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Earning the model-minority image: diverse strategies of economic adaptation by Asian-American women

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Abstract

Using the 1980 US Population Census data, this article documents the diverse strategies of economic adaptation adopted by a group of working-age immigrant women: Japanese, Chinese, Filipino, Korean, Indian and Vietnamese. A comparable sample of non-Hispanic white women serves as the reference group. Striking heterogeneity in the individual and collective resources of these groups, together with differences in labour market opportunities and historical context of immigration, have led to a variety of patterns of labour force participation and methods of income attainment. In order to move beyond the oversimplified image of Asian-Americans as a model minority in their economic success, the article applies four different theories to the census data – assimilation, dual economy, ethnic-enclave economy and middleman minority. The article closes with a discussion of theoretical implications and methodological suggestions for future studies concerning labour force position and economic adaptation of minority and immigrant women.

Introduction

Asian-American women have pursued a wide array of strategies for economic adaptation in the racially and sexually segregated US labour market. Though market forces often relegate anyone who is a minority, foreign born or a woman to an exploitable position, Asian-American women have demonstrated great resilience in coping with economic obstacles. Their vaunted 'success', however, has varied widely, depending on their own personal and group resources, the size and concentration of their ethnic groups in local areas of settlement and the available economic opportunities. In the light of this diversity among Asian women, the commonly adopted census category of 'Asian-Americans' is revealed as an artificial construct with little sociological

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utility for the analysis of female labour force behaviour or strategies for economic advancement. This article analyses the 1980 US Population Census to document the diverse economic outcomes for Asian-American women and suggests new theoretical approaches for understanding their complex patterns for economic adaptation.

The article has three aims. First, it discusses theoretical and methodological problems associated with the analysis of immigrant women workers and demonstrates the deficiencies of existing theoretical perspectives – assimilation, dual economy, ethnic enclave economy and middleman minority – in accounting for their labour force experience and methods of economic adaptation. Second, it analyses the 1980 US Population Census to explain patterns of labour force participation and income attainment compared to those of white counterparts. To ensure the comparability in the analysis of labour market opportunities across states, the study introduces for the white sample a statistical control of residential concentration by Asian-Americans. Finally, it suggests conceptual models for strategies of survival, based on patterns commonly observed among Asian women workers.

Theories of immigrant economic adaptation

Asian-Americans, when considered as a single group, by their impressive educational and occupational achievements have gained the image of a 'successful' minority group, even a model for other minorities. Theoretical approaches most often used in socio-economic studies of Asian immigrants derive from four major models of immigrant economic adaptation:

(1) an *assimilation* model, first formulated by Milton Gordon (1964), which points to an individual's hard work as a key to economic success;
(2) a theory of *dual-economy/labour markets*, which suggests that the restriction of labour mobility by segmented markets often traps immigrants in dead-end jobs in the peripheral sector of the economy (Doeringer and Piore 1971);
(3) an *ethnic enclave* theory, which also postulates a segmentation, but views the peripheral sector dominated by an ethnic group as a springboard for further progress rather than a trap (Wilson and Portes 1980); and
(4) the *middleman minority* hypothesis, proposed by conflict theorists who see immigrant entrepreneurs as filling an economic niche between the monopoly capitalist and an oppressed working class (Bonacich 1973).

These four approaches have contributed much to the understanding of immigrants' survival strategies, but they were primarily formulated for the analysis of male labour market experience. These theories refer hardly at all to women's roles in reproducing labour or in supporting the household economy. By assuming that the prototypical immigrant worker is a single male, or else a married male head of household, theorists have regarded women, whether young or old, married or single, merely as dependants of male migrants. This discussion has paid relatively little attention to women (Morokvasic 1984), nor is there much discussion of women in the literature which heralds Asians as a 'model minority' (Hirschman and Wong 1981, 1984; Chiswick 1983; Borjas 1985; Nee and Saunders 1985).

Socio-economic status of Asian-American women

This traditional emphasis on male status attainment and the shortage of quality data on Asian-Americans have resulted in a lack of empirical studies analysing the labour force position and the socio-economic status of Asian-American women. Except for a few studies reviewed below, studies of Asian-American women have used historical data and focused on women's roles as unpaid family workers in the context of community development (for example, Glenn 1983). This relative lack of empirical studies for Asian women sharply contrasts with the abundance of empirical studies for Hispanic- and African-American women (for example, Tienda and Glass 1985; Tienda and Guhleman 1985).

The seminal study of Asian women's socio-economic status was conducted by Wong and Hirschman (1983) using 1970 US census data. Applying the conventional socio-economic attainment (assimilation) model to a sample of Asian women – Japanese, Chinese and Filipino – this study analyses interracial disparity between Asian and non-Hispanic white women in employment rates and mean income in 1969. After adjusting for differences in personal characteristics, the study concluded that Asian women's relatively high work commitment and earnings are likely to be determined not only by such individual factors as education and working hours, but also by such opportunity factors as place of residence.

Yamanaka (1987) used 1980 census data to analyse labour force participation rates [LFPR] for married Asian women – Japanese, Chinese, Filipino, Korean, Indian and Vietnamese. In search of a comprehensive model that would take into account both individual resources and collective opportunities, she classified the LFPR determinants into endowments, family life cycle and ethnic enclave opportunities. Her results from decomposition analysis indicated that the LFPR

gaps between whites and Asians were explained more by labour market opportunities and family life cycle than by endowments. This suggested the significance of collective resources in determining Asian women's employment opportunities, which in turn implied discriminatory (by non-Asian employers) or preferential (by Asian employers) treatment of Asian workers in the labour market.

The US Commission on Civil Rights (1988) also used the 1980 census data in a comparative analysis of the earnings of married Asian and white women. Applying the motivational orientation framework to the sample of six Asian-American women (married), this study found that the annual and hourly earnings of Asian women generally surpassed those of white women. This earnings advantage, after controlling for the effects of individual differences including residence, was primarily attributed to higher educational levels and stronger attachment of Asian women to the labour force, thus strongly supporting the human capital model.

These past studies of the socio-economic status of Asian-American women, all based on US census data and applying the assimilation hypothesis or a modified version of it, reach a striking conclusion: Asian-American women as a group do as well as, or even surpass, white women in economic activities and outcomes in the United States. This relatively high achievement of Asian women comes as a surprise. Discrimination by gender and place of birth is likely to put a double burden on an immigrant woman entering the host labour market, and immigrant women in general have fared worse socio-economically than native born males and females, or even foreign-born males (Boyd 1984). Indeed, a large proportion of Hispanic and Asian immigrant women face precisely the same problems, as shown in studies which indicate that many Asian women occupy unskilled manual and service jobs with low wages (Wong and Hirschman 1983; Yamanaka 1987).

There are two major theoretical and methodological shortcomings in the approaches used by the three empirical studies mentioned above. First, they conceptualized Asian-Americans as a unified group according to the racial groupings established by the US Census Bureau. As shown later, Asian immigrants not only derive from at least six major groups of ethnic origin, culture, language and history, but also there are many further divisions within each group by social class, demographic profile, timing of immigration and hence labour market opportunities (Woo 1985). The assumption that these diverse groups can be treated as one sociological entity is far too sweeping and poses difficulties for data analysis. Moreover, the previous studies applied only the assimilation model, resulting in oversimplified conclusions supporting the model minority myth.

Second, past studies have shown labour market opportunities to exert a small but significant influence on Asian women's economic

achievement. Yet, none of the studies described above have taken into account the geographic overrepresentation of Asian populations in large metropolitan areas of a few coastal states, such as California, Hawaii and New York. Not only might these large cities offer better employment opportunities and higher wages for women than do other states where the majority white women tend to live, but they also typically have a high concentration of ethnic business establishments which tend preferentially to hire ethnic women.

In short, past studies tend simplistically to depict Asian women as economically successful minority women. A new approach must assume that the methods of economic adaptation and survival by Asian immigrants have been as diverse as their backgrounds. It must look for evidence of different strategies adopted by the various Asian female groups and devise new models that clarify dynamic combinations of human resources, opportunity structures, institutional barriers and public policies. Such an approach can begin only after adjusting for residential concentrations of minority and majority groups.

History of Asian-American women

Each sub-group of the Asian-American population has a unique history of immigration to the United States. Frequent changes in immigration laws have shaped the ways Asian women entered the US and thus have determined family formation in each community. These historical forces have in turn shaped the economic circumstances facing Asian women in 1980. A brief history of Asian-American women will help in understanding the interplay between individual resources and the collective opportunities unique to each sub-group.

The history of Asian-American women dates back to the 1860s, when a tiny trickle of Chinese women followed the first wave of 33,000 Chinese male labourers. The settlement process of the Chinese, however, was soon disrupted by rising anti-Chinese agitation on the part of local white workers, eventually leading to the 1882 Chinese Exclusion Act. The extreme sex-ratio imbalance among Chinese immigrants (see the fifth column of Table 1) damaged the development of their community in a significant way, because of the delay in forming families. Much of the Chinese labour immigration history was repeated by the succeeding waves of Asian arrivals. The Japanese came as manual labourers around the turn of the century. A major difference from the Chinese case was that the Gentleman's Agreement of 1908 allowed wives and children of Japanese males to enter the country, so that the Japanese started families as early as 1910 (Nee and Wong 1985). Table 1 shows that the proportion of foreign born fell sharply in the 1930s for the Japanese, but not until the 1940s for the Chinese.

Soon, the post World War I [WWI] depression set off another flurry of anti-immigrant agitation, resulting in the virtual prohibition of Asian immigration by the 1924 Immigration Act and the Tydings-McDuffie Act of 1934. No major change occurred in US immigration policies until 1965. Nevertheless, the period during and immediately after World War II [WWII] saw some notable changes affecting Asian-American women and families. In 1944 the US government repealed the Chinese Exclusion Act and opened a tiny annual quota of 105 Chinese. With the end of WW II, the War Brides Act of 1946 allowed Asian wives and children of American soldiers to enter America as

Table 1. *Asian-American population and sex ratio, 1860–1980*

Year	Female (N)	Male (N)	Total (N)	Sex ratio	Percentage foreign born	Percentage of all Asian Americans
Chinese						
a 1980	401,242	410,936	812,178	102	63	25
b 1970	206,497	228,565	435,062	111	47	30
c 1960	101,743	135,549	237,292	133	39	27
1950	40,621	77,008	117,629	190	–	36
1940	20,115	57,389	77,504	285	48	30
1930	15,152	59,802	74,954	395	59	28
1920	7,748	53,891	61,639	696	70	33
1910	4,675	66,856	71,531	1,430	79	48
1900	4,522	85,341	89,863	1,887	90	79
1890	3,868	103,620	107,488	2,679	97	98
1880	4,779	100,686	105,465	2,107	99	100
1870	4,566	58,633	63,199	1,284	99	100
1860	1,784	33,149	34,933	1,858	–	100
Japanese						
a 1980	387,628	328,703	716,331	85	28	22
b 1970	319,990	271,300	591,290	85	21	41
c 1960	239,504	224,828	464,332	94	22	53
1950	65,119	76,649	141,768	118	–	43
1940	54,980	71,967	126,947	131	37	49
1930	57,063	81,771	138,834	143	51	52
1920	38,303	72,707	111,010	190	73	60
1910	9,087	63,070	72,157	694	94	48
1900	985	23,341	24,326	2,370	99	21
1890	259	1,780	2,039	687	94	2
1880	14	134	148	957	98	0
1870	8	47	55	588	98	0
Filipino						
a 1980	404,722	377,172	781,894	93	65	24
b 1970	153,562	189,498	343,060	123	52	24
c 1960	64,024	112,286	176,310	175	50	20
1950	15,535	46,101	61,636	297	–	19
1940	5,840	39,723	45,563	680	–	18
1930	2,940	42,268	45,208	1,438	–	17
1920	371	5,232	5,603	1,410	–	3
1910	16	144	160	900	–	0

Table 1. *Asian-American population and sex ratio, 1860–1980*–continued

Korean						
a 1980	207,439	149,954	357,393	72	82	11
d 1970	42,107	28,491	70,598	68	54	5
1960	–	–	–	–	–	–
e 1950	–	–	7,030	–	–	2
e 1940	–	–	8,568	–	–	3
e 1930	–	–	8,332	–	–	3
e 1920	–	–	6,181	–	–	3
e 1910	–	–	5,008	–	–	3
Indian						
a 1980	193,760	193,463	387,223	100	70	12
Vietnamese						
a 1980	117,541	127,484	245,025	108	91	7

Sources:

a Table 1. Asian and Pacific Islander Persons by Nativity and Sex: 1980. 1980 Census of Population, PC80–2–1E, Volume 2, U.S. Bureau of the Census, 1988.

b The data for this year and earlier are from Series A–91–104, Population, by Sex and Race: 1790 to 1970; and Series A 105–118, Foreign-Born Population, by Sex and Race: 1850 to 1970, Historical Statistics of the United States, Part 1, U.S. Bureau of the Census, 1975.

c After this year, figures include Alaska and Hawaii.

d Table 190, 1970 Census of Population, Volume 1, Section 2, Characteristics of the Population. U.S. Bureau of the Census, 1973.

e Table 2, Gardner *et al.*, 1985, p. 8.

non-quota immigrants. Finally, the 1952 McCarran-Walter Act declared an official end to the exclusion of Asian immigrants.

It was only with the Immigration Act of 1965 that the US immigration policy was substantially altered. This law abolished the national-origin quota system and established instead preferences, such as for family reunification, scarce skills and refugees. As a result, a drastic shift in the composition of the immigrant stream into America occurred; the proportion of Europeans sharply declined, whereas the number of Asians and Hispanics grew rapidly (Keely 1971). In particular, the new emphasis on family reunification brought about a marked increase in the number of female immigrants from Asia (Dejong and Root Davis 1986). As Table 1 shows, the sex ratio changed so rapidly that by 1980 females even exceeded males among the Japanese, Filipino and Korean groups. At the same time, a small but not insignificant number of Asian immigrants were being admitted as professional workers (Gardner, Robey and Smith 1985). While the liberalization of immigration policies attracted many Asians, another stream of Asian immigration stemmed from America's involvement in Vietnam. The first wave of over 130,000 Indochinese refugees, arriving from Vietnam in 1975, was soon followed by thousands of boat people fleeing the aftermath of the war. As an emergency measure, these refugees – 42 per cent of whom were women – were admitted on a non-quota basis beyond the statutory limitations (Gordon 1987).

Economic adaptation of immigrant women

Once in America, most Asian women have had to work. Yet past studies have rarely focused on these female workers, despite their relatively high rates of labour force participation and income attainment (see below). This neglect is due partly to conceptual and methodological difficulties originating from immigrant women's dependent status and exploitable position. For example, the assimilation model, which is akin to the human capital model in neoclassical economics, ignores women's initial reasons for relocating; nor does the assimilation model take into account the limited resources that most women are able to bring along. The fact that many immigrant Asian women have come in order to be reunited with male relatives makes any postulated achievement drive less relevant to women than to men. In their new circumstances, most immigrant women have endured hardships and deferred their personal gratification in the hope of a better life for their children, for whom behavioural acculturation may raise the chances of success (Gordon 1964). The second generation's achievement, however, presupposes good education that individuals must acquire on their own, and their success depends on the receptivity of the host society to their efforts to succeed and assimilate (Hirschman 1982).

In the dual-economy theory, great attention is given to the structural barriers categorically blocking the achievement of racial minorities, immigrants and women. Such theorists argue that labour-intensive sweatshops, small factories and service establishments are the only places where newly arrived immigrant women can find a job. While many studies support their hypothesis (Wong 1983), the approach fails to account for the immigrant women who are independent and well educated and therefore able to find highly skilled jobs in the core sector. Since the passage of the 1965 Immigration Act, a small minority of professional women have been admitted to alleviate shortages of qualified workers in such areas. For instance, Filipino and Korean nurses have served in American hospitals (Ishi 1987, 1988). In addition, some female professionals originally came as students and extended their stay to work in American companies and universities. This 'brain drain' phenomenon, especially among Asian Indians and Filipinos, challenges any simplistic dual-economy assumptions that would automatically place female immigrants in the peripheral sector. Foreign professionals are nevertheless likely to remain marginalized in their work organizations, or are likely to encounter a 'glass ceiling' (Suzuki 1980).

The two other theories – the ethnic enclave theory and the middleman minority hypothesis – postulate positive effects of collective actions on market outcomes for immigrants, but both have used male data (Wilson and Portes 1980; Bonacich and Modell 1980). Not surprisingly, little discussion is devoted to women's dual roles as homemakers and workers in small family businesses and their collective labour force position in an expanding ethnic enclave economy. While some recent studies have examined the cultural expectations about wives' roles and their economic contributions to family businesses (Kim and Hurh 1988), there is still very little understanding of the ways in which women, either paid or unpaid, utilize their economic niche to improve their socio-economic status.

Finally, existing theories of immigrant economic progress fail to take into account the affirmative action measures imposed by the government since the early 1970s. These programmes, mainly affecting large corporations and public bureaucracies, give preferential treatment to qualified minorities and women (DiPrete and Soule 1986). Such programmes suggest a variation of the ethnic enclave theory. In localities where immigrant groups are numerous enough to have significant political power, affirmative action policies may result in substantial opportunities for minority women. A case in point is the public sector in Hawaii, where Japanese-Americans comprise more than a quarter of the population. Here, the state political machine has for many years been monopolized by the Democratic Party, whose primary constituency is Japanese-Americans (Mejer 1987). Affirmative action policies have undoubtedly helped Hawaiian-born Japanese women fill positions in local government and state supported public schools. Their high educational levels are also likely to have helped their promotion within organizations.

In short, immigrant women's strategies for economic adaptation will vary depending on individual resources, life-cycle position and group resources developed in the historical context. These individual and collective resources variously interact to generate opportunity structures for immigrant women otherwise subject to institutionalized barriers. No single theory of immigrant economic adaptation will adequately explain immigrant women's strategies. The diversity in individual and group backgrounds of immigrant women, together with the effects of public policies, make these strategies resistant to a single explanatory model. A possible solution for dealing with this complexity is to recognize the diversity in both the immigrants' origins and their modes of incorporation into American society (Portes and Rumbaut 1990).

Working from this flexible perspective, this study will examine the application of the six models of economic adaptation to the analysis of labour force participation and income attainment of Asian-American women: assimilation, dual economy, ethnic enclave economy, middleman minority, affirmative action policy and brain drain. In addition, the present study will address some methodological problems neglected by previous studies. First, it will analyse patterns and causes of both

labour force participation and earnings of Asian women of all marital statuses in 1980. The two previous studies by Yamanaka (1987) and the US Commission on Civil Rights (1988) have analysed labour force participation and earnings separately using samples of married women only. Second, this study will take into account differences in the geographical distribution between Asian and white populations in the United States. Finally, it will advance the statistical technique of analysing labour force participation by using logit regression instead of ordinary least square [OLS] regression, as was used by Wong and Hirschman (1983) and Yamanaka (1987). The conventional OLS method is not appropriate when there is a dichotomous dependent variable [LFPR].

Data

The data for this study are drawn from a sub-file of the 5 per cent Public Use Microdata Samples [PUMS] of the 1980 US Population Census (US Bureau of the Census 1983). The sample consists of women of working age (25–64), from six Asian ethnic groups: Chinese, Japanese, Korean, Filipino, Indian and Vietnamese. A one-in-ten sample of non-Hispanic white women from the sub-file has also been selected to serve as a comparison group for the Asian groups. The final size of the sample totalled 39,701 for the six groups of Asians – 10,869 Japanese, 8,983 Chinese, 8,930 Filipino 4,741 Korean, 4,147 Indian and 2,031 Vietnamese – and 41,557 for the non-Hispanic whites.

Dependent variables

There are two dependent variables in this study. The first dependent variable is *labour force participation rate* [LFPR] in 1980. It is constructed as a dichotomous measure, with a '1' for labour force participation and '0' for those out of the labour force. The other dependent variable is a woman's annual earnings in 1979, which is a total of wage earnings and income from self-employment. To adjust for the wide range of incomes among the sample, the natural logarithm of the variable is used in the analysis of income attainment.

Independent variables

Past studies on women's labour force activities and immigrant economic adaptation suggest six sets of independent variables to be taken into consideration:

(1) *ethnicity/immigration* characteristics – 'ethnicity' and 'period of immigration' – that indicate national origin and the historical context of immigration to the US;

(2) *human resource* characteristics – 'education' and 'English speaking ability – that represent women's employability in the US labour market;

(3) *demographic* characteristics – 'age', 'marital status' and 'number and age of children' – that show women's changing relationship between work commitment and family life cycles (Mincer 1962; Cain 1966; Bowen and Finegan 1969; Sweet 1973; Waite 1980; Oppenheimer 1982);

(4) *socio-economic* characteristics – 'family income (minus the woman's income) in 1979' and 'occupation' – that indicate pressure for women to work and their skills;

(5) *labour market* characteristics – 'Asian residential concentration' and 'market and sectors' – that measure effects of market structures on immigrant women's employment and income; and

(6) *hours and weeks* worked in 1979 – that control the effects of the length of working hours on women's income.

Table 2 explains the measurement of the variables used in this study.

Weighting the sample of white women

To adjust the extremely uneven geographical distribution between Asians and non-Hispanic whites, a set of weights for the white sample was constructed. Categorizing the sample by data on the percentages of Asian residents in Standard Metropolitan Statistical Areas (SMSAs), geographic weights were created by taking the ratio of the frequency of each category in the Asian sample to the frequency for the same category in the white sample. Then this set of weights was multiplied by the ratio for the total sample size of the white sample to the total sample size of the Asian sample, so that the weights as applied would have a mean of 1.0 for the white sample, thus avoiding any large change in the nominal sample size.[1] This process was carried out separately for SMSAs from California, Hawaii and New York, while SMSAs from the other forty-seven states were combined in the weighting procedure.[2]

Personal characteristics

Tables 3 and 4 present univariate tabulations for personal characteristics and labour force activities. First, in Table 3, about three-quarters of the women in the total Asian-American samples are foreign born, most of them having arrived since 1965. Compared to the geographi-

Table 2. *Variables used in analysis of labour force participation and income attainment*

Variable	Measurement	Definition and theoretical assumptions
Dependent variables		
Labour force participation	In labour force (0,1)	The employed and the unemployed represent those who are in the labour force.
Income	Total annual income (Continuous: $5 to 75,000 for wage earnings, and −$9,900 to 75,000 for self-employed income)	A woman's annual earnings are a total of wage earnings and income from self-employment, both non-farm and farm sources.
Independent variables		
Ethnicity/immigration characteristics		
Ethnicity	Non-Hispanic White, Japanese, Chinese, Filipino, Korean, Indian, Vietnamese (0,1)	Non-whites are the primary reference group for comparison. The Vietnamese group serves as the reference group for the aggregate analysis of Asian-American women.
Period of immigration	Native born, immigrated before 1964, immigrated 1965–1974, immigrated 1975–1980 (0,1)	The most recent immigrant group serves as the reference category.
Human resource characteristics		
Education	More than 12 years, 12 years, less than 12 years (0,1)	Less-than-12 years is the omitted category.
English speaking ability	Native, well, not well (0,1)	English-speaking ability is self-rated by the sample. The not-well group serves as the reference category.
Demographic characteristics		
Age	55–64, 45–54, 35–44, 25–34 (0,1)	The youngest group serves as the reference category.
Marital status	Single, formerly married, married (0,1)	Currently married is the omitted group.
N and age of children	N of under 5 years old, N of 6–11 years old, N of 12–17 years old (Continuous)	N and age of children counts the number of children in the family according to three stages of their age.

Table 2. *Variables used in analysis of labour force participation and income attainment*–continued

Socio-economic characteristics		
Family income	Family income minus a woman's own income (Continuous: −$9,900 to 75,000)	A women's socio-economic status correlates inversely with her labour force participation (LFP), while positively correlating with her education. Family income controls this dual effect of socio-economic status on her LFP.
Occupation	Manager, professional, sales, service, clerical, service, farming, manual, service, unemployed or not in the labour force (0,1)	Service occupation is the reference category.
Labour market characteristics		
Asian residential concentration	6% and more, 2–5.9%, Less than 1.9% (0,1)	The percentage of Asians in the total population in an SMSA in 1980 is attached to the SMSA variable and classified into three levels of density. Those who do not live in an SMSA are included in the lowest density group (the reference category).
Market and sector	Core self-employed, Core public, Core private, Periphery self-employed, Periphery public, Periphery private (0,1)	The Market and sector variable is a composite variable made up of three employment sectors derived from the Class of Worker variable in the PUMS, and two industrial sectors defined by Tolbert, Horan and Beck (1980).
Hours and weeks worked		
Hours/weeks worked	Hours worked last week, Weeks worked in 1979 (Continuous: 1–99 or more hours; 1–52 weeks)	

Table 3. *Selected demographic and socio-economic characteristics of non-Hispanic White and Asian-American women in 1980*

Characteristics	White		Asian	Asian native born			Asian foreign born					
	Unweighted	Weighted	Unweighted	Japanese	Chinese	Filipino	Japanese	Chinese	Filipino	Korean	Indian	Vietnamese
Period of Immigration (%)												
Native-born	95.8	92.8	26.8	100.0	100.0	100.0	–	–	–	–	–	–
Immigrated before 1965	3.1	5.0	15.2	–	–	–	50.6	26.3	15.8	9.6	5.8	1.3
Immigrated 1965–74	0.8	1.3	32.6	–	–	–	28.8	44.7	54.1	48.2	53.1	21.0
Immigrated 1975–80	0.4	0.9	25.5	–	–	–	20.6	29.0	30.2	42.2	41.1	77.7
Education (%)												
Less than 12 years	21.7	16.7	22.3	11.2	9.0	18.9	17.4	34.3	19.4	26.2	21.2	46.6
12 years	45.2	41.3	29.3	39.7	28.7	44.4	47.8	21.4	13.3	36.8	20.8	32.0
More than 12 years	33.1	42.0	48.4	49.1	62.3	36.7	34.8	44.3	67.3	37.0	58.0	21.4
English speaking ability (%)												
Native speaker	94.3	92.8	24.4	66.6	52.8	73.7	17.6	4.6	8.0	11.3	25.3	6.0
Speaks well	5.1	6.3	58.1	30.4	44.1	25.1	62.9	56.6	87.5	57.1	65.8	51.0
Do not speak well	0.6	0.9	17.5	3.0	3.0	1.2	19.5	38.8	4.5	31.6	8.9	43.0
Age (%)												
25–34 years old	31.8	33.1	39.8	28.4	45.7	49.1	25.3	39.3	42.3	45.2	50.3	52.8
35–44 years old	23.5	23.9	28.0	19.2	18.1	24.9	27.0	27.9	33.9	36.3	28.2	28.5
45–54 years old	21.9	20.9	19.9	25.1	19.4	18.4	40.1	19.8	14.7	13.3	11.5	12.0
55–64 years old	22.8	22.1	12.3	27.3	16.8	7.6	7.6	13.0	9.1	5.2	10.0	6.7
Marital status (%)												
Currently married	76.5	71.5	79.2	74.0	68.8	72.3	83.5	83.4	75.3	83.7	86.7	75.8
Formerly married	16.5	19.9	11.2	11.2	12.3	17.8	13.3	9.3	10.2	12.4	8.3	14.1
Single	7.0	8.6	9.6	14.8	18.8	9.9	3.2	7.3	14.5	3.9	4.9	10.0
Mean number of children and age												
N of 12–17 years old	0.24	0.36	0.35	0.29	0.25	0.47	0.36	0.37	0.35	0.36	0.29	0.56
N of 6–11 years old	0.33	0.29	0.40	0.21	0.24	0.48	0.31	0.37	0.48	0.49	0.46	0.83
N of under 5	0.38	0.21	0.36	0.17	0.24	0.37	0.25	0.37	0.42	0.44	0.51	0.62
States of residence (%)												
California	8.9	35.4	35.4	38.1	45.0	38.3	35.7	38.7	43.7	28.4	14.6	31.7
Hawaii	0.1	13.0	13.1	44.0	22.6	35.2	8.9	2.5	8.4	5.2	0.1	1.9
New York	7.6	9.6	9.6	1.1	8.5	1.7	7.5	21.3	6.6	9.1	17.8	2.6
Others	83.3	42.0	41.9	16.7	23.9	24.9	47.9	37.6	41.3	57.3	67.5	63.9

Table 3. *Selected demographic and socio-economic characteristics of non-Hispanic White and Asian-American women in 1980*–continued

Residential concentration												
Less than 1.9%	83.0	36.1	36.0	21.9	22.0	33.5	42.7	31.0	31.2	44.8	54.9	55.9
2 to 5.9%	14.9	40.7	40.6	33.2	30.2	29.2	40.1	47.0	46.1	44.0	40.1	33.3
More than 6%	2.1	23.2	23.4	44.9	47.8	37.3	17.2	22.0	22.6	11.3	4.9	10.7
Mean family income ($) a	25,671	28,852	27,380	33,285	32,999	24,486	26,536	25,465	27,821	23,773	28,758	19,081
(N)	(41,557)	(41,451)	(39,701)	(6,234)	(2,067)	(1,388)	(4,635)	(6,916)	(7,542)	(4,741)	(4,147)	(2,031)

Source: 1980 US Population Census.

Footnotes:

a. The calculation of mean family income is based on the sample with the family income of $5 and over.

cally weighted sample of white women, Asian women are more likely to have attended college, as exemplified by the half to two-thirds of the American-born Chinese and foreign-born Filipinos and Indians who have gone to college. However, they are also more likely not to have finished high school than whites, particularly among the immigrant groups. For example, more than one third of Chinese and nearly half of Vietnamese have not completed high school. A third or more of Chinese, Korean and Vietnamese immigrants do not speak English well. In other demographic characteristics, as compared to whites, Asians tend to be younger, to be married in greater proportions and more often to be rearing young children. At least three-quarters of the Filipino, Korean, Indian and Vietnamese are under forty-five years old, and similar proportions of these women are married. Consequently, fairly large proportions of all the groups, except native-born Japanese, have small children and the average number of children below the age of twelve is generally larger for Asians than for whites.

The PUMS data confirm that the geographic weights applied to the white sample are effective since they have virtually eliminated any geographical differences in the racial comparison. California is the most popular state for all Asians except Japanese, who are more concentrated in Hawaii, and Indians, who are clustered in New York. The Koreans and Vietnamese tend to be scattered widely. The majority of these Asian women live in the large metropolitan cities of these states where at least 2 per cent of the total population is Asian. Compared to the weighted white sample, the Asians have lower family incomes and, as with other measures of status, there is substantial income inequality among them. Incomes range from about $33,000 for native-born Japanese and Chinese families to less than $20,000 for the Vietnamese.

Labour force characteristics

Asian-American women participated in the labour force in 1980 more frequently (66 per cent) than the weighted white sample (59.8 per cent). The rates, however, vary among Asians by ethnic origin and nativity, ranging from more than 70 per cent for native-born Japanese and Chinese and Filipinos (both nativity groups) to less than 50 per cent for Japanese immigrants (Table 4). In terms of women's occupation and industry, Asians are more likely than whites to be in service and in manual-labour jobs, as well as in professional positions. By contrast, whites tend to be more concentrated in the lower white-collar occupations. Among Asians, however, native-born Japanese, Chinese and Filipino are even more concentrated in clerical jobs than are whites, often located in professional services and public administration, and in the core industrial sector.

Among immigrants, the proportion of white-collar workers tends to be lower and the proportion of blue-collar workers in the peripheral sector higher. Filipino and Indian women present an anomaly with a substantial proportion of each group having professional jobs. These Asian women are also distributed differently in the employment sector. A quarter of the native Japanese and Chinese are in the public sector, whereas a relatively high proportion of Korean and Chinese are in the self-employment sector. The diversity among Asian women is also reflected in wage levels. Two of the American-born groups – Japanese and Chinese – and two of the immigrant groups – Indian and Japanese – had higher mean earnings than the weighted white sample, but other immigrant groups earned much less. The self-employed Asians made more money than self-employed whites, although incomes from self-employment tend to be less than incomes from waged employment. The small groups of self-employed Filipino and Indian (probably in professional jobs) earned substantially more than $12,000 on average. Finally, there are the relatively small variations among the samples in mean hours worked the previous week and mean weeks worked in 1979. The Asians, however, consistently worked more weeks than the weighted white sample.

Determinants of labour force participation

Turning to the analysis of labour force participation patterns of the sample, it is important to note the complex nature of the dependent variable, LFPR, especially as applied to immigrants. A higher LFPR may indicate nothing more than that a group of recent immigrants is mostly composed of the prime working age or is simply in need of money. Nor is a lower rate a sign of affluence, because the group may include more retirees or else discouraged workers who have given up because of lower skill levels or discrimination (Sullivan 1978, p. 166). Thus, LFPR measures neither the achievement nor the socio-economic status of a group; rather, it should be interpreted as reflecting a result of the complex processes determined by the group's circumstances in a particular historical context.

Accordingly, the model for immigrant women's LFPR used in this study seeks to explain a group's LFPR as a function of individual resources – timing of immigration, education, English-speaking ability, age, marital status, number and age of children, family income – and collective employment opportunities – ethnic residential concentration (see Table 3).

Table 5 presents results from logit regression analysis of twelve

Table 4. *Labour force characteristics of non-Hispanic White and Asian-American women in 1980*

Characteristics	White		Asian	Asian native born			Asian foreign born					
	Unweighted	Weighted	Unweighted	Japanese	Chinese	Filipino	Japanese	Chinese	Filipino	Korean	Indian	Vietnamese
Labour force participation (%)												
In the labour force	57.6	59.8	66.0	75.4	74.4	70.4	47.5	65.4	77.7	61.0	56.9	56.9
Occupation (%)												
Manager	6.0	7.9	6.0	8.6	11.3	6.8	3.5	7.2	5.4	4.0	4.2	3.2
Professional	13.1	14.2	16.7	17.6	22.4	11.7	6.3	15.1	26.8	9.6	23.7	6.3
Sales	8.4	9.0	6.5	7.5	8.1	7.4	7.0	6.8	4.6	8.4	5.4	4.7
Clerical	23.0	25.2	18.3	30.7	29.4	29.6	9.6	13.9	20.7	9.1	16.9	11.4
Service	11.2	10.3	13.2	10.7	7.7	16.1	18.3	11.4	13.6	18.1	8.6	14.6
Farming	0.8	0.6	0.9	1.6	0.3	1.3	0.8	0.4	1.3	0.6	0.6	0.4
Manual	10.3	7.3	15.9	7.9	5.3	8.8	15.3	23.7	13.9	24.4	10.9	28.3
Unemployed, not in L/F	27.4	25.6	22.5	15.5	15.4	18.3	39.3	21.5	13.7	25.9	29.8	31.2
Industry (%)												
Agriculture	1.3	0.9	1.1	2.0	0.7	1.7	1.1	0.7	1.4	0.8	0.9	0.7
Manufacturing	17.1	15.2	20.2	14.3	14.4	16.1	16.8	28.9	19.4	24.7	15.5	28.1
Retail trade	15.9	16.2	16.0	17.2	14.9	15.6	19.8	18.6	10.3	21.4	10.8	16.0
Finance	8.5	10.8	8.5	9.4	13.4	13.6	4.6	8.7	10.5	5.4	8.8	5.4
Personal services	3.8	4.0	5.4	6.0	3.8	6.7	6.7	4.0	5.8	7.1	2.8	6.0
Professional services	22.7	23.9	22.2	26.8	29.0	20.6	9.9	15.5	35.2	13.0	29.5	10.5
Public administration	3.3	3.4	3.9	8.8	8.3	7.5	1.8	2.1	3.8	1.7	1.8	2.1
Unemployed, not in L/F	27.4	25.6	22.6	15.5	15.4	18.3	39.3	21.5	13.7	25.9	29.8	31.2
Class of worker (%)												
Private company worker	53.8	55.3	58.9	54.1	54.6	59.6	49.1	63.4	68.5	59.1	54.6	57.7
Government worker	14.4	15.3	13.7	25.4	25.4	19.1	6.8	8.2	15.6	7.1	12.0	7.8
Self-employed worker	4.4	3.9	4.8	5.0	4.5	3.1	4.9	6.8	2.3	8.0	3.6	3.3
Unemployed, not in L/F	27.4	25.5	22.6	15.4	15.4	18.2	39.2	21.6	13.7	25.8	29.8	31.2
Industrial sector (%)												
Core	25.0	26.0	25.2	30.2	33.4	33.0	17.0	21.7	30.1	20.4	48.1	26.6
Periphery	47.6	48.4	52.2	54.4	51.2	48.8	43.7	56.8	56.2	53.8	22.1	42.1
Unemployed, not in L/F	27.4	25.5	22.6	15.4	15.4	18.2	39.2	21.6	13.7	25.9	29.8	31.3
(N)	(41,557)	(41,451)	(39,701)	(6,234)	(2,067)	(1,388)	(4,635)	(6,916)	(7,542)	(4,741)	(4,147)	(2,031)
Mean wages ($) a												
	8,514	9,642	9,950	11,328	11,813	9,447	9,797	7,965	8,897	8,317	10,115	7,323
(N)	(24,562)	(25,556)	(25,659)	(4,663)	(1,529)	(982)	(2,196)	(4,386)	(5,812)	(2,676)	(2,310)	(1,105)

Table 4. *Labour force characteristics of non-Hispanic White and Asian-American women in 1980*--continued

Mean non-farm self-employment income ($) b												
	5,885	6,092	8,331	7,163	6,499	6,492	6,678	7,315	12,469	8,604	12,460	4,293
(N)	(1,433)	(1,557)	(1,674)	(290)	(109)	(37)	(210)	(359)	(200)	(284)	(140)	(45)
Mean hours worked in previous week c												
	42.3	42.6	43.1	46.4	45.3	43.8	42.5	41.9	43.9	40.9	40.2	40.2
Mean weeks worked in 1979 c												
	30.9	30.7	33.1	33.8	32.9	32.5	30.9	32.8	34.6	33.1	31.5	32.8
(N)	(25,919)	(26,794)	(27,090)	(4,902)	(1,597)	(1,022)	(2,366)	(4,717)	(5,947)	(2,978)	(2,420)	(1,141)

Source: 1980 US Population Census.

Footnotes:

a. The calculation of mean wage income is based on the sample who worked in 1979 and had income of $5 and over.

b. The calculation of mean self-employment income is based on the self-employed sample only.

c. The calculation of mean hours worked last week and mean weeks worked in 1979 is based on the sample who worked in 1979.

equations explaining differences in LFPR between the Asian and white samples, as well as differences within Asians themselves. The derivative of the logit with respect to the independent variable is evaluated at the mean of the dependent variable to obtain Delta P (Petersen 1985), which indicates the change in the probability associated with a unit change in the respective categorical regressor. The effect of a subcategory is measured by the deviation from the omitted category.[3]

Aggregate differences

The first two columns of Table 5 show that the geographic weighting imposed on the white sample appears to have negligible impact on the probability estimates for whites, except to increase the coefficients for the immigration variable, apparently because the disparity in labour force participation between recent immigrants (the reference category) and other white women is greater in the coastal, urban areas with high concentrations of Asian-Americans. A number of important differences become evident, however, in comparing the second and third columns of Table 5. Asian women who live in localities with a high Asian concentration are about 11 percentage points more likely to work than women in areas where other Asians are scarce. By contrast, LFPRs for white women in areas of Asian concentration do not show much variation. Furthermore, Asian immigrants whose English is good have a much higher LFPR than the barely fluent (omitted category).

For most of the remaining variables, coefficients for Asians are weaker than those for whites, suggesting that Asian women's decisions about going to work are less influenced by personal and family characteristics than are those of whites. For instance, recent Asian immigrants suffer less disadvantage than their white counterparts in entering the labour force. Education has less effect upon LFPRs for Asians than for whites. Moreover, Asians appear less likely to drop out of the labour force as they get older, or when they get married, and the presence of children appears to have a less inhibiting effect on their working. Finally, after controlling for effects of all variables in the equation, ethnicity still exerts a significant influence on Asian women's LFPRs. Compared to the Vietnamese (omitted), all groups but Filipinos have lower LFPRs, suggesting the strong pressure on Vietnamese women to work.

Ethnic and nativity differences

Starting with the three native-born groups, columns 4 to 6 of Table 4 show that all three have LFPRs of over 70 per cent. Moreover, their LFPR equations exhibit considerable similarity, especially for the

Japanese and Chinese. For all three native-born groups, the impact of education on LFPR is higher than for Asians as a whole, though lower than for the comparative sample of whites. The impact of age and the presence of children on LFPRs is also similar and intermediate between whites and Asians as a whole. Holding other things equal, the effect of marriage on Filipino women's LFPR virtually disappears. For the Chinese and Filipino groups, family income considerations are less closely linked to labour force participation than they are for whites or Asians as a whole.

Rather more striking differences in participation patterns occur among the foreign-born Asian groups. LFPRs for these groups range from 47.5 per cent for the Japanese to 77.7 per cent for Filipinos. Among the Japanese, older immigrants are dramatically higher in LFPR than the most recent arrivals. Vietnamese women appear to be eager to work but are often frustrated in their attempts to secure it, owing to the recency of their immigration. Differences in LFPR by education and English proficiency are greater for the Vietnamese than for other groups. The other four immigrant groups[4] – Chinese, Filipino, Korean and Indian – show more similarities in their LFPR results. They tend to contrast both with whites and with native-born Asians; personal and family characteristics have a generally lower impact on LFPRs than is true for women born in America. Each of the groups, however, seems distinctive in some way. Among the foreign-born Chinese, the advantages of earlier immigrants over more recent immigrants in employment are big, and the differences in LFPR by educational categories seem small. The Filipino women are the least likely to stay home with small children, other things being equal. The Korean women with high-school-age children have an increased LFPR. Single Indian women who speak good English are more likely to work than Indian women not possessing these characteristics.

Determinants of income in 1979

Compared to LFPR, earned income is a straightforward measure of economic well-being, but interpretational ambiguities still remain. Income may indicate quantitative success, but does not necessarily refer to quality of success or levels of participation of the disadvantaged in the host society (Kim and Hurh 1983). Table 6 presents regression results[5] for our samples,[6] and Table 7 supplements Table 6 by showing the change in R^2 associated with each of the regressor clusters when entered into the equation in the order shown.[7]

Each of the regression equations in Table 6 explains 50 per cent or more of the variation in log income, but this apparently high level of prediction is misleading. These samples include part-time and part-

Table 5. *Logit analysis of labour force participation for non-Hispanic White and Asian-American women in 1980*[a]

Determinant		White		Asian	Asian native born			Asian foreign born					
		Unweighted	Weighted	Unweighted	Japanese	Chinese	Filipino	Japanese	Chinese	Filipino	Korean	Indian	Vietnamese
Period of immigration	Native	.09 *	.21 ***	.18 ***	–	–	–	–	–	–	.15 ***	.00	−.02
	Before 1965	.07	.21 ***	.12 ***	–	–	–	.39 ***	.16 ***	.09 ***	.04	.11 **	−.04
	1965–74	.11 *	.24 ***	.13 ***	–	–	–	.34 ***	.16 ***	.10 ***	.08 ***	.09 ***	−.09
	1975–80	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Education	More than 12 years	.24 ***	.22 ***	.14 ***	.16 ***	.16 ***	.20 ***	.20 ***	.06 **	.14 ***	.10 ***	.11 ***	.17 ***
	12 years	.16 ***	.13 ***	.06 ***	.11 ***	.11 ***	.12 ***	.14 ***	−.02	.03 *	.08 ***	.07 *	.07 *
	Less than 12 years	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
English speaking	Native	−.07	−.04	.03 *	.03	.02	−.04	.16 ***	−.01	−.02	−.01	.16 ***	.16 **
	Well	−.07	−.02	.06 ***	.04	.00	.05	.15 ***	.02	.04	.03	.17 ***	.22 ***
	Not well	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Age	55–64 years	−.35 ***	−.34 ***	−.24 ***	−.25 ***	−.34 ***	−.36 ***	−.22 ***	−.26 ***	−.27 ***	−.28 ***	−.33 ***	−.32 ***
	45–54	−.15 ***	−.13 ***	−.04 ***	−.09 ***	−.14 ***	−.10 *	−.11 ***	−.03	−.05 **	.01	−.03	−.12 **
	35–44	−.04 ***	−.01	.01	−.01	−.07	.02	−.03 **	.00	.02	.03	.10 ***	−.01
	25–34	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Marital status	Single	.17 ***	.19 ***	.16 ***	.09 ***	.10 ***	−.03	.35 ***	.16 ***	.14 ***	.16 ***	.21 ***	.02
	Formerly married	.13 ***	.13 ***	.03 **	.06 **	.08 *	−.03	.22 ***	.01	−.02	.06 *	.02	.00
	Married	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
No. of children and age	<5 years old	−.23 ***	−.23 ***	−.14 ***	−.16 ***	−.21 ***	−.11 ***	−.25 ***	−.17 ***	−.08 ***	−.13 ***	−.15 ***	−.15 ***
	6–11 years old	−.08 ***	−.08 ***	−.04 ***	−.08 ***	−.04 *	−.07 ***	−.08 ***	−.05 ***	−.03 ***	−.01	−.03 **	−.03 *
	12–17 years old	−.01	−.02 ***	.02 ***	−.01 ***	−.03	−.02	.02	.02 *	.03 ***	.06 ***	−.01	−.01
Economic pressure	Family income[b]	−.06 ***	−.05 ***	−.06 ***	−.05 ***	−.03 ***	−.04 ***	−.01 ***	−.01 ***	.00 ***	−.01 ***	−.01 ***	.00
% of Asians	6 and more	.03	−.01	.11 ***	.09 ***	.09 ***	.06 *	.20 ***	.06 ***	.09 ***	.11 ***	.10	−.05
	2–5.9	.03 ***	.02 **	.06 ***	.03	.03	.04	.08	.04 **	.08 ***	.08 ***	.05 **	−.10 **
	Less than 1.9	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Ethnicity	Japanese	–	–	−.15 ***	–	–	–	–	–	–	–	–	–
	Chinese	–	–	−.05 ***	–	–	–	–	–	–	–	–	–
	Filipino	–	–	.03 *	–	–	–	–	–	–	–	–	–
	Korean	–	–	−.06 ***	–	–	–	–	–	–	–	–	–
	Indian	–	–	−.11 ***	–	–	–	–	–	–	–	–	–
	Vietnamese	–	–	(O)	–	–	–	–	–	–	–	–	–

Table 5. *Logit analysis of labour force participation for non-Hispanic White and Asian-American women in 1980*[a]–continued

−2 Log likelihood	49,260 ***	49,260 ***	44,503 ***	6,117 ***	2,000 ***	1,505 **	5,345 ***	8,005 ***	6,750 ***	5,720 ***	5,027 ***	2,475 ***
Goodness of fit	938,256***	938,256***	44,799 ***	6,086 ***	2,038 ***	1,364	4,602 ***	6,869 ***	7,470 ***	6,694 ***	4,114 ***	2,039 ***
Degrees of freedom	41,519	41,519	39,641	6,215	2,050	1,371	4,617	6,894	7,511	4,721	4,121	2,012

Source: 1980 US Population Census.

Footnotes:

a. Coefficients indicate changes in the probability resulting from a unit change in an independent variable (See Petersen 1985).

b. Family income unit $1.000.

(O) indicates the omitted category.

*** p<0.001; **p<0.01; *p<0.05.

year workers, and when these regressors are added last in a stepwise specification, hours and weeks together still add at least 30 per cent to the R^2 total in each equation (see Table 7). Thus, more than half of the explained variation, for both whites and Asians, comes from differences in working time, not from other characteristics like human capital, supporting the hypothesis that income differences between women will have more to do with working hours than with characteristics of the job or the woman (Treiman and Terrell 1975).

Examining the differences between the weighted and unweighted samples of whites, the coefficients for the two groups are generally similar except for those relating to immigration and to family type. The advantages of native-born and long-term immigrants are greater and reach statistical significance in the weighted sample, who come more often from the coastal, urban areas in which Asian-Americans concentrate. Perhaps recent white immigrants to these areas experience stiff competition from Asians and other ethnic groups. Differences relating to age, marital status and number of children[8] are also generally greater in the weighted sample, suggesting that the labour markets in the areas where Asians are concentrated offer differentiated opportunities unavailable elsewhere.[9]

Aggregate differences

Comparing the weighted white sample and the pooled Asian sample, the larger immigration coefficients for whites than Asians indicate the relative disadvantages of the recent white immigrants in finding high-paying jobs compared to recent Asian immigrants. For both samples, education explains less than 5 per cent of the variation, though much more for Asians than for whites (Table 7), and a good command of English confers a modest but statistically significant income advantage for Asians. Regarding family position and the life cycle, the Asians are much less differentiated on these variables than the weighted white sample. Marital status and number of children each explain over 5 per cent of the variation for whites, but less than a percentage point apiece for Asians (Table 7). In both samples, women in the middle years and the formerly married have an income advantage over younger women and single or married women. Numbers of children of school age have a significantly negative impact on the incomes of whites, but a smaller impact on Asians.

The pattern of occupational differences in income is similar for whites and Asians, and the differences between occupational categories explain almost twice as much of the variation for Asians as for whites, though still only adding 7 per cent to the explained variation (Table 7). Comparing the effects of residential concentration, the income

advantages for the Asian are salient compared to those for the whites only in areas with 6 per cent or more Asian. In any event, income effects related to concentration are fairly weak, adding less than 1 per cent to the explained variation for whites and Asians alike. Furthermore, self-employment in the core labour market is significantly advantageous for Asians but not for whites, and Asians appear to sacrifice less than do whites from self-employment in the periphery. Holding occupation constant, labour market sector and segment explain relatively little variation for both Asians and whites (Table 7). As noted earlier, the most powerful independent variables in the model are hours worked and weeks worked. These add over 35 per cent to the explained variation for both Asians and whites. The coefficients for these variables suggest that whites have a slightly easier time translating extra work into extra income. Finally, coefficients for Asian ethnicity reveal that these variables explain just over 1 per cent of the variation in income among the Asian sample (Table 7). Evidently, the groups must all face similar labour-market obstacles.

Ethnic and nativity differences

As in the LFPR analysis, the native-born groups of Asian-American women show a fair degree of similarity in their income results, and their coefficients in the regression equations are closer to the white sample than to the Asian immigrant groups. However, employment in the core of the public sector (government bureaucracies) and in the periphery of the public sector (mainly schools and hospitals) appears to offer some special income advantages to the native-born Japanese and Chinese. Overall, the American-born Japanese and Chinese have come a long way towards parity with the white majority in their income attainment patterns, whereas the Filipinos seem to have assimilated less.

The immigrant groups in various ways appear to bear the marks of their immigrant status. The Japanese, who tend to be older than the other groups, have relatively large coefficients for age, marital status and number of children, and employment in the core public or private sector seems important to their chances of gaining a good income. For the Chinese, recency of immigration, level of schooling and fluent English have relatively large effects. The Filipino immigrants exhibit a brain-drain pattern. Two-thirds of these women have attended college, and when they have managed to turn their educational advantages into professional employment, especially as self-employed, they have gained a considerable income edge. The Indian group presents a very similar brain-drain pattern.

The pattern for the Korean women is more like that of the Chinese.

Table 6. *Regression analysis of log 1979 income for non-Hispanic White and Asian-American women*

Determinant		White		Asian	Asian native born			Asian foreign born					
		Unweighted	Weighted	Unweighted	Japanese	Chinese	Filipino	Japanese	Chinese	Filipino	Korean	Indian	Vietnamese
Immigration	Native	.055	.234**	.128***	–	–	–	–	–	–	.220*	−.094	.284
	Before 1965	.127	.242**	.106***	–	–	–	.121*	.194***	.212***	.050	.055	.272
	1965–74	.123	.323***	.127***	–	–	–	.097	.147***	.218***	.097**	.093*	−.046
	1975–80	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Schooling	More than 12 years	.171***	.171***	.134***	.108*	.093	.181*	.155*	.133**	.113**	.198***	.062	.085
	12 years	.052**	.030	.046**	.027	.020	.067	.060	.059*	−.017	.050	.059	.012
	Less than 12 years	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
English	Native	.099	−.050	.056*	.108	.177	.065	.035	.218***	.020	−.032	.018	.215*
	Well	.087	−.015	.065***	.110	.148	.091	.040	.102**	.073	−.010	−.020	.097
	Not well	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Age	55–64 years old	−.021	−.044*	.014	.062	−.047	.041	−.312***	−.100*	.025	−.001	.078	−.074
	45–54	−.026	.043*	.033*	.075*	−.019	.087	−.157*	−.033	.090*	.033	.003	−.043
	35–44	.004	.125***	.071***	.171***	.121*	.082	−.044	−.019	.097***	.050	.055	−.049
	25–34	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Marital status	Single	.046*	.059**	.047**	.030	.027	.017	.204*	.008	.068*	−.004	.042	.070
	Formerly married	.087***	.152***	.020	.057	.103	−.046	.041	.021	.013	−.002	.081	.004
	Married	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
No. of children	<5 years old	−.048***	.009	.014	−.005	−.011	−.041	−.021	−.033	.036*	−.025	.050	.027
	6–11 years old	−.099***	−.233***	−.039***	−.074***	−.103*	.013	−.100*	−.039*	−.027*	.011	−.093***	−.034
	12–17 years old	−.056***	−.079***	−.018*	−.096***	−.058	−.022	−.046*	−.001	.005	.001	−.037	.027
Occupation	Manager	.454***	.424***	.416***	.524***	.542***	.385***	.347***	.303***	.381***	.333***	.266***	.539***
	Professional	.547***	.511***	.647***	.611***	.623***	.505***	.332***	.574***	.697***	.642***	.681***	.514***
	Sales	.192***	.242***	.124***	.237***	.318**	.154	.095	.123*	.030	.086	−.133	.155
	Clerical	.260***	.255***	.191***	.265***	.299***	.200*	.128*	.091*	.195***	.101*	.099	.220*
	Farming	−.043	.622***	.177***	.162*	.887*	−.054	.184	.060	.272**	−.089	.449*	−.105
	Manual	.341***	.317***	.137***	.198***	.291*	231*	.127*	.026	.143***	.128**	.085	.242**
	Service	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
% of Asians	6 and more	.153***	.025*	.110***	.093**	.148*	056	.135*	.134***	.108***	.101*	.071	−.039
	2–5.9	.150***	.122***	.121***	.133***	.103*	.122*	.140**	.133***	.114***	.128***	.082*	.070
	Less than 1.9	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Market/ sector	Core self-employed	−.095	.034	.181**	−.181	.281	.219	−.436*	−.215	.703***	−.101	.714***	.125
	Core public	.195***	.130***	.182***	.259***	.145*	.200*	.254*	.141*	.120*	.151*	.124	−.025
	Core private	.190***	.196***	.186***	.202***	.210***	.195**	.204***	.247***	.133***	.227***	.148**	.125*
	Periphery self-employed	−.270***	−.272***	−.131***	−.123*	−.205*	.034	−.202*	−.133*	−.132	−.004	−.004	−.164

Table 6. *Regression analysis of log 1979 income for non-Hispanic White and Asian-American women*–continued

	Periphery public	.203***	.108***	.085***	.248***	.172*	.034	.025	.056	.027	−.036	.083	.035
	Periphery private	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
Hours worked in previous week		.010***	.009***	.008***	.010***	.010***	.011***	.010***	.006***	.006***	.006***	.008***	.007***
Weeks worked in 1979		.045***	.050***	.041***	.042***	.044***	.042***	.041***	.038***	.040***	.039***	.043***	.040***
Ethnicity	Japanese	–	–	−.081**	–	–	–	–	–	–	–	–	–
	Chinese	–	–	−.060*	–	–	–	–	–	–	–	–	–
	Filipino	–	–	−.023	–	–	–	–	–	–	–	–	–
	Korean	–	–	.025	–	–	–	–	–	–	–	–	–
	Indian	–	–	−.019	–	–	–	–	–	–	–	–	–
	Vietnamese	–	–	(O)	–	–	–	–	–	–	–	–	–
	Constant	5.857***	5.697***	6.214***	6.023***	5.958***	6.101***	6.207***	6.380***	6.235***	6.444***	6.332***	6.357***
	(N)	(25,548)	(26,364)	(26,747)	(4,849)	(1,579)	(1,012)	(2,346)	(4,635)	(5,911)	(2,894)	(2,391)	(1,130)
R-Squared		.583	.596	.550	.496	.516	.578	.520	.540	.573	.547	.616	.566

Source: 1980 US Population Census.
Footnotes:
1. (O) indicates the omitted category.
2. *** $p<0.001$; ** $p<0.01$; * $p<0.05$.

Table 7. *Summary of R-square changes for income analyses*

Determinant	White		Asian	Asian native born			Asian foreign born					
	Unweighted	Weighted	Unweighted	Japanese	Chinese	Filipino	Japanese	Chinese	Filipino	Korean	Indian	Vietnamese
	%	%	%	%	%	%	%	%	%	%	%	%
Ethnicity			1.3				1.4	5.0	6.1	2.7	1.4	1.6
Immigration	0.0	0.1	2.9				1.4	7.3	6.9	4.3	2.1	2.3
Schooling	1.9	1.5	4.6	2.6	2.1	4.0	1.4	1.1	0.3	0.0	0.2	1.4
English	0.0	0.0	0.2	0.2	0.8	0.1	0.2	0.1	0.5	1.1	1.5	0.2
Age	0.6	1.2	0.4	0.3	0.2	0.6	0.3	0.7	1.2	0.3	1.1	0.3
Marital status	2.9	5.2	0.9	1.1	1.4	0.3	1.8	1.0	0.2	0.3	1.2	0.9
No. of children	3.7	5.4	0.5	2.1	3.2	1.3	2.4	5.1	9.6	5.2	14.5	5.0
Occupation	5.8	3.9	7.0	8.0	6.8	5.9	2.9	0.1	1.2	1.8	0.3	0.4
Percentage of Asians	1.0	0.9	0.9	1.1	0.8	1.9	1.5	0.9	0.8	1.7	1.0	1.0
Market segment	1.9	2.2	1.0	1.9	1.8	2.2	2.3	32.9	30.6	37.4	38.5	43.5
Hours and weeks	40.4	39.3	35.4	32.3	34.6	41.1	37.8					
R-Square total	58.1	59.6	55.0	49.6	51.6	57.8	52.1	54.1	57.4	54.7	61.6	56.8

Recent immigration can be a problem for the Koreans, and location in areas with fairly high proportions of Asians is an advantage. One difference from the Chinese is that proficiency in English appears to make little difference for the Koreans. Together with the fact that the penalty associated with peripheral self-employment is very low for the Koreans, these results are consistent with the stereotypical figure of the Korean shopkeeper. Finally, for the Vietnamese, nothing makes much of a difference in income except English fluency and occupation, with manual occupations offering some advantages over service work, as do white-collar, professional and managerial jobs. Beyond these factors, income for the Vietnamese is primarily determined by hours and weeks worked. The more than 43 per cent of the variation explained by hours and weeks is the highest total for any of the ethnic/nativity groups.

These results from the analysis of income patterns, combined with the LFPR analyses, suggest three broad conclusions. First, they cast further doubt on the status of Asian-Americans as a model minority, even surpassing whites in labour force commitment and income attainment. At the very least, they underline the conclusion that Asian women in general must work harder than whites in the same geographic areas to attain economic parity with the whites. Seemingly, Asians can afford to pay less attention to family and personal needs in decisions about going to work and rates of pay to accept. Second, the diverse results confirm the conclusion that there are great dangers in trying to generalize Asian-Americans as a unified category. Third, the results also suggest once again that Asian women of different types are pushed into different economic strategies. The results point to the efficacy of the ethnic enclave as a source of work and higher income for some, but not all, Asians.

Finally, the present conclusion extends those of Wong and Hirschman (1983) and Yamanaka (1987). After adjusting for the effects of Asian residential concentration on the employment opportunity of whites, this study confirms the additive effects of labour market opportunities on immigrant women's labour force activities. Individual skills are necessary conditions, but they do not give comparative advantage to minority women in open competition with the majority women. The findings of this study, then, present a less optimistic picture of Asian women's process of achieving economic parity with white women than did the portrait painted by the US Commission on Civil Rights study (1988). Rather, this study implies that it is Asian women's strenuous efforts combining individual and collective resources that have given rise to the conditions for their adjustment to labour market requirements. The cost of their adaptation is not necessarily small; it may be indifference to family needs, lower income returns to education, or longer working hours.

Discussion and conclusion

The comparison of economic data from the 1980 Census, for samples of Asian and non-Hispanic white women, has revealed the distortions implicit in the stereotype of Asian-Americans as an economically 'successful' minority. Although Asian-American women, on average, have achieved levels of success comparable to or, in some cases, surpassing averages for white women in their localities, this study also shows how Asian women have had to struggle to achieve their parity with whites. In spite of the great heterogeneity, Asians all seem to be alike in one respect: they achieve their relatively high income only by working harder and longer than comparable whites. Thus, Asian-American women tend to work more hours per year and more consistently through the life cycle, regardless of family circumstances. Asian women also receive lower economic returns than whites on their superior levels of education. In short, Asian-American women, both native and foreign born, as of 1980 had not yet escaped the stigmatization of being minority and recent immigrants in a discriminatory job market.

Any highly diverse collection of people facing a common problem will necessarily adopt a variety of strategies to overcome the problem, according to their various circumstances. Thus, Asian women from differing backgrounds and immigrating to the US at different times have sought economic parity in America by a number of different routes. The native-born Japanese, Chinese and Filipino women seem to have had greater opportunities than have their immigrant sisters. Among the immigrant groups, Indian and Filipino women have adopted different strategies than have the Chinese and Koreans, and the other two immigrant groups – Japanese and Vietnamese – have followed their own unique patterns. These differing economic approaches are perhaps most visible in the results for the variable cross-classifying industrial sector by job-market segmentation. Although this composite variable explains a relatively small amount of the variation in income, the patterns are clearly marked for the various subgroups of Asian-American women.

Looking back at Table 6, those white women who managed to secure employment in the Core-Private category, say as clerical workers in larger companies, or in the Periphery-Public category as, for instance, teachers in public schools, have tended to do well economically. Asian-American women overall follow a somewhat similar pattern, although in addition to deriving benefits from Core-Private or Periphery-Public employment, they appear to have increased their income by finding jobs in the Core-Public sector, for example, in large governmental bureaucracies. Earlier we described this approach as an affirmative-action strategy for achieving success in areas where Asians have political power. The most successful Indian and Filipino immigrant women

have secured positions in Core-Self Employment, usually as privately practising health professionals, the strategy described earlier as the brain-drain pattern. By contrast, Chinese and Korean immigrant women have managed to maintain relatively good incomes in Periphery-Self Employment, most likely as small shopkeepers. The women who fit these patterns are only a small percentage of the women in their respective groups – large numbers of immigrant women are relegated to unskilled labour in peripheral enterprises. Nevertheless, enough women have followed these distinctive patterns to produce statistically significant results. The patterns are less clear for the Vietnamese and foreign-born Japanese. The former seems to exemplify the bare-survival strategy of working hard to cope with limited opportunities, whereas the latter mainly consists of two unrelated groups of women who immigrated at different times for different reasons – war brides and wives of multinational businessmen.

In summary, the generalization that Asian-American women are a successful minority group becomes less tenable the more closely the group is examined. This conclusion has important implications for the further development of sociological theory about immigration. According to the present findings, the widely used racial category of Asian-Americans is of little use for analysing labour force behaviour and position of female workers. As in the case of Hispanic-Americans consisting of Mexicans, Cubans, Puerto Ricans and others, Asian-Americans may exist as a category only for the convenience of administrators and statisticians; the category does not reflect sociological reality captured by the 1980 census data.

Each of the competing theories of the immigrant experience reviewed earlier can be seen to have some plausibility when applied to some subgroup of the women in this study, but none of the views is comprehensive enough to serve as an adequate guide to the complexities uncovered in this analysis. The assimilation model seems to fit a minority within the entire group of Asian-American women. It includes those who have been born in the United States with access to good education and to jobs in the protected public sector. Those immigrants who arrive with a high level of education and professional skills also fit to this model. Such women are often better off when they are located in areas with a high Asian concentration. The dual economy view has relevance to the majority of the immigrants, who have less education and lack saleable skills but have to find work because of economic pressure on their families. They tend to work in the peripheral industries and in the unprotected private sector, although they may also gain some advantage from employment in areas of high Asian concentration.

Ethnic enclaves appear to provide an economically hospitable environment for some of the groups we have looked at, but not neces-

sarily for all. This study suggests that Chinese, Filipino and Korean immigrants have experienced modest income gains in these enclaves, but Indians and Vietnamese apparently have not, perhaps because of their own greater dispersal across the country. Finally, the middleman minority hypothesis may have something to do with the experiences of a small minority of these women, in particular, Filipino and Indian women who find employment in successful professions and the Korean and Chinese women who work as small shopkeepers. For the former group, being skilled and self-employed evidently means rapid advancement, but for the latter group being unskilled and self-employed has value only to secure an opportunity to work.

Future research on Asian-American women will have to develop more complex articulated models for understanding the diversity of their experiences. Nevertheless, the present research suggests the usefulness of looking at women as economic actors adopting any one of a large repertoire of strategies, depending on their circumstances, resources and community support. This conclusion challenges the role of 'passive worker' long assigned to immigrant women in the migration literature. The findings will also serve as a benchmark for future studies exploring in more detail the reasons for the alternative economic strategies sought by women from different ethnic groups in the United States. Hispanic-American women, for example, also consisting of several major immigrant groups, may fit to models of either an ethnic enclave economy (Cubans and Mexicans) or of the dual economy (Puerto Ricans and Mexicans). In applying diverse models to each of the different groups, future research using census and other survey data (including longitudinal data) should be supplemented by qualitative, ethnographic studies of the strategies that women use, especially among the small groups, like affirmative-action public servants, brain-drain professionals or urban shopkeepers, who have successfully or unsuccessfully pursued distinctive approaches.

As the 1990 Census data become available in the next few years, one high priority should be to see how the rapid growth of the Asian-American minority during the 1980s has affected the mixture of economic strategies such women choose. More broadly, research is needed on the connection between the macro structure of occupation and industry and the micro structure of the household, if we are to understand how women make decisions about work. Particularly in the midst of economic restructuring by which the distribution of employment opportunities are becoming more uneven in urban centres, collective measures of survival may become more important. Researchers investigating Asian-American communities will need to consider how immigrant women take advantage of the presence of ethnic enterprises, protective public policies, and personal resources including the prevalent extended family structure to advance economic well-being of their households. Such research has obvious implications for public policies concerning both immigration and minority groups in a worsening economy.

Finally, the diversity of economic outcomes found in this study of Asian-American women, as well as the overall similarity of the economic fortunes of the Asian and white women in the samples, have underscored the degree to which gender may be the key variable in this research. Just as in the comparison of African-American and white women (e.g., Farley 1984), racial differences seem far less striking than the obstacles that Asian-Americans and white women jointly face in striving to achieve their economic goals. One way to investigate gender versus racial obstacles may well be in the inclusion of Asian and white men in the sample to see whether the cross-racial/ethnic differences found in this study are also found for men, and to explore for each model whether large income inequalities still persist along gender lines. Ultimately, the diverse economic strategies employed by Asian-American women must be viewed in the context of the long-term struggle of women for economic justice.

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Notes

1. Because of rounding errors, the imposition of weights resulted in a nominal sample size of 41,451 for the weighted sample of non-Hispanic white women, compared to 41,557 for the unweighted data.
2. The weights ranged from 0.045 for an SMSA in upstate New York to 91.107 for the Honolulu SMSA. Applying such extremely high weights to the small number of white women from Hawaii introduces some statistical variability, but the risk of increasing the sampling error seemed less problematic than the geographic bias inherent in using an unweighted sample.
3. Original logit coefficients are available from the authors upon request.
4. While the Japanese, Chinese and Filipino immigrant groups shown here are entirely foreign born, the Korean, Indian, and Vietnamese groups include a few women born in the United States.
5. The small number of women who had negative incomes are mostly self-employed. These women were omitted because of the methodological difficulties of representing their incomes in the semi-log specification. In addition, the business losses they report may not be a good measure of their long-term economic benefits from working.
6. In the semi-log specification regression coefficients are approximately equal to the percentage change in the dependent variable for each one-unit change in the interdependent variable. For instance, a coefficient of .050 is associated with a 5.1 per cent increase in the dependent variable. With larger coefficients, the percentage change is

somewhat greater, e.g., a coefficient of .300 corresponds to about a 35 per cent increase. For negative coefficients, the percentage change is somewhat smaller. A coefficient of −.300 represents about a 26 per cent decrease.

7. Because this analysis is limited to those women who are in the labour force, it suffers from potential selection bias. Heckman (1979) has established the standard procedure to correct this bias; however, computation of the correction measure is complicated due to the large size of our sample. To cope with this difficulty, a corrected regression model was compared with a non-corrected regression model using the 5 per cent extract of the PUMS file. The results show very little difference between the two equations, leading to the conclusion that any bias arising from sample selection is likely to be minor.

8. The negative impact of small children on the unweighted white mothers' income changes into insignificance after regional differences are adjusted in the weighted model. This may indicate the greater childcare availability and lower cost of childcare in the high Asian concentration areas, namely California, Hawaii and other metropolitan cities. Stolzenberg and Waite (1984) find that, controlling for differences in individual characteristics, the higher rates of employment are more common in those areas where inexpensive childcare services are readily available for working mothers.

9. One other effect of weighting shows up in the coefficient for farming occupations. In the unweighted sample this coefficient is slightly negative, but for the weighted sample the coefficient becomes strongly positive. Very likely, this difference reflects the large agricultural industry of California and Hawaii.

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