

CNMI  
wages

Wages in the Commonwealth of the  
Northern Mariana Islands

(CNMI)

An Analysis Based on the  
1990 Census of the CNMI

and

the 1992 Labor Force Survey

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## INTRODUCTION

This short paper looks at average wages for persons born in various place and living in the Commonwealth of the Northern Mariana Islands (CNMI) at the time of the 1990 Census. The study was started at the request of the government of the CNMI to assist the assessment of the current wage structure. The Chief of Central Statistics, then, took the liberty to work on this a paper with the assistance of Dr. Michael J. Levin. This Paper was written after working hours with the intention to stimulate discussions and more detail analysis on the wages in the CNMI.

## METHODOLOGY

The number of persons for each table cell appears in the printed publications of the 1990 Census and the 1992 Current Household Survey (CHS) , but are shown here in the Appendix. The methodology used for this study is straight forward. In order to obtain the average (mean) wage for each cell in a table, two sets of cells were tabulated: one set of cells was for the estimated hours worked in 1989 for all persons in the cell, obtained by multiplying the recorded "weeks worked in 1989" by the "average hours worked per week in 1989". Hence a person who worked 50 weeks in 1989 and worked an average of 40 hours per week, would be recorded here as having worked 2000 hours during the year (50 weeks x 40 hours per week = 2000 hours).

The second set of cells was for aggregate income, obtained by summing the wage earnings in 1989 of each individual appearing in each cell of the table. Finally, the second set of cells was divided by the first set to obtain the average hourly earnings for 1989.

developed by Tom Torres, Central Statistics Division, CNMI. The CNMI may later use results of the 1992 Income and Expenditures Survey as well as locally obtained Administrative Records. Although the text and tables would refer the income data as 1990 and 1992, the income data are actually 1989 and 1991 earned income. The methodology of the 1990 Census and 1992 CHS are explained in their respective publications.

## FINDINGS

Table 1 shows that 25,965 persons 16 years and over were employed in the CNMI in 1990. Of these, 11,183 (43 percent) were females and 14,782 were males. Only 4,745 (18.3 percent) of the employed population were born in the CNMI while 18,409 (70.9 percent) were born in various countries in Asia — that is, less than 1 in every 5 of the CNMI's workers were born in the CNMI compared to about 7 in every 10 born in Asia.

| Sex<br>Class of Worker | Total  | CNMI  | Palau | FSM | Asia   |       |       |       |        |
|------------------------|--------|-------|-------|-----|--------|-------|-------|-------|--------|
|                        |        |       |       |     | Total  | China | Japan | Korea | Phil.  |
| Employed 16+           | 25,965 | 4,745 | 768   | 830 | 18,409 | 2,643 | 543   | 1,839 | 12,441 |
| Females                | 11,183 | 1,939 | 388   | 357 | 8,064  | 1,986 | 116   | 1,153 | 4,181  |
| Males                  | 14,782 | 2,806 | 380   | 473 | 10,345 | 657   | 427   | 686   | 8,260  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

Because of legal requirements surrounding documentation of the impact of Micronesian migrants to the CNMI as a result of the Compacts of Free Association between the United States and the Federated States of Micronesia (FSM) and the Republic of the Marshall Islands (RMI), we have included persons from FSM employed in the CNMI in this study.

The 1,939 employed females born in the CNMI constituted 17.3 percent of all female workers, while the 2,806 employed males born in the CNMI were 19.0 percent of all employed males.

Table 2 shows average wages in 1989 for persons employed in 1990. Note that while the employment status is for the week before enumeration in 1990, the earnings and hours worked are for 1989, so a person could have been employed in 1990 but have not earned money in 1989, or vice versa (which is why the totals vary for some tables.)

| Sex          | Total | CNMI | Palau | FSM  | Asia  |       |       |       |       |
|--------------|-------|------|-------|------|-------|-------|-------|-------|-------|
|              |       |      |       |      | Total | China | Japan | Korea | Phil. |
| 1990         |       |      |       |      |       |       |       |       |       |
| Employed 16+ | 4.55  | 7.54 | 4.93  | 4.42 | 3.34  | 1.63  | 13.11 | 8.18  | 2.44  |
| Females      | 3.93  | 6.99 | 4.74  | 3.41 | 3.07  | 1.40  | 7.05  | 7.15  | 2.53  |
| Males        | 5.02  | 7.92 | 5.12  | 5.18 | 3.55  | 2.33  | 14.76 | 9.91  | 2.39  |
| 1992         |       |      |       |      |       |       |       |       |       |
| Employed 16+ | 5.02  | 8.94 | 5.59  | 4.67 | 2.82  | 2.86  | 12.60 | 4.55  | 2.45  |
| Females      | 4.72  | 8.31 | 6.01  | 4.85 | 2.58  | 2.47  | 16.84 | 3.72  | 2.32  |
| Males        | 5.22  | 9.36 | 5.10  | 4.56 | 2.98  | 3.95  | 11.76 | 5.62  | 2.52  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54); CNMI Current Household Survey, 1992

The average wage for employed persons in 1989 was \$4.55 per hour. Males averaged \$5.02 per hour while females were averaging \$3.93, about \$1 less per hour. In fact, females only made about 78 cents for every male dollar. And, this value does not take into account actual hours worked, and since females are more likely than males to work part time, their economic situation is almost certainly worse than the 78 percent indicated.

The average person born in the CNMI was making about \$7.50 per hour, about \$3 more per hour than all workers in the CNMI. This trend held for both males and females, native born males and females making about \$3 more per hour than the total of those born elsewhere. Asians — by far the largest expatriate group in the CNMI — made about \$1 less per hour than the total CNMI working population, and about \$4 less than those born in the CNMI. Asian females made about \$1 less than all females, and less than half of what CNMI-born females made (\$3.07 per hour, only 44 percent of the \$6.99 hourly rate for the CNMI-born females).

The situation for Asian males was worse. Asian males made about \$1.50 less than the total for all males, and 45 percent of the CNMI-born males' average hourly rate. The \$3.55 hourly rate for Asian males was less than the rate for all CNMI female workers.

Two groups — Philippines-born and China-born — exerted a downward influence on the Asian rate. The average Filipino worker (defined as a person born in the Philippines) made only \$2.44 per hour in 1989, fully \$2 less than the CNMI total, and only 1/3 of the hourly wage for CNMI-born workers. Filipino females did slightly better than Filipino males — the Filipino females making \$2.53 per hour

compared to the \$2.39 per hour made by the males. Filipino males made only 30 cents for every dollar earned by a CNMI-born male.

Korea-born persons earned slightly more per hour in 1989 than did the CNMI-born workers, with females about the same as the CNMI-born females and Korea-born males making about \$2 more per hour than their CNMI-born counterparts. Japan-born males did the best of the groups shown, making almost \$15 per hour, almost double the rate for CNMI-born males, and triple the rate for all male workers in the CNMI.

Two relatively new immigrant groups, those from the Federated States of Micronesia (FSM) and the Republic of Palau, made about the same as the average for the total working population in 1989. FSM and Palau-born males made about what all males averaged, while FSM females made somewhat less than all females, and Palau-born females made somewhat more.

### CLASS OF WORKER

The 1990 Census of the Commonwealth of the Northern Mariana Islands showed that government work continued to be more remunerative than private sector work. The average private sector worker (for profit) made about \$3.50 less than the average local government worker in 1990 (Table 3). The average local government worker born in the CNMI made more than \$1 per hour more than those working in the private sector, indicating that the private sector was heavily weighted in favor of non-CNMI-born workers, as would be expected. Few non-CNMI-born workers would be expected to be working for local government, particularly when considering the relative sizes of the two sectors. However, this is not the case here in the CNMI.

| Class of Worker     | Total | CNMI  | Palau | FSM  | Asia  |       |       |       |       |
|---------------------|-------|-------|-------|------|-------|-------|-------|-------|-------|
|                     |       |       |       |      | Total | China | Japan | Korea | Phil. |
| Employed 16+        | 4.55  | 7.54  | 4.93  | 4.42 | 3.34  | 1.63  | 13.11 | 8.18  | 2.44  |
| Private, profit     | 3.86  | 6.71  | 3.56  | 3.64 | 3.27  | 1.62  | 12.95 | 8.20  | 2.33  |
| Private, not profit | 4.80  | 7.13  | 4.78  | 2.97 | 2.46  | 0.11  | 7.70  | 6.20  | 2.13  |
| Local government    | 8.47  | 8.04  | 9.07  | 7.36 | 7.53  | 9.83  | 20.97 | 9.06  | 6.75  |
| Federal government  | 11.14 | 8.12  | 7.67  | 8.70 | 7.47  | -     | 25.23 | 4.17  | 5.73  |
| Self-employed       | 15.09 | 18.06 | 10.05 | -    | 5.21  | 4.79  | 0.55  | 7.23  | 5.07  |
| Unpaid family       | 3.76  | 3.53  | -     | -    | 2.65  | 2.13  | -     | 4.89  | 1.53  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

In fact, the average private sector wage for Asians was \$2.37 per hour, about 60 cents less than the private sector wage for all working persons, and about \$3.50 less than for CNMI-born workers. Private sector workers born in China made only \$1.62 per hour, only 42 percent of the average private sector hourly wage, and only 1/4 of the hourly wage earned by CNMI-born workers. Filipinos, while about 50 percent better off than the China-born, still only averaged about 60 percent of the average wage for all CNMI workers.

Asian-born workers in local government earned about \$1 an hour less than CNMI-born workers, while Palau-born workers in the local government earned about \$1 more than CNMI-born. The Asia-born workers in local government tended to earn more than the local-born, except for Philippines-born workers, who earned substantially less.

The 1992 Labor Force Survey also collected data on class of worker, although the categories were slightly different. For the four categories which were the same, those shown in Table 4, show mixed changes, due to size of the sample of the 1992 survey. The average wage of employed persons increased from \$4.55 to \$5.02 per hour, about 10 percent in 2 years. The increase was seen mostly in the local government sector, which increased from an average of \$8.47 in 1990 to \$9.89 in 1992, and increase of about \$1.40 per hour during the two year period. Wages in the private sector actually decreased.

| Class of Worker     | 1990  |      |       |      |      | 1992  |       |       |       |      |
|---------------------|-------|------|-------|------|------|-------|-------|-------|-------|------|
|                     | Total | CNMI | Palau | FSM  | Asia | Total | CNMI  | Palau | FSM   | Asia |
| Employed 16+        | 4.55  | 7.54 | 4.93  | 4.42 | 3.34 | 5.02  | 8.94  | 5.59  | 4.67  | 2.82 |
| Private, profit     | 3.86  | 6.71 | 3.56  | 3.64 | 3.27 | 3.81  | 7.73  | 3.99  | 3.21  | 2.74 |
| Private, not profit | 4.80  | 7.13 | 4.78  | 2.97 | 2.46 | 2.26  | 4.81  | 11.54 | .54   | 1.12 |
| Local government    | 8.47  | 8.04 | 9.07  | 7.36 | 7.53 | 9.89  | 9.74  | 9.83  | 10.48 | 9.16 |
| Federal government  | 11.14 | 8.12 | 7.67  | 8.70 | 7.47 | 10.96 | 11.23 | 7.23  | -     | 4.00 |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54) and CNMI Current Household Survey, 1992

The average wage for CNMI workers also increased by \$1.40 during the two year period, from about \$7.20 per hour to \$8.90. Palau-born workers saw an average of about 70 cents more per hour, while FSM-born received about 25 cents more per hour. Total wages for Asia-born persons, however, decreased during the two year period, from \$3.34 per hour in 1990 down to \$2.82 per hour in 1992. This decrease appeared in the private sector because Asia-born local government employees saw their average hourly wage increase from \$7.53 per hour in 1990 to \$9.16 in 1992, still about 60 cents per hour less than the CNMI-born local government employees. FSM-born workers in the private, for profit sector also lost ground, going from \$3.64 per hour in 1990 to \$3.21 in 1992.

Female workers in the for-profit private sector made only about 43 percent of what those in local government made in 1990 (\$3.36 per hour compared to \$7.78, Table 5). In the local government, females born in the CNMI made slightly less than the amount for all females, but the CNMI-born females in the private sector made about \$3 per hour more than the amount for all female workers in the CNMI. Asian females in the public sector (local government) made even less than the CNMI-born females, so "other"-born, presumably females born on Guam or in the United States.

| Class of Worker     | Total | CNMI | Palau | FSM  | Asia  |       |       |       |       |
|---------------------|-------|------|-------|------|-------|-------|-------|-------|-------|
|                     |       |      |       |      | Total | China | Japan | Korea | Phil. |
| Empl Fmles 16+      | 3.93  | 6.99 | 4.74  | 3.41 | 3.07  | 1.40  | 7.05  | 7.15  | 2.53  |
| Private, profit     | 3.36  | 6.29 | 3.63  | 2.85 | 2.99  | 1.40  | 6.98  | 7.17  | 2.31  |
| Private, not profit | 5.15  | 8.19 | 5.34  | 2.52 | 2.27  | 0.11  | -     | 6.14  | 2.50  |
| Local government    | 7.78  | 7.60 | 7.64  | 6.09 | 7.20  | -     | 8.77  | 1.93  | 7.28  |
| Federal government  | 8.01  | 7.28 | 11.28 | 9.04 | 4.74  | -     | -     | 4.17  | 6.85  |
| Self-employed       | 8.40  | 6.25 | 8.08  | -    | 4.32  | 2.31  | -     | 5.93  | 2.89  |
| Unpaid family       | 8.02  | -    | -     | -    | 4.68  | -     | -     | 4.68  | -     |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

Palau-born females in the private sector made slightly more than all females, while FSM-born females made somewhat less. China-born females made the lowest wages of the groups shown, at \$1.40 per hour, only 22 percent of the CNMI-born females. Philippines-born females made \$2.31 per hour, still \$1 less than the average for all female workers in the for-profit private sector.

As shown before, male workers in the CNMI in 1990 made higher wages than did females. The average for-profit private sector male worker made \$4.25, compared to \$3.36 for the females — hence, female workers in this sector made only 79 percent of the male wages (about the same as for all wages, Table 6). Similarly, males in local government averaged \$8.95 per hour compared to \$7.78 for females. Here females did noticeably better, an average 87 percent of the male wages. As before, local males in the private sector made higher wages than those born elsewhere, while local born males made slightly less than all males in local government, again probably the result of United States-born workers in the local government.



Table 6. Mean Wages for Males by Class of Worker and Birthplace, CNMI: 1990

| Class of Worker     | Total | CNMI  | Palau | FSM  | Asia  |       |       |       |       |
|---------------------|-------|-------|-------|------|-------|-------|-------|-------|-------|
|                     |       |       |       |      | Total | China | Japan | Korea | Phil. |
| Employed 16+        | 5.02  | 7.92  | 5.12  | 5.18 | 3.55  | 2.33  | 14.76 | 9.91  | 2.39  |
| Private, profit     | 4.25  | 7.05  | 3.49  | 4.27 | 3.49  | 2.30  | 14.56 | 10.03 | 2.34  |
| Private, not profit | 4.59  | 5.75  | 3.94  | 3.60 | 2.52  | -     | 7.70  | 6.21  | 2.03  |
| Local government    | 8.95  | 8.30  | 10.63 | 8.05 | 7.97  | 14.75 | 26.39 | 11.44 | 5.97  |
| Federal government  | 13.06 | 8.79  | 4.96  | 8.55 | 10.88 | -     | 25.23 | -     | 4.39  |
| Self-employed       | 17.27 | 21.26 | 11.36 | -    | 5.48  | 5.69  | 0.67  | 7.67  | 5.72  |
| Unpaid family       | -1.31 | 6.18  | -     | -    | 0.15  | 2.13  | -     | 5.84  | 2.14  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

## OCCUPATION

Table 7 shows the six major occupation groups from the 1990 Census. The occupation groups are displayed roughly in declining order of economic status, so that the general decline in average wages when looking down the chart is not unexpected. While the average worker in 1990 made about \$4.55 per hour, those in managerial and professional occupations, made about \$4 more per hour. Workers born in the CNMI in this category did even better, averaging almost \$11 per hour.

Table 7. Mean Wages for Occupation by Birthplace, CNMI: 1990

| Occupation               | Total | CNMI  | Palau | FSM   | Asia  |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                          |       |       |       |       | Total | China | Japan | Korea | Phil. |
| Employed 16+             | 4.55  | 7.54  | 4.93  | 4.42  | 3.34  | 1.63  | 13.11 | 8.18  | 2.44  |
| Managerial/professional  | 9.59  | 10.87 | 9.55  | 10.65 | 7.12  | 3.94  | 14.95 | 10.08 | 4.66  |
| Technical, sales, admin  | 6.25  | 6.53  | 4.35  | 4.21  | 5.21  | 5.67  | 10.43 | 7.86  | 3.71  |
| Service                  | 2.99  | 5.48  | 3.49  | 3.60  | 2.37  | 2.24  | 13.49 | 8.12  | 1.89  |
| Farming, fishing, forest | 2.37  | 4.38  | 4.00  | 2.58  | 1.88  | 2.01  | 5.48  | 13.25 | 1.69  |
| Precision prod., craft   | 3.55  | 5.64  | 4.80  | 3.31  | 3.29  | 1.77  | 7.61  | 22.16 | 2.04  |
| Operators, fabric, labor | 2.47  | 4.27  | 2.82  | 2.55  | 2.30  | 1.47  | 3.98  | 4.12  | 2.38  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

FSM-born managers and professional also averaged higher average wages than the total population, as did Japan- and Korea-born persons. In general, however, Asia-born workers averaged lower wages than other groups, and Asia-born as a whole averaged lower wages for each of the occupational categories. Asia-born managers and professionals made an average of \$7.12 per hour,

only 74 percent of the rate for all managers and professionals. China-born did even worse, at \$3.94 earning only 41 percent of average, and Philippines-born made \$4.66 (49 percent).

Persons in technical occupations, combined with sales and administrative support jobs averaged \$6.25 per hour. The CNMI-born average was slightly higher, the averages for all other groups except Japan and Korea were lower. However, the rate for Asians was only \$1 less than the rate for all persons.

Real differences were seen in the other occupational categories. For example, the average CNMI-born worker in the service category earned \$5.48 per hour compared to only \$2.99 (55 percent of the CNMI average) for all persons. Palau- and FSM-born persons earned higher wages than average, but the Asia-born average was much lower (although, as usual, Japan- and Korea-born earned much more). Philippines-born in service occupations made an average of only \$1.89, only 2/3 of the average for CNMI, and only 1/3 of the rate for CNMI-born.

CNMI-born in precision production and crafts occupations earned about \$2 more, on average, than did all workers, but there were fewer CNMI-born than other workers in these occupations. Similarly, the CNMI-born earned about \$2 more than average as operators, fabricators, and laborers.

As noted earlier, the average wage increased by about 50 cents between 1990 and 1992. Some of the occupational categories, like operators, fabricators, and laborers, and managers and professionals showed similar increases during the two year period (Table 8). Persons working in service occupations and those working in precision production and crafts received about the same pay, around \$3.00 and \$3.50, respectively, in 1990 and 1992. However, persons working in technical, sales, and administrative support occupations, and those doing fishing, forestry, and farming occupations saw their wages decrease during the period. The decrease in technical, sales, and administrative support was from \$6.25 per hour in 1990 to \$5.74 in 1992, a decrease of about 50 cents per hour. Farmers, fishermen, and forestry workers' pay decreased from \$2.37 per hour to \$1.58.

| Occupation               | 1990  |       |       |       |      | 1992  |       |       |      |      |
|--------------------------|-------|-------|-------|-------|------|-------|-------|-------|------|------|
|                          | Total | CNMI  | Palau | FSM   | Asia | Total | CNMI  | Palau | FSM  | Asia |
| Employed 16+             | 4.55  | 7.54  | 4.93  | 4.42  | 3.34 | 5.02  | 8.94  | 5.59  | 4.67 | 2.82 |
| Managerial/professional  | 9.59  | 10.87 | 9.55  | 10.65 | 7.12 | 9.85  | 11.78 | 8.83  | 9.56 | 5.96 |
| Technical, sales, admin  | 6.25  | 6.53  | 4.35  | 4.21  | 5.21 | 5.74  | 6.76  | 4.23  | 4.83 | 3.77 |
| Service                  | 2.99  | 5.48  | 3.49  | 3.60  | 2.37 | 2.95  | 6.90  | 2.60  | 2.52 | 1.95 |
| Farming, fishing, forest | 2.37  | 4.38  | 4.00  | 2.58  | 1.88 | 1.58  | 7.61  | -     | .90  | 1.22 |
| Precision prod., craft   | 3.55  | 5.64  | 4.80  | 3.31  | 3.29 | 3.49  | 5.18  | -     | 2.91 | 2.66 |
| Operators, fabric, labor | 2.47  | 4.27  | 2.82  | 2.55  | 2.30 | 2.86  | 6.93  | 4.66  | 3.85 | 2.33 |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54) and CNMI Current Household Survey, 1992

The salaries of CNMI-born farmers, fishermen, and forestry workers actually increased in 1992, the average increasing from \$4.38 per hour in 1990 to \$7.61. However, FSM-born wages in this category decreased from \$2.58 to 90 cents, and wages of Asian-born decreased from \$1.88 to \$1.22 per hour.

The average wage for CNMI-born managers and professionals increased from almost \$11 in 1990 to almost \$12 in 1992, while the average wage for the other groups — Palau-, FSM-, and Asia-born — decreased. Wages for the technical and sales workers born in the CNMI or the FSM increased during the two years, while the others decreased. Also, while wages for CNMI-born in the service category increased, wages for all other groups decreased during the two years.

Tables 9 and 10 show 1990 Census displays for females and males separately. The average wage of \$43.54 for Korean females in the precision production occupation tends to distort the average wage for the Asian-born females as well as the total for all Asian-born. This case usually occurs when only one or two individuals were recorded.

| Occupation               | Total | CNMI | Palau | FSM  | Asia  |       |       |       |       |
|--------------------------|-------|------|-------|------|-------|-------|-------|-------|-------|
|                          |       |      |       |      | Total | China | Japan | Korea | Phil. |
| Empl. Females 16+        | 3.93  | 6.99 | 4.74  | 3.41 | 3.07  | 1.40  | 7.05  | 7.15  | 2.53  |
| Managerial/professional  | 7.19  | 9.38 | 7.28  | 7.20 | 4.74  | 2.11  | 6.89  | 7.12  | 4.39  |
| Technical, sales, admin  | 5.32  | 6.26 | 4.27  | 3.72 | 4.05  | 2.42  | 7.61  | 4.71  | 3.55  |
| Service                  | 2.17  | 4.39 | 4.17  | 3.70 | 1.83  | 1.25  | 4.76  | 9.04  | 1.58  |
| Farming, fishing, forest | 6.82  | 5.89 | -     | 1.92 | 7.59  | -     | 8.65  | -     | 7.56  |
| Precision prod., craft   | 16.81 | 4.64 | 2.71  | 2.15 | 18.54 | 1.19  | 4.04  | 43.54 | 2.52  |
| Operators, fabric, labor | 2.12  | 2.76 | 2.42  | 2.55 | 2.11  | 1.39  | -     | 3.47  | 2.48  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

For the other occupations, CNMI-born females tended to do better than all females, except for the category having to do with farming, fishing, and forestry, but even here, the difference was small. On the other hand, some groups of Asia-born females were not doing well, even considering the type of occupation. China-born females in service occupations averaged only \$1.25 per hour, and Philippines-born females in this occupation did only slightly better.

CNMI-born males in technical, sales, and administrative support occupations made somewhat lower hourly wages than did all CNMI males, but did better in all other occupational categories. FSM and Palau-born males also did less well in the technical occupations and in service occupations, but did better in farming and fishing and precision productions and crafts. Asia-born males averaged only \$1.78 per hour in farming and fishing occupations, although many of these were probably fishermen on boats docked in the CNMI at the time of the 1990 Census. Philippines-born male fishermen made only \$1.58 per hour.

| Occupation               | Total | CNMI  | Palau | FSM   | Asia  |       |       |       |       |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                          |       |       |       |       | Total | China | Japan | Korea | Phil. |
| Employed Males 16+       | 5.02  | 7.92  | 5.12  | 5.18  | 3.55  | 2.33  | 14.76 | 9.91  | 2.39  |
| Managerial/professional  | 11.15 | 11.85 | 13.07 | 12.12 | 8.70  | 4.48  | 16.21 | 10.81 | 4.95  |
| Technical, sales, admin  | 7.55  | 6.97  | 4.55  | 4.86  | 6.49  | 7.99  | 12.45 | 10.20 | 3.93  |
| Service                  | 4.28  | 5.99  | 2.88  | 3.54  | 3.58  | 2.76  | 15.30 | 4.87  | 2.67  |
| Farming, fishing, forest | 2.27  | 4.29  | 4.00  | 2.66  | 1.78  | 2.01  | 5.16  | 13.25 | 1.59  |
| Precision prod., craft   | 2.79  | 5.72  | 4.90  | 3.89  | 2.47  | 1.94  | 8.16  | 10.81 | 2.03  |
| Operators, fabric, labor | 3.11  | 4.55  | 3.00  | 2.65  | 2.79  | 1.88  | 3.98  | 8.86  | 2.32  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

Table 11 shows mean wages for managers and professionals only by sex and birthplace. On average, male managers and professionals earned about \$4 more per hour than females in the CNMI. While males born in the CNMI made about 80 cents more per hour than the average for all male workers, females born in the CNMI did much better, more than \$2 more per hour than the average. Still, female managers and professionals born in the CNMI made about \$2.50 less per hour than did their male counterparts.

| Managers and Professionals | Total | CNMI  | Palau | FSM   | Asia  |       |       |       |       |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                            |       |       |       |       | Total | China | Japan | Korea | Phil. |
| Both sexes                 | 9.59  | 10.87 | 9.55  | 10.65 | 7.12  | 3.94  | 14.95 | 10.08 | 4.66  |
| Females                    | 7.19  | 9.38  | 7.28  | 7.20  | 4.74  | 2.11  | 6.89  | 7.12  | 4.39  |
| Males                      | 11.15 | 11.85 | 13.07 | 12.12 | 8.70  | 4.48  | 16.21 | 10.81 | 4.95  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

Most of the groups showed considerable differences between male and female managers. For example, Japan-born males made more than \$9 more per hour than their female counterparts. Palauan males made \$6 more per hour, and FSM males made \$5 more per hour than the females. The difference for all Asia-born workers was less, males earning about \$4 more per hour than the females, but both values were much lower than for all of the CNMI.

Table 12 shows somewhat different results for the other end of the occupational continuum — operators, fabricators, and laborers. This category is particularly important in the CNMI because

so many of these workers are employed in the garment factories. The average wage for these persons in 1990 was \$2.47, with males making about \$1 more per hour than females. CNMI-born males, however, made almost \$2 more per hour than did their female counterparts, with only Korean males of the groups shown making more per hour.

| Operators,<br>Fabricators, and<br>Laborers | Total | CNMI | Palau | FSM  | Asia  |       |       |       |       |
|--|-------|------|-------|------|-------|-------|-------|-------|-------|
|  |       |      |       |      | Total | China | Japan | Korea | Phil. |
| Both sexes                                 | 2.47  | 4.27 | 2.82  | 2.55 | 2.30  | 1.47  | 3.98  | 4.12  | 2.38  |
| Females                                    | 2.12  | 2.76 | 2.42  | 2.42 | 2.11  | 1.39  | -     | 3.47  | 2.48  |
| Males                                      | 3.11  | 4.55 | 3.00  | 2.65 | 2.79  | 1.88  | 3.98  | 8.86  | 2.32  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 54)

FSM male and female laborers made almost the same wage rates, while Asia-born and Palau-born showed about the same differences between males and females - about 60 cents per hour. China-born males and females had the lowest wages, with China-born females *averaging* only \$1.39 per hour. This value was about 2/3 the rate for all female laborers, but was only about 1/3 the value for all female workers in the CNMI.

## INDUSTRY

Since CNMI-born workers earned about \$3 more than the average worker in the CNMI in general, they also made more in almost all of the industry categories. In manufacturing, for example, the average for CNMI-born workers was \$6.56 per hour, more than twice the average for all of CNMI workers (Table 13). CNMI-born workers in business services made almost \$12 per hour compared to about \$4 per hour for all CNMI workers. Similarly, CNMI-born in construction were making more than \$9 per hour, compared to less than \$3 per hour for the whole working population.

Table 13. Mean Wages for Industry by Birthplace, CNMI: 1990

| Industry                | Total | CNMI  | Palau | FSM   | Asia  |       |       |       |       |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                         |       |       |       |       | Total | China | Japan | Korea | Phil. |
| Employed 16+            | 4.55  | 7.54  | 4.93  | 4.42  | 3.34  | 1.63  | 13.11 | 8.18  | 2.44  |
| Agriculture             | 2.26  | 5.84  | 4.79  | 3.20  | 1.66  | 1.88  | 5.69  | 2.12  | 1.59  |
| Forestry & fisheries    | 4.53  | 4.48  | 5.36  | ...   | 4.01  | 2.43  | 8.65  | 57.69 | 2.02  |
| Mining                  | 2.93  | 4.51  | ...   | ...   | 2.92  | 5.77  | 16.43 | ...   | 2.68  |
| Construction            | 2.83  | 9.29  | 6.11  | 7.80  | 2.46  | 2.35  | 11.07 | 14.28 | 2.14  |
| Manufacturing           | 2.44  | 6.56  | 2.87  | 2.38  | 2.30  | 1.49  | 14.56 | 3.65  | 2.51  |
| Nondurable goods        | 2.37  | 6.21  | 2.89  | 2.40  | 2.26  | 1.49  | 10.66 | 3.60  | 2.54  |
| Durable goods           | 5.29  | 8.85  | 2.54  | 2.24  | 4.44  | 3.12  | 17.11 | 8.15  | 2.13  |
| Transport/communic/util | 6.45  | 6.41  | 4.28  | 3.91  | 5.38  | 7.24  | 9.26  | 8.34  | 3.49  |
| Wholesale trade         | 7.41  | 6.02  | 4.39  | 5.18  | 5.77  | 1.85  | 9.31  | 26.97 | 4.18  |
| Retail trade            | 4.94  | 6.62  | 3.50  | 3.50  | 4.12  | 4.79  | 9.78  | 9.90  | 2.83  |
| Finance/insur/r.estate  | 10.67 | 9.16  | 5.89  | 19.39 | 10.02 | 2.44  | 39.14 | 10.54 | 4.81  |
| Business services       | 4.05  | 11.93 | 3.13  | 3.00  | 2.62  | 2.13  | 9.74  | 8.32  | 2.40  |
| Repair services         | 4.25  | 4.21  | 3.12  | 3.02  | 4.10  | 1.62  | 4.62  | 10.36 | 2.46  |
| Personal services       | 5.49  | 4.54  | 2.98  | 3.33  | 5.66  | 13.37 | 14.09 | 45.20 | 2.03  |
| Entertainment/rec       | 6.72  | 6.53  | 3.61  | 5.58  | 6.09  | ...   | 16.91 | 13.06 | 2.93  |
| Professional            | 8.53  | 7.70  | 9.55  | 7.12  | 6.23  | 5.77  | 9.13  | 9.47  | 5.77  |
| Public administration   | 9.23  | 8.63  | 8.97  | 7.80  | 10.42 | ...   | 49.48 | 4.17  | 6.08  |

Source: U.S. Bureau of the Census unpublished tabulations (Table 55)

Persons working in finance, insurance, and real estate made the highest hourly wages — \$10.67 per hour — while those working in agriculture (at \$2.26 per hour) and manufacturing (\$2.37) made the lowest wages. Persons working in construction and mining also made comparatively low wages, at less than \$3 per hour.

Asia-born workers made considerably less than the CNMI average in most industries. As noted previously, the average for all Asia-born workers was about \$3.34, more than \$1 less than the total CNMI, and more than \$4 less than CNMI-born workers. Some of the differences are small, other are very large. In some areas, finance, for example, Asia-born were making more than the CNMI born. In agriculture, on the other hand, Asia-born made only \$1.66 per hour, compared to \$5.84 for the CNMI-born.

The 1992 Labor Force Survey grouped the industry categories in a different way (Table 14). For this survey, agriculture, forestry and fishing occupations were combined, nondurable and durable goods were not shown separately, and all services areas were combined. Hence, the values shown above the asterisks in each case are aggregates of what appears below. So, while in 1990 agricultural workers were making \$2.26 per hour and persons in the forestry and fishing industries were making

\$4.53 per hour, the 1992 Survey showed these persons (in the aggregate) making only about \$1.64 per hour. Similarly, while the average wage in the manufacturing category increased from \$2.44 in 1990 to \$2.90 in 1992, we cannot show the values for persons making nondurable goods compared to those making durable goods in 1992.

Table 14. Mean Wages for Industry by Birthplace, CNMI: 1990 and 1992

| Industry                | 1990  |       |       |       |       | 1992  |       |       |       |      |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
|                         | Total | CNMI  | Palau | FSM   | Asia  | Total | CNMI  | Palau | FSM   | Asia |
| Employed 16+            | 4.55  | 7.54  | 4.93  | 4.42  | 3.34  | 5.02  | 8.94  | 5.59  | 4.67  | 2.82 |
| Agriculture             | 2.26  | 5.84  | 4.79  | 3.20  | 1.66  | 1.64  | 7.32  | -     | -     | 1.27 |
| Forestry & fisheries    | 4.53  | 4.48  | 5.36  | ...   | 4.01  | *     | *     | -     | *     | *    |
| Mining                  | 2.93  | 4.51  | ...   | ...   | 2.92  | 11.54 | 11.54 | -     | -     | -    |
| Construction            | 2.83  | 9.29  | 6.11  | 7.80  | 2.46  | 2.85  | 7.20  | 1.75  | -     | 2.47 |
| Manufacturing           | 2.44  | 6.56  | 2.87  | 2.38  | 2.30  | 2.90  | 6.04  | 2.24  | 2.45  | 2.65 |
| Nondurable goods        | 2.37  | 6.21  | 2.89  | 2.40  | 2.26  | *     | *     | *     | *     | *    |
| Durable goods           | 5.29  | 8.85  | 2.54  | 2.24  | 4.44  | *     | *     | *     | *     | *    |
| Transport/communic/util | 6.45  | 6.41  | 4.28  | 3.91  | 5.38  | 7.35  | 7.78  | 4.24  | 5.55  | 4.68 |
| Wholesale trade         | 7.41  | 6.02  | 4.39  | 5.18  | 5.77  | 5.37  | 4.41  | 18.27 | -     | 5.65 |
| Retail trade            | 4.94  | 6.62  | 3.50  | 3.50  | 4.12  | 4.93  | 7.48  | 4.07  | 3.67  | 3.83 |
| Finance/insur/r.estate  | 10.67 | 9.16  | 5.89  | 19.39 | 10.02 | 6.73  | 8.27  | 8.17  | 5.00  | 4.00 |
| Business services       | 4.05  | 11.93 | 3.13  | 3.00  | 2.62  | 4.73  | 9.41  | 5.19  | 4.18  | 2.35 |
| Repair services         | 4.25  | 4.21  | 3.12  | 3.02  | 4.10  | *     | *     | *     | *     | *    |
| Personal services       | 5.49  | 4.54  | 2.98  | 3.33  | 5.66  | *     | *     | *     | *     | *    |
| Entertainment/rec       | 6.72  | 6.53  | 3.61  | 5.58  | 6.09  | *     | *     | *     | *     | *    |
| Professional            | 8.53  | 7.70  | 9.55  | 7.12  | 6.23  | *     | *     | *     | *     | *    |
| Public administration   | 9.23  | 8.63  | 8.97  | 7.80  | 10.42 | 9.98  | 9.88  | 8.80  | 11.17 | 9.46 |

Source: U.S. Bureau of the Census unpublished tabulations (Table 55) and CNMI Current Household Survey, 1992

Notes: \* = For 1992, Agriculture, forestry and fishing occupations combined, nondurable and durable goods not shown separately, and all services combined.

As noted before, the average wage increased from \$4.55 to \$5.02 per hour between 1990 and 1992. Probably because of small numbers, the largest increase was seen in mining industries, increasing from about \$3 per hour to \$12 per hour. Wages in construction and retail trade remained about the same, while finance, insurance, and real estate showed the greatest decline — from \$10.67 to \$6.73 per hour.

Table 15 shows the industry distribution for females from the 1990 Census. Females working in public administration made the highest hourly wages, at \$8.67 per hour, followed by those in finance, insurance, and real estate, forestry and fisheries, and professionals. Females working in manufacturing made the lowest wages, \$2.09 per hour, with those working in nondurable goods influencing this low wage. Females working in mining, construction, and entertainment and recreation services all made less than \$4 per hour.