largest industry for foreign affiliates in terms of employment, this industry alone accounting for 36 percent of all employment in foreign establishments in 1987 and 40 percent in 1992. Correspondingly, these were relatively large establishments with 270 employees per establishment in 1987 and 329 employees per establishment in 1992. Almost all of these were Japanese hotels and motels. Another industry with relatively large employment in foreign establishments is eating and drinking places, primarily eating places. This industry accounted for 12 percent of all foreign establishment employment in 1987 and 19 percent in 1992, with a little less than half of this being in Japanese establishments in the latter year. However, foreign shares of total employment were actually below average in this industry and the size differential (measured as employees per firm) was relatively small in this industry.

As indicated in section 2 above, MNCs are expected to be more efficient than non-MNCs and as a result they are often observed to have relatively high labor productivity and/or payroll per employee. However, according to the available information on payroll and payroll per employee for foreign establishments in Hawaii

(Table 11), the share of foreign establishments in all payroll was 7.7 percent in 1987, only slightly larger than the corresponding share of employment, 7.2 percent. As a result, payroll per employee in foreign establishments was only 7 percent higher than payroll per employee in U.S. establishments. Unfortunately, a similar comparison is not possible at the aggregate level or for several major industry categories for 1992.⁹ However, comparisons are possible for a number of major industries. By far the largest foreign establishment industry in terms of payroll is again hotels and motels, where the share of foreign establishments in all establishments was about one-third in 1987 and about one-half in 1992. Interestingly, foreign establishments paid higher wages than U.S. establishments in 1987, 15,306 versus 13,165, but this was reversed in 1992, 17,991 versus 19,177. Wholesale trade of durable goods, eating and drinking places, and insurance carriers were also relatively large in terms of payroll in foreign establishments, had a relatively large wage differentials in favor of foreign establishments in 1987, but the large wage differential almost totally disappeared by 1992. The reverse pattern was observed in food manufacturing and automotive dealers with U.S. establishment wages being much higher in 1987 and the differentials decreasing markedly by 1992. Thus, in a number of important industries there was a trend toward reduction or reversal of wage differentials between foreign and U.S. establishments during this period.

In a number of other important industries, large wage differentials persisted or widened. This is observed in transportation services, general merchandise stores, apparel and accessory stores, miscellaneous retail stores, real estate, and amusement and recreation services. The figures for amusement and recreation services are somewhat strange in suggesting that foreign establishments paid unusually high wages in 1992 and I have been told that there is a high probability that this may be the result of foreign establishments employing highly paid sports personnel. Figures are also unusual for luggage and leather goods stores, where the estimate of payroll in foreign establishments is larger than for all U.S. establishments and payroll per employee is thus negative for U.S. establishments, and I am told this is due to a revision of the U.S. total in the Economic

⁹The publication with the foreign establishment data for 1992 (U.S. Department of Commerce 1997) does not include estimates of payroll for all U.S. establishments disaggregated by state. Such data are available from the economic census publications (U.S. Bureau of the Census 1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h) but these data often do not match the data on the number of establishments and employment included in the foreign establishment publication. In principle, these figures should match once different classifications of administrative and auxiliary units are taken into account but in practice this researcher had trouble making the totals match even after taking the different classifications into account. Thus, ratios of foreign establishments to all establishments and estimates for U.S. establishments are only given for industries in which the estimates of the number of establishments and employment were identical in the two sources.

Census.

It is even more difficult to match data for sales than for payroll so very few totals or subtotals are available.¹⁰ Moreover, the 1992 data for foreign firm sales reveal a somewhat different pattern than the employment and payroll data. Namely, finance, insurance, and real estate, not services is the largest industry for foreign establishments, followed closely by retail trade, and then more distantly by services (Table 12). Unfortunately, the lack of corresponding data preclude any comparisons between local and foreign establishments in finance, insurance, and real estate or for the retail trade subtotal in 1992, though it is notable that insurance, like wholesale trade, was characterized by relatively high sales per employee among foreign establishments. Here it should be also noted that sales per employee is at best only a very rough indicator of the average product of labor because the sales indicator includes both value added and intermediate expenditures. Hence higher sales per employee may be indicative of relatively high value added per employee (the more standard measure of the average product of labor) or higher intermediate expenditures per employee. Relatively high sales per employee in wholesale trade, for example, is commonly due in large part to relatively high intermediate expenditures per employee in the industry. In this respect, it is notable that sales per employee is relatively high for both foreign and U.S. establishments in this industry. However, it is of some interest that this indicator tends to be somewhat higher in foreign establishments than in U.S. establishments in the industry.

Turning to the next largest industry in terms of foreign establishment sales, retail trade, foreign establishments accounted for 11 percent of sales in the industry in 1987 and had relatively high sales per employee (Table 12). Comparisons for the industry as a whole are impossible for 1992 but among the 5 major sub-industries for which comparisons are possible, foreign shares grew rapidly in all of them, food stores, automotive dealers, apparel and accessory stores, eating and drinking places, and miscellaneous retail stores. Sales per employee was larger in foreign establishments for both years in apparel and accessory stores and miscellaneous retail stores but lower in both years in food stores and automotive dealers. In eating and drinking

¹⁰As with the payroll data, the publication with the foreign establishment data for 1992 (U.S. Department of Commerce 1997) does not include estimates of payroll for all U.S. establishments disaggregated by state. Such data are available from the economic census publications (U.S. Bureau of the Census 1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h) but these data often do not match the data on the number of establishments and employment included in U.S. the foreign establishment publication. Thus, here again, ratios of foreign establishments to all establishments and estimates for U.S. establishments are only given for industries in which the estimates of the number of establishments and employment were identical in the two sources. Moreover, a number of subtotals are also unavailable for 1987 (U.S. Department of Commerce 1992).

places there was little difference in 1987 but the figure was about 13 percent higher in local establishments in 1992.

In the service sector, overall comparison is again impossible for 1992 but foreign establishments had higher sales per employee in 1987 and, correspondingly, the foreign share in terms of sales, 14 percent, was somewhat higher than in terms of employment (Table 12). The vast majority of the sales in the industry come from hotels and motels (89 percent in 1987 and 83 percent in 1992) and the foreign share of sales in this industry skyrocketed from 35 percent in 1987 to 51 percent in 1992. However, while sales per employee was some 24 larger in foreign establishments in 1987, this differential reversed itself to 4 percent in favor of local establishments in 1992. This reflected the fact that the growth of the foreign share of employment in the industry (12 percent to 21 percent, see Table 9) was even more rapid than the rapid growth of the foreign share of sales in this important industry.

There were notable differentials in sales per employee in favor of foreign establishments in construction in 1987 and manufacturing in 1992. However, sales per employee in foreign construction establishment actually fell 25 percent by 1992 indicating that the differential in this may have dissipated or reversed itself. In manufacturing the 1992 differential is due primarily to one large oil refinery (see below) and foreign establishments had much lower sales per employee in both years in food products, the only industry for which comparisons are possible in both years.

The comparisons noted above are just some of the things that can be done with this very rich data set. In this respect, it is important to note that much more rigorous comparisons are possible by contracting the BEA to analyze the establishment level data that cannot published due to disclosure requirements.¹¹

5. The Largest Foreign Multinationals in Hawaii by Sales, 1984-1996

Having reviewed the official information on foreign multinationals in Hawaii, it is possible to get a general picture of the roles foreign multinationals play. However, the official data are plagued by two nagging

¹¹Note that the BEA can be contracted to do compilations and/or statistical analysis of establishment-level, provided that publication of the results do not compromise disclosure requirements.

problems. First, they are quite slow to come out, with preliminary 1995 data just becoming available in August of 1997. Second, there are a number of important categories where data suppression makes it impossible to ascertain patterns and trends, a relatively large problem in a small state like Hawaii. Perhaps the most obvious example of this is the suppression of data on total GPPE stocks for 1981-1983. Fortunately, there are a number of other local Hawaiian sources than can be used to supplement the official data and partially complement the official data. As noted in the introduction, an official state source (State of Hawaii 1995b) is an extremely valuable source of qualitative information on foreign investment-related transactions, though the quantitative information presented is seriously flawed because standard definitions and sampling techniques are not used.

Fortunately, there is a private sector publication, Hawaii Business (various years), which has compiled quantitative information on large firms in Hawaii using more standard definitions and compilation techniques since 1984. Moreover, the publication includes information on parent firms classified by country, making it possible to identify foreign-owned firms. It should be noted that there are cases in which this publication appear to have classified some foreign firms as U.S. firms and some initial cross checking has been done with State of Hawaii (1995b) and Hoover's (1997) to confirm the ownership status of some parents as well as the timing of acquisitions and sales of affiliates in Hawaii.¹² Some of the more important advantages of using these firm-level data are (1) they are published about a year ahead of the BEA data (e.g., 1996 data were published in August 1997), (2) it is possible to do detailed country by industry compilations without data suppression, and (3) it is possible to track the performance of individual firms across time.

As with all data sets there are problems one faces when using the data, the primary ones being that the sampling technique used, that is gathering data on large firms in Hawaii from all possible sources, is rather ad hoc and thus subject to unknown biases. More specifically, even among large firms, there are a number of firms for which is impossible to gather data for some or all years and it is not clear if or how this might bias the samples. Second, some of the figures are estimates or unconfirmed. In addition, to figures given in the

¹²Much of the problem comes when trying to ascertain the country of ultimate beneficial owner when the direct owner is a U.S. corporation which is in turn foreign-owned. Note also that the cross checking that has been completed focused on questionable cases, and that further, more comprehensive cross checking with these and other sources is desirable in the future.

publication, this author has also interpolated estimates for some firms and years when data were not available.¹³ Hawaii Business (various years) is itself keenly aware of these coverage and reliability problems and every year stresses the need to use such data with caution and I wish to echo that sentiment here. A third problem in this context is that these data can facilitate compilation of only three indicators, number of firms, sales, and number of employees. A fourth problem is one of industry classification. Many of the firms are involved in activities in several related industries, for example, hotels, restaurants, and tour arrangements, and it is impossible to tell which of these activities is largest from these data. The classification of such firms is based on my perception of which activity is largest and should be reviewed in the future by someone with greater knowledge of these firms and their activities.¹⁴

However, despite these problems, this source is still thought to be an extremely valuable source of quantitative information that can be used to supplement the BEA data described above. The three indicators that can be compiled from this source are presented by country/region and industry for 1974-1996 in Tables 13-15. First, much like the BEA data, these data show a rather steady increase in the number of large foreign firms in Hawaii during this period, with particularly large increases in the mid- to late-1980s (Table 13). The underlying firm-level data highlight that a major source of this increase was the acquisition of existing large firms by foreigners from U.S. owners. For example, between 1985 and 1988, there were 15 known foreign acquisitions from U.S. persons, 9 new foreign firms added to the sample, some of which were probably acquisitions themselves, 1 U.S. acquisition of a foreign firm, and 4 foreign firms that were dropped from the sample, for a net increase of 19 firms. Hence foreign acquisitions were a very important avenue through which foreign presence increased in Hawaii during this period. Second, as suggested by the BEA data, the vast majority of large firms in the state are Japanese, and in recent years they are heavily concentrated in the hotel industry. No other country/region group had more than 5 large firms in the state during this period.

Japanese firms are also seen to be very important in terms of employment and sales (Tables 14-15). In

¹³For example, if a firm's sales were available for years 1, 2, 4, and 5 but not for year 3 and it was known that the firm was excluded in year 3 because sales failed to meet the threshold (usually about \$10-\$20 million depending on the year), I estimated the figure for year 3 using this information. Such estimates were added for only a very small number of years and firms.

¹⁴Note also that this source includes data on U.S.-owned firms. However, data for many of the U.S.-owned firms, especially those based in Hawaii, apparently include activities outside of the state, making them fundamentally incompatible with data on foreign-owned firms.

the mid 1980s, however, retail trade was relatively large for large Japanese firms, especially in terms of sales where this industry was actually larger than hotels until 1985. However, since the investment boom of the mid- to late-1980s, hotels has become by far the largest industry for large Japanese firms, both in terms of sales and employment. These data thus further underlie the importance of Japanese investment in hotels and related industries in the state.¹⁵

Interestingly, however, these data differ somewhat from the BEA estimates in suggesting that trends in Japanese firms and overall trends diverged somewhat in the late 1980s and early 1990s. Much of this divergence in terms of sales is due to one large oil refinery that was bought by Australia's BHP in the late 1980s (Table 15). In terms of employment, large fluctuations in construction due to the activities of Australian and New Zealand firms in the late 1980s and early 1990s also had significant effects on overall trends (Table 14). However, these data are similar to the BEA data in suggesting that foreign firm activity peaked in 1989-1991 and fell off somewhat thereafter. Interestingly, both the employment and sales figures suggests that there may have been some pick up in foreign activity in 1996, though much of this is due to the inclusion of several new Japanese firms in the sample for this year (Tables 13-15).

6. Conclusions and Recommendations

This paper has examined the quantitative information available on the activities of foreign multinational firms in Hawaii using three sources. First, information on gross property, plant, and equipment, as well as employment and underlying sample sizes were assembled from firm-based compilations of annual BEA surveys of foreign MNCs in the United States. It was argued that these data are the most comprehensive and clearly defined data available on an annual basis and that they thus constitute the best source for tracking the activities of foreign MNCs in the state over time and across industries or investing countries. These data showed that Japan and services industries account for a very large share of foreign MNC activity in Hawaii. The data also showed that there was a large increase in this activity in the mid- to late-1980s but that foreign MNC activity has declined somewhat since its peak in the early 1990s.

¹⁵Note that the share of hotels may be somewhat overestimated here due to possible misclassification of large firms involved in the hotel and other industries as noted above.

The second source of data examined were the establishment-level compilations of the BEA survey data that is done for benchmark survey years (1987 and 1992 so far). These provide much more industry detail as well as two additional indicators of interest, payroll and sales of establishments. Moreover, they are tied to the economic census data which means that direct comparisons of foreign and U.S.-owned establishments are possible. As indicated in Section 2, the facts that (1) the distinction between MNCs and non-MNCs is generally thought to be of greater economic consequence than distinctions between nationality of ownership per se and (2) many U.S.-owned establishments are themselves part of MNCs, mean that differences between foreign-owned and U.S.-owned establishments may not that large. However, this remains a point that should be examined empirically. In this respect, it was also noted that much more rigorous comparisons are possible by contracting the BEA to analyze the establishment level data.

Finally, a privately assembled set of data on large foreign firms was examined. Although these data are subject to numerous sampling and quality problems, they also showed the same general patterns that were observed in the BEA data sets above, namely that there was a large increase in the activities of foreign MNCs in the mid- to late-1980s, and that Japanese firms in the hotel industry accounted for a very large portion of this increase. These data also reveal a few large firms owned by Australian and New Zealand interests in oil manufacturing and construction.

As the title of this paper indicates this analysis should be thought of a preliminary in nature. In other words, more rigorous and substantial economic analysis is left for future research. In contrast, a major focus of this paper has been to describe the nature of the data sources available and to illustrate, not to comment on how Hawaii's policies should deal with foreign investors. However, if this observer has an inclination in this respect, it would be to suggest that the most rational way to deal with foreign investors is to treat them as much like U.S. investors as possible, so that they can make rational decisions based on the economic fundamentals in the state. Hawaii should not want or need investments that are made primarily to take advantage of investment incentive schemes as such investments will inevitably lead to unnecessary inefficiencies. On the other hand, Hawaii should also seek to provide a rational and open business environment where restrictions on business are limited to the bare necessities, for example to regulations regarding public safety, the environment, and other areas where market failures are known to exist. It should also be stressed that this viewpoint is derives not so much from examination of the data described above, but from what I would call common sense economics.

Nonetheless, whenever Hawaii implements specific policies it is important to pay attention to how those policies affect individual firms. There are many cases in which well-intentioned policies have unintended effects on firms, both foreign- and U.S.-owned. Moreover, since many of these unintended effects are adverse, it is crucial that policy makers be made more aware of the effects of the policies they implement. In order to increase awareness of these problems vis a vis foreign investors in the state, it is in turn crucial that the state maintain a certain core set of information on the activities of foreign investors, including both qualitative and quantitative information. In the process of compiling this study I have become aware of four potentially important ways in which to improve the relevant information maintained by the State of Hawaii's Department of Business, Economic Development & Tourism and related agencies.

First, as indicated several times in this paper, the major state publication on foreign investment (e.g., State of Hawaii 1995a) is an extremely valuable source of qualitative information on the acquisitions of foreign investors in the state and it is highly desirable that this publication be updated. However, the quantitative information in the publication is seriously flawed due to sampling and definitional problems. Accordingly, the first recommendation is that the quantitative information presently included in this publication be treated in the same manner as the qualitative information. Specifically, instead of listing investment amounts separately in one column (and thus implying they are all based on a common definition of investment), the amounts should be included in the text using phrases such as "investment was reported to amount to xxx dollars." Correspondingly, tables based on the sums of these reported amounts should be deleted from the publication to avoid misleading the public.

Second, the State of Hawaii should rely on the annual firm-level BEA surveys for official quantitative estimates of foreign affiliate activity in the state in time series. These surveys are very comprehensive in coverage and use standard definitions in the compilation of quantitative indicators. As part of the background work for this paper I have already set up firm-based data sets on gross property, plant, and equipment, and employment, as well as the underlying sample sizes, for 1977-1994 for all states in the country in Excel format. Annual updating of these data sets will be very inexpensive and provide a valuable source of official estimates on the activities of foreign multinationals by state in the country. It is also possible to set up data bases on a few other indicators (see Appendix Table 1 for a summary of data available by state). Compilations of commercial property holdings by industry or country are some potential interest in this respect.

Third, the State of Hawaii could potentially benefit from detailed economic analysis of the activities foreign MNCs using the establishment-level compilations of the BEA surveys in benchmark years and corresponding data on all establishments in Hawaii from the economic census. Some examples of the types of comparison possible were given in Section 4 above, but much more rigorous and detailed analysis is possible, especially if the BEA is contracted to do analysis of unpublished data. However, this is likely to be a relatively expensive exercise and the costs must be weighted against the potential benefits before deciding to spend public funds on this activity.

Fourth and finally, the State of Hawaii may find it beneficial to maintain a very limited set of data on large foreign MNCs in Hawaii based on the information published in Hawaii Business (various years). These data are described in Section 5 and I have set up an Excel data base on these firms for 1984-1996. However, if the State is to use these data, they should first be cross-checked with other published and unpublished sources, a process that may take a much a one month of worker's time. Once the basic data base are cross checked, this data base could be updated and supplemented relatively cheaply in future years.

There are three areas in which it would be desirable to independently check and supplement published firm-level information. First, it is desirable to confirm the accuracy of the published estimates. Second, if a large foreign firm is known to be excluded from the published data, it would be highly desirable to try and gather information from that firm. Third, it would also be helpful to ask for estimates of book values of the stocks of fixed assets to correspond to the measure of GPPE available from BEA. Probably the cheapest (for both the State and the firms involved) and thus the most effective way to do this type of follow up would be by phone. All together updates of the published data and the supplemental phone survey would probably take no more than 10 or 15 minutes for an official from each company and 1 or 2 weeks of a State worker's time each year and would thus be rather inexpensive to implement. There is a potential problem with this proposal however, in that it is not clear that the State of Hawaii would find it appropriate to publish data obtained in this manner. If it were decided that such data could not be published, it may not be worth the expense to implement this proposal.

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Table 1: Gross Property, Plant, and Equipment of Nonbank Affiliates, Selected State by Industry of Affiliate (US\$ millions)

State, measure-a	Year	All industries	Petroleum	Manufacturing	Wholesale trade	Retail trade	Finance, nonbank	Insurance	Real estate	Services & Other	Services
Hawaii -stock	1977	672	16	8	5	54	0	1	233	354	n.a.
	1978	742	17	12	8	57	1	1	246	400	n.a.
	1979	789	17	14	7	65	1	1	256	427	n.a.
	1980	1,020	<44	<44	17	52	<44	2	431	474	n.a.
	1981	>1,021	(D)	24	(D)	(D)	1	2	494	501	n.a.
	1982	>1,083	21	38	24	80	(D)	1	584	(D)	n.a.
	1983	>1,208	22	40	28	253	10	1	558	>295	n.a.
	1984	1,691	23	73	56	274	3	3	605	653	n.a.
	1985	1,777	26	103	60	281	3	2	584	719	n.a.
	1986	2,013	31	157	61	280	4	1	713	767	n.a.
	1987	3,474	26	129	44	297	3	<125	991	<1,985	1,860
	1988	4,990	28	201	91	322	3	8	1,739	2,598	2,371
	1989	8,224	<615	247	179	340	10	15	2,380	<5,054	4,309
	1990	11,830	<929	368	189	490	17	15	3,868	<6,884	5,855
	1991	13,921	<1,239	386	212	535	82	13	4,069	<8,624	7,385
	1992	15,454	<837	290	<837	564	222	17	5,075	8,450	7,939
	1993	16,030	<729	296	258	570	300	<729	4,907	8,970	8,454
	1994	16,185	<1,221	308	257	597	306	18	4,615	<10,084	8,863
	1995	16,102	<1,160	330	242	616	<1,160	20	4,063	9,671	8,853
	Hawaii -flow	1978	70	1	4	3	3	1	0	13	46
1979		47	0	2	-1	8	0	0	10	27	n.a.
1980		231	(D)	(D)	10	-13	(D)	1	175	47	n.a.
1981		(D)	(D)	(D)	(D)	(D)	(D)	0	63	27	n.a.
1982		(D)	(D)	14	(D)	(D)	(D)	-1	90	(D)	n.a.
1983		(D)	1	2	4	173	(D)	0	-26	(D)	n.a.
1984		(D)	1	33	28	21	-7	2	47	(D)	n.a.
1985		86	3	30	4	7	0	-1	-21	66	n.a.
1986		236	5	54	1	-1	1	-1	129	48	n.a.
1987		1,461	-5	-28	-17	17	-1	(D)	278	(D)	n.a.
1988		1,516	2	72	47	25	0	(D)	748	(D)	511
1989		3,234	(D)	46	88	18	7	7	641	(D)	1,938
1990		3,606	(D)	121	10	150	7	0	1,488	(D)	1,546
1991		2,091	(D)	18	23	45	65	-2	201	(D)	1,530
1992		1,533	(D)	-96	(D)	29	140	4	1,006	(D)	554
1993		576	(D)	6	(D)	6	78	(D)	-168	520	515
1994		155	(D)	12	-1	27	6	(D)	-292	(D)	409
1995	-83	(D)	22	-15	19	(D)	2	-552	(D)	-10	

Table 1 (2/5)

State, measure-a	Year	All indus- tries	Petro- leum	Manu- fac- turing	Whole- sale trade	Retail trade	Fi- nance, nonbank	Insur- ance	Real estate	Ser- vices & Other	Ser- vices
California -stock	1977	4,746	<1,720	1,424	412	125	16	31	1,019	<1,720	n.a.
	1978	6,408	1,605	2,157	506	236	66	43	1,350	445	n.a.
	1979	11,860	<5,741	3,302	567	296	75	49	1,831	<5,741	n.a.
	1980	15,117	<6,675	3,843	703	351	108	157	3,281	<6,675	n.a.
	1981	20,404	<8,503	4,768	955	478	112	194	5,395	<8,503	n.a.
	1982	25,240	<10,216	5,307	1,409	666	155	243	7,245	<10,216	n.a.
	1983	27,601	<11,085	5,798	1,553	718	258	176	8,014	<11,085	n.a.
	1984	31,517	<12,038	7,545	1,664	618	342	188	9,123	<12,038	n.a.
	1985	35,323	<12,732	8,751	2,112	695	493	249	10,292	<12,732	n.a.
	1986	38,321	<13,508	9,285	2,475	1,326	946	298	10,484	<13,508	n.a.
	1987	44,275	<12,035	11,245	2,929	1,315	403	281	13,045	<15,058	2,915
	1988	52,411	<13,880	12,931	3,744	1,939	245	442	14,230	<18,880	5,000
	1989	63,706	10,918	15,613	4,912	1,799	470	492	17,213	12,289	6,515
	1990	75,768	11,795	17,697	6,719	2,684	642	776	20,853	14,602	9,036
	1991	82,334	11,758	18,138	8,242	3,405	883	1,259	22,383	16,267	10,418
	1992	85,661	<11,972	20,043	10,206	2,517	879	<11,972	24,118	15,927	11,207
	1993	87,300	<12,209	19,967	11,759	2,546	1,013	<12,209	23,340	16,467	11,790
1994	92,919	<11,636	20,175	14,246	<11,636	924	1,697	23,488	20,754	12,539	
1995	95,856	<11,953	21,001	15,728	2,721	<11,953	1,670	22,280	20,504	10,937	
California -flow	1978	1,662	(D)	733	94	111	50	12	331	(D)	n.a.
	1979	5,452	(D)	1,145	61	60	9	6	481	(D)	n.a.
	1980	3,257	(D)	541	136	55	33	108	1,450	(D)	n.a.
	1981	5,287	(D)	925	252	127	4	37	2,114	(D)	n.a.
	1982	4,836	(D)	539	454	188	43	49	1,850	(D)	n.a.
	1983	2,361	(D)	491	144	52	103	-67	769	(D)	n.a.
	1984	3,916	(D)	1,747	111	-100	84	12	1,109	(D)	n.a.
	1985	3,806	(D)	1,206	448	77	151	61	1,169	(D)	n.a.
	1986	2,998	(D)	534	363	631	453	49	192	(D)	n.a.
	1987	5,954	(D)	1,960	454	-11	-543	-17	2,561	(D)	n.a.
	1988	8,136	(D)	1,686	815	624	-158	161	1,185	(D)	2,085
	1989	11,295	(D)	2,682	1,168	-140	225	50	2,983	(D)	1,515
	1990	12,062	877	2,084	1,807	885	172	284	3,640	2,313	2,521
	1991	6,566	-37	441	1,523	721	241	483	1,530	1,665	1,382
	1992	3,327	(D)	1,905	1,964	-888	-4	(D)	1,735	-340	789
	1993	1,639	(D)	-76	1,553	29	134	(D)	-778	540	583
	1994	5,619	(D)	208	2,487	(D)	-89	(D)	148	4,287	749
1995	2,937	(D)	826	1,482	(D)	(D)	-27	-1,208	-250	-1,602	

Table 1 (3/5)

State, measure-a	Year	All industries	Petro- leum	Manu- fac- turing	Whole- sale trade	Retail trade	Fi- nance, nonbank	Insur- ance	Real estate	Ser- vices & Other	Ser- vices
Oregon -stock	1977	209	27	104	56	0	0	1	13	8	n.a.
	1978	261	32	118	60	0	3	1	29	18	n.a.
	1979	359	35	140	92	1	3	0	55	32	n.a.
	1980	559	39	309	101	1	4	3	82	20	n.a.
	1981	845	42	337	159	4	<53	4	247	<53	n.a.
	1982	939	47	397	121	14	<101	5	255	<101	n.a.
	1983	932	46	306	161	12	8	<139	261	<139	n.a.
	1984	1,155	49	359	200	13	<175	6	354	<175	n.a.
	1985	1,730	52	767	209	<295	25	7	375	<295	n.a.
	1986	1,637	63	597	282	<153	27	<153	379	136	n.a.
	1987	1,812	45	701	265	149	60	21	397	174	46
	1988	2,099	39	931	398	29	8	32	422	240	78
	1989	2,467	99	995	403	64	29	27	525	324	104
	1990	3,427	242	1,343	676	222	<61	<61	612	272	127
	1991	4,544	228	1,597	768	267	<873	49	583	<1,053	180
	1992	4,741	223	1,476	946	262	<220	<220	490	1,125	215
	1993	4,734	110	2,216	1,013	298	<198	<198	485	415	185
	1994	5,514	<296	2,821	1,201	294	<296	53	464	386	174
	1995	5,676	46	2,974	1,347	324	<354	<354	429	203	285
Oregon -flow	1978	52	5	14	4	0	3	0	16	10	n.a.
	1979	98	3	22	32	1	0	-1	26	14	n.a.
	1980	200	4	169	9	0	1	3	27	-12	n.a.
	1981	286	3	28	58	3	(D)	1	165	(D)	n.a.
	1982	94	5	60	-38	10	(D)	1	8	(D)	n.a.
	1983	-7	-1	-91	40	-2	(D)	(D)	6	(D)	n.a.
	1984	223	3	53	39	1	(D)	(D)	93	(D)	n.a.
	1985	575	3	408	9	(D)	(D)	1	21	(D)	n.a.
	1986	-93	11	-170	73	(D)	2	(D)	4	(D)	n.a.
	1987	175	-18	104	-17	(D)	33	(D)	18	38	n.a.
	1988	287	-6	230	133	-120	-52	11	25	66	32
	1989	368	60	64	5	35	21	-5	103	84	26
	1990	960	143	348	273	158	(D)	(D)	87	-52	23
	1991	1,117	-14	254	92	45	(D)	(D)	-29	(D)	53
	1992	197	-5	-121	178	-5	(D)	(D)	-93	(D)	35
	1993	-7	-113	740	67	36	(D)	(D)	-5	-710	-30
	1994	780	(D)	605	188	-4	(D)	(D)	-21	-29	-11
1995	162	(D)	153	146	30	(D)	(D)	-35	-183	111	

Table 1 (4/5)

State, measure-a	Year	All indus- tries	Petro- leum	Manu- fac- turing	Whole- sale trade	Retail trade	Fi- nance, nonbank	Insur- ance	Real estate	Ser- vices & Other	Ser- vices
Washington -stock	1977	721	183	377	45	2	1	2	88	24	n.a.
	1978	973	198	503	57	2	5	3	159	47	n.a.
	1979	1,264	195	646	116	3	6	1	238	60	n.a.
	1980	1,617	<293	828	107	8	<293	4	378	<293	n.a.
	1981	2,430	260	1,195	135	12	<209	4	616	<209	n.a.
	1982	2,788	266	1,328	177	70	10	11	715	213	n.a.
	1983	2,871	267	1,411	237	77	12	<205	663	<205	n.a.
	1984	2,969	273	1,465	267	85	22	12	664	181	n.a.
	1985	3,680	316	2,145	230	99	34	25	633	197	n.a.
	1986	3,301	333	1,295	263	<322	44	<322	723	322	n.a.
	1987	3,588	314	1,542	177	<625	21	39	732	<764	139
	1988	4,803	409	2,084	216	389	20	47	894	743	341
	1989	6,082	473	2,341	343	313	50	56	1,142	1,364	547
	1990	7,985	493	3,396	388	444	<167	<167	1,352	1,746	632
	1991	9,673	569	3,944	607	532	92	83	1,794	2,050	562
	1992	10,155	609	4,336	692	421	22	107	1,646	2,323	683
	1993	10,294	368	4,869	757	483	67	107	1,557	2,087	657
	1994	10,676	<520	5,180	1,071	535	17	<520	1,483	1,871	620
1995	11,214	<361	5,583	1,112	712	<361	119	1,450	1,878	560	
Washington -flow	1978	252	15	126	12	0	4	1	71	23	n.a.
	1979	291	-3	143	59	1	1	-2	79	13	n.a.
	1980	353	(D)	182	-9	5	(D)	3	140	(D)	n.a.
	1981	813	(D)	367	28	4	(D)	0	238	(D)	n.a.
	1982	358	6	133	42	58	(D)	7	99	(D)	n.a.
	1983	83	1	83	60	7	2	(D)	-52	(D)	n.a.
	1984	98	6	54	30	8	10	(D)	1	(D)	n.a.
	1985	711	43	680	-37	14	12	13	-31	16	n.a.
	1986	-379	17	-850	33	(D)	10	(D)	90	125	n.a.
	1987	287	-19	247	-86	(D)	-23	(D)	9	(D)	n.a.
	1988	1,215	95	542	39	(D)	-1	8	162	(D)	202
	1989	1,279	64	257	127	-76	30	9	248	621	206
	1990	1,903	20	1,055	45	131	(D)	(D)	210	382	85
	1991	1,688	76	548	219	88	(D)	(D)	442	304	-70
	1992	482	40	392	85	-111	-70	24	-148	273	121
	1993	139	-241	533	65	62	45	0	-89	-236	-26
	1994	382	(D)	311	314	52	-50	(D)	-74	-216	-37
1995	538	(D)	403	41	177	(D)	(D)	-33	7	-60	

Table 1 (5/5)

State, measure-a	Year	All indus- tries	Petro- leum	Manu- fac- turing	Whole- sale trade	Retail trade	Fi- nance, nonbank	Insur- ance	Real estate	Ser- vices & Other	Ser- vices
U.S.A. -stock	1977	66,785	23,682	24,151	3,881	1,880	99	321	6,095	6,676	n.a.
	1978	80,633	27,583	29,452	4,761	2,733	334	421	7,750	7,598	n.a.
	1979	101,209	33,413	37,961	5,985	3,599	383	507	10,695	8,664	n.a.
	1980	127,838	38,218	46,793	7,217	5,200	585	1,175	16,802	11,847	n.a.
	1981	187,956	49,665	74,230	10,832	6,290	634	1,462	26,277	18,567	n.a.
	1982	225,235	57,768	84,742	13,566	7,744	1,088	1,897	34,389	24,041	n.a.
	1983	244,012	64,598	92,445	14,036	8,590	1,559	1,919	38,541	22,322	n.a.
	1984	269,462	70,247	101,927	15,485	9,533	1,744	2,053	42,607	25,865	n.a.
	1985	295,181	76,109	110,529	17,304	10,646	2,336	2,292	47,658	28,307	n.a.
	1986	320,215	81,216	114,067	20,789	13,674	3,982	3,083	52,730	30,675	n.a.
	1987	353,278	85,510	129,620	22,192	13,503	4,200	3,427	56,472	38,355	15,068
	1988	418,069	91,916	153,867	26,133	18,642	4,639	4,307	63,462	55,102	21,701
	1989	489,461	92,198	184,393	28,963	20,775	5,568	4,713	76,079	76,772	29,631
	1990	578,355	102,186	223,889	37,008	22,420	3,923	9,744	86,731	92,454	38,325
	1991	640,140	101,187	244,951	46,041	26,557	6,085	16,741	92,125	106,453	44,411
	1992	660,826	98,771	268,018	53,917	23,851	6,951	19,805	94,175	95,339	47,539
	1993	705,665	102,910	286,380	61,073	25,497	7,839	22,345	93,874	105,746	53,491
1994	754,383	108,561	303,698	69,181	25,624	7,600	25,336	92,822	121,563	55,351	
1995	766,937	112,417	292,002	77,370	29,960	7,255	26,990	87,068	133,875	52,354	
U.S.A. -flow	1978	13,848	3,901	5,301	880	853	235	100	1,655	922	n.a.
	1979	20,576	5,830	8,509	1,224	866	49	86	2,945	1,066	n.a.
	1980	26,629	4,805	8,832	1,232	1,601	202	668	6,107	3,183	n.a.
	1981	60,118	11,447	27,437	3,615	1,090	49	287	9,475	6,720	n.a.
	1982	37,279	8,103	10,512	2,734	1,454	454	435	8,112	5,474	n.a.
	1983	18,777	6,830	7,703	470	846	471	22	4,152	-1,719	n.a.
	1984	25,450	5,649	9,482	1,449	943	185	134	4,066	3,543	n.a.
	1985	25,719	5,862	8,602	1,819	1,113	592	239	5,051	2,442	n.a.
	1986	25,034	5,107	3,538	3,485	3,028	1,646	791	5,072	2,368	n.a.
	1987	33,063	4,294	15,553	1,403	-171	218	344	3,742	7,680	n.a.
	1988	64,791	6,406	24,247	3,941	5,139	439	880	6,990	16,747	6,633
	1989	71,392	282	30,526	2,830	2,133	929	406	12,617	21,670	7,930
	1990	88,894	9,988	39,496	8,045	1,645	-1,645	5,031	10,652	15,682	8,694
	1991	61,785	-999	21,062	9,033	4,137	2,162	6,997	5,394	13,999	6,086
	1992	20,686	-2,416	23,067	7,876	-2,706	866	3,064	2,050	-11,114	3,128
	1993	44,839	4,139	18,362	7,156	1,646	888	2,540	-301	10,407	5,952
	1994	48,718	5,651	17,318	8,108	127	-239	2,991	-1,052	15,817	1,860
1995	12,554	3,856	-11,696	8,189	4,336	-345	1,654	-5,754	12,312	-2,997	

1995 figures are preliminary; >x or <x=greater or less than x (exact figure not disclosed); (D)=not disclosed; n.a.=not available; values between -0.5 and 0.5 are rounded to zero.

a-Stocks are book values as given in the source. Flows are annual change (first differences) of stocks

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 2: Employment of Nonbank Affiliates, Selected State by Industry of Affiliate (thousands)

State	Year	All industries	Petroleum	Manufacturing	Wholesale trade	Retail trade	Finance, nonbank	Insurance	Real estate	Services & Other	Services
Hawaii	1977	11.4	<7.2	0.6	0.4	2.9	0.0	0.2	0.2	<7.2	n.a.
	1978	11.9	<6.9	0.8	0.6	3.2	0.0	0.2	0.2	<6.9	n.a.
	1979	14.7	<8.2	1.3	0.7	4.0	0.0	0.2	0.3	<8.2	n.a.
	1980	15.5	<8.7	1.3	0.8	4.0	<8.7	0.3	0.5	<8.7	n.a.
	1981	17.0	<8.3	1.3	0.8	5.4	0.1	0.3	0.8	<8.3	n.a.
	1982	16.4	<0.3	1.9	0.7	4.2	0.3	<0.3	0.7	8.4	n.a.
	1983	16.3	<8.6	1.4	0.8	4.5	0.3	0.2	0.7	<8.6	n.a.
	1984	16.5	<7.2	2.0	2.0	4.4	0.2	0.3	0.5	<7.2	n.a.
	1985	18.7	<8.4	2.0	1.8	5.0	0.2	0.3	1.0	<8.4	n.a.
	1986	18.4	<7.9	2.4	2.0	4.5	0.2	0.2	1.3	<7.9	n.a.
	1987	27.3	0.0	1.3	1.3	5.1	0.2	1.4	0.6	17.4	11.0
	1988	34.8	0.0	2.1	2.9	5.3	0.2	0.4	1.8	22.2	13.2
	1989	45.0	0.8	2.3	4.0	5.3	0.2	1.0	2.0	29.5	16.9
	1990	53.0	0.9	2.8	4.2	7.1	0.2	1.0	3.5	33.4	21.2
	1991	56.0	<11.9	2.7	4.7	<11.9	0.2	1.1	<11.9	35.5	23.0
	1992	53.8	1.0-2.3	3.5	4.1	7.8	0.2	1.0-2.3	3.1	32.9	23.8
	1993	52.4	1.3	2.3	4.2	7.8	0.1	1.0	3.4	32.4	25.0
	1994	50.8	1.0	2.4	3.5	7.8	0.2	0.9	2.6	32.5	26.0
	1995	49.8	1.3	2.6	3.4	8.0	0.1	0.6	2.5	31.1	24.5
California	1977	124.2	5.5	64.2	28.2	10.9	1.1	3.3	1.7	9.3	n.a.
	1978	155.4	6.8	83.3	30.8	14.0	1.8	3.6	1.7	13.3	n.a.
	1979	205.2	6.9	116.5	33.6	19.5	2.0	3.8	6.9	16.1	n.a.
	1980	219.6	9.3	120.6	35.2	20.1	2.8	5.4	4.1	22.2	n.a.
	1981	248.4	10.8	118.2	38.1	24.7	2.1	5.9	6.4	42.3	n.a.
	1982	249.0	10.2	115.5	42.3	28.7	3.2	6.0	4.6	38.6	n.a.
	1983	255.6	11.6	117.8	44.5	28.3	4.6	5.8	3.9	39.2	n.a.
	1984	274.4	10.7	133.2	45.9	24.8	5.6	4.6	4.0	45.6	n.a.
	1985	298.8	9.5	150.5	49.0	26.2	5.7	5.3	4.7	48.0	n.a.
	1986	289.2	8.7	132.7	49.3	32.2	7.4	5.2	4.5	49.1	n.a.
	1987	334.9	9.7	141.6	57.5	32.2	8.5	7.0	6.2	72.1	49.4
	1988	407.1	9.6	173.3	65.4	48.2	10.1	12.2	6.5	81.7	53.5
	1989	514.9	10.9	213.9	74.8	68.0	9.8	12.7	7.5	117.4	75.8
	1990	555.9	12.4	216.8	75.4	74.6	4.8	18.1	8.4	145.4	99.3
	1991	561.1	11.4	210.1	80.0	77.2	4.9	19.1	6.2	152.2	105.2
	1992	522.7	8.2	203.6	81.8	57.1	4.4	18.9	6.7	141.8	103.4
	1993	528.6	6.9	195.8	81.9	62.0	3.8	19.0	6.6	152.6	109.5
	1994	536.4	6.4	190.3	87.3	64.8	3.8	18.1	6.5	159.2	115.6
	1995	549.6	5.9	197.4	86.7	66.8	3.8	17.1	5.7	166.2	114.2
Oregon	1977	5.1	<0.8	2.3	1.7	0.0	<0.8	0.3	0.0	<0.8	n.a.
	1978	5.9	0.4	2.5	1.7	0.0	<1.0	0.3	0.0	<1.0	n.a.
	1979	8.8	0.3	4.2	2.5	0.1	<1.4	0.2	0.1	<1.4	n.a.
	1980	10.2	<2.1	5.4	2.4	<2.1	<2.1	0.2	0.1	<2.1	n.a.
	1981	13.1	0.4	4.6	4.7	0.4	<0.4	<0.4	0.2	2.5	n.a.
	1982	13.5	0.2	5.2	3.7	1.3	0.2	0.3	<2.6	<2.6	n.a.
	1983	14.6	<2.4	5.6	4.8	1.4	0.2	0.2	0.1	<2.4	n.a.
	1984	15.5	<2.7	5.9	5.1	1.4	0.2	0.2	0.1	<2.7	n.a.
	1985	18.6	0.2	9.6	4.3	1.2	<2.7	0.5	0.2	<2.7	n.a.
	1986	17.4	0.2	7.0	4.6	1.5	0.2	1.0	0.2	2.7	n.a.
	1987	21.0	0.2	8.1	5.3	1.8	0.6	1.0	0.1	4.0	2.5
	1988	25.1	0.2	10.2	6.2	2.1	0.6	1.0	0.1	4.6	3.0
	1989	30.8	0.4	11.7	6.1	3.8	0.7	1.0	0.4	6.7	3.2

Table 2 (2/2)

State	Year	All industries	Petroleum	Manufacturing	Wholesale trade	Retail trade	Finance, nonbank	Insurance	Real estate	Services & Other	Services
Oregon	1990	39.1	0.4	15.9	5.8	7.4	1.0	1.6	0.4	6.7	3.7
	1991	41.9	0.4	17.5	6.2	8.2	0.9	1.7	0.4	6.6	3.9
	1992	41.9	0.4	17.2	7.6	8.2	0.4	1.8	0.2	6.2	3.8
	1993	42.5	0.2	17.9	7.8	8.6	0.2	1.8	0.3	5.8	3.7
	1994	46.7	0.3	19.8	9.7	9.0	0.3	1.6	0.2	5.7	3.6
	1995	47.6	0.2	19.7	9.5	9.5	0.3	1.6	0.1	6.6	3.6
Washington	1977	11.9	0.7	7.5	2.0	0.2	0.1	0.6	0.1	0.7	n.a.
	1978	15.2	0.7	9.0	2.7	0.1	0.1	0.6	0.3	1.7	n.a.
	1979	17.8	0.8	10.1	3.1	0.2	0.1	0.4	0.5	2.7	n.a.
	1980	21.1	0.7	11.7	2.8	0.9	0.1	0.6	0.6	3.7	n.a.
	1981	26.0	0.8	13.7	2.8	0.8	0.1	0.6	0.6	6.6	n.a.
	1982	26.3	0.7	12.0	3.7	4.9	0.1	0.6	0.3	4.0	n.a.
	1983	31.5	0.6	14.1	6.3	5.3	0.2	0.5	0.3	4.3	n.a.
	1984	32.6	0.7	14.6	5.6	5.9	0.3	0.5	0.3	4.7	n.a.
	1985	35.5	0.8	19.1	3.6	5.2	0.3	0.7	0.3	5.6	n.a.
	1986	35.0	0.8	13.4	3.8	7.2	0.4	0.6	0.6	8.3	n.a.
	1987	40.6	1.0	15.0	4.1	7.7	1.0	1.4	0.6	9.9	4.6
	1988	55.8	0.7	22.5	5.0	10.3	1.0	1.7	0.4	14.2	7.9
	1989	69.9	1.6	24.0	6.9	13.7	1.0	1.9	0.8	20.0	9.6
	1990	77.5	1.8	24.8	7.4	14.9	1.7	2.9	0.6	23.6	11.4
	1991	82.1	<2.2	26.2	7.7	18.7	1.7	2.9	<2.2	22.8	12.1
	1992	80.2	1.5	29.5	7.5	14.4	0.3	2.8	0.4	23.8	11.6
	1993	77.6	0.7	28.2	7.0	15.9	0.2	2.9	0.4	22.3	11.2
	1994	77.9	0.5	27.3	6.6	16.5	0.2	2.7	0.5	23.6	12.6
1995	81.5	0.4	28.0	6.6	18.9	0.2	2.6	0.4	24.4	13.0	
U.S.A.	1977	1,218.7	89.9	685.6	153.0	142.0	9.6	33.3	8.1	97.3	n.a.
	1978	1,429.9	97.8	804.0	171.8	171.7	10.8	37.7	10.6	125.5	n.a.
	1979	1,753.2	86.4	1,006.1	195.9	235.8	13.5	45.1	21.8	148.7	n.a.
	1980	2,033.9	101.6	1,105.0	217.2	304.2	24.8	62.3	19.7	199.1	n.a.
	1981	2,416.6	127.7	1,300.0	254.0	344.0	18.1	67.9	28.7	276.2	n.a.
	1982	2,448.1	122.2	1,241.6	280.1	397.7	25.4	70.9	25.7	284.4	n.a.
	1983	2,546.5	120.8	1,321.5	269.5	419.8	36.6	68.5	26.6	283.3	n.a.
	1984	2,714.3	125.4	1,381.5	287.4	457.0	42.5	62.0	27.2	331.2	n.a.
	1985	2,862.2	124.8	1,455.2	294.6	481.5	47.4	69.0	30.8	358.8	n.a.
	1986	2,937.9	117.7	1,411.6	308.0	561.1	56.4	74.0	32.1	376.9	n.a.
	1987	3,224.3	114.9	1,542.6	321.9	558.7	83.9	87.4	33.9	481.0	290.3
	1988	3,844.2	127.0	1,828.6	364.8	678.4	98.8	101.9	36.3	608.4	378.6
	1989	4,511.5	135.8	2,138.6	398.7	803.9	94.9	111.6	38.1	789.8	460.7
	1990	4,734.5	149.4	2,220.7	429.9	744.7	53.8	133.3	43.3	959.3	570.3
	1991	4,871.9	137.0	2,233.6	448.3	797.5	57.9	152.9	41.6	1,003.1	615.2
	1992	4,715.4	121.0	2,252.0	438.2	710.9	56.6	153.1	38.0	945.6	593.2
	1993	4,765.6	111.1	2,241.2	450.9	740.9	46.8	152.9	38.4	983.4	589.6
	1994	4,840.5	115.4	2,309.5	438.0	712.8	45.5	152.5	28.7	1,038.1	613.0
1995	4,928.3	105.7	2,276.6	455.6	759.1	45.3	148.2	24.9	1,112.9	633.0	

1995 figures are preliminary; <x=less than x (exact figure not disclosed); n.a.=not available; values between -0.05 and 0.05 are rounded to zero for 1987-1995.

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 3: Gross Property, Plant, and Equipment of Nonbank Affiliates, Selected State by Country of Ultimate Beneficial Owner (US\$ millions)

State, measure-a	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
Hawaii-stock	1977	672	374	1	31	83	<183	<183	n.a.
	1978	742	407	1	37	69	3	225	n.a.
	1979	789	445	1	51	109	5	178	n.a.
	1980	1,020	565	<203	115	119	18	<203	n.a.
	1981	>1,021	664	2	94	134	16	>111	n.a.
	1982	>1,083	758	(D)	96	213	17	(D)	n.a.
	1983	>1,208	1,098	(D)	93	(D)	18	(D)	n.a.
	1984	1,691	1,203	<187	96	187	18	<187	n.a.
	1985	1,777	1,278	102	99	129	20	149	n.a.
	1986	2,013	1,442	109	113	171	32	146	n.a.
	1987	3,474	2,969	125	66	134	66	114	107
	1988	4,990	4,235	136	78	261	73	207	199
	1989	8,224	6,757	666	88	368	97	248	237
	1990	11,830	9,960	(D)	68	759	119	(D)	(D)
	1991	13,921	11,866	736	80	837	139	263	251
	1992	15,454	13,601	738	121	487	209	298	291
	1993	16,030	13,935	867	183	487	217	341	335
	1994	16,185	13,948	858	198	454	230	497	483
	1995	16,102	13,517	1,114	221	500	242	508	488
Hawaii-flow	1978	70	33	0	6	-14	(D)	(D)	n.a.
	1979	47	38	0	14	40	2	-47	n.a.
	1980	231	120	(D)	64	10	13	(D)	n.a.
	1981	(D)	99	(D)	-21	15	-2	(D)	n.a.
	1982	(D)	94	(D)	2	79	1	(D)	n.a.
	1983	(D)	340	(D)	-3	(D)	1	(D)	n.a.
	1984	(D)	105	(D)	3	(D)	0	(D)	n.a.
	1985	86	75	(D)	3	-58	2	(D)	n.a.
	1986	236	164	7	14	42	12	-3	n.a.
	1987	1,461	1,527	16	-47	-37	34	-32	n.a.
	1988	1,516	1,266	11	12	127	7	93	92
	1989	3,234	2,522	530	10	107	24	41	38
	1990	3,606	3,203	(D)	-20	391	22	(D)	(D)
	1991	2,091	1,906	(D)	12	78	20	(D)	(D)
	1992	1,533	1,735	2	41	-350	70	35	40
	1993	576	334	129	62	0	8	43	44
1994	155	13	-9	15	-33	13	156	148	
1995	-83	-431	256	23	46	12	11	5	

Table 3 (2/5)

State, measure-a	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
California-stock	1977	4,746	564	45	743	2,942	162	290	n.a.
	1978	6,408	790	54	1,328	3,633	224	379	n.a.
	1979	11,860	1,043	95	1,644	8,116	487	475	n.a.
	1980	15,117	1,246	112	2,665	9,704	574	816	n.a.
	1981	20,404	1,585	152	4,630	11,847	830	1,360	n.a.
	1982	25,240	2,296	178	5,494	14,210	1,110	1,952	n.a.
	1983	27,601	2,940	238	5,077	15,530	1,279	2,537	n.a.
	1984	31,517	3,907	242	5,304	17,036	1,317	3,711	n.a.
	1985	35,323	4,598	448	5,775	19,130	1,373	3,999	n.a.
	1986	38,321	5,793	681	6,100	20,505	1,237	4,005	n.a.
	1987	44,275	8,464	1,080	6,108	21,536	1,351	5,736	3,474
	1988	52,411	11,702	1,300	7,922	24,591	1,452	5,444	2,952
	1989	63,706	17,054	992	9,563	28,483	1,865	5,749	3,259
	1990	75,768	23,060	1,171	8,954	34,123	2,214	6,246	3,809
	1991	82,334	27,688	1,171	8,972	35,443	2,168	6,892	4,274
	1992	85,661	30,962	1,129	6,915	36,574	2,662	7,419	4,866
	1993	87,300	32,280	1,129	7,766	35,752	2,520	7,853	5,217
1994	92,919	33,649	1,398	8,425	38,112	2,793	8,542	5,773	
1995	95,856	34,341	1,476	9,756	39,649	2,204	8,430	6,078	
California-flow	1978	1,662	226	9	585	691	62	89	n.a.
	1979	5,452	253	41	316	4,483	263	96	n.a.
	1980	3,257	203	17	1,021	1,588	87	341	n.a.
	1981	5,287	339	40	1,965	2,143	256	544	n.a.
	1982	4,836	711	26	864	2,363	280	592	n.a.
	1983	2,361	644	60	-417	1,320	169	585	n.a.
	1984	3,916	967	4	227	1,506	38	1,174	n.a.
	1985	3,806	691	206	471	2,094	56	288	n.a.
	1986	2,998	1,195	233	325	1,375	-136	6	n.a.
	1987	5,954	2,671	399	8	1,031	114	1,731	n.a.
	1988	8,136	3,238	220	1,814	3,055	101	-292	-522
	1989	11,295	5,352	-308	1,641	3,892	413	305	307
	1990	12,062	6,006	179	-609	5,640	349	497	550
	1991	6,566	4,628	0	18	1,320	-46	646	465
	1992	3,327	3,274	-42	-2,057	1,131	494	527	592
	1993	1,639	1,318	0	851	-822	-142	434	351
	1994	5,619	1,369	269	659	2,360	273	689	556
1995	2,937	692	78	1,331	1,537	-589	-112	305	

Table 3 (3/5)

State, measure-a	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
Oregon-stock	1977	209	25	0	78	104	0	2	n.a.
	1978	261	28	0	108	123	0	2	n.a.
	1979	359	28	1	158	168	2	2	n.a.
	1980	559	32	1	222	295	<10	<10	n.a.
	1981	845	34	3	332	391	7	78	n.a.
	1982	939	33	2	355	460	<90	<90	n.a.
	1983	932	54	3	309	454	<113	<113	n.a.
	1984	1,155	177	5	335	517	<122	<122	n.a.
	1985	1,730	197	<125	358	1,046	5	<125	n.a.
	1986	1,637	290	<129	344	870	5	<129	n.a.
	1987	1,812	391	5	362	959	<1	95	33
	1988	2,099	493	<116	419	1,066	6	<116	<116
	1989	2,467	678	37	443	1,224	13	72	51
	1990	3,427	1,100	57	478	1,685	10	97	58
	1991	4,544	1,256	57	560	2,527	32	112	67
	1992	4,741	1,605	14	392	2,555	62	113	56
	1993	4,734	1,624	20	351	2,533	42	164	98
	1994	5,514	1,918	50	287	3,022	55	182	115
1995	5,676	1,969	49	390	3,043	34	191	127	
Oregon-flow	1978	52	3	0	30	19	0	0	n.a.
	1979	98	0	1	50	45	2	0	n.a.
	1980	200	4	0	64	127	(D)	(D)	n.a.
	1981	286	2	2	110	96	(D)	(D)	n.a.
	1982	94	-1	-1	23	69	(D)	(D)	n.a.
	1983	-7	21	1	-46	-6	(D)	(D)	n.a.
	1984	223	123	2	26	63	(D)	(D)	n.a.
	1985	575	20	(D)	23	529	(D)	(D)	n.a.
	1986	-93	93	(D)	-14	-176	0	(D)	n.a.
	1987	175	101	(D)	18	89	(D)	(D)	n.a.
	1988	287	102	(D)	57	107	(D)	(D)	(D)
	1989	368	185	(D)	24	158	7	(D)	(D)
	1990	960	422	20	35	461	-3	25	7
	1991	1,117	156	0	82	842	22	15	9
	1992	197	349	-43	-168	28	30	1	-11
	1993	-7	19	6	-41	-22	-20	51	42
1994	780	294	30	-64	489	13	18	17	
1995	162	51	-1	103	21	-21	9	12	

Table 3 (4/5)

State, measure-a	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, sub-total-c	Other, Asia & Pacific
Washington-stock	1977	721	170	1	136	413	0	1	n.a.
	1978	973	264	2	215	486	0	6	n.a.
	1979	1,264	384	6	291	539	9	35	n.a.
	1980	1,617	498	8	482	624	1	4	n.a.
	1981	2,430	543	52	770	1,044	1	20	n.a.
	1982	2,788	575	62	883	1,121	<148	<148	n.a.
	1983	2,871	650	69	1,124	875	<154	<154	n.a.
	1984	2,969	717	73	1,096	866	<218	<218	n.a.
	1985	3,680	830	84	773	1,766	<228	<228	n.a.
	1986	3,301	679	95	1,094	1,118	<316	<316	n.a.
	1987	3,588	796	88	1,103	1,290	52	259	132
	1988	4,803	1,118	176	1,323	1,729	58	399	266
	1989	6,082	1,523	192	1,455	2,466	104	342	257
	1990	7,985	2,514	258	1,840	2,832	85	456	361
	1991	9,673	3,211	224	2,226	3,468	67	477	377
	1992	10,155	3,420	165	1,464	4,139	359	608	429
	1993	10,294	3,639	199	1,453	4,180	326	497	394
	1994	10,676	4,065	143	1,509	4,104	325	530	431
1995	11,214	4,175	152	1,722	4,325	310	530	431	
Washington-flow	1978	252	94	1	79	73	0	5	n.a.
	1979	291	120	4	76	53	9	29	n.a.
	1980	353	114	2	191	85	-8	-31	n.a.
	1981	813	45	44	288	420	0	16	n.a.
	1982	358	32	10	113	77	(D)	(D)	n.a.
	1983	83	75	7	241	-246	(D)	(D)	n.a.
	1984	98	67	4	-28	-9	(D)	(D)	n.a.
	1985	711	113	11	-323	900	(D)	(D)	n.a.
	1986	-379	-151	11	321	-648	(D)	(D)	n.a.
	1987	287	117	-7	9	172	(D)	(D)	n.a.
	1988	1,215	322	88	220	439	6	140	134
	1989	1,279	405	16	132	737	46	-57	-9
	1990	1,903	991	66	385	366	-19	114	104
	1991	1,688	697	-34	386	636	-18	21	16
	1992	482	209	-59	-762	671	292	131	52
	1993	139	219	34	-11	41	-33	-111	-35
	1994	382	426	-56	56	-76	-1	33	37
1995	538	110	9	213	221	-15	0	0	

Table 3 (5/5)

State, measure-a	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
U.S.A.-stock	1977	66,785	2,691	552	11,582	48,225	2,429	1,306	n.a.
	1978	80,633	3,484	833	14,072	57,947	2,397	1,900	n.a.
	1979	101,209	4,401	1,032	16,830	73,556	2,896	2,494	n.a.
	1980	127,838	5,287	1,268	23,141	90,283	4,094	3,765	n.a.
	1981	187,956	6,803	3,073	47,968	117,783	5,571	6,758	n.a.
	1982	225,235	8,666	3,850	57,360	137,625	6,983	10,751	n.a.
	1983	244,012	10,892	4,407	61,928	144,516	8,710	13,559	n.a.
	1984	269,462	15,508	5,667	64,824	156,865	9,669	16,929	n.a.
	1985	295,181	18,438	7,169	67,984	173,263	10,132	18,195	n.a.
	1986	320,215	22,964	10,174	72,757	178,453	11,233	24,634	n.a.
	1987	353,278	32,950	9,750	74,118	196,200	10,440	29,820	7,035
	1988	418,069	48,603	10,994	89,976	224,229	10,916	33,351	6,674
	1989	489,461	70,931	17,514	99,616	252,431	14,488	34,481	10,340
	1990	578,355	98,891	21,612	105,890	294,386	16,687	40,889	13,032
	1991	640,140	119,231	21,055	108,255	328,001	17,884	45,714	13,852
	1992	660,826	134,784	13,803	95,955	345,805	19,544	50,935	15,617
	1993	705,665	143,770	13,648	103,492	368,499	21,428	54,828	16,688
1994	754,383	156,203	11,920	105,913	393,848	24,629	61,870	18,853	
1995	766,937	164,076	12,498	83,387	415,619	25,199	66,158	21,065	
U.S.A.-flow	1978	13,848	793	281	2,490	9,722	-32	594	n.a.
	1979	20,576	917	199	2,758	15,609	499	594	n.a.
	1980	26,629	886	236	6,311	16,727	1,198	1,271	n.a.
	1981	60,118	1,516	1,805	24,827	27,500	1,477	2,993	n.a.
	1982	37,279	1,863	777	9,392	19,842	1,412	3,993	n.a.
	1983	18,777	2,226	557	4,568	6,891	1,727	2,808	n.a.
	1984	25,450	4,616	1,260	2,896	12,349	959	3,370	n.a.
	1985	25,719	2,930	1,502	3,160	16,398	463	1,266	n.a.
	1986	25,034	4,526	3,005	4,773	5,190	1,101	6,439	n.a.
	1987	33,063	9,986	-424	1,361	17,747	-793	5,186	n.a.
	1988	64,791	15,653	1,244	15,858	28,029	476	3,531	-361
	1989	71,392	22,328	6,520	9,640	28,202	3,572	1,130	3,666
	1990	88,894	27,960	4,098	6,274	41,955	2,199	6,408	2,692
	1991	61,785	20,340	-557	2,365	33,615	1,197	4,825	820
	1992	20,686	15,553	-7,252	-12,300	17,804	1,660	5,221	1,765
1993	44,839	8,986	-155	7,537	22,694	1,884	3,893	1,071	
1994	48,718	12,433	-1,728	2,421	25,349	3,201	7,042	2,165	
1995	12,554	7,873	578	-22,526	21,771	570	4,288	2,212	

1995 figures are preliminary; >x or <x=greater or less than x (exact figure not disclosed);

(D)=not disclosed; n.a.=not available; values between -0.5 and 0.5 are rounded to zero.

a-Stocks are book values as given in the source. Flows are annual changes (first differences of stocks).

b-Figures for Australia include New Zealand and South Africa for 1977-1986 but exclude these countries for 1987-1995.

c-Figures for Other subtotal include New Zealand and South Africa for 1987-1995 but exclude these countries for 1977-1986. Figures for Other subtotal include Middle East, Africa less South Africa, Other Asia & Pacific less New Zealand, and United States for all years.

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 4: Employment of Nonbank Affiliates, Selected State by Country of Ultimate Beneficial Owner (thousands)

State	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
Hawaii	1977	11.4	7.3	0.1	0.3	0.5	<3.2	<3.2	n.a.
	1978	11.9	7.2	<0.5	0.4	0.8	<0.5	3.1	n.a.
	1979	14.7	8.6	<0.8	0.6	1.3	<0.8	3.4	n.a.
	1980	15.5	9.0	<4.3	0.7	1.5	<4.3	<4.3	n.a.
	1981	17.0	9.1	<4.6	0.7	1.6	1.1	<4.6	n.a.
	1982	16.4	9.3	0.4	0.6	2.2	<3.9	<3.9	n.a.
	1983	16.3	9.7	<3.6	0.6	1.7	0.7	<3.6	n.a.
	1984	16.5	9.8	<3.2	0.5	2.2	0.8	<3.2	n.a.
	1985	18.7	11.7	<4.1	0.5	1.6	0.8	<4.1	n.a.
	1986	18.4	10.9	1.1	0.7	1.8	2.1	1.8	n.a.
	1987	27.3	20.6	1.4	0.7	1.0	(D)	(D)	0.8
	1988	34.8	24.3	1.5	0.8	3.2	3.5	1.5	1.4
	1989	45.0	30.3	2.6	0.8	4.0	3.7	3.6	3.2
	1990	53.0	36.0	2.7	0.7	6.2	3.6	3.8	3.6
	1991	56.0	38.3	3.2	0.7	6.1	4.0	3.7	3.3
	1992	53.8	36.5	3.3	0.5	6.5	4.0	3.0	2.3
1993	52.4	37.5	3.5	1.5	3.6	4.0	2.3	2.1	
1994	50.8	37.0	1.4	1.4	4.0	4.7	2.3	2.0	
1995	49.8	35.4	1.8	1.5	4.4	4.8	1.9	1.5	
California	1977	124.2	21.7	4.0	18.7	72.4	4.3	3.2	n.a.
	1978	155.4	29.5	4.8	22.8	89.0	6.0	3.2	n.a.
	1979	205.2	34.1	5.9	29.4	115.4	15.3	5.0	n.a.
	1980	219.6	34.8	5.9	25.6	132.7	15.1	5.5	n.a.
	1981	248.4	39.8	8.0	29.4	142.1	14.0	15.1	n.a.
	1982	249.0	42.6	6.7	25.6	144.9	16.2	13.1	n.a.
	1983	255.6	47.5	7.8	24.5	148.7	14.4	12.6	n.a.
	1984	274.4	54.3	7.8	27.1	155.8	15.2	14.2	n.a.
	1985	298.8	61.2	11.7	30.1	170.2	11.4	14.2	n.a.
	1986	289.2	61.0	13.4	34.8	153.8	12.4	13.8	n.a.
	1987	334.9	71.3	14.7	34.0	174.2	13.0	27.7	22.4
	1988	407.1	86.6	14.7	60.2	211.0	13.7	20.9	14.2
	1989	514.9	109.4	20.0	63.8	265.6	32.7	23.4	15.6
	1990	555.9	134.3	21.9	63.6	290.2	17.7	28.2	22.2
	1991	561.1	152.4	18.5	63.2	280.2	17.5	29.3	24.0
	1992	522.7	146.4	17.5	35.7	269.9	17.7	35.5	25.9
1993	528.6	144.7	16.5	50.3	265.3	18.7	33.1	25.7	
1994	536.4	142.9	11.9	52.7	270.6	20.9	37.4	27.7	
1995	549.6	144.3	13.5	69.2	266.7	16.5	39.4	31.1	
Oregon	1977	5.1	0.5	0.0	1.7	2.7	0.0	0.1	n.a.
	1978	5.9	0.6	0.0	1.7	3.4	<0.2	<0.2	n.a.
	1979	8.8	0.6	0.2	2.9	4.9	0.0	0.2	n.a.
	1980	10.2	<1.2	<1.2	2.2	6.9	0.0	<1.2	n.a.
	1981	13.1	<2.1	<2.1	2.7	8.3	0.0	<2.1	n.a.
	1982	13.5	0.9	0.3	3.1	8.7	<0.5	<0.5	n.a.
	1983	14.6	1.0	0.3	2.6	10.1	<0.5	<0.5	n.a.
	1984	15.5	1.1	0.2	2.8	10.9	<0.5	<0.5	n.a.
	1985	18.6	1.1	0.4	2.8	13.7	0.1	0.5	n.a.
	1986	17.4	1.8	0.4	4.2	10.4	0.2	0.4	n.a.
	1987	21.0	3.2	1.2	4.1	11.9	0.2	0.4	0.2
1988	25.1	4.2	1.5	4.5	14.0	0.2	0.7	0.5	
1989	30.8	7.1	1.6	3.6	16.6	0.9	1.0	0.7	

Table 4 (2/2)

State	Year	All countries	Japan	Australia, etc.-b	Canada	Europe	Latin America	Other, subtotal-c	Other, Asia & Pacific
Washington	1991	41.9	10.3	1.7	5.3	22.4	0.8	1.4	1.0
	1992	41.9	11.8	1.2	3.6	23.3	1.1	0.9	0.8
	1993	42.5	12.0	1.0	3.5	24.0	0.9	1.1	0.9
	1994	46.7	13.6	0.7	3.7	26.5	0.7	1.5	1.0
	1995	47.6	12.2	0.9	5.9	26.6	0.5	1.5	0.9
	1977	11.9	1.4	0.1	2.7	7.6	0.0	0.1	n.a.
	1978	15.2	2.0	0.2	3.2	9.8	0.1	0.1	n.a.
	1979	17.8	2.4	0.5	3.6	11.0	0.1	0.1	n.a.
	1980	21.1	2.6	0.5	4.2	13.5	<0.3	<0.3	n.a.
	1981	26.0	2.9	1.3	4.4	16.8	0.1	0.4	n.a.
	1982	26.3	2.7	1.0	4.2	17.6	<0.9	<0.9	n.a.
	1983	31.5	4.2	1.2	5.7	18.8	<1.7	<1.7	n.a.
	1984	32.6	4.7	1.3	6.1	18.6	<2.0	<2.0	n.a.
	1985	35.5	5.4	1.6	4.9	21.7	<2.0	<2.0	n.a.
	1986	35.0	4.1	2.1	12.2	15.0	<1.7	<1.7	n.a.
	1987	40.6	5.8	2.3	11.8	17.6	1.2	1.9	0.5
	1988	55.8	9.7	2.8	13.1	25.5	1.3	3.4	1.8
	1989	69.9	10.1	5.0	13.6	33.0	4.2	4.0	2.2
	1990	77.5	12.2	5.2	15.0	38.8	(D)	(D)	3.0
	1991	82.1	15.0	3.8	15.6	41.9	1.1	4.7	3.0
1992	80.2	16.7	3.5	8.8	43.3	1.3	6.6	3.5	
1993	77.6	17.4	3.5	9.6	42.4	0.9	3.8	2.0	
1994	77.9	16.3	1.5	10.9	43.4	1.3	4.5	2.2	
1995	81.5	15.7	1.5	15.0	43.6	1.2	4.5	2.2	
U.S.A.	1977	1,218.7	76.2	19.6	189.3	855.6	54.5	23.6	n.a.
	1978	1,429.9	89.9	21.8	221.2	1,013.4	54.7	28.8	n.a.
	1979	1,753.2	105.9	28.1	255.5	1,266.0	60.1	37.5	n.a.
	1980	2,033.9	115.3	29.2	290.0	1,477.1	74.5	47.9	n.a.
	1981	2,416.6	138.1	49.4	437.4	1,628.4	74.7	88.6	n.a.
	1982	2,448.1	139.9	53.9	455.4	1,640.4	73.7	84.8	n.a.
	1983	2,546.5	164.1	53.7	473.5	1,658.0	96.0	101.2	n.a.
	1984	2,714.3	190.0	63.0	507.1	1,735.6	114.7	103.8	n.a.
	1985	2,862.2	212.8	73.3	527.5	1,806.0	122.1	120.4	n.a.
	1986	2,937.9	220.8	91.5	609.2	1,783.2	128.0	105.2	n.a.
	1987	3,224.3	303.2	91.7	592.9	1,940.4	148.5	147.6	61.1
	1988	3,844.2	427.1	97.6	737.9	2,301.3	119.3	161.0	59.7
	1989	4,511.5	528.0	155.1	721.4	2,711.1	227.7	168.2	78.4
	1990	4,734.5	629.2	166.2	739.1	2,894.6	134.5	170.9	95.2
	1991	4,871.9	719.4	155.0	724.1	2,979.5	133.2	160.7	85.2
1992	4,715.4	727.6	138.3	587.5	2,894.9	129.7	237.4	92.5	
1993	4,765.6	731.1	140.1	669.9	2,889.7	141.3	193.5	95.2	
1994	4,840.5	744.8	70.5	661.9	2,974.0	159.1	230.2	108.1	
1995	4,928.3	758.2	73.6	703.7	2,981.0	168.1	243.7	122.8	

1995 figures are preliminary; <x=less than x (exact figure not disclosed); n.a.=not available; values between -0.05 and 0.05 are rounded to zero for 1987-1995.

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 5: Number of Nonbank Affiliates with Gross Property, Plant, and Equipment (=PPE), Selected State by PPE Size Class (number)

State	Year	Total	Small	Small-medium	Medium-large	Large
Hawaii	1977	125	72	35	16	2
	1978	144	85	43	12	4
	1979	155	90	43	19	3
	1980	179	96	60	19	4
	1981	191	101	64	21	5
	1982	207	111	59	32	5
	1983	212	115	60	30	7
	1984	215	116	60	32	7
	1985	223	120	62	35	6
	1986	239	121	73	36	9
	1987	256	130	75	43	8
	1988	306	140	98	55	13
	1989	377	153	121	83	20
	1990	449	167	146	105	31
	1991	500	189	158	120	33
	1992	685	223	276	151	35
	1993	690	219	283	152	36
1994	691	220	283	153	35	
1995	684	222	291	138	33	
California	1977	1,026	633	311	70	12
	1978	1,203	704	391	89	19
	1979	1,309	719	457	107	26
	1980	1,649	836	636	143	34
	1981	1,852	878	739	185	50
	1982	2,051	923	844	218	66
	1983	2,149	939	895	233	82
	1984	2,241	935	941	272	93
	1985	2,301	927	973	299	102
	1986	2,369	931	998	323	117
	1987	2,197	882	824	403	88
	1988	2,394	907	912	476	99
	1989	2,729	953	1,064	590	122
	1990	3,018	990	1,172	699	157
	1991	3,168	1,027	1,220	759	162
	1992	3,478	1,325	1,187	799	167
	1993	3,561	1,324	1,242	826	169
1994	3,609	1,329	1,296	813	171	
1995	3,554	1,303	1,264	823	164	
Oregon	1977	135	103	29	3	0
	1978	162	118	41	2	1
	1979	172	124	42	5	1
	1980	210	148	53	6	3
	1981	250	165	71	8	6
	1982	267	176	75	10	6
	1983	280	188	74	13	5
	1984	294	184	88	15	7
	1985	318	205	85	20	8
1986	329	205	90	24	10	

Table 5 (2/2)

State	Year	Total	Small	Small-medium	Medium-large	Large
Oregon (con'd)	1987	331	213	82	33	3
	1988	360	217	97	43	3
	1989	409	236	119	51	3
	1990	470	266	136	61	7
	1991	499	275	148	68	8
	1992	513	280	153	72	8
	1993	544	292	168	76	8
	1994	537	290	170	69	8
	1995	535	290	164	71	10
Washington	1977	225	159	51	11	4
	1978	264	173	69	17	5
	1979	295	184	84	23	4
	1980	367	227	110	23	7
	1981	416	245	119	45	7
	1982	448	252	137	49	10
	1983	470	270	143	46	11
	1984	491	274	156	51	10
	1985	510	284	163	53	10
	1986	531	292	169	59	11
	1987	541	304	166	66	5
	1988	596	311	194	83	8
	1989	681	331	227	111	12
	1990	783	386	252	127	18
	1991	832	392	281	138	21
	1992	875	417	283	155	20
	1993	906	439	286	162	19
1994	920	452	290	158	20	
1995	919	439	308	149	23	
United States	1977	3,827	1,730	1,532	399	166
	1978	4,580	1,990	1,906	488	196
	1979	5,168	2,039	2,307	575	247
	1980	6,822	2,583	3,184	738	317
	1981	7,756	2,632	3,788	917	419
	1982	8,499	2,685	4,249	1,055	510
	1983	8,860	2,698	4,405	1,185	572
	1984	9,171	2,675	4,591	1,282	623
	1985	9,392	2,637	4,708	1,368	679
	1986	9,656	2,567	4,902	1,436	751
	1987	7,451	1,861	3,414	1,669	507
	1988	7,928	1,813	3,614	1,916	585
	1989	8,718	1,788	3,952	2,287	691
	1990	9,517	1,812	4,257	2,632	816
	1991	9,971	1,841	4,439	2,806	885
	1992	10,882	2,555	4,467	2,925	935
	1993	11,125	2,604	4,570	2,965	986
1994	11,333	2,624	4,646	3,061	1,002	
1995	11,214	2,587	4,600	3,029	998	

1995 figures are preliminary.

Small firms have PPE of less than \$1 million; small-medium firms have PPE greater than or equal to \$1 million and less than \$10 million; medium-large firms have PPE greater than or equal to \$10 million and less than \$50 million in 1977-1986 or less than \$100 million in 1987-1995; large firms are firms with PPE greater than or equal to \$50 million in 1977-1986 or greater than or equal to \$100 million in 1987-1995.

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 6: Number of Nonbank Affiliates with Employment by Employment Size Class (number)

State	Year	Total	Small	Small-medium	Medium-large	Large
Hawaii	1977	131	65	49	15	2
	1978	143	72	51	17	3
	1979	161	77	59	22	3
	1980	173	79	65	26	3
	1981	179	79	68	29	3
	1982	183	79	74	27	3
	1983	190	89	70	28	3
	1984	191	87	75	26	3
	1985	192	84	75	30	3
	1986	199	86	82	28	3
	1987	215	92	87	28	8
	1988	261	119	92	42	8
	1989	306	136	102	58	10
	1990	359	160	123	63	13
	1991	384	166	137	67	14
	1992	448	200	157	77	14
	1993	459	208	160	79	12
1994	471	226	152	83	10	
1995	467	223	152	79	13	
California	1977	1,103	514	387	174	28
	1978	1,246	584	413	213	36
	1979	1,319	582	460	229	48
	1980	1,505	657	534	266	48
	1981	1,639	704	584	297	54
	1982	1,749	751	623	329	46
	1983	1,804	750	658	347	49
	1984	1,871	766	673	383	49
	1985	1,905	767	691	391	56
	1986	1,971	772	726	413	60
	1987	2,040	729	799	432	80
	1988	2,188	735	862	499	92
	1989	2,413	763	951	590	109
	1990	2,661	867	1,009	667	118
	1991	2,813	906	1,098	685	124
	1992	3,189	1,142	1,248	689	110
	1993	3,249	1,154	1,279	711	105
1994	3,294	1,186	1,262	747	99	
1995	3,253	1,167	1,245	737	104	
Oregon	1977	207	139	56	12	0
	1978	239	161	66	12	0
	1979	257	160	80	17	0
	1980	299	189	88	21	1
	1981	332	218	92	21	1
	1982	340	219	96	24	1
	1983	356	234	98	23	1
	1984	375	244	102	28	1
	1985	384	243	112	27	2
	1986	400	243	120	36	1

Table 6 (2/2)

State	Year	Total	Small	Small-medium	Medium-large	Large
Oregon (con'd)	1987	409	235	126	47	1
	1988	454	251	144	57	2
	1989	486	242	181	60	3
	1990	571	303	192	72	4
	1991	591	289	215	83	4
	1992	611	297	228	83	3
	1993	638	315	234	86	3
	1994	652	334	226	88	4
	1995	647	330	227	84	6
Washington	1977	338	224	87	27	0
	1978	384	244	103	36	1
	1979	425	262	122	40	1
	1980	504	310	149	44	1
	1981	530	319	165	43	3
	1982	565	352	166	44	3
	1983	584	352	175	53	4
	1984	610	353	196	57	4
	1985	623	359	197	63	4
	1986	655	376	202	75	2
	1987	659	358	216	81	4
	1988	742	384	249	100	9
	1989	836	417	292	114	13
	1990	917	462	311	130	14
	1991	981	495	334	136	16
	1992	1,030	529	339	148	14
	1993	1,061	552	340	157	12
1994	1,072	555	356	150	11	
1995	1,069	544	364	149	12	
United States	1977	2,999	726	1,232	837	204
	1978	3,410	852	1,376	960	222
	1979	3,694	884	1,502	1,040	268
	1980	4,419	1,214	1,752	1,136	317
	1981	4,790	1,257	1,911	1,251	371
	1982	5,121	1,389	2,064	1,295	373
	1983	5,288	1,449	2,082	1,368	389
	1984	5,407	1,401	2,132	1,463	411
	1985	5,528	1,419	2,152	1,523	434
	1986	5,716	1,415	2,224	1,625	452
	1987	5,525	1,311	2,121	1,567	526
	1988	5,867	1,290	2,235	1,740	602
	1989	6,407	1,382	2,406	1,936	683
	1990	6,959	1,499	2,595	2,120	745
	1991	7,303	1,553	2,731	2,269	750
	1992	8,489	2,057	3,277	2,397	758
	1993	8,631	2,094	3,346	2,423	768
1994	8,773	2,158	3,333	2,514	768	
1995	8,678	2,159	3,251	2,485	783	

1995 figures are preliminary.

For 1977-1986, small=1-10 employees, small-medium=11-100 employees, medium-large=101-1,000 employees, and large=1,001 or more employees.

For 1987-1995, small=1-9 employees, small-medium=10-99 employees, medium-large=100-999 employees, and large=1,000 or more employees.

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 7: Gross Property, Plant, and Equipment of Nonbank Affiliates,
Selected State by Use (US\$ millions)

State, measure-a	Year	Total	Commercial Property-b	Other
Hawaii, stocks	1987	3,474	2,848	626
	1988	4,990	3,316	1,674
	1989	8,224	5,169	3,056
	1990	11,830	8,599	3,231
	1991	13,921	9,923	3,998
	1992	15,454	10,939	4,515
	1993	16,030	10,828	5,202
	1994	16,185	11,210	4,975
	1995	16,102	10,983	5,119
Hawaii, flows	1988	1,516	468	1,048
	1989	3,234	1,853	1,382
	1990	3,606	3,430	175
	1991	2,091	1,324	767
	1992	1,533	1,016	517
	1993	576	-111	687
	1994	155	382	-227
	1995	-83	-227	144
California, stocks	1987	44,275	17,848	26,427
	1988	52,411	19,876	32,534
	1989	63,706	23,809	39,896
	1990	75,768	30,788	44,981
	1991	82,334	34,507	47,827
	1992	85,661	37,293	48,368
	1993	87,300	37,045	50,255
	1994	92,919	36,435	56,484
	1995	95,856	35,861	59,994
California, flows	1988	8,136	2,028	6,107
	1989	11,295	3,933	7,362
	1990	12,062	6,979	5,085
	1991	6,566	3,719	2,846
	1992	3,327	2,786	541
	1993	1,639	-248	1,887
	1994	5,619	-610	6,229
	1995	2,937	-574	3,510
Oregon, stocks	1987	1,812	581	1,231
	1988	2,099	554	1,545
	1989	2,467	673	1,794
	1990	3,427	990	2,438
	1991	4,544	1,089	3,455
	1992	4,741	1,053	3,688
	1993	4,734	961	3,773
	1994	5,514	1,044	4,471
1995	5,676	965	4,712	

Table 7 (2/2)

State, measure-a	Year	Total	Commercial Property-b	Other
Oregon, flows	1988	287	-27	314
	1989	368	119	249
	1990	960	317	644
	1991	1,117	99	1,017
	1992	197	-36	233
	1993	-7	-92	85
	1994	780	83	698
	1995	162	-79	241
Washington, stocks	1987	3,588	1,153	2,435
	1988	4,803	1,372	3,431
	1989	6,082	1,645	4,437
	1990	7,985	2,010	5,975
	1991	9,673	2,628	7,045
	1992	10,155	2,835	7,320
	1993	10,294	2,705	7,589
	1994	10,676	2,689	7,987
Washington, flows	1988	1,215	219	996
	1989	1,279	273	1,006
	1990	1,903	365	1,538
	1991	1,688	618	1,070
	1992	482	207	275
	1993	139	-130	269
	1994	382	-16	398
	1995	538	-38	576
U.S.A., stocks	1987	353,278	89,919	263,359
	1988	418,069	104,048	314,020
	1989	489,461	124,839	364,621
	1990	578,355	146,520	431,835
	1991	640,140	165,759	474,381
	1992	660,826	172,613	488,213
	1993	705,665	173,867	531,798
	1994	754,383	173,118	581,265
U.S.A., flows	1988	64,791	14,129	50,661
	1989	71,392	20,791	50,601
	1990	88,894	21,681	67,214
	1991	61,785	19,239	42,546
	1992	20,686	6,854	13,832
	1993	44,839	1,254	43,585
	1994	48,718	-749	49,467
	1995	12,554	-5,642	18,196

Values between -0.5 and 0.5 are rounded to zero.

a-Stocks are book values as given in the source. Flows are annual changes (first differences) of stocks.

b-Commercial property is the gross book value of all commercial buildings and associated land owned by the affiliate, including apartment buildings, office buildings, hotels, motels, and buildings used for wholesale, retail, and services trades (e.g., shopping centers, recreational facilities, department stores, bank buildings, restaurants, public garages, and automobile service stations).

Sources: U.S. Department of Commerce (1990, 1995, various years).

Table 8: The Number of Foreign Establishments, the Ratio of Foreign to All Establishments, and the Number of Japanese Establishments in Hawaii, by Industry and Year

SIC Code	Industry	Foreign Establishments (number)		Ratio of Foreign to All Establishments (percent)		Japanese Establishments (number)	
		1987	1992	1987	1992	1987	1992
	All industries	453	1,030	1.7	3.6	206	565
	Agr. services, forestry, fishing	0	2	0.0	0.6	1	n.a.
	Mining	3	n.a.	33.3	n.a.	10	n.a.
	Construction	17	39	0.9	1.5	n.a.	27
15	General building contractors	4	8	0.6	0.8	2	6
16	Heavy construction, except bldgs	1	1	0.9	1.1	1	1
17	Special trade contractors	6	15	0.5	1.0	n.a.	7
6552	Land subdividers, developers	6	15	15.4	14.7	n.a.	13
	Manufacturing	29	27	2.8	2.6	6	8
20	Food and kindred products	3	6	1.3	2.6	n.a.	5
23	Apparel, other textile prod.	2	n.a.	1.1	n.a.	n.a.	n.a.
27	Printing and publishing	3	4	1.6	2.0	1	1
29	Petroleum and coal products	n.a.	1	n.a.	33.3	n.a.	n.a.
32	Stone, clay, and glass prod.	9	6	16.7	11.8	n.a.	n.a.
	Administrative and auxiliary	5	3	21.7	14.3	n.a.	n.a.
	Transportation, public utilities	19	68	1.6	4.3	11	43
41	Local, interurban passenger	n.a.	4	n.a.	3.4	n.a.	4
42	Trucking and warehousing	3	n.a.	1.4	n.a.	2	n.a.
44	Water transportation	n.a.	4	n.a.	4.1	n.a.	n.a.
45	Transportation by air	3	5	2.9	3.5	n.a.	n.a.
47	Transportation services	11	34	2.0	5.4	8	28
472	Passenger transp. arrangement	7	26	1.4	4.7	7	26
4724	Travel agencies	4	7	1.2	1.9	4	7
4725+4729	Tour operators, other	3	19	1.9	10.1	3	19
4725	Tour operators	2	18	1.8	11.2	2	18
4729	Other arrangements	1	n.a.	2.0	n.a.	1	n.a.
473	Freight transp. arrangement	4	n.a.	7.4	n.a.	n.a.	n.a.
	Wholesale trade	70	105	3.5	4.7	20	30
50	Durable goods	36	58	3.5	5.1	11	18
504	Professional, commercial equip.	n.a.	9	n.a.	5.0	n.a.	n.a.
506	Electrical goods	7	9	6.0	6.9	7	7
5064	Electrical appli., tvs, radios	7	5	21.2	15.6	7	5
507	Hardware, plumbing, heating	n.a.	14	n.a.	13.1	n.a.	n.a.
508	Machinery, equipment, supplies	13	11	9.0	7.2	n.a.	n.a.
51	Nondurable goods	30	43	3.1	4.0	8	11
511	Paper and paper products	n.a.	6	n.a.	6.0	n.a.	n.a.
514	Groceries, related products	n.a.	10	n.a.	2.5	n.a.	8
516	Chemicals and allied products	8	n.a.	20.5	n.a.	n.a.	n.a.
517	Petroleum, petroleum products	n.a.	11	n.a.	19.6	n.a.	n.a.
	Administrative and auxiliary	4	n.a.	21.1	n.a.	n.a.	n.a.
	Retail trade	186	437	2.6	5.5	75	209
52	Building mater., garden supplies	5	8	3.4	5.1	n.a.	n.a.
53	General merchandise stores	12	14	7.9	9.5	7	6
531	Department stores	6	n.a.	23.1	n.a.	6	6
539	Miscellaneous	6	14	7.5	15.2	n.a.	6
54	Food stores	8	71	0.9	8.2	7	68
541	Grocery stores	2	59	0.3	9.8	n.a.	56
546	Retail bakeries	n.a.	8	n.a.	6.9	n.a.	8
55-554	Automotive dealers	13	25	4.6	8.7	n.a.	22
554	Gasoline service stations	n.a.	44	n.a.	13.5	n.a.	n.a.
56	Apparel and accessory stores	12	55	1.2	5.0	n.a.	14
562	Women's clothing	n.a.	11	n.a.	3.4	n.a.	1
563	Women's accessories, specialties	n.a.	12	n.a.	14.3	n.a.	9
565	Family clothing	n.a.	15	n.a.	6.1	n.a.	n.a.

Table 8 (continued, 2/2)

SIC Code	Industry	Foreign Establishments (number)		Ratio of Foreign to All Establishments (percent)		Japanese Establishments (number)	
		1987	1992	1987	1992	1987	1992
58	Eating and drinking places	76	146	3.4	5.7	32	62
5812	Eating places	74	145	3.9	6.4	30	61
59-591	Miscellaneous retail stores	42	45	2.5	2.6	11	18
594	Miscellaneous shopping goods	35	42	3.3	3.9	n.a.	16
5944	Jewelry stores	27	18	7.4	4.5	n.a.	n.a.
5945	Hobby, toy, game shops	n.a.	5	n.a.	10.9	n.a.	5
5948	Luggage, leather goods stores	3	6	30.0	24.0	n.a.	n.a.
598	Fuel dealers	n.a.	2	n.a.	66.7	n.a.	n.a.
5999	Miscellaneous retail, nec	2	n.a.	1.4	n.a.	2	n.a.
	Administrative and auxiliary	12	26	8.9	16.5	3	12
	Finance, insurance, real estate	68	175	2.0	4.3	n.a.	140
60	Banking	19	27	7.2	4.7	18	23
63	Insurance carriers	9	20	3.5	14.5	n.a.	9
631	Life insurance	5	5	9.3	9.4	n.a.	1
633	Fire, marine, casualty insurance	n.a.	14	n.a.	27.5	n.a.	8
64	Insurance agents, brokers, serv.	4	10	1.2	2.7	n.a.	n.a.
65	Real estate	25	90	1.3	3.7	18	82
651	Operators and lessors	11	50	1.2	6.9	8	46
6512	Nonresidential buildings	n.a.	30	n.a.	8.8	n.a.	27
6513	Apartment buildings	n.a.	12	n.a.	4.3	n.a.	12
653	Agents and managers	6	24	0.7	1.5	n.a.	22
654+655	Other real estate	n.a.	16	n.a.	12.1	n.a.	14
655	Subdividers and developers	7	15	6.8	12.6	n.a.	13
	Services	65	191	0.9	2.2	42	120
	Services excl. admin., auxil.	n.a.	174	n.a.	2.1	n.a.	112
70-704	Lodging places, excl memberships	35	65	14.8	24.3	26	55
7011	Hotels, motels	35	65	15.3	25.4	26	55
72	Personal services	n.a.	4	n.a.	0.5	n.a.	n.a.
73	Business services	12	36	1.1	2.7	n.a.	9
75	Auto repair, services, parking	4	9	0.6	1.3	4	n.a.
751	Auto rentals without drivers	4	5	4.0	6.1	4	n.a.
7514+7515	Passenger car rentals	4	5	4.7	7.4	4	n.a.
78+79+84	Amusement, recreation services	3	31	0.6	4.5	3	30
79-792-793+84	Commercial sports, other	3	30	0.9	6.8	3	30
79-792-793-794+84	Other amusement	3	30	1.0	6.9	3	30
7992	Public golf courses	2	19	11.8	61.3	2	19
7997	Membership sports&rec. clubs	1	5	5.0	25.0	1	5
80	Health services	n.a.	6	n.a.	0.3	n.a.	n.a.
807	Medical, dental laboratories	n.a.	6	n.a.	8.5	n.a.	n.a.
8071	Medical laboratories	n.a.	6	n.a.	18.2	n.a.	n.a.
87-8733	Engineering, accounting, etc.	n.a.	19	n.a.	1.6	n.a.	11
871	Engineering, architectural, etc.	n.a.	4	n.a.	0.8	n.a.	n.a.
8711	Engineering services	n.a.	4	n.a.	1.5	n.a.	n.a.
872	Accounting, auditing, bookkeeping	n.a.	3	n.a.	0.7	n.a.	3
874	Management, public relations	n.a.	10	n.a.	3.5	n.a.	n.a.
8741	Management services	n.a.	7	n.a.	6.9	n.a.	n.a.
	Administrative and auxiliary	n.a.	17	n.a.	30.4	n.a.	8
	Private education & noncommercial	0	n.a.	0.0	n.a.	n.a.	n.a.
	Unclassified	2	n.a.	0.2	n.a.	1	n.a.

(D)=not disclosed; n.a.=not available.

Sources: U.S. Bureau of the Census (1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h), U.S. Department of Commerce (1992, 1997).

Table 9: Employment of Foreign Establishments, the Ratio of Foreign to All Establishments in Terms of Employment, and Employment of Japanese Establishments in Hawaii, by Industry and Year

Industry	Employment of Foreign Establishments (number)		Ratio of Foreign to All Establish. (percent)		Employment of Japanese Establishments (number)	
	1987	1992	1987	1992	1987	1992
All industries	26,220	53,799	7.2	13.1	18,281	36,829
Agr. services, forestry, fishing	0	100-249	0.0	(D)	20-99	n.a.
Mining	100-249	n.a.	(D)	n.a.	1,000-2,499	n.a.
Construction	3,142	6,724	14.5	20.2	n.a.	5,082
General building contractors	1,000-2,499	3,623	(D)	32.1	1,000-2,499	1,000-2,499
Heavy construction, except bldgs	100-249	100-249	(D)	(D)	100-249	100-249
Special trade contractors	250-499	1,000-2,499	(D)	(D)	n.a.	500-999
Land subdividers, developers	100-249	500-999	(D)	(D)	n.a.	1,829
Manufacturing	1,000-2,499	1,644	(D)	8.0	388	505
Food and kindred products	213	482	2.2	5.4	n.a.	369
Apparel, other textile prod.	100-249	n.a.	(D)	n.a.	n.a.	n.a.
Printing and publishing	250-499	250-499	(D)	(D)	100-249	100-249
Petroleum and coal products	n.a.	250-499	n.a.	(D)	n.a.	n.a.
Stone, clay, and glass prod.	500-999	250-499	(D)	(D)	n.a.	n.a.
Administrative and auxiliary	217	100-249	43.4	(D)	n.a.	n.a.
Transportation, public utilities	1,000-2,499	3,244	(D)	7.6	778	1,379
Local, interurban passenger	n.a.	100-249	n.a.	(D)	n.a.	100-249
Trucking and warehousing	100-249	n.a.	(D)	n.a.	100-249	n.a.
Water transportation	n.a.	100-249	n.a.	(D)	n.a.	n.a.
Transportation by air	100-249	1,000-1,809	(D)	(D)	n.a.	n.a.
Transportation services	742	1,235	12.9	19.4	500-999	1,184
Passenger transp. arrangement	548	1,165	11.4	20.1	500-999	1,165
Travel agencies	247	302	12.5	12.9	100-249	302
Tour operators, other	301	863	10.7	25.0	100-249	863
Tour operators	100-249	500-863	(D)	(D)	100-249	785
Other arrangements	100-249	n.a.	(D)	n.a.	100-249	n.a.
Freight transp. arrangement	194	n.a.	28.2	n.a.	n.a.	n.a.
Wholesale trade	1,107	1,702	5.5	7.2	250-499	556
Durable goods	631	1,000	6.2	9.0	100-249	364
Professional, commercial equip.	n.a.	111	n.a.	4.7	n.a.	n.a.
Electrical goods	168	219	14.3	14.8	100-249	195
Electrical appli., tvs, radios	168	141	36.4	35.1	100-249	141
Hardware, plumbing, heating	n.a.	208	n.a.	22.7	n.a.	n.a.
Machinery, equipment, supplies	250-499	250-462	(D)	(D)	n.a.	n.a.
Nondurable goods	250-499	631	(D)	5.2	100-249	100-249
Paper and paper products	n.a.	190	n.a.	13.6	n.a.	n.a.
Groceries, related products	n.a.	136	n.a.	2.5	n.a.	127
Chemicals and allied products	169	n.a.	42.5	n.a.	n.a.	n.a.
Petroleum, petroleum products	n.a.	128	n.a.	24.0	n.a.	n.a.
Administrative and auxiliary	100-249	n.a.	(D)	n.a.	n.a.	n.a.
Retail trade	7,069	12,042	6.9	10.4	3,861	5,669
Building mater., garden supplies	100-249	100-249	(D)	(D)	n.a.	n.a.
General merchandise stores	1,778	1,965	20.7	19.4	1,000-2,499	500-999
Department stores	1,000-1,278	n.a.	(D)	n.a.	1,000-2,499	500-999
Miscellaneous	500-999	1,965	(D)	66.4	n.a.	500-999
Food stores	192	1,112	1.5	7.5	100-249	1,087
Grocery stores	100-192	500-999	(D)	(D)	n.a.	500-999
Retail bakeries	n.a.	100-249	n.a.	(D)	n.a.	100-249
Automotive dealers	166	253	3.5	5.1	n.a.	190
Gasoline service stations	n.a.	293	n.a.	7.9	n.a.	n.a.
Apparel and accessory stores	133	853	1.8	9.2	n.a.	244
Women's clothing	n.a.	238	n.a.	8.3	n.a.	0-109
Women's accessories, specialties	n.a.	184	n.a.	31.8	n.a.	100-249
Family clothing	n.a.	285	n.a.	12.1	n.a.	n.a.

Table 9 (continued, 2/2)

Industry	Employment of Foreign Establishments (number)		Ratio of Foreign to All Establish. (percent)		Employment of Japanese Establishments (number)	
	1987	1992	1987	1992	1987	1992
Eating and drinking places	3,018	4,933	6.5	10.1	1,000-2,499	2,247
Eating places	2,500-3,018	4,888	(D)	10.6	1,000-2,499	2,202
Miscellaneous retail stores	821	1,256	7.8	12.2	250-499	640
Miscellaneous shopping goods	444-499	1,047	(D)	16.1	n.a.	595
Jewelry stores	344	278	16.1	11.8	n.a.	n.a.
Hobby, toy, game shops	n.a.	250-499	n.a.	(D)	n.a.	250-499
Luggage, leather goods stores	100-155	195	(D)	73.6	n.a.	n.a.
Fuel dealers	n.a.	100-249	n.a.	(D)	n.a.	n.a.
Miscellaneous retail, nec	250-499	n.a.	(D)	n.a.	250-499	n.a.
Administrative and auxiliary	500-999	1,169	(D)	23.1	250-499	193
Finance, insurance, real estate	1,798	4,570	5.4	12.1	n.a.	3,852
Banking	250-499	500-999	(D)	(D)	250-499	500-999
Insurance carriers	262	943	8.2	21.1	n.a.	500-999
Life insurance	100-249	250-292	(D)	(D)	n.a.	100-249
Fire, marine, casualty insurance	n.a.	651	n.a.	45.6	n.a.	250-499
Insurance agents, brokers, serv.	100-249	100-249	(D)	(D)	n.a.	n.a.
Real estate	698	2,716	5.5	18.2	250-499	2,688
Operators and lessors	401	557	8.2	13.2	250-499	543
Nonresidential buildings	n.a.	382	n.a.	14.4	n.a.	372
Apartment buildings	n.a.	157	n.a.	12.4	n.a.	157
Agents and managers	100-249	250-499	(D)	(D)	n.a.	316
Other real estate	n.a.	500-999	n.a.	(D)	n.a.	1,829
Subdividers and developers	100-249	500-999	(D)	(D)	n.a.	1,829
Services	10,529	25,485	11.5	21.4	9,466	21,607
Services excl. admin., auxil.	n.a.	25,248	n.a.	21.4	n.a.	21,451
Lodging places, excl memberships	9,454	21,362	29.9	52.1	5,000-8,966	19,097
Hotels, motels	9,454	21,362	30.0	52.1	5,000-8,966	19,097
Personal services	n.a.	205	n.a.	3.2	n.a.	n.a.
Business services	100-249	759	(D)	3.6	n.a.	100
Auto repair, services, parking	250-499	100-249	(D)	(D)	250-499	n.a.
Auto rentals without drivers	250-499	100-249	(D)	(D)	250-499	n.a.
Passenger car rentals	250-499	100-249	(D)	(D)	250-499	n.a.
Amusement, recreation services	344	1,799	6.0	19.2	250-499	1,798
Commercial sports, other	344	1,000-1,799	9.5	(D)	250-499	1,798
Other amusement	344	1,000-1,799	9.6	(D)	250-499	1,798
Public golf courses	100-249	1,000-1,375	(D)	(D)	100-249	1,302
Membership sports&rec. clubs	100-249	424	(D)	56.7	100-249	424
Health services	n.a.	100-249	n.a.	(D)	n.a.	n.a.
Medical, dental laboratories	n.a.	100-249	n.a.	(D)	n.a.	n.a.
Medical laboratories	n.a.	100-249	n.a.	(D)	n.a.	n.a.
Engineering, accounting, etc.	n.a.	781	n.a.	7.1	n.a.	346
Engineering, architectural, etc.	n.a.	250-317	n.a.	(D)	n.a.	n.a.
Engineering services	n.a.	250-317	n.a.	(D)	n.a.	n.a.
Accounting, auditing, bookkeeping	n.a.	250-317	n.a.	(D)	n.a.	250-499
Management, public relations	n.a.	214	n.a.	10.4	n.a.	n.a.
Management services	n.a.	152	n.a.	20.1	n.a.	n.a.
Administrative and auxiliary	n.a.	237	n.a.	18.6	n.a.	156
Private education & noncommercial	0	n.a.	0.0	n.a.	n.a.	n.a.
Unclassified	0-19	n.a.	(D)	n.a.	0-19	n.a.

(D)=not disclosed; n.a.=not available.

SIC codes for each industry are given in Table 8.

Sources: U.S. Bureau of the Census (1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h), U.S. Department of Commerce (1992, 1997).

Table 10: Employees per Establishment for Foreign, U.S., and Japanese Establishments in Hawaii, by Industry and Year

Industry	Employees per Foreign Establishment (number)		Employees per U.S. Establishment (number)		Employees per Japanese Establishment (number)	
	1987	1992	1987	1992	1987	1992
All industries	58	52	13	13	89	65
Agr. services, forestry, fishing	n.a.	(D)	7	(D)	(D)	n.a.
Mining	(D)	(D)	(D)	n.a.	(D)	n.a.
Construction	185	172	10	10	n.a.	188
General building contractors	(D)	453	(D)	8	(D)	(D)
Heavy construction, except bldgs	(D)	(D)	(D)	(D)	(D)	(D)
Special trade contractors	(D)	(D)	(D)	(D)	n.a.	(D)
Land subdividers, developers	(D)	(D)	(D)	(D)	n.a.	141
Manufacturing	(D)	61	(D)	19	65	63
Food and kindred products	71	80	42	38	n.a.	74
Apparel, other textile prod.	(D)	n.a.	(D)	n.a.	n.a.	n.a.
Printing and publishing	(D)	(D)	(D)	(D)	(D)	(D)
Petroleum and coal products	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Stone, clay, and glass prod.	(D)	(D)	(D)	(D)	n.a.	n.a.
Administrative and auxiliary	43	(D)	16	(D)	n.a.	n.a.
Transportation, public utilities	(D)	48	(D)	26	71	32
Local, interurban passenger	n.a.	(D)	n.a.	(D)	n.a.	(D)
Trucking and warehousing	(D)	n.a.	(D)	n.a.	(D)	n.a.
Water transportation	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Transportation by air	(D)	(D)	(D)	(D)	n.a.	n.a.
Transportation services	67	36	9	9	(D)	42
Passenger transp. arrangement	78	45	9	9	(D)	45
Travel agencies	62	43	5	6	(D)	43
Tour operators, other	100	45	16	15	(D)	45
Tour operators	(D)	(D)	(D)	(D)	(D)	44
Other arrangements	(D)	n.a.	(D)	n.a.	(D)	n.a.
Freight transp. arrangement	49	n.a.	10	n.a.	n.a.	n.a.
Wholesale trade	16	16	10	10	(D)	19
Durable goods	18	17	10	9	(D)	20
Professional, commercial equip.	n.a.	12	n.a.	13	n.a.	n.a.
Electrical goods	24	24	9	10	(D)	28
Electrical appli., tvs, radios	24	28	11	10	(D)	28
Hardware, plumbing, heating	n.a.	15	n.a.	8	n.a.	n.a.
Machinery, equipment, supplies	(D)	(D)	(D)	(D)	n.a.	n.a.
Nondurable goods	(D)	15	(D)	11	(D)	(D)
Paper and paper products	n.a.	32	n.a.	13	n.a.	n.a.
Groceries, related products	n.a.	14	n.a.	13	n.a.	16
Chemicals and allied products	21	n.a.	7	n.a.	n.a.	n.a.
Petroleum, petroleum products	n.a.	12	n.a.	9	n.a.	n.a.
Administrative and auxiliary	(D)	n.a.	(D)	n.a.	n.a.	n.a.
Retail trade	38	28	14	14	51	27
Building mater., garden supplies	(D)	(D)	(D)	(D)	n.a.	n.a.
General merchandise stores	148	140	49	61	(D)	(D)
Department stores	(D)	n.a.	(D)	n.a.	(D)	(D)
Miscellaneous	(D)	140	(D)	13	n.a.	(D)
Food stores	24	16	14	17	(D)	16
Grocery stores	(D)	(D)	(D)	(D)	n.a.	(D)
Retail bakeries	n.a.	(D)	n.a.	(D)	n.a.	(D)
Automotive dealers	13	10	17	18	n.a.	9
Gasoline service stations	n.a.	7	n.a.	12	n.a.	n.a.
Apparel and accessory stores	11	16	8	8	n.a.	17
Women's clothing	n.a.	22	n.a.	8	n.a.	(D)
Women's accessories, specialties	n.a.	15	n.a.	5	n.a.	(D)
Family clothing	n.a.	19	n.a.	9	n.a.	n.a.

Table 10 (continued, 2/2)

Industry	Employees per Foreign Establishment (number)		Employees per U.S. Establishment (number)		Employees per Japanese Establishment (number)	
	1987	1992	1987	1992	1987	1992
Eating and drinking places	40	34	20	18	(D)	36
Eating places	(D)	34	(D)	19	(D)	36
Miscellaneous retail stores	20	28	6	5	(D)	36
Miscellaneous shopping goods	(D)	25	(D)	5	n.a.	37
Jewelry stores	13	15	5	5	n.a.	n.a.
Hobby, toy, game shops	n.a.	(D)	n.a.	(D)	n.a.	(D)
Luggage, leather goods stores	(D)	33	(D)	4	n.a.	n.a.
Fuel dealers	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Miscellaneous retail, nec	(D)	n.a.	(D)	n.a.	(D)	n.a.
Administrative and auxiliary	(D)	45	(D)	30	(D)	16
Finance, insurance, real estate	26	26	9	9	n.a.	28
Banking	(D)	(D)	(D)	(D)	(D)	(D)
Insurance carriers	29	47	12	30	n.a.	(D)
Life insurance	(D)	(D)	(D)	(D)	n.a.	(D)
Fire, marine, casualty insurance	n.a.	47	n.a.	21	n.a.	(D)
Insurance agents, brokers, serv.	(D)	(D)	(D)	(D)	n.a.	n.a.
Real estate	28	30	6	5	(D)	33
Operators and lessors	36	11	5	5	(D)	12
Nonresidential buildings	n.a.	13	n.a.	7	n.a.	14
Apartment buildings	n.a.	13	n.a.	4	n.a.	13
Agents and managers	(D)	(D)	(D)	(D)	n.a.	14
Other real estate	n.a.	(D)	n.a.	(D)	n.a.	131
Subdividers and developers	(D)	(D)	(D)	(D)	n.a.	141
Services	162	133	11	11	225	180
Services excl. admin., auxil.	n.a.	145	n.a.	11	n.a.	192
Lodging places, excl memberships	270	329	110	97	(D)	347
Hotels, motels	270	329	114	103	(D)	347
Personal services	n.a.	51	n.a.	8	n.a.	n.a.
Business services	(D)	21	(D)	15	n.a.	11
Auto repair, services, parking	(D)	(D)	(D)	(D)	(D)	n.a.
Auto rentals without drivers	(D)	(D)	(D)	(D)	(D)	n.a.
Passenger car rentals	(D)	(D)	(D)	(D)	(D)	n.a.
Amusement, recreation services	115	58	10	12	(D)	60
Commercial sports, other	115	(D)	10	(D)	(D)	60
Other amusement	115	(D)	11	(D)	(D)	60
Public golf courses	(D)	(D)	(D)	(D)	(D)	69
Membership sports&rec. clubs	(D)	85	(D)	22	(D)	85
Health services	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Medical, dental laboratories	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Medical laboratories	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Engineering, accounting, etc.	n.a.	41	n.a.	9	n.a.	31
Engineering, architectural, etc.	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Engineering services	n.a.	(D)	n.a.	(D)	n.a.	n.a.
Accounting, auditing, bookkeeping	n.a.	(D)	n.a.	(D)	n.a.	(D)
Management, public relations	n.a.	21	n.a.	7	n.a.	n.a.
Management services	n.a.	22	n.a.	6	n.a.	n.a.
Administrative and auxiliary	n.a.	14	n.a.	27	n.a.	20
Private education & noncommercial	n.a.	n.a.	29	n.a.	n.a.	n.a.
Unclassified	(D)	n.a.	(D)	n.a.	(D)	n.a.

(D)=not disclosed; n.a.=not available.

SIC codes for each industry are given in Table 8.

Sources: U.S. Bureau of the Census (1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h), U.S. Department of Commerce (1992, 1997).

Table 11: Payroll of Foreign Establishments, the Ratio of Foreign to All Establishments in Terms of Payroll, and Payroll per Employee in Foreign and U.S. Establishments, by Industry and Year

Industry	Payroll of Foreign Establishments (\$ thousands)		Ratio of Foreign to All Establishments (percent)		Payroll per Employee in Foreign Establishments (\$)		Payroll per Employee in U.S. Establishments (\$)	
	1987	1992	1987	1992	1987	1992	1987	1992
All industries	484,714	1,308,452	7.7	n.a.	18,486	24,321	17,256	n.a.
Agr. services, forestry, fishing	0	(D)	0.0	n.a.	0	(D)	15,236	n.a.
Mining	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Construction	102,827	217,219	16.9	n.a.	32,727	32,305	27,151	n.a.
General building contractors	(D)	128,328	(D)	n.a.	(D)	35,420	(D)	n.a.
Heavy construction, except bldgs	(D)	(D)	(D)	n.a.	(D)	(D)	(D)	n.a.
Special trade contractors	(D)	(D)	(D)	n.a.	(D)	(D)	(D)	n.a.
Land subdividers, developers	(D)	(D)	(D)	n.a.	(D)	(D)	(D)	n.a.
Manufacturing	(D)	55,626	(D)	10.2	(D)	33,836	(D)	25,943
Food and kindred products	3,186	10,886	1.7	5.0	14,958	22,585	19,267	24,303
Apparel, other textile prod.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Printing and publishing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Petroleum and coal products	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Stone, clay, and glass prod.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Administrative and auxiliary	7,137	(D)	39.0	(D)	32,889	(D)	39,445	(D)
Transportation, public utilities	(D)	120,209	(D)	n.a.	(D)	37,056	(D)	n.a.
Local, interurban passenger	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Trucking and warehousing	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Water transportation	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Transportation by air	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Transportation services	14,757	37,370	17.7	27.0	19,888	30,259	13,694	19,701
Passenger transp. arrangement	11,205	34,843	16.4	28.2	20,447	29,908	13,400	19,189
Travel agencies	4,265	8,627	16.6	17.3	17,267	28,566	12,398	20,289
Tour operators, other	6,940	26,216	16.4	35.6	23,056	30,378	14,087	18,323
Tour operators	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other arrangements	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Freight transp. arrangement	3,552	n.a.	27.8	n.a.	18,309	n.a.	18,682	n.a.
Wholesale trade	29,055	52,981	7.0	n.a.	26,247	31,129	20,266	n.a.
Durable goods	18,708	30,392	8.0	9.3	29,648	30,392	22,516	29,222
Professional, commercial equip.	n.a.	3,268	n.a.	4.0	n.a.	29,441	n.a.	34,912
Electrical goods	4,890	6,388	15.7	13.0	29,107	29,169	26,046	33,912
Electrical appli., tvs, radios	4,890	3,902	43.9	32.3	29,107	27,674	21,311	31,280
Hardware, plumbing, heating	n.a.	5,145	n.a.	21.3	n.a.	24,736	n.a.	26,917
Machinery, equipment, supplies	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nondurable goods	(D)	19,737	(D)	6.6	(D)	31,279	(D)	24,100
Paper and paper products	n.a.	4,564	n.a.	12.8	n.a.	24,021	n.a.	25,930
Groceries, related products	n.a.	4,077	n.a.	3.2	n.a.	29,978	n.a.	23,726
Chemicals and allied products	3,840	n.a.	39.2	n.a.	22,722	n.a.	25,991	n.a.
Petroleum, petroleum products	n.a.	4,881	n.a.	25.4	n.a.	38,133	n.a.	35,389
Administrative and auxiliary	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Retail trade	85,915	200,578	8.5	n.a.	12,154	16,657	9,802	n.a.
Building mater., garden supplies	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
General merchandise stores	25,091	36,116	26.6	26.9	14,112	18,380	10,158	12,069
Department stores	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Miscellaneous	(D)	36,116	(D)	68.0	(D)	18,380	(D)	17,051
Food stores	2,210	16,089	1.4	7.2	11,510	14,469	11,727	15,314
Grocery stores	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Retail bakeries	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Automotive dealers	2,772	7,216	2.7	5.2	16,699	28,522	21,364	27,914
Gasoline service stations	n.a.	4,457	n.a.	8.6	n.a.	15,212	n.a.	13,914
Apparel and accessory stores	1,267	11,862	1.9	10.7	9,526	13,906	9,053	11,714
Women's clothing	n.a.	3,109	n.a.	10.3	n.a.	13,063	n.a.	10,295
Women's accessories, specialties	n.a.	3,107	n.a.	31.8	n.a.	16,886	n.a.	16,851
Family clothing	n.a.	3,820	n.a.	14.0	n.a.	13,404	n.a.	11,312

Table 11 (continued, 2/2)

Industry	Payroll of Foreign Establishments (\$ thousands)		Ratio of Foreign to All Establishments (percent)		Payroll per Employee in Foreign Establishments (\$)		Payroll per Employee in U.S. Establishments (\$)	
	1987	1992	1987	1992	1987	1992	1987	1992
Eating and drinking places	26,615	51,394	7.6	10.1	8,819	10,418	7,496	10,487
Eating places	(D)	50,988	(D)	10.5	(D)	10,431	(D)	10,489
Miscellaneous retail stores	8,840	22,531	8.5	15.3	10,767	17,939	9,729	13,831
Miscellaneous shopping goods	(D)	15,719	(D)	16.9	(D)	15,013	(D)	14,248
Jewelry stores	3,175	2,864	12.5	7.7	9,230	10,302	12,454	16,674
Hobby, toy, game shops	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Luggage, leather goods stores	(D)	5,436	(D)	126.9	(D)	27,877	(D)	-16,471
Fuel dealers	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Miscellaneous retail, nec	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Administrative and auxiliary	(D)	46,334	(D)	n.a.	(D)	39,636	(D)	n.a.
Finance, insurance, real estate	41,401	130,530	6.1	n.a.	23,026	28,562	20,288	n.a.
Banking	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Insurance carriers	9,018	28,704	12.7	21.2	34,420	30,439	21,200	30,191
Life insurance	(D)	7,826	(D)	(D)	(D)	(D)	(D)	(D)
Fire, marine, casualty insurance	n.a.	20,754	n.a.	39.8	n.a.	31,880	n.a.	40,531
Insurance agents, brokers, serv.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Real estate	12,535	70,857	5.7	20.1	17,958	26,089	17,022	23,053
Operators and lessors	6,652	13,369	9.7	13.9	16,589	24,002	13,828	22,686
Nonresidential buildings	n.a.	9,504	n.a.	14.0	n.a.	24,880	n.a.	25,807
Apartment buildings	n.a.	3,154	n.a.	14.6	n.a.	20,089	n.a.	16,628
Agents and managers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other real estate	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Subdividers and developers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Services	161,724	537,236	10.8	n.a.	15,360	21,080	16,486	n.a.
Services excl. admin., auxil.	n.a.	527,657	n.a.	20	n.a.	20,899	n.a.	22,937
Lodging places, excl memberships	144,699	384,315	33.2	50.5	15,306	17,991	13,157	19,167
Hotels, motels	144,699	384,315	33.2	50.5	15,306	17,991	13,165	19,177
Personal services	n.a.	4,236	n.a.	5.3	n.a.	20,663	n.a.	12,390
Business services	(D)	12,812	(D)	3.9	(D)	16,880	(D)	15,547
Auto repair, services, parking	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Auto rentals without drivers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Passenger car rentals	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Amusement, recreation services	5,118	93,758	8.8	74.4	14,878	52,117	9,772	4,259
Commercial sports, other	5,118	(D)	13.1	(D)	14,878	(D)	10,371	(D)
Other amusement	5,118	(D)	13.2	(D)	14,878	(D)	10,290	(D)
Public golf courses	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Membership sports&rec. clubs	(D)	7,698	(D)	66.9	(D)	18,156	(D)	11,756
Health services	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Medical, dental laboratories	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Medical laboratories	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Engineering, accounting, etc.	n.a.	23,746	n.a.	5.9	n.a.	30,405	n.a.	36,831
Engineering, architectural, etc.	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Engineering services	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Accounting, auditing, bookkeeping	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Management, public relations	n.a.	7,491	n.a.	10.7	n.a.	35,005	n.a.	33,824
Management services	n.a.	5,220	n.a.	18.9	n.a.	34,342	n.a.	36,985
Administrative and auxiliary	n.a.	9,579	n.a.	n.a.	n.a.	40,418	n.a.	n.a.
Private education & noncommercial	0	n.a.	0.0	n.a.	0	n.a.	18,258	n.a.
Unclassified	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.

(D)=not disclosed; n.a.=not available.

SIC codes for each industry are given in Table 8.

Sources: U.S. Bureau of the Census (1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h), U.S. Department of Commerce (1992, 1997).

Table 12: Sales of Foreign Establishments, the Ratio of Foreign to All Establishments in Terms of Sales, and Sales per Employee in Foreign and U.S. Establishments

Industry	Sales of Foreign Establishments (\$ thousands)		Ratio of Foreign to All Establishments (percent)		Sales per Employee in Foreign Establishments (\$)		Sales per Employee in U.S. Establishments (\$)	
	1987	1992	1987	1992	1987	1992	1987	1992
All industries	n.a.	7,256,724	n.a.	n.a.	n.a.	134,886	n.a.	n.a.
Agr. services, forestry, fishing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mining	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Construction	677,533	1,091,450	23.8	n.a.	215,637	162,322	117,014	n.a.
General building contractors	(D)	743,111	(D)	n.a.	(D)	205,109	(D)	n.a.
Heavy construction, except bldgs	(D)	(D)	(D)	n.a.	(D)	(D)	(D)	n.a.
Special trade contractors	(D)	110,318	(D)	n.a.	(D)	(D)	(D)	n.a.
Land subdividers, developers	(D)	(D)	(D)	n.a.	(D)	(D)	(D)	n.a.
Manufacturing	(D)	887,971	(D)	23.4	(D)	540,128	(D)	153,183
Food and kindred products	16,579	46,660	1.2	3.5	77,836	96,805	140,223	150,134
Apparel, other textile prod.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Printing and publishing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Petroleum and coal products	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Stone, clay, and glass prod.	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Administrative and auxiliary	n.a.	n.a.	n.a.	(D)	n.a.	n.a.	n.a.	(D)
Transportation, public utilities	n.a.	235,723	n.a.	n.a.	n.a.	72,664	n.a.	n.a.
Local, interurban passenger	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Trucking and warehousing	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Water transportation	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Transportation by air	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Transportation services	37,575	128,237	15.6	32.0	50,640	103,836	40,700	53,321
Passenger transp. arrangement	34,186	123,474	17.3	34.1	62,383	105,986	38,412	51,630
Travel agencies	14,647	21,854	18.3	15.8	59,300	72,364	37,733	57,204
Tour operators, other	19,539	101,620	16.6	45.4	64,914	117,752	38,877	47,245
Tour operators	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Other arrangements	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Freight transp. arrangement	3,389	n.a.	9.1	n.a.	17,469	n.a.	68,449	n.a.
Wholesale trade	331,355	795,627	6.2	n.a.	299,327	467,466	264,102	n.a.
Durable goods	178,909	429,268	8.1	14.0	283,532	429,268	210,846	259,262
Professional, commercial equip.	n.a.	28,444	n.a.	6.1	n.a.	256,252	n.a.	195,188
Electrical goods	66,113	101,488	18.0	18.3	393,530	463,416	298,209	360,074
Electrical appli., tvs, radios	66,113	62,242	49.3	39.0	393,530	441,433	231,795	372,866
Hardware, plumbing, heating	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Machinery, equipment, supplies	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nondurable goods	(D)	366,359	(D)	7.4	(D)	580,601	(D)	396,874
Paper and paper products	n.a.	48,134	n.a.	13.7	n.a.	253,337	n.a.	251,739
Groceries, related products	n.a.	63,041	n.a.	3.1	n.a.	463,537	n.a.	380,744
Chemicals and allied products	26,451	n.a.	25.1	n.a.	156,515	n.a.	344,646	n.a.
Petroleum, petroleum products	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Administrative and auxiliary	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Retail trade	872,589	1,515,684	10.8	n.a.	123,439	125,866	75,994	n.a.
Building mater., garden supplies	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
General merchandise stores	633,558	(D)	50.5	n.a.	356,332	(D)	90,929	(D)
Department stores	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Miscellaneous	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Food stores	17,918	118,937	1.1	5.7	93,323	106,958	119,074	143,836
Grocery stores	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Retail bakeries	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Automotive dealers	28,716	54,322	2.4	3.6	172,988	214,711	257,069	306,360
Gasoline service stations	n.a.	70,209	n.a.	12.8	n.a.	239,621	n.a.	140,593
Apparel and accessory stores	21,492	109,525	3.7	11.3	161,594	128,400	75,522	101,406
Women's clothing	n.a.	23,478	n.a.	9.9	n.a.	98,647	n.a.	81,320
Women's accessories, specialties	n.a.	41,440	n.a.	26.0	n.a.	225,217	n.a.	298,686
Family clothing	n.a.	30,892	n.a.	13.0	n.a.	108,393	n.a.	99,739

Table 12 (continued, 2/2)

Industry	Sales of Foreign Establishments (\$ thousands)		Ratio of Foreign to All Establishments (percent)		Sales per Employee in Foreign Establishments (\$)		Sales per Employee in U.S. Establishments (\$)	
	1987	1992	1987	1992	1987	1992	1987	1992
Eating and drinking places	90,894	166,737	6.7	9.1	30,117	33,800	29,250	38,331
Eating places	(D)	166,158	(D)	9.5	(D)	33,993	(D)	38,119
Miscellaneous retail stores	51,076	160,841	7.0	15.8	62,212	128,058	69,563	94,755
Miscellaneous shopping goods	(D)	158,180	(D)	22.2	(D)	151,079	(D)	102,093
Jewelry stores	27,765	41,075	16.0	15.0	80,712	147,752	81,264	111,976
Hobby, toy, game shops	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Luggage, leather goods stores	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Fuel dealers	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Miscellaneous retail, nec	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.
Administrative and auxiliary	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finance, insurance, real estate	n.a.	1,554,778	n.a.	n.a.	n.a.	340,214	n.a.	n.a.
Banking	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Insurance carriers	n.a.	439,683	n.a.	18.6	n.a.	466,260	n.a.	544,118
Life insurance	n.a.	102,420	n.a.	(D)	n.a.	(D)	n.a.	(D)
Fire, marine, casualty insurance	n.a.	335,763	n.a.	48.2	n.a.	515,765	n.a.	464,445
Insurance agents, brokers, serv.	n.a.	9,737	n.a.	4.5	n.a.	(D)	n.a.	(D)
Real estate	n.a.	355,399	n.a.	19.3	n.a.	130,854	n.a.	121,905
Operators and lessors	n.a.	100,572	n.a.	13.4	n.a.	180,560	n.a.	178,174
Nonresidential buildings	n.a.	62,997	n.a.	11.4	n.a.	164,914	n.a.	216,263
Apartment buildings	n.a.	22,189	n.a.	14.7	n.a.	141,331	n.a.	115,880
Agents and managers	n.a.	49,907	n.a.	6.8	n.a.	(D)	n.a.	(D)
Other real estate	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Subdividers and developers	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Services	607,237	1,380,334	13.6	n.a.	57,673	54,163	47,431	n.a.
Services excl. admin., auxil.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Lodging places, excl memberships	541,252	1,146,814	34.7	51.0	57,251	53,685	46,094	55,970
Hotels, motels	541,252	1,146,814	34.7	51.1	57,251	53,685	46,120	55,965
Personal services	n.a.	17,447	n.a.	7.9	n.a.	85,107	n.a.	33,148
Business services	(D)	36,784	(D)	4.8	(D)	48,464	(D)	36,510
Auto repair, services, parking	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Auto rentals without drivers	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Passenger car rentals	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Amusement, recreation services	14,528	81,181	6.3	17.8	42,233	45,126	39,580	49,449
Commercial sports, other	14,528	81,181	10.0	25.6	42,233	(D)	39,902	(D)
Other amusement	14,528	81,181	10.2	25.9	42,233	(D)	39,309	(D)
Public golf courses	(D)	54,549	(D)	66.6	(D)	(D)	(D)	(D)
Membership sports&rec. clubs	(D)	21,795	(D)	64.1	(D)	51,403	(D)	37,710
Health services	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Medical, dental laboratories	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Medical laboratories	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Engineering, accounting, etc.	n.a.	49,131	n.a.	4.9	n.a.	62,908	n.a.	92,964
Engineering, architectural, etc.	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Engineering services	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Accounting, auditing, bookkeeping	n.a.	(D)	n.a.	(D)	n.a.	(D)	n.a.	(D)
Management, public relations	n.a.	12,961	n.a.	6.5	n.a.	60,565	n.a.	101,550
Management services	n.a.	8,684	n.a.	12.8	n.a.	57,132	n.a.	98,157
Administrative and auxiliary	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Private education & noncommercial	0	n.a.	0.0	n.a.	n.a.	n.a.	42,828	n.a.
Unclassified	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(D)=not disclosed; n.a.=not available.

SIC codes for each industry are given in Table 8.

Sources: U.S. Bureau of the Census (1995a, 1995b, 1995c, 1995d, 1995e, 1995f, 1995g, 1995h), U.S. Department of Commerce (1992, 1997).

Table 13: The Number of Firms in a Sample of Large Foreign Multinationals in Hawaii by Country of Owner and Industry of Operation

Country, industry	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ALL COUNTRIES	17	21	22	29	35	41	42	42	44	45	43	46	47	51
Construction	0	0	0	0	2	6	7	7	7	5	5	5	5	4
Food mfg.	1	1	1	2	3	3	3	3	3	3	3	3	3	3
Oil mfg.	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Cement mfg.	0	0	1	1	1	1	1	0	0	0	0	0	0	0
Air transport	1	1	1	1	1	1	1	2	2	2	2	3	2	2
Tours, agents	0	0	0	0	0	0	0	0	1	2	2	4	7	9
Wholesale trade	3	4	4	4	4	4	5	5	6	7	5	5	5	6
Retail trade	9	9	8	9	9	9	10	10	9	8	6	6	5	7
Insurance	1	1	1	1	1	1	2	3	3	3	3	4	4	3
Real estate	0	0	0	2	2	1	1	1	1	1	1	1	1	0
Hotel services	2	5	6	9	12	15	11	10	11	13	14	14	14	16
Other services	0	0	0	0	0	0	0	0	0	0	1	0	0	0
JAPAN	12	15	14	19	24	28	29	30	33	33	31	34	37	43
Construction	0	0	0	0	0	2	3	3	4	3	3	3	3	3
Food mfg.	1	1	1	1	2	2	2	2	2	2	2	2	2	2
Air transport	1	1	1	1	1	1	1	2	2	2	2	2	2	2
Tours, agents	0	0	0	0	0	0	0	0	1	2	2	4	7	9
Wholesale trade	1	2	2	2	2	2	3	3	3	3	2	2	2	3
Retail trade	6	6	5	6	7	7	8	8	8	7	5	5	4	6
Insurance	1	1	1	1	1	1	2	2	2	2	2	2	2	2
Real estate	0	0	0	2	2	1	1	1	1	1	1	1	1	0
Hotel services	2	4	4	6	9	12	9	9	10	11	12	13	14	16
AUSTRALIA	1	1	2	4	4	5	5	4	5	4	3	3	2	2
Construction	0	0	0	0	0	1	1	1	1	0	0	0	0	0
Food mfg.	0	0	0	1	1	1	1	1	1	1	1	1	1	1
Oil mfg.	0	0	0	0	0	0	1	1	1	1	1	1	1	1
Cement mfg.	0	0	1	1	1	1	1	0	0	0	0	0	0	0
Wholesale trade	1	1	1	1	1	1	1	1	2	2	1	1	0	0
Hotel services	0	0	0	1	1	1	0	0	0	0	0	0	0	0
NEW ZEALAND	0	0	0	0	2	3	3	3	2	2	2	2	2	1
Construction	0	0	0	0	2	3	3	3	2	2	2	2	2	1
HONG KONG	2	2	2	3	2	2	2	2	1	2	2	1	1	1
Retail trade	2	2	2	3	2	2	2	2	1	1	1	1	1	1
Hotel services	0	0	0	0	0	0	0	0	0	1	1	0	0	0
KOREA	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Air transport	0	0	0	0	0	0	0	0	0	0	0	1	0	0
CANADA	1	1	1	0	0	0	0	0	0	0	0	1	1	0
Retail trade	1	1	1	0	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0	0	1	1	0
EUROPE	1	2	3	3	3	3	3	3	3	4	5	4	4	4
Wholesale trade	1	1	1	1	1	1	1	1	1	2	2	2	3	3
Insurance	0	0	0	0	0	0	0	1	1	1	1	1	1	1
Hotel services	0	1	2	2	2	2	2	1	1	1	1	1	0	0
Other services	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Sources:

Hawaii Business (various years); State of Hawaii (1995b); author's estimates based on these sources.

Table 14: Employment in a Sample of Large Foreign Multinationals in Hawaii by Country of Owner and Industry of Operation (number of employees)

Country, industry	1983	1984	1985	1986	1987	1988	1989
ALL COUNTRIES	11,514	14,435	15,208	19,821	22,199	25,267	28,146
Construction	0	0	0	0	622	2,290	4,440
Food mfg.	300	300	300	365	540	570	538
Oil mfg.	0	0	0	0	0	0	1,129
Cement mfg.	0	0	200	237	292	300	335
Air transport	280	280	350	360	360	179	185
Tours, agents	0	0	0	0	0	0	0
Wholesale trade	644	654	683	743	970	926	886
Retail trade	4,837	5,264	5,622	7,600	7,190	6,986	7,026
Insurance	103	72	73	76	90	85	478
Real estate	0	0	0	266	297	300	350
Hotel services	5,350	7,865	7,980	10,174	11,838	13,631	12,779
Other services	0	0	0	0	0	0	0
JAPAN	8,664	10,168	10,178	13,575	16,717	18,091	17,849
Construction	0	0	0	0	0	500	740
Food mfg.	300	300	300	295	470	420	468
Air transport	280	280	350	360	360	179	185
Tours, agents	0	0	0	0	0	0	0
Wholesale trade	44	84	113	103	105	106	168
Retail trade	2,587	2,437	2,372	3,650	4,690	4,166	3,760
Insurance	103	72	73	76	90	85	478
Real estate	0	0	0	266	297	300	350
Hotel services	5,350	6,995	6,970	8,825	10,705	12,335	11,700
AUSTRALIA	470	450	650	1,041	1,246	2,346	3,420
Construction	0	0	0	0	0	1,000	1,336
Food mfg.	0	0	0	70	70	150	70
Oil mfg.	0	0	0	0	0	0	1,129
Cement mfg.	0	0	200	237	292	300	335
Wholesale trade	470	450	450	520	730	670	550
Hotel services	0	0	0	214	154	226	0
NEW ZEALAND	0	0	0	0	622	790	2,364
Construction	0	0	0	0	622	790	2,364
HONG KONG	2,100	2,577	3,000	3,950	2,500	2,820	3,266
Retail trade	2,100	2,577	3,000	3,950	2,500	2,820	3,266
Hotel services	0	0	0	0	0	0	0
KOREA	0	0	0	0	0	0	0
Air transport	0	0	0	0	0	0	0
CANADA	150	250	250	0	0	0	0
Retail trade	150	250	250	0	0	0	0
Insurance	0	0	0	0	0	0	0
EUROPE	130	990	1,130	1,255	1,114	1,220	1,247
Wholesale trade	130	120	120	120	135	150	168
Insurance	0	0	0	0	0	0	0
Hotel services	0	870	1,010	1,135	979	1,070	1,079
Other services	0	0	0	0	0	0	0

Table 14 (continued)

Country, industry	1990	1991	1992	1993	1994	1995	1996
ALL COUNTRIES	28,888	28,124	23,387	24,383	23,674	23,627	25,686
Construction	6,258	5,052	2,420	1,970	1,665	1,869	1,575
Food mfg.	615	660	640	635	597	630	640
Oil mfg.	1,215	1,250	1,250	1,120	1,128	1,000	1,000
Cement mfg.	0	0	0	0	0	0	0
Air transport	330	342	340	332	531	336	341
Tours, agents	0	65	261	255	489	926	1,130
Wholesale trade	978	1,080	1,041	731	386	314	372
Retail trade	7,326	6,964	4,511	4,840	4,676	3,986	5,027
Insurance	605	663	619	574	531	546	533
Real estate	300	350	330	33	48	13	0
Hotel services	11,261	11,698	11,975	13,741	13,623	14,007	15,068
Other services	0	0	0	152	0	0	0
JAPAN	17,302	17,988	17,125	17,720	17,861	18,635	20,475
Construction	1,308	1,377	1,220	915	705	800	483
Food mfg.	465	460	440	435	397	410	410
Air transport	330	342	340	332	331	336	341
Tours, agents	0	65	261	255	489	926	1,130
Wholesale trade	210	225	186	116	116	113	158
Retail trade	3,580	3,412	2,811	2,240	2,145	1,622	2,477
Insurance	462	520	488	454	423	408	408
Real estate	300	350	330	33	48	13	0
Hotel services	10,647	11,237	11,049	12,940	13,207	14,007	15,068
AUSTRALIA	4,185	3,645	2,135	1,770	1,433	1,220	1,230
Construction	2,220	1,500	0	0	0	0	0
Food mfg.	150	200	200	200	200	220	230
Oil mfg.	1,215	1,250	1,250	1,120	1,128	1,000	1,000
Cement mfg.	0	0	0	0	0	0	0
Wholesale trade	600	695	685	450	105	0	0
Hotel services	0	0	0	0	0	0	0
NEW ZEALAND	2,730	2,175	1,200	1,055	960	1,069	1,092
Construction	2,730	2,175	1,200	1,055	960	1,069	1,092
HONG KONG	3,746	3,552	2,165	3,000	2,531	2,364	2,550
Retail trade	3,746	3,552	1,700	2,600	2,531	2,364	2,550
Hotel services	0	0	465	400	0	0	0
KOREA	0	0	0	0	200	0	0
Air transport	0	0	0	0	200	0	0
CANADA	0	0	0	0	13	13	0
Retail trade	0	0	0	0	0	0	0
Insurance	0	0	0	0	13	13	0
EUROPE	925	764	762	838	676	326	339
Wholesale trade	168	160	170	165	165	201	214
Insurance	143	143	131	120	95	125	125
Hotel services	614	461	461	401	416	0	0
Other services	0	0	0	152	0	0	0

Sources:

Hawaii Business (various years); State of Hawaii (1995b); author's estimates based on these sources.

Table 15: Sales in a Sample of Large Foreign Multinationals in Hawaii by Country of Owner and Industry of Operation (\$ millions)

Country, industry	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
ALL COUNTRIES	876	1,016	1,120	1,414	1,873	2,431	5,300	7,130	5,095	4,768	4,028	4,251	4,397	4,717
Construction	0	0	0	0	140	412	704	947	1,145	595	546	394	374	355
Food mfg.	20	20	22	39	71	78	88	86	83	84	91	87	90	83
Oil mfg.	0	0	0	0	0	0	2,300	3,900	1,600	1,700	1,141	1,114	1,104	1,072
Cement mfg.	0	0	31	50	51	65	85	0	0	0	0	0	0	0
Air transport	19	27	27	30	25	26	27	66	56	53	56	88	71	70
Tours, agents	0	0	0	0	0	0	0	0	40	69	64	377	612	763
Wholesale trade	71	95	104	106	140	161	200	216	248	229	162	149	102	153
Retail trade	520	533	565	643	663	646	751	765	681	664	563	572	595	639
Insurance	21	25	27	20	18	21	133	236	286	307	305	321	294	247
Real estate	0	0	0	32	51	33	43	68	52	47	44	53	37	0
Hotel services	225	316	345	494	714	990	969	847	905	1,020	1,041	1,097	1,119	1,336
Other services	0	0	0	0	0	0	0	0	0	0	17	0	0	0
JAPAN	581	712	727	931	1,240	1,638	1,875	1,984	2,178	2,232	2,130	2,413	2,683	3,106
Construction	0	0	0	0	0	112	133	246	321	252	272	142	135	165
Food mfg.	20	20	22	23	55	55	58	65	65	64	65	63	64	61
Air transport	19	27	27	30	25	26	27	66	56	53	56	69	71	70
Tours, agents	0	0	0	0	0	0	0	0	40	69	64	377	612	763
Wholesale trade	13	31	30	32	35	38	63	78	86	83	50	52	60	110
Retail trade	284	332	323	364	405	430	500	467	457	455	346	359	387	414
Insurance	21	25	27	20	18	21	133	173	221	229	235	225	199	188
Real estate	0	0	0	32	51	33	43	68	52	47	44	53	37	0
Hotel services	225	277	299	430	653	924	918	822	880	980	998	1,075	1,119	1,336
AUSTRALIA	40	46	85	135	166	303	2,665	4,185	1,926	1,838	1,249	1,207	1,130	1,094
Construction	0	0	0	0	0	101	140	154	173	0	0	0	0	0
Food mfg.	0	0	0	16	17	23	30	21	18	20	26	24	26	22
Oil mfg.	0	0	0	0	0	0	2,300	3,900	1,600	1,700	1,141	1,114	1,104	1,072
Cement mfg.	0	0	31	50	51	65	85	0	0	0	0	0	0	0
Wholesale trade	40	46	54	54	83	97	110	110	135	119	83	69	0	0
Hotel services	0	0	0	15	15	17	0	0	0	0	0	0	0	0
NEW ZEALAND	0	0	0	0	140	199	431	547	651	343	274	252	239	190
Construction	0	0	0	0	140	199	431	547	651	343	274	252	239	190
HONG KONG	207	170	212	279	259	216	251	298	224	229	237	213	208	225
Retail trade	207	170	212	279	259	216	251	298	224	209	217	213	208	225
Hotel services	0	0	0	0	0	0	0	0	0	20	20	0	0	0
KOREA	0	0	0	0	0	0	0	0	0	0	0	19	0	0
Air transport	0	0	0	0	0	0	0	0	0	0	0	19	0	0
CANADA	30	31	31	0	0	0	0	0	0	0	0	32	32	0
Retail trade	30	31	31	0	0	0	0	0	0	0	0	0	0	0
Insurance	0	0	0	0	0	0	0	0	0	0	0	32	32	0
EUROPE	18	57	66	69	68	75	78	116	118	126	138	116	105	102
Wholesale trade	18	18	20	20	22	26	27	28	28	28	28	28	42	43
Insurance	0	0	0	0	0	0	0	64	65	78	70	65	63	59
Hotel services	0	38	46	49	46	49	51	25	25	20	22	22	0	0
Other services	0	0	0	0	0	0	0	0	0	0	17	0	0	0

Sources:

Hawaii Business (various years); State of Hawaii (1995b); author's estimates based on these sources.

Appendix Table 1: Enterprise Data Available by State from BEA's Surveys of Nonbank U.S. Affiliates of Foreign Companies: Table Numbers by Indicator and Year of Survey

Indicator	1977-86	1987	1988-91	1992	1993-95
Gross Property, Plant, and Equipment of Affiliates, State by Use	NA	D-12	D-12	D-11	D-11
Gross Property, Plant, and Equipment of Affiliates, State by Industry of Affiliate	D-13	D-13	D-13	D-12	D-12
Gross Property, Plant, and Equipment of Affiliates, State by Country of UBO	D-14	D-14	D-14	D-13	D-13
Gross Property, Plant, and Equipment of Affiliates, State by Industry of UBO	NA	D-15	NA	D-14	NA
Gross Property, Plant, and Equipment of Affiliates Used for Manufacturing, State by Country of UBO	NA	D-18	NA	D-16	NA
Commercial Property of Affiliates, State by Industry of Affiliate	NA	D-20	D-20	D-18	D-18
Commercial Property of Affiliates, State by Country of UBO	NA	D-21	D-21	D-19	D-19
Number of Affiliates with Property, Plant, and Equipment State by Property, Plant, and Equipment Size Class	D-23	D-22	D-22	D-20	D-20
Number of Affiliates with Property, Plant, and Equipment, State by Use	NA	D-24	D-24	D-21	D-21
Employment of Affiliates, State by Industry of Affiliate	F-7	F-7	F-7	G-7	G-7
Employment of Affiliates, State by Country of UBO	F-8	F-8	F-8	G-8	G-8
Employment of Affiliates, State by Industry of UBO	NA	F-9	NA	G-9	NA
Manufacturing Employment of Affiliates, State by Country of UBO	NA	F-14	F-14	G-13	G-13
Number of Affiliates With Employment, State by Employment Size Class	F-10	F-19	F-19	G-18	G-18

Appendix Table 2: Establishment Data Available by State from BEA's Surveys of Nonbank U.S. Affiliates of Foreign Companies for 1987 (tables cover all industries except as noted)

PART I. OVERVIEW BY INDUSTRY, COUNTRY, AND STATE

Tables for the U.S. as a Whole (note: these tables [1.1 to 1.7] have no state-wise information)

State Tables

- 1.8. Data for U.S. Affiliates and All U.S. Businesses, by State
- 1.9. Employment, and Number of Establishments by Employment Size Class, of U.S. Affiliates, by State
- 1.10. Data for Manufacturing Establishments of U.S. Affiliates and All U.S. Businesses, by State
- 1.11. Manufacturing Employment, and Number of Manufacturing Establishments by Employment Size Class, of U.S. Affiliates, by State
- 1.12. Number of Establishments of U.S. Affiliates, State by Selected Industry of Establishment
- 1.13. Number of Establishments of U.S. Affiliates, State by Country of UBO
- 1.14. Number of Manufacturing Establishments of U.S. Affiliates, State by Country of UBO
- 1.15. Employment of U.S. Affiliates, State by Selected Industry of Establishment
- 1.16. Employment of U.S. Affiliates, State by Country of UBO
- 1.17. Employment of Manufacturing Establishments of U.S. Affiliates, State by Country of UBO
- 1.18. Payroll of U.S. Affiliates, State by Selected Industry of Establishment
- 1.19. Payroll of U.S. Affiliates, State by Country of UBO
- 1.20. Payroll of Manufacturing Establishments of U.S. Affiliates, State by Country of UBO
- 1.21. Shipments or Sales of U.S. Affiliates, State by Selected Industry of Establishment
- 1.22. Shipments or Sales of Manufacturing Establishments of U.S. Affiliates, State by Country of UBO

PART II. INDIVIDUAL STATES: DETAILED INDUSTRY TABLES

- 2.1. Data for U.S. Affiliates and All U.S. Businesses in Each State, by Detailed Industry of Establishment (data for all 50 states and the District of Columbia)
- 2.2. Employment, and Number of Establishments by Employment Size Class, of U.S. Affiliates in Each State, by Detailed Industry of Establishment (note: data cover all 50 states and the District of Columbia)

PART III. SELECTED COUNTRIES: DETAILED INDUSTRY AND STATE-BY-INDUSTRY TABLES

- 3.3. Employment, and Number of Establishments by Employment Size Class, of U.S. Affiliates With UBO's in Major Investing Countries, by State and Detailed Industry of Establishment (note: data cover Canada, France, Germany, Japan, Netherlands, United Kingdom)
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Appendix Table 3: Establishment Data Available by State from BEA's Surveys of Nonbank U.S. Affiliates of Foreign Companies for 1992 (tables cover all industries except as noted)

PART A ALL INDUSTRIES

Group I. Overview by Industry, Country, and State

Detailed Industry and Detailed Country Tables (note: these tables [A1.1, A1.2, A1.7] have no state-wise information)

Country by Industry and Industry by Country Tables (note: these tables [A1.8 to A1.15] have no state-wise information)

State Tables:

A1.16. Number, Employment, Payroll, and Value of Shipments or Sales of Foreign-Owned and All U.S. Establishments, by State

A1.17. Employment, and Number by Employment Size Class of Foreign-Owned Establishments, by State

State by Industry and State by Country Tables:

A1.18. Number of Foreign-Owned Establishments, State by Selected Industry

A1.19. Number of Foreign-Owned Establishments, State by Country of UBO

A1.20. Employment of Foreign-Owned Establishments, State by Selected Industry

A1.21. Employment of Foreign-Owned Establishments, State by Country of UBO

A1.22. Payroll of Foreign-Owned Establishments, State by Selected Industry

A1.23. Payroll of Foreign-Owned Establishments, State by Country of UBO

A1.24. Shipments or Sales of Foreign-Owned Establishments, State by Selected Industry

A1.25. Shipments or Sales of Foreign-Owned Establishments, State by Country of UBO

Group II. Individual States: Detailed Industry Tables

A2.1. Number, Employment, Payroll and Shipments or Sales of Foreign-Owned and All U.S. Establishments in Each State, by Detailed Industry

A2.2. Employment, and Number by Employment Size Class, of Foreign-Owned Establishments in Each State, by Detailed Industry

Group III. Selected Countries: Industry and State-by-Industry Tables

A3.1 to A3.7. Number, Employment, Payroll, and Shipments or Sales of ____-Owned Establishments, by Industry (for Canada, France, Germany, Netherlands, Switzerland, U.K., Japan; note no state-wise information included)

A3.8 to A3.14. Number and Employment of ____-Owned Establishments, by Detailed Industry (for Canada, France, Germany, Netherlands, Switzerland, U.K., Japan; note no state-wise information included)

A3.15. Number and Employment of Canadian-Owned Establishments, by State and Industry

A3.16. Number and Employment of French-Owned Establishments, by State and Industry

A3.17. Number and Employment of German-Owned Establishments, by State and Industry

A3.18. Number and Employment of Netherlands-Owned Establishments, by State and Industry

A3.19. Number and Employment of Swiss-Owned Establishments, by State and Industry

A3.20. Number and Employment of British-Owned Establishments, by State and Industry

A3.21. Number and Employment of Japanese-Owned Establishments, by State and Industry
