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# EXTENDED STRATIFICATION: Immigrant and Native Differences in Individual and Family Labor

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This article outlines a theoretical system of extended stratification in order to account for differences between immigrants and natives in (1) the amount of time individuals devote to paid work and (2) the number of family members participating in paid work. The basic argument is that immigrants with a frame of reference that includes being socialized in a relatively poor sending society tend to have greater work incentive than natives who have been socialized in a richer host society. This variation in work incentive obtains because the economic rewards achieved through additional work are evaluated more highly by groups that have as their frame of reference a comparatively poor society. According to this argument, the intergroup difference in work incentive should obtain even when economic need is held constant. We derived two hypotheses and tested them with a comparative analysis of immigrants and natives, including native coethnics of the immigrants. At the level of the individual and of the household, the findings are largely consistent with the hypotheses.

An intriguing aspect of social stratification is the upward mobility of foreign-born minority groups. Immigrant minorities often ultimately achieve an average standard of living that exceeds that of disadvantaged native groups. There are several examples wherein immigrant minority groups approach, and sometimes reach, the economic standing of advantaged native groups. These events have transpired in various parts of the world including the Pacific Islands, Africa, South and North America, the Middle East, Europe, and Southeast Asia (e.g., Sowell 1983; Shibutani and Kwan 1965). The international migrants who have built this record of achievement are as diverse as their points of destination. The accomplishments of Armenians, subcontinent Indians, Chinese, Cubans, Jews, Koreans, West Indians, and Japanese are among the most widely recognized.

How is it that so many immigrant minority groups, relocating in various parts of the world at different points in time, have been able to move up the economic ladder of the host soci-

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ety? The aim of this article is to offer a theoretical argument that partly accounts for the economic progress of immigrants. The argument hinges on intergroup variation in the incentive to work long hours for what natives tend to consider marginal economic gain. Because work incentive is more difficult to measure than time devoted to work, the empirical part of this article focuses on work time. Although the idea of work incentive is integral to our argument, it is the actual performance of work that creates opportunities for upward mobility. Consequently, if our argument is to help account for immigrant upward mobility, it must do so in terms of explaining intergroup variation in *work time* (or *work effort*—we use the terms interchangeably, which is consistent with most of the relevant literature).

It is a tenet of sociology that groups with differing frames of reference often have differing interpretations of a situation (Thomas 1931). Our argument assumes that this tenet is valid and predicts that group averages in work time vary in systematic patterns because of intergroup differences in frames of reference. This variation in frames of reference is due to the tendency that immigrants from relatively poor societies are more likely socialized in different environments, with differing structural opportunities, than natives of wealthier host societies or immigrants from wealthier sending societies. Consequently, groups may vary in the standard by which they evaluate the magnitude of a given economic gain and the costs incurred (e.g., loss of time for leisure) in procuring economic gain. The net value one group may attach to a given economic gain may therefore be different from the net value another group places on such a gain. As a result, what constitutes a valuable payoff for additional work effort can vary across groups, with immigrants moving from a relatively poor society to a richer society setting the bar lowest in deciding what constitutes an acceptable economic return. The result is a tendency for immigrants from relatively poor sending societies to have lower reservation wages than either immigrants from relatively wealthier sending societies or the natives of the receiving society. In this article, we outline a hypothetical explanation of intergroup variation in work time, derive two testable hypotheses, and test them on several immigrant and native groups.

### ECONOMIC ADVANCEMENT AMONG CONTEMPORARY IMMIGRANTS

A voluminous literature on the economic experiences of minority immigrants has emerged during the past quarter of a century. Studies from Australia, Israel, Canada, France, Germany, the United Kingdom, and the United States are common. Focused reviews of the literature are often published in journals. Attempts to review the broad literature on immigration are occasionally undertaken, and these are especially important in helping scholars take inventory of the breadth of the field (e.g., Borjas 1994; Waldinger 1989). The review included in Richard Alba and Victor Nee (1997, pp. 850–857) covers the most influential lines of inquiry and theoretical development, with a focus on the key themes and debates.

The theoretical approaches that guide this literature focus on several processes through which social stratification is generated. To one degree or another, each hypothetical argument either implies or asserts that one reason for the economic progress of many immigrant groups is that their members tend to have strong work incentives and that their postimmigration work records reveal a willingness to work long hours, even if the conditions of work are poor and earnings are low. Some research contends that immigrants have unusually strong incentives because they are a nonrandom, self-selected, highly motivated subgroup of their home society's population (e.g., Borjas 1987; Chiswick 1986). Other studies suggest that what might look like self-exploitation under difficult work conditions

is often an astute investment in gaining work-related experiences and social connections that contribute to better employment opportunities down the line (e.g., Bailey and Waldinger 1991; Portes and Sensenbrenner 1993; Zhou 1992). A third possibility is that immigrants work long hours because of preimmigration exposure to grueling work schedules. According to this view, work time may not so much be a proxy for work incentive as it is a reflection of how past work experiences condition immigrants to accept long hours of work as a normal part of life. Notwithstanding, work time is still an indicator of how home society frames of reference influence immigrants' willingness to undertake arduous work schedules in an effort to improve their circumstances.

Two earlier attempts to explain the work-related motivations of immigrants who move from poorer to richer societies are especially germane to our argument. Edna Bonacich (1972) and Michael Piore (1979) consider how sojourners are influenced by home society frames of reference. The more immigrants perceive themselves as sojourners, the more their social identity remains fixed with their social roles back home. Sojourners identify little with their employment role in the host society inasmuch as work is strictly an instrumental device through which they can bring to fruition their aspirations of returning home. Hence, immigrants who seriously plan to return home may be disproportionately willing to put up with difficult employment circumstances because such circumstances are seen as a necessary, but temporary, means to an end. Given the evidently permanent settlement practices of a large share of contemporary immigrants (particularly "legal" immigrants) to relatively rich societies, it is difficult to know if a very large percentage of immigrants view themselves as sojourners. Nonetheless, Bonacich (1972) and Piore (1979) are highly relevant to our work because of the importance they place on how reference groups in the home society influence the behavior of immigrants. Also, Bonacich (1972, p. 549) argues that the poorer the sending society relative to the receiving society, the lower the reservation wage of immigrants. We draw on this argument in developing our account of native-immigrant differences in work time.

If immigrants tend to be more motivated than natives to get ahead by working additional hours, or if immigrants are simply more accustomed to long work-hours, native immigrant differences in actual hours of work are likely to emerge. But because the work time of individuals is influenced by their overall economic need (or attainment), including their household circumstances (e.g., Ehrenberg 1994), and because the economic circumstances of immigrants from poor sending societies tend to be worse than those of natives and immigrants from wealthy societies, it is necessary to control for economic need in order to test our argument. Holding constant objective indicators of economic need such as per capita household income and occupational attainment, we expect immigrants to work more than natives due to the influence of differing frames of reference. That is, controlling for economic need, immigrants from poor sending societies will be more motivated than natives to add to their work week. The short-term labor supply curve of immigrants, therefore, is less backward bending than that of natives.

What is the existing evidence as to whether immigrants work longer hours than natives? The review by George Borjas (1994) shows that the work effort of some groups of foreign-born men in the United States is relatively high, but recent Third World immigrants with little human capital have serious difficulties in the labor market, and this adversely affects their work time. Similar findings have been reported for several groups of women (Schoeni 1998). When human capital is controlled, immigrant disadvantages in work time often attenuate. There is also some evidence that low-skilled immigrants who

migrate through family reunification avoid short working hours with the help of their better connected, more assimilated relatives (Jasso and Rosensweig 1990). Comparing native-born and foreign-born coethnics often reveals smaller intergroup differences in work time than when immigrants are compared to majority members of the native-born population (Allensworth 1997; LeLonde and Topel 1991). Of course, the labor market experiences of immigrants are strongly affected by their age at the time of immigration (Borjas 1994).

These documented patterns are not encouraging for our argument that immigrants from poor sending societies tend to put in more hours of work than natives, once economic need is controlled. For the most part, white non-Hispanic natives in the United States appear to put in as many or more hours of work than do the foreign-born, and some native-born ethnic groups average more hours of work than their foreign-born coethnics. In the face of these data, to what degree might our argument contribute to an understanding of differences in the work effort of various immigrant and native groups? In the remainder of this article, we address this question by proposing a theory of extended stratification that emphasizes the influence of intergroup variation in frames of reference and by testing two work-effort hypotheses derived from the theory.

THE EXTENDED STRATIFICATION SYSTEM

We propose the theory of extended stratification systems. This hypothetical system is represented in Figure 1. First-generation immigrants (born and raised in the sending society) are distinctive in that they were socialized, well into the life cycle, in a society different from the one in which they now live. The social contexts or frames of reference that immigrants have experienced, and have been influenced by, include those of both the sending and receiving societies. Consequently, the behavior of immigrants, including economic action, is affected by pre- and postimmigration socialization experiences. We suggest that having a social frame of reference based on growing up in a sending society that is mark-

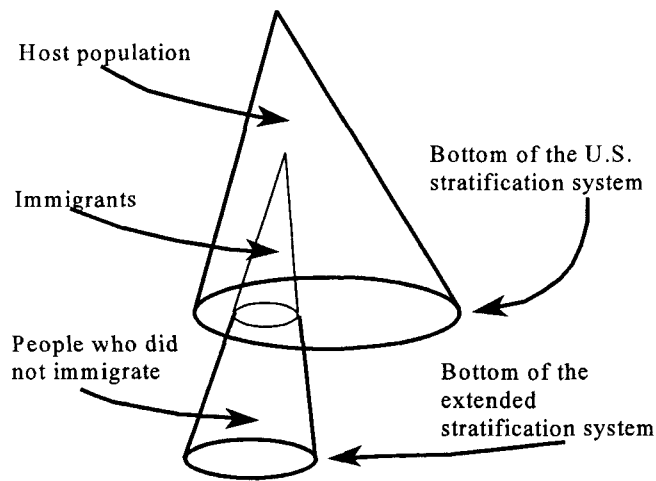


FIGURE 1. ILLUSTRATION OF THE EXTENDED STRATIFICATION SYSTEM

edly poorer than the receiving society encourages immigrants to pursue economic actions that require sacrifice and hard work. We are hardly the first to make such an argument, but we offer a theoretical model, with testable hypotheses, in an effort to explain how economic actions are influenced by the combined influences of being socialized in a relatively poor society and earning a living in a richer society. As Figure 1 depicts, the stratification system for natives terminates at the lower end of the host social system. For immigrants, by contrast, the stratification system extends into the social system of their home country and ends at the bottom of that system.

With the extended stratification system, we emphasize that natives and immigrants have different frames of reference. An important dimension of this distinction is that immigrants and natives have different reference groups. The reference groups for natives are different native status groups. The reference groups for immigrants also include native status groups, but because of cultural, social, and economic ties between immigrants and their home society, immigrants have additional reference groups. These include different status groups in their home country, including their own preimmigration social status. With respect to Figure 1, the reference groups of natives are found within the large cone that represents the host population. Some of the reference groups for immigrants are also found there, but other reference groups for immigrants are found in the lower part of the smaller cone—the population remaining in the home country.

In economic action, as with many types of social interaction, reference groups influence individuals' sense of how well or how poorly they are doing. That is, the extent to which people view their economic situation as acceptable depends partly on the extent to which they view themselves as relatively deprived. Given the option, it might be reasonable for a native worker to refuse overtime work, if they are satisfied with their economic situation or if they view the overtime earnings as so modest that the additional money would not appreciably improve their economic situation. Such choices are made with reference to the economic situation of the individual and to the groups to which the individual compares his well-being. Reference groups, therefore, play a role in determining how people make decisions about matters such as what constitutes an appreciable economic improvement.

The same situation described above might play out differently if the employee is an immigrant from a society with a lower standard of living than the host society. Even modest additional pay for working overtime may be attractive to a person who has as her frame of reference the still lower pay she would receive for comparable work effort in her home society. For example, Korean physicians have tended to accept lower status and less important positions in the United States than positions they could have in Korea. Furthermore, Korean physicians who take such positions are often paid less than their native counterparts in the United States. Why take such positions? While the pay may be low by the standards of U.S. physicians, it is still higher than what the physicians could earn in Korea (Shin and Chang 1988). The lower standard of living of the home country compared with the standard of living of the host country constitutes a major difference between the reference groups of immigrants and natives. This difference can result in immigrants being more willing than natives to work hard for what natives would view as a modest economic gain. That is, the reservation wage of the two groups differs. Thus, the differing frames of reference of the two actors play an important role in generating the differences in reservation wages.

Demographers have long observed that people migrate for economic gains (or potential economic gains) and indeed, the prevailing direction of migration is from economically

less developed areas to areas of greater economic development (Lee 1966; Massey, Goldring, and Durand 1994). This tendency implies an important structural difference between host and sending societies. Due to the better economic conditions of the host society, the same kind of work, or the same amount of work, will typically yield more remuneration in the host society. To the immigrant from a poor society, this remuneration represents an *additional* payoff that is there for the taking—all that is required is the willingness to work long hours. Natives, by contrast, have no comparable frame of reference and therefore no reason to be especially motivated to work longer hours in order to make what they see as no better than marginal improvements in their economic situation. For natives, the baseline for evaluating *improvement* is their standard of living and that of their reference groups in the host society. For immigrants, the baseline is more complicated. Immigrants' standard of living and those of their host society reference groups play a role, but their view of improvement also takes into account how much the additional remuneration raises them above the standard of living they would have had back home. Hence, the payoff appears greater for immigrants. This greater payoff, or at least a greater appreciation of the payoff, gives immigrants additional incentive to gain even marginal economic gains through additional work. The degree to which such payoffs provide incentives to work more may be moderated by the higher cost of living in the host society. Therefore, the greater the margin of economic gain, net of the higher costs of the host society, the greater the incentive to undertake long working hours.

Theories that imply self-selection, such as migration and class-resource theories, point out that immigrant populations are often nonrandom samples of the home society's population. Such theories argue that immigrant groups are only likely to be particularly hard working to the degree that they consist of self-selected, highly motivated people. Consequently, these theories imply that there should be substantial differences in work-related behavior between largely voluntary, self-selected immigrant groups and largely nonvoluntary, non-self-selected immigrant groups. It follows that refugee groups that are largely characterized by nonvoluntary immigration will be less motivated to work hard than non-refugee groups of voluntary immigrants. By contrast, the extended stratification system theory predicts that strong motivations to work hard are characteristic of all immigrant groups as long as their frames of reference includes a poor home society with limited opportunity for upward mobility.

### THE WORK-EFFORT HYPOTHESIS OF THE EXTENDED STRATIFICATION SYSTEM

The extended stratification theory contends that *because* people have different socioeconomic frames of reference, they vary in their willingness to work long hours in an effort to achieve modest improvements in their current socioeconomic circumstances. Thus, immigrants from relatively poor societies tend to see their richer host society as abundant in opportunities for getting ahead through hard work. Immigrants will often be more willing than natives to work long hours because they value the economic return more highly than native persons who have been raised in a comparatively rich society. It is not that most immigrants achieve high standards of living when evaluated by the standards of the host society, rather that immigrants often have the opportunity to achieve a considerably higher standard of living in the host society than they could achieve back home. What looks like a modest economic return to a person raised in a wealthy society may be inter-

preted as a more meaningful gain by immigrants who compare their current situation to the alternative of staying in the home society.

The work-effort hypothesis of the extended stratification system can be stated as: *Immigrants from a society with a lower level of economic development than the destination country will tend to work more hours than native workers.* We expect that this relationship is roughly proportional in the sense that the greater the economic gap between the host and home society, the greater the work effort gap between immigrants and natives.

We contend that moving from a relatively poor society with limited opportunity to a richer society with greater opportunity encourages immigrants to work long hours so as to maximize their economic situation. But it is also possible to derive an alternative hypothesis about the impact of differing frames of reference on work effort. Having a frame of reference that includes a poor home society may lead immigrants to emphasize the lower standard of living back home, rather than the higher standard in the host society, in interpreting their postimmigration success. In this case, immigrants may have little incentive to work long hours because such a work schedule is unnecessary to achieve a better standard of living than they would have had back home. This perspective is related to Piore's (1979, pp. 95–98) discussion of target earners, although he attributed this tendency mostly to immigrants who planned to return to the homeland. To the degree immigrants who see themselves as permanently settled in the host society work toward a low target as an acceptable standard of living (the target is low by the standards of the host society but much higher with respect to the home society), we would expect that the opposite of our hypothetical relationship would obtain. That is, immigrants from poor societies would tend to work less than natives.

The weakness of this alternative hypothesis, in our view, is that the economic actions of immigrants are more balanced by both home and host society frames of reference. In most cases, we argue, the comparatively greater opportunities for material gain in the host society are sufficient to motivate immigrants to work long hours if that is the only way they can improve their standard of living. In testing the work-effort hypothesis, we are also testing the alternative hypothesis. If our arguments are highly accurate, the work-effort hypothesis should be confirmed. By contrast, if the alternative hypothesis is highly accurate, findings that are the opposite of what we argue should obtain.

### Testing The Work-Effort Hypothesis

Our dependent variable is work time. The analyses reported below are based on the operational variable *usual hours worked per week last year*. Though not shown, we replicated the analyses with total hours worked during the year. The findings of the two analyses are virtually identical.<sup>1</sup> Because the work time variables are badly skewed, which increases the chance that outliers will influence the findings and that the disturbance will be heteroskedastic, we analyze logged hours of work. The key independent variables are ethnicity and nativity. As discussed earlier, we also need to rule out economic circumstances as an alternative hypothesis, and therefore we control for two indicators of economic need or attainment (per capita household income and occupational prestige as measured by the Duncan socioeconomic index). We also control for self-employment and age in order to make the findings more generalizable. Research shows that self-employed immigrants sometimes work unusually long hours (e.g., Portes and Zhou 1996). Consequently, failure to control for self-employment could produce findings that are consistent with our hypoth-



esis when such findings are largely attributable to the minority of immigrants who operate their own businesses. Age is controlled because relatively inexperienced young workers and the oldest workers may have less opportunity and wherewithal to work the same hours as the bulk of workers who fall more toward the middle of the age distribution. Analyses are conducted separately for women and men.<sup>2</sup>

Our initial test compares the work hours of immigrants, who were raised in the sending society, to native-born and first-and-a-half generation (born in the sending society, but raised in the host society) people who share a common ethnic heritage and ancestral homeland. Our analyses provide such comparisons for Hispanic and Asian groups that have large immigrant and native populations in the United States. In any population, the distribution of work hours can be influenced by local economic conditions. It is therefore necessary to control for variation in regional labor markets. Two metropolitan areas, New York and Los Angeles, offer the largest populations that meet our needs. We analyzed 1990 census samples drawn from the five-county Los Angeles metropolitan area. James Allen and Eugene Turner (1997) and Roger Waldinger and Mehdi Bozorgmehr (1996) offer detailed descriptions of the regional economy and population of Greater Los Angeles. Details of the sample and data are available (USDC 1993). Illegal workers, and the informal employment circumstances they often experience, are unlikely to be more than marginally represented in these samples.

We included the three largest immigrant groups in the western United States (Mexicans, Filipinos, and Chinese) because each group also has a large, well-established native population. These groups offer several useful comparisons. Mexicans and Filipinos differ in terms of Hispanic and Asian heritage, but the Philippine Islands were a Spanish colony for 350 years, and this experience left Filipinos with a unique East-West cultural experience, including a strong presence of Catholicism. Further, the twentieth-century U. S. influence in the Philippines added more Western influence, including the widespread use of the English language. The Chinese immigrants in our sample hail from China and Taiwan. In Los Angeles, immigrants from these two sending societies vary greatly in attributes and resources that can affect employment. For instance, the Taiwanese tend to be younger and better educated than immigrants from China. The Taiwanese are also unusually affluent, benefiting from Taiwan's emergence as a relatively rich society.<sup>3</sup>

Because the extended stratification theory contends that variation in socioeconomic frames of reference predicts variation in work effort, the degree to which a group achieves a certain level of postimmigration affluence is also germane to our study. For instance, a group from a poor society that achieves a comparatively affluent standing in the host society may not have as strong of a motivation to work long hours as groups from equally poor societies who achieve considerably less economic success in the host society. Our sample includes immigrant groups whose home societies vary considerably in level of economic development. At the group level, the average standard of living in the home society and the standard of living achieved in the United States covary positively. However, Filipino immigrants and to a lesser degree, immigrants from China, tend to achieve higher postimmigration standards of living than other groups from societies of similar per capita wealth.<sup>4</sup>

The extended stratification theory also contends that greater work effort among immigrants is *not* limited to a presumably highly motivated select sample of voluntary immigrants. We hypothesize that both voluntary and nonvoluntary immigrants will work longer hours than native workers (born and/or raised in the host society) if they have been raised in a society that is less economically developed than the host society. To test this part of the argument, we include samples of foreign-born Vietnamese and Salvadorans. The addition

of these groups means that we include the two largest Hispanic immigrant groups and three of the four largest Asian immigrant groups in the western United States.<sup>5</sup>

There is little question as to the appropriateness of recognizing the Vietnamese as a mostly nonvoluntary refugee group. By contrast, there is a good deal of debate over the extent to which the Salvadoran immigrant stream is made up of nonvoluntary refugees. We cannot resolve this debate, but given the timing of the civil war in El Salvador and of the movement of large numbers of Salvadorans into the United States, it seems clear that this migration represents a reasonably good example of nonvoluntary immigration. The Salvadorans and Vietnamese do not have substantial native samples for comparative purposes, but we contend that their work effort will be similar to that of voluntary immigrant groups from societies that are substantially poorer than the host society.

Table 1 shows the number of cases by ethnicity, nativity, and sex. We defined the first-and-a-half generation as having come to the United States by age twelve or younger. Anal-

**TABLE 1. NUMBER OF CASES BY ETHNICITY, NATIVITY, AND SEX**

	N
Mexicans	
Women	
Native-born and 1.5 generation	17,844
Foreign-born	12,230
Men	
Native-born and 1.5 generation	20,785
Foreign-born	26,974
Filipinos	
Women	
Native-born and 1.5 generation	786
Foreign-born	3,486
Men	
Native-born and 1.5 generation	807
Foreign-born	2,840
Chinese	
Women	
Native-born and 1.5 generation	772
Foreign-born	
Mainland	935
Taiwan	818
Men	
Native-born and 1.5 generation	863
Foreign-born	
Mainland	1,149
Taiwan	867
Salvadorans	
Women, foreign-born	2,737
Men, foreign-born	3,385
Vietnamese	
Women, foreign-born	1,167
Men, foreign-born	1,782

TABLE 2. MEAN DIFFERENCES IN USUAL HOURS OF WORK PER WEEK, BY ETHNICITY, NATIVITY, AND SEX

PANEL 1	1		2	3	4	5	6	7
	Simple Means		Mean Differences of Logged Work Hours*	Mean Logged Per Capita Household Income	Mean SEI	Self-Employment	Mean Age	
	Unlogged	Logged						
Mexicans								
Women								
Native-born and 1.5 generation	36.5	3.54			10.09	40.8	3.6	32.6
Foreign-born	38.2	3.59	.116***		9.85	32.1	5.7	35.3
Men								
Native-born and 1.5 generation	40.5	3.66			10.09	38.7	6.3	32.9
Foreign-born	41.1	3.67	.067***		9.83	33.3	6.6	33.6
Filipinos								
Women								
Native-born and 1.5 generation	34.7	3.46			10.24	44.3	2.1	28.1
Foreign-born	39.8	3.65	.198***		10.20	47.5	4.2	40.3
Men								
Native-born and 1.5 generation	36.5	3.51			10.25	43.0	5.5	28.8
Foreign-born	41.1	3.68	.182***		10.18	44.3	6.4	41.5
Chinese								
Women								
Native-born and 1.5 generation	35.1	3.46			10.38	49.3	7.9	31.2
Foreign-born								
Mainland	39.0	3.60	.229***		10.14	41.1	11.8	44.2
Taiwan	37.9	3.57	.154***		10.25	48.1	16.0	36.1
Men								
Native-born and 1.5 generation	39.6	3.60			10.39	51.2	10.4	33.0
Foreign-born								
Mainland	42.5	3.70	.154***		10.13	45.2	22.0	46.3
Taiwan	42.0	3.69	.116***		10.20	51.4	25.6	38.8

PANEL 2		2		3 Mean Differences of Logged Work Hours*	4 Mean Logged Per Capita Household Income	5 Mean SEI	6 Self- Employment	7 Mean Age
		Simple Means						
		Unlogged	Logged					
Salvadorans								
Women								
Foreign-born vs. Mexican native-born and 1.5 generation		37.9	3.57	.096***	9.86	31.7	7.5	33.9
Men								
Foreign-born vs. Mexican native-born and 1.5 generation		40.5 <sup>†</sup>	3.67 <sup>†</sup>	.041***	9.83	34.1	6.0	32.1
Vietnamese								
Women								
Foreign-born vs. Chinese native-born and 1.5 generation		36.6	3.52	.145***	10.07	41.4	11.1	33.8
Men								
Foreign-born vs. Chinese native-born and 1.5 generation		38.9 <sup>†</sup>	3.60 <sup>†</sup>	.064***	10.03	43.6	9.2	34.6
				.112***				
				.115***				

\* Foreign-born minus natives, net of SEI, age, per capita household income, self-employment.

† The simple mean differences (unlogged and logged) between Salvadoran men and native Mexican American men, and between Vietnamese men and native Chinese American men, are nonsignificant by the  $p < .01$  criterion (two-tailed test). All other differences are statistically significant.

\*\*\*  $p < .001$ .

yses reported throughout the article are replicated with slightly older and younger definitions of the first-and-a-half generation. The findings are not affected by the exact age at which the distinction is operationalized. The sample members are noninstitutionalized civilians who worked at least a total of forty hours in 1989 and are at least eighteen years of age.<sup>6</sup>

Our analysis has two parts. The first part involves comparative analyses of the work hours of *individuals* who belong to one of the groups reported in Table 1. Additional comparisons are then made to native-born non-Hispanic whites. These analyses provide a direct test of the extended stratification theory as it pertains to the work effort of individuals. The second part of the analysis considers the *household* as the unit of analysis. Here we extend the work-effort hypothesis of the extended stratification theory to the work effort of families. We contend that *immigrants whose frame of reference is a comparatively poor society will seek to improve the socioeconomic situation of their family by maximizing the number of paid workers living in one household*. This part of the analysis takes into account that the family, as well as the individual, is an economic actor (Ehrenberg 1997). Immigrant strategies of upward mobility are influenced by family strategies of childrearing and labor force participation rather than simply individual strategies (e.g., Blank and Torrecilha 1998; Gold 1992; Jasso and Rosensweig 1990; Massey 1990; Sanders and Nee 1996).

### Findings

Columns 1 and 2 of Table 2 provide comparisons of the mean of the usual hours worked per week (unlogged and logged) by sex, ethnicity, and nativity. Voluntary immigrant groups and their native counterparts are reported in panel 1. Even without controlling for economic circumstances, each of the foreign-born groups tends to work more than their coethnic native counterparts ( $p < .01$ ). The more rigorous tests of the hypothesis, with per capita household income, occupational prestige, self-employment, and age held constant, are reported in column 3.<sup>7</sup> Columns 4–7 show the degree to which these control variables differ across the groups.

According to our hypothesis, the foreign-born should work more hours than their coethnic native counterparts. The findings in column 3 of panel 1 are consistent with the hypothesis. All eight of the comparisons reveal that the foreign-born tend to work more hours than their coethnic native counterparts. The largest difference is that women from China work approximately 26 percent more hours than native-born Chinese women.<sup>8</sup> Furthermore, among Chinese men and women, immigrants from Taiwan work significantly ( $p < .01$ ) less than immigrants from China whereas they work significantly ( $p < .001$ ) more than native-born Chinese. Inasmuch as per capita GDP is far greater in Taiwan than in mainland China, this rank ordering among the Chinese conforms to our hypothesis.

At this point, the findings are consistent with the work-effort hypothesis of the extended stratification theory. By turning to panel 2 of Table 2, we consider whether the hypothesis is also supported by data from groups that are more characteristic of nonvoluntary immigration. According to our argument, both nonvoluntary and voluntary immigrants should work more than native groups when the sending societies are poorer than the receiving society. Because Vietnamese and Salvadorans did not have large well-established native populations in 1990, our comparison must be across ethnic lines. The most reasonable comparisons are between Hispanics (Salvadorans and native Mexicans) and Asians (Vietnamese and native Chinese and Filipinos).

As column 3 (Table 2, panel 2) shows, all six comparisons between nonvoluntary immigrants and natives are consistent with the hypothesis. This implies that the work-effort hypothesis is also applicable to nonvoluntary immigrant groups. This interpretation, however, must be considered tentative until more precise comparative analyses can test the hypothesis for nonvoluntary immigrants. Earlier we discussed two limitations of our analyses involving immigrants from Vietnam and El Salvador that warrant repeating. First, in the absence of a native-born coethnic comparison group, the analyses may confound effects due to nativity and to ethnicity. Second, it is unclear to what degree the immigration stream from El Salvador represents a movement of nonvoluntary immigrants or refugees. The case of the Vietnamese seems to be more clear-cut.

What can we conclude? Five ethnic groups, including the most populous ones that include large native and foreign-born populations, have been considered. Each immigrant-native comparison conforms to the work-effort hypothesis of the extended stratification theory. Consequently, we conclude that the extended stratification theory's work-effort hypothesis is useful in understanding processes through which immigrants tend to work more hours than their native-born coethnics. One limitation of these findings, however, is that they pertain only to minority groups. The theoretical and practical importance of the findings will be greater if immigrants have a similar edge in work effort when they are compared to native non-Hispanic whites.

The comparative edge in work effort found for immigrants may facilitate their move up the economic ladder in comparison to their coethnic native-born counterparts. But how does the work effort of these immigrant groups compare to that of native-born white non-Hispanics? This question is addressed in Table 3.

Column 1 reports mean differences in logged work hours for women. Each minority group is compared to non-Hispanic white natives. Column 2 provides the same information for men. These intergroup comparisons obtain with occupational prestige, per capita household income, self-employment, and age held constant. Without these controls, we know from the research cited earlier that native-born white non-Hispanic men tend to work as much or more than other groups. In our sample, the simple mean of usual hours worked per week is 42.3 hours for white non-Hispanic male natives. Only Chinese immigrants from China and Taiwan work comparable hours. The picture is different for women. White non-Hispanic female natives averaged 36.6 hours of work per week. The simple mean of each female immigrant group is higher than this figure. Thus, the data for women are consistent with our work-effort hypothesis even without controls for self-employment and economic circumstances. For men, however, the simple comparison of work hours runs counter to our hypothesis. We now turn to Table 3 to see whether the pattern predicted by the work-effort hypothesis emerges once controls for self-employment, age, and economic circumstances are applied.

In comparing foreign-born women to white non-Hispanic women, we find unanimous support for the work-effort hypothesis. Immigrants tend to work more than non-Hispanic white natives. Moreover, women from mainland China tend to work more than women from Taiwan, which is also consistent with our hypothesis inasmuch as Taiwan is the more affluent society. Two of the native-born groups, Filipinas and Chinese, average fewer hours of work than native white non-Hispanic women. That the findings conform to the work-effort hypothesis is not surprising given the patterns described in the previous paragraph.

**TABLE 3. USUAL HOURS OF WORK PER WEEK:  
COMPARISONS WITH NATIVE-BORN, NON-HISPANIC WHITES**

	Mean Differences of Logged Work Hours*	
	Women	Men
Foreign-born		
Mexican	.178***	.082***
Filipino	.143***	.018**
Chinese (mainland)	.140***	.041***
Chinese (Taiwan)	.066***	.003
Salvadoran	.159***	.056***
Vietnamese	.057***	-.049***
Native-born and 1.5 generation		
Mexican Americans	.062***	.015***
Filipino Americans	-.055***	-.164***
Chinese Americans	-.088***	-.113***
N of white non-Hispanic native born	82,857	98,544

\* Foreign-born minus native whites, net of SEI, age, per capita household income, and self-employment.

\*\*  $p < .01$ , \*\*\*  $p < .001$ .

Among men, four of the six immigrant groups average *more* working hours than white non-Hispanic natives. Men from Taiwan represent one of the two exceptions. Taiwanese men work comparable hours to those worked by white non-Hispanic men. Despite this finding, our hypothesis is still partly supported when Chinese immigrants are considered. In addition to working more than white non-Hispanics, immigrants from mainland China tend to work more than immigrants from the more affluent Taiwan. Because Taiwan is by far the most affluent sending society under consideration, by itself, the failure of men from Taiwan to work more than white non-Hispanic native-born men would probably be innocuous for the work-effort hypothesis. But support for our hypothesis is more seriously clouded by the finding that, among men, immigrants from Vietnam tend to work less than native non-Hispanic whites. At first glance, this finding seems to support the self-selection hypothesis that implies that nonvoluntary immigrant groups are less motivated to work hard than are self-selected voluntary immigrant groups. This interpretation, however, is problematic. First, female immigrants from Vietnam do tend to work more than comparable white non-Hispanic female natives. Second, immigrants from El Salvador, both men and women, tend to work more hours than non-Hispanic white natives. Neither the self-selection hypothesis nor our work-effort hypothesis accounts for the finding that obtains for men from Vietnam. Yet our hypothesis is supported when men from Vietnam are compared to Chinese and Filipino native-born Americans (Table 2). Thus, even in the case of men from Vietnam, our work-effort hypothesis receives partial support.

What do these findings imply for the view that immigrants work their way up the economic ladder through a tendency to work unusually long hours? Generally, we find that net of self-employment, age, and economic circumstances, foreign-born men and women tend to devote more time to work than their native-born coethnic counterparts. For the most

part, this conclusion can be extended to a comparison of immigrants and non-Hispanic white natives, although male immigrants from Vietnam tend to work fewer hours than white non-Hispanic native men.

### WORK EFFORT, STRATIFICATION, AND FAMILIES

At the level of the individual, the work-effort hypothesis of the extended stratification theory appears to be useful for explaining intergroup variation in hours of work. Furthermore, the processes described by the theory have implications for social stratification. But the analyses thus far reported ignore the weighty reliance that immigrants place on the family as an economic actor. There is a strong tendency for immigrants to pursue economic action through familial as well as individual actions. It is not that the development of family-based economic strategies and the pursuit of upward mobility through family actions pertain only to immigrants, but a good deal of research shows that immigrant groups that form families in the host society rely heavily on family strategies (see the studies cited earlier). For many immigrants, especially those with language difficulties and human capital that is discounted in the host society, the family is a key resource to draw on and to organize economic action around in an effort to overcome the difficulties of earning a good living. Labor power within the family household is an important resource that immigrants frequently utilize. Immigrants may be able to gain economic ground on natives by placing comparatively more family workers into the paid labor force.

Do immigrant-headed households place more family members in the work force than other households? Yes. As shown in Table 4, each immigrant group averages more family labor per household than white non-Hispanics.<sup>9</sup> Most immigrant groups average about one-half more workers per household than the native white average of 1.67. But immigrants from

**TABLE 4. NUMBER OF FAMILY WORKERS PER HOUSEHOLD:  
COMPARISONS WITH NATIVE-BORN, NON-HISPANIC WHITES**

	Family Workers per Household	Simple Mean Differences: Minorities Minus Native Whites
Foreign-born		
Mexican	2.29	.62***
Filipino	2.34	.67***
Chinese (mainland)	2.20	.53***
Chinese (Taiwan)	1.85	.18***
Salvadorans	2.15	.48***
Vietnamese	2.20	.53***
Native-born and 1.5 generation		
Mexican Americans	1.90	.23***
Filipino Americans	1.79	.14***
Chinese Americans	1.69	.02
White Non-Hispanics	1.67	—

\*\*\*  $p < .001$ .



the most affluent sending society, Taiwan, tend to have family workforces closer to the white average. Native Filipino- and native Mexican-headed households also have somewhat more family labor per household than white non-Hispanics. In each case, immigrant-headed households tend to have more family workers than households headed by their coethnic native counterparts ( $p < .01$ ); this also holds for the comparisons involving nonvoluntary immigrants (Salvadorans versus Mexican natives; Vietnamese versus Chinese and Filipino natives).

Table 4 is consistent with the extension of the work-effort hypothesis in that immigrant-headed households tend to have more workers than households headed by their coethnic native counterparts and more workers than households headed by white non-Hispanic natives. Yet having relatively more family members in the workforce is not a guarantee of economic progress. The economic impact of family labor is contingent on other characteristics of the household. Having more family workers in the household is likely to translate into the greatest economic impact when the labor advantage is derived from households with relatively few dependents. The degree to which the living arrangements of immigrants differ from those of natives, such that immigrant households not only have more workers, but also have more people, will moderate the degree to which a larger labor pool facilitates reducing the economic disadvantages of immigrants. Because two-thirds of current legal immigration falls into family reunification categories (USDC 1997), we might anticipate that immigrant living arrangements differ in ways that result in more family members as well as more family workers.

An important element of social organization that facilitates immigrant households in establishing a numeric advantage in family workers is the household type. Certain types of households are conducive to having more working-age family members and immigrants are disproportionately likely to live in such households. Table 5, panel 1, shows two ways in which the organization of immigrant households contributes to more potential labor power in one household. Column 1 of panel 1 (Table 5) shows that when the householder is an immigrant, the odds that the household is a family household (versus a nonfamily household) are much greater than when the householder is a native white non-Hispanic. In each case, immigrant-headed households are also more likely to be family households than households headed by their coethnic native counterparts ( $p < .001$ ), and the pattern also obtains for the comparisons involving the nonvoluntary immigrant groups (Vietnamese versus native Chinese and Filipinos; Salvadorans versus native Mexicans).

Column 2 of panel 1 (Table 5) compares the odds that households include a subfamily. Households headed by foreign-born and native minorities are much more likely to include a subfamily than households headed by native non-Hispanic whites. The odds of this type of living arrangement are greater for each of the immigrant groups than for their coethnic native counterparts ( $p < .001$ ). Again, this latter finding also holds for the comparisons pertaining to the nonvoluntary immigrant groups.

Immigrant-headed households may increase their economic progress by having several family workers living under one roof. However, family living arrangements that increase the number of working-age residents are also likely to increase the overall number of residents, including dependents. Immigrants' efforts to reduce the economic gap between themselves and non-Hispanic whites, by having more family members in the workforce, will be most successful when the households of the two groups are comparable except for the number of workers. But as we see in panel 2 (Table 5) immigrant-headed households tend to have more relatives and hence more people to support with the household's labor

**TABLE 5. HOUSEHOLD CHARACTERISTICS BY ETHNICITY AND NATIVITY OF THE HOUSEHOLDER**

<b>PANEL 1</b>			
	Number of Households:	140,964	
	Family Households:	104,733	
	Subfamily Households:	5,808	
	Nonfamily Households:	36,231	
In Reference to Households Headed by Non-Hispanic White Natives			
	Odds that Residence Is a Family Household vs. a Nonfamily Household	Odds that Residence Is a Subfamily Household vs. Other Households	N
Foreign-born			
Mexican	6.49***	6.82***	17,329
Filipino	3.35***	6.88***	2,598
Chinese (mainland)	3.53***	4.69***	1,072
Chinese (Taiwan)	3.29***	4.15***	860
Salvadorans	5.04***	5.78***	2,488
Vietnamese	4.47***	6.15***	1,173
Native-born and 1.5 generation			
Mexican Americans	2.38***	4.16***	14,941
Filipino Americans	1.13	2.12**	438
Chinese Americans	0.79**	1.76*	649
White Non-Hispanics	—	—	99,416
<b>PANEL 2</b>			
	Family Members per Household	Simple Mean Differences: Minorities Minus Native Whites	
Foreign-born			
Mexican	4.82	2.41***	
Filipino	3.80	1.38***	
Chinese from the mainland	3.55	1.14***	
Chinese from Taiwan	3.39	.97***	
Salvadorans	4.07	1.65***	
Vietnamese	4.21	1.79***	
Native-born and 1.5 generation			
Mexican Americans	3.37	.95***	
Filipino Americans	2.74	.32***	
Chinese Americans	2.39	-.03	
White Non-Hispanics	2.42	—	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

force.<sup>10</sup> This implies that the potential economic advantage of having more workers in the family household is diluted by the necessity of providing for a larger family. The smallest immigrant-white gap in average family members per household is one person (Taiwanese) and the largest is about two and one-half persons (Mexicans). In each case, immigrant-headed households tend to have more family members than households headed by their coethnic native counterparts ( $p < .001$ ), and this also holds for the comparisons involving nonvoluntary immigrant groups.

Together, Tables 4 and 5 show that although immigrant-headed households tend to have a numerical advantage in family workers, these households also tend to be organized in such a way as to contain more family members that must be fed, clothed, and generally provided for. Hence, what appears to be an immigrant household advantage in labor may simply be an artifact of different living arrangements and family size. While economies of scale apply to many routine costs, and *doubling up* in housing can significantly reduce total rental or mortgage costs, it is nonetheless almost certainly the case that the potential for making economic headway through living arrangements that increase the family labor pool is moderated by the many costs that are associated with maintaining a large family. It is therefore questionable as to how much upward mobility can be obtained by having comparatively more family members in the labor force, if the way this is achieved is simply to have more people living in one household.

When household characteristics that influence the number of family workers are held constant, do households that are headed by immigrants place more family members in the workforce than other households? The answer to this question is critical in understanding the degree to which the immigrant household advantage in family labor may contribute to closing the economic gap between immigrants and natives. This question is examined in Table 6.

The dependent variable in Table 6 is the natural logarithm of the sum of family workers in one household. As with hours of work, this variable is badly skewed, and modeling the logged term mitigates against the undue influence of outliers and against heteroskedasticity.

Four variables are specified in order to control for intergroup variation in the household characteristics reported in Table 5. Three of these are dummy variables that distinguish married couple family households, family households other than married couple households (nonfamily households are the reference); and the presence of at least one subfamily in the household. The number of family members in the household is also controlled. We control for several additional characteristics of the household that may influence how many family members are in the workforce. These include the presence of at least one minor child, the presence of at least one adult over the age of sixty-four, and linguistically isolated households (no adults or older teenagers who speak English). We also control for the sex, age, occupational prestige, and earnings of the householder. Logged earnings are specified so as to model what we expect to be a nonlinear relationship. The procedure described in note 7, with regard to per capita household income, is followed. Also controlled are nine dummy variables that distinguish the ten ethnic-nativity groups we consider.<sup>11</sup>

The findings in Table 6 reveal the importance of several household characteristics in predicting the number of family workers per household. Each of the three controls for household type (the first three coefficients listed) are associated with increases in the size of the family workforce. The effect of an additional family member is also positively related to the number of family members working for wages. The largest of the coefficients is interpreted as, on average, married couple family households have 72 percent more family workers than nonfamily households (see note 8). By contrast, the presence of children, the

**TABLE 6. OLS ESTIMATES OF THE LOGGED NUMBER OF WORKING FAMILY MEMBERS IN THE HOUSEHOLD**

Independent Variables	B	SE
Married couple family household	.541***	.003
Family household other than married couple	.379***	.003
Subfamily in family household	.256***	.004
Number of family members in household	.130***	.001
Person under 18 in household	-.341***	.002
Person over 64 in household	-.172***	.003
Linguistically isolated household	-.063***	.003
Female householder	.007**	.002
Age of householder	.040***	.007
SEI of householder	-.005	.007
Logged earnings of householder	-.016***	.002
Foreign-born		
Mexican	-.022***	.003
Filipino	.115***	.006
Chinese (mainland)	.071***	.009
Chinese (Taiwan)	-.025*	.010
Salvadorans	.059***	.006
Vietnamese	.021*	.009
Native-born and 1.5 generation		
Mexican Americans	-.009***	.003
Filipino Americans	.055***	.014
Chinese Americans	.031**	.011
Intercept	.049	.019
R <sup>2</sup>		.588

Notes: Households with a white non-Hispanic householder are the reference category. The regression coefficients and standard errors of the relationships involving age and SEI have been multiplied by 100 in order to show nonzero numbers.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

presence of adults of retirement age, and households that are linguistically isolated tend to have relatively fewer family workers. With the exception of earnings, the characteristics of the householder are either not significantly related to the size of the family workforce or they have only weak substantive associations.

The effects of ethnicity and nativity, net of household characteristics, indicate that four of the six groups of immigrant-headed households tend to have more workers than households with a native white non-Hispanic householder. These include households headed by immigrants from China, El Salvador, Vietnam, and the Philippines. The strongest ethnicity/nativity relationship is that households headed by Filipino immigrants tend to have a net advantage in the size of the family labor pool of approximately 12 percent in comparison to households headed by native non-Hispanic whites. Households headed by Filipino immigrants also average larger labor pools than households headed by native Filipinos ( $p < .001$ ). Similarly, households headed by Chinese immigrants average larger family labor pools than either households headed by native-born Chinese ( $p < .01$ ) or households headed by immigrants from comparatively affluent Taiwan ( $p < .001$ ).

The two exceptions to our hypothesis are households headed by immigrants from Mexico and from Taiwan. Although the magnitude of both coefficients translates into a modest substantive relationship, both relationships are statistically significant and contrary to our hypothesis. According to our arguments, the finding that pertains to the Taiwanese is largely a reflection of the affluent level of economic development in Taiwan. Consequently, this finding is probably not a serious challenge to our work-effort hypothesis. The other exception, however, clearly contradicts the hypothesis. Net of the household characteristics controlled in Table 6, households headed by immigrants from Mexico not only fail to have more workers than households headed by native non-Hispanic whites, they tend to have comparatively smaller labor forces. In Table 4 we saw that households headed by Mexican immigrants have relatively large workforces, but Table 6 demonstrates that this labor advantage fails to obtain once household characteristics are held constant.

We examined whether the exceptional case of Mexicans could be accounted for by the fact that their households average more family members and more dependents than other households (Tables 4 and 5: family members minus family workers). To test this possibility, we specified an interaction between the number of family members and households headed by immigrants from Mexico (not shown). The estimates yield a main effect of .129 for households headed by Mexican immigrants and an interaction effect of  $-.036$ . Combining terms shows that households headed by Mexican immigrants tend to have *more* workers than households headed by native non-Hispanic whites *when family size is small*. Once family size reaches about four persons, the relationship becomes consistent with that reported in Table 6. Consequently, the exceptional case of households headed by immigrants from Mexico does not materialize in small families.

### SUMMARY AND CONCLUSIONS

We have introduced the extended stratification theory in an effort to help account for the upward mobility of immigrants from poor societies. The theory contends that because immigrants have as their frame of reference a poor society with limited opportunity for upward mobility, they see their own circumstances in a wealthier host society as full of opportunities for those who are willing to work hard and sacrifice. It is not so much that immigrants are a select sample of highly motivated people from the sending society; rather, it is moving from a poor society with limited opportunities to a richer society with more opportunities that motivates immigrants to work hard. Consequently, our argument applies to voluntary and nonvoluntary immigrants alike, so long as the sending society is poorer than the receiving society.

At the individual level, we find strong evidence in support of the hypothesis that immigrants from poor societies work longer hours than their coethnic native counterparts. The pattern holds for both sexes and for nonvoluntary as well as voluntary immigrants. These findings support the extended stratification theory and thereby help us understand one way in which immigrants make up economic ground on their native minority counterparts. When we compare the immigrants to native white non-Hispanics, immigrants also tend to work more than whites. Among men, however, we find that Vietnamese immigrants tend to work fewer hours than white non-Hispanic natives. This exception to our hypothesis is only partial in that Vietnamese men tend to work more hours than the two native-born Asian groups under consideration. Consequently, we can report strong but incomplete support for the work-effort hypothesis as it applies to individuals.

We have also considered the argument that immigrants disproportionately rely on the family as an economic actor. Adding this argument to the logic of the work-effort hypothesis leads to the hypothesis that immigrant-headed households tend to place more workers into the labor force than otherwise similar households headed by natives. All of the immigrant groups we studied have more family workers than households headed by white non-Hispanics. But it is also true that immigrants tend to live in the types of households that have more people, including dependents. Thus, the degree to which immigrant-headed households can gain ground on white-headed households depends partly on the economies of scale of reducing per person costs in comparatively larger families. Net of several household controls, most of the immigrant groups have an advantage over households headed by non-Hispanic white natives in the number of family workers. Consequently, the extension of the work-effort hypothesis to the size of the family household workforce is largely consistent with the findings. However, we uncovered one clear exception. With household characteristics held constant, the number of workers in households headed by Mexican immigrants is less than that of households headed by native white non-Hispanics except when the household is small. Much like the individual-level analyses, our household-level analyses tend to support the extension of the work-effort hypothesis, but the support is not quite unanimous.

We contend that the work-effort hypotheses tested here are useful in the study of stratification and the economic mobility of immigrants. We believe that the theoretical argument underlying the hypotheses points to an important structural dimension that helps to explain intergroup variation in the postimmigration experiences of newcomers and how native and immigrant differences in economic action may be better understood.

At its present stage, the extended stratification theory must undergo additional tests before we can rigorously evaluate its explanatory value. Yet the theory has already provided guidance in suggesting two hypotheses; our findings indicate that these hypotheses are informative. Furthermore, it is possible that the same intergroup variation in frames of reference that we have found to associate with the work time of individuals and the number of family workers per household may also help to explain additional intergroup differences in actions that reflect attempts to get ahead. For instance, research into intergroup differences in outcomes such as the savings-to-earnings ratio of families or the academic performance of children might be informed by the frame of reference argument of the extended stratification theory. We hope this article will reinforce current interest in how the preimmigration experiences of newcomers influence their social and economic actions in the host society.

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### NOTES

1. Substantively and theoretically, both measures of work time allow us to compare the amount of work time reported by immigrants and natives. Usual hours worked per week may have a slight advantage in measurement. Any measurement problems of work hours per week are also present in total work hours per year inasmuch as the former is included in the latter. But total work hours per year may be adversely affected by inconsistency over how spells of paid nonwork, such as vacations,

are treated. For instance, some full-time, year-round workers with two weeks of paid vacation may report fifty-two weeks of work whereas others may report fifty weeks. Similarly, some workers may be more precise than others in reporting weeks worked by taking into account the number of nonworking holidays or days missed due to illness. Consequently, we prefer the measure of weekly hours of work.

2. We include unpaid family workers as self-employed for reasons similar to those reported by Sanders and Nee (1996). Davis and Smith (1994) link three-digit census occupational codes to the appropriate SEI value of the Duncan socioeconomic index.

3. In 1995, the per capita GNP of Taiwan was five times that of Mexico and China. The other sending societies relevant to our study are poorer than Mexico and the Philippines (USCD 1997).

4. Whether we considered individual earnings, individual income, family income, or household income, the immigrants rank as follows: Taiwanese (most affluent), Filipinos, mainland Chinese, Vietnamese, Mexicans, and Salvadorans (least affluent). At the individual-level, white non-Hispanic natives are most affluent, but native Chinese and immigrants from Taiwan are not far behind. At the family and household levels, Chinese natives are most affluent, with whites and immigrants from Taiwan close behind. By far the poorest groups are immigrants from Mexico and El Salvador.

5. Koreans slightly outnumber Vietnamese in Greater Los Angeles. Because Koreans are a largely voluntary immigrant group without a large, well-established native population (adults), they were not included in our analyses.

6. We tried to exclude as few of the working adults as possible so as to avoid the potential complications that can result from censoring variables (Berk 1983). This means we set a relatively low requirement for hours of work in order to be included in the sample, and we avoided blatant censoring, such as the exclusion of workers beyond a certain age.

7. Control was applied with OLS. Because we expected a nonlinear relationship between work time and per capita household income, this independent variable was logged. A difference of say \$10,000 in per capita household income between two hypothetical cases with per capita household income of \$5,000 and \$15,000, respectively, was expected to be more strongly related to work effort than a \$10,000 difference between households with per capita household income of \$90,000 and \$100,000 respectively. The logged transformation required positive values, and because self-employment losses resulted in some households having negative income, we added a constant value to all cases. This operation does not distort the estimates reported in column 3 of Table 2.

8. Halvorsen and Palmquist (1980) demonstrate how to transform a semilogged regression coefficient into an estimate of the percentage change in the dependent variable that is attributable to the distinction represented by a dummy independent variable. The estimate of 26 percent is obtained from  $(e^B - 1)100$  or  $(2.72^{.229} - 1)100$  where .229 is the semilogged regression coefficient. Interpretation of semilogged regression coefficients that pertain to interval or ratio independent variables approximates the conventional interpretation of a percentage change in Y for a unit change in X.

9. The number of family workers is obtained with a program that counts the number of family members age eighteen and over per household who are working. The census file contains a variable for the number of family workers, but it is top coded at three and is therefore inadequate for our needs.

10. When a person lives with no family members, the census variable that counts the number of family members living under one roof is coded zero. Therefore, no cases are coded one. We recode values of zero to equal one. That is, we count each individual as a member of his or her own family whereas the census variable only does this when there are at least two family members residing in the same household.

11. In analyses not shown, we also controlled for whether the householder was self-employed. The findings were identical to those reported in Table 6. We prefer to omit self-employment from the model because most of the existing literature contends that family structure and the size of the family labor pool contributes to the establishment and successful operation of small immigrant-owned businesses (e.g., Sanders and Nee 1996). By including self-employment as an independent in our

model, we would be turning the causal argument backwards. Also, all of the analyses based on logged dependent variables were estimated with the unlogged terms and only minor differences obtain.

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