

# Vancouver Centre of Excellence



## Research on Immigration and Integration in the Metropolis

Working Paper Series

#00-09

The Housing Market Outcomes of Immigrants in Norway

John E. Hayfron

August 2000

## RIIM

### Research on Immigration and Integration in the Metropolis

The Vancouver Centre is funded by grants from the Social Sciences and Humanities Research Council of Canada, Citizenship & Immigration Canada, Simon Fraser University, the University of British Columbia and the University of Victoria. We also wish to acknowledge the financial support of the Metropolis partner agencies:

- Health Canada
- Human Resources Development Canada
- Department of Canadian Heritage
- Department of the Solicitor General of Canada
- Status of Women Canada
- Canada Mortgage and Housing Corporation
- Correctional Service of Canada
- Immigration & Refugee Board

Views expressed in this manuscript are those of the author(s) alone. For more information contact the Co-Directors of the Centre, Dr. Don DeVoretz, Department of Economics, SFU (e-mail: [devoretz@sfu.ca](mailto:devoretz@sfu.ca)) or Dr. David Ley, Department of Geography, UBC (e-mail: [davidley@unixg.ubc.ca](mailto:davidley@unixg.ubc.ca)).

# **The Housing Market Outcomes of Immigrants in Norway**

by

John E. Hayfron

Senior Researcher  
Vancouver Centre of Excellence  
Research on Immigration and Integration in the Metropolis (RIIM)  
Simon Fraser University  
Burnaby, B.C.  
V5A 1S6

August 2000

I thank Don DeVoretz and Atsu Amegashie for their useful comments on an earlier draft, and Sydney Preston for her copyediting services.

**Abstract:** In this paper I analyze the housing market outcomes of immigrants in Norway. An initial descriptive analysis of the raw data indicates that a higher proportion of immigrant and Norwegian renters in 1980 became home-owners in 1990. Moreover, the MNL results indicate a convergence between the homeownership rate of immigrants and that of Norwegians over time. The decomposition analyses indicate that a greater part of the growth in homeownership among immigrants and Norwegians between 1980 and 1990 is due to residual, or “homeownership propensity” effect, while changes in endowment account for the narrowing of the gap between Norwegian and immigrant homeownership rates over time.

***JEL Classification:*** J1, J15, R21

***Key words:*** Immigration cohorts, homeownership

## **I. Introduction**

Following Chiswick's (1978) seminal work, economists have studied income data extensively to estimate the extent to which immigrants' earnings change over time relative to the native-born. Evidence suggests that immigrants experience an initial earnings gap, but this gap narrows with years of residence in the host country (Beggs and Chapman 1988, Bloom et al. 1994, Borjas 1994, and the literature cited therein).

Due to the direct link between the labour market and the housing market, several researchers have applied a similar technique to analyze immigrants' housing market performances in some countries. In the U.S. for example, where the bulk of the studies have been done on ethnic groups (Wachter and Megbolugbe 1992, Krivo 1986, Coulson 1999) and immigrants as a whole (Krivo 1995, Schill, Friedman and Rosenbaum 1998, Myers and Lee 1998, Myers, Megbolugbe and Lee 1998), evidence suggests that the immigrants' homeownership rate converges towards that of the native-born over time. These studies also found that permanent income, aging, duration of residence, educational level and immigrant status are important determinants of homeownership attainment of immigrants in the U.S.

Similarly, studies conducted in countries, such as Australia (Bourassa 1994), Canada (Ray 1991, Laryea 1999) and Israel (Lewin-Epstein, Elmelech and Semyonov 1997) have shown that length of stay in a host country is positively correlated with immigrants' homeownership attainment. For example, Bourassa (1994) found that time spent beyond the age of 15 has a significantly positive effect on immigrants' propensity to own a home in Australia. He concluded that differences in endowments account for virtually all the differences in homeownership rates between immigrants and the Australian-born in Sydney and Melbourne.

In Norway, the foreign-born population has grown from 61,806 (or 1.5%) in 1975 to 232,200 (or 5.3% of the total population of 4.4 million) in 1997, little is known about their

performances in the Norwegian housing market.<sup>1</sup> This paper fills the gap by investigating two things. First, it investigates whether the tenure status (renting versus owning) of immigrants changed between 1980 and 1990. Second, the paper investigates whether the gap (if any) between immigrant and Norwegian homeownership rates narrows over time. A convergence between the homeownership rates of Norwegians and immigrants over time is interpreted as evidence of immigrant assimilation in the Norwegian housing market.

The paper proceeds with a brief discussion of the Norwegian housing market. Section III describes the data employed in this study, while section IV is the model specification. Section V reports the results, and section VI decomposes the changes in tenure status into the portion due to differences in endowment, and a portion due to the residual. Section VII concludes with a summary of the analysis.

## II. The Norwegian Housing Market

The Norwegian housing market is currently unregulated. However, the government attempts to redistribute housing in the country by using a multitude of policies (taxes, subsidies, public housing, etc.). One important policy tool is the setting of the The Norwegian State Housing Bank's interest rates.<sup>2</sup> The politically determined interest rates are normally low compared to those of the commercial banks.<sup>3</sup> This is one reason why people find the state bank mortgage loans a reasonable alternative to those provided by the private credit institutions. For this reason, immigrant home buyers who are denied access to loans from the private credit institutions are able to obtain similar loans from the state housing bank. Furthermore, the state housing bank influences the size of the house, which the individual intends to purchase or

---

<sup>1</sup> Norway introduced the so-called *innvandringsstopp* (immigration freeze) in 1975. Generally, Norway has a closed-door immigration policy. For a detailed analysis of the Norwegian immigration policy, see Hayfron (1998b).

<sup>2</sup> The Norwegian State Housing Bank (Husbanken) was established in 1946 and is the Norwegian government's main instrument for implementing national housing policy. About 50 percent of the existing homes in Norway were financed by the state housing bank.

<sup>3</sup> This depends on whether it is a fixed or a floating interest rate. The floating rate is about the same level as that of the commercial banks. As of 1996, the fixed rate (for 1 – 3 years) has a maturity period of 20-30 years and requires a down payment of 30 percent of the total cost of housing. Turner (1999) provides an excellent international comparison of housing finance across countries.

build, through its mortgage loans requirements. That is, the size of the house should not exceed 140 square metres.

In the rental market, the rents in housing co-operatives are controlled by the interest rate trend of the state housing bank (Weekly Bulletin of Statistics no. 2, 1999). Moreover, the Norwegian government gives tax incentives (i.e., tax relief on interest costs) to home buyers, and a housing subsidy (*bostøttet*) to low-income earners in the rental market. Given that tax incentives normally benefit high-income earners, the tax benefits may not have a greater impact on immigrants' homeownership attainment since most of them are low-income earners.

Due to public funding, the rents of municipal or social housing are relatively low compared to those of the private sector. However, access to public housing is strictly regulated. Eligibility for social housing depends on one's income (i.e., income tested).<sup>4</sup> On the whole, the redistributive purposes of municipal housing are somewhat achieved since only low-income earners (including most immigrants from non-OECD countries) are normally channeled into this sector.

To sum up, it is obvious that the government's housing policies (taxes and subsidies) would have major implications for immigrants' homeownership attainment.<sup>5</sup> Unfortunately, absence of a policy-related variable in the data makes it impossible to measure the effects of government policy. However, an after-tax income variable is used throughout the analysis to account for the effect of tax benefits that are associated with homeownership.

### **III. Data and sample selection**

An important lesson from Borjas' (1985, 1994) oft-cited cohort analysis, is that the use of cross-section data to measure immigrants' assimilation (whether in the labour or housing market) would overstate the effects of duration of residence because of return migration, to mention one example. For this reason, I used data from the 1980 and 1990 censuses. The data

---

<sup>4</sup> Some municipal companies offer individuals with longer years of tenancy the opportunity to become owners of the apartment after paying for the remainder of the costs of the apartment.

<sup>5</sup> Equally important are the other government policies that do not only remove structural barriers in the credit or real estate market, but also support the development of good multicultural housing environments in the country (Newsletter no. 3, 1997) For example, the Norwegian government has introduced an environmental prize to housing co-operatives whose policies facilitate integration and interaction among residents.

were obtained from the Norwegian Population and Housing Census Databank (FTDB). The Census Databank is a 10 percent sample from the 1960, 1970, 1980 and 1990 Population and Housing Censuses linked on an individual level. For the purposes of this study, the whole 9,080 observations on immigrants aged 17–66 in the census databank were used. An immigrant is a person born abroad, permanently resident in Norway, whose parents were born abroad (St meld no. 17). The individual immigrants in the 1980 sample are the same people in the 1990 sample, thus eliminating the possibility of panel attrition. In addition, a randomly drawn sample of 9,080 Norwegians was used to match the immigrant sample.

The data provide detailed information about households, including ownership/tenancy, number of rooms, area size, and number of occupants. The conditions of ownership/tenancy fall under five categories: single or collective ownership, housing co-operatives (*Borettslag*), tenant, housing in connection with the job, and tenancy agreement for a limited period. Since an individual can either build a “conventional” home (or have one built) or purchase an apartment from the housing co-operatives, three dummies were created, which indicate whether an individual lives in a (1) rented dwelling, or (2) co-operative housing, or (3) privately owned home.<sup>6</sup> See appendix for a more detailed description of the data.

### *Descriptive Statistics*

Table 1 shows the tenure status of immigrants and Norwegians in 1980 and 1990. The summary statistics show that the proportion of Norwegians in rented dwellings dropped from 20 percent to 15.3, while those in co-op housing dropped from 17.6 percent to 15.3 percent between 1980 and 1990. However, the proportion of Norwegians in privately owned homes increased from 62.4 percent to 72.2 percent over a similar period.

Similarly, the proportion of immigrants in rented houses dropped from 40.2 percent to 16 percent, while those in co-op housing increased slightly from 21 percent to 21.6 percent between 1980 and 1990. Moreover, the proportion of immigrants in privately owned homes increased from 38.8 percent to 62.4 percent over the ten-year period. Table 1 shows a similar trend among immigrant cohorts. For example, the proportion of recent immigrants (i.e., 1970–

---

<sup>6</sup> I assume that rented dwelling includes renting of both private and municipal houses in the rental sector.



79 arrivals) in a rented dwelling decreased from 54.2 percent to 19 percent in 1990. Similarly, the proportion of 1960–69 and pre-1960 cohorts in rented dwellings dropped from 23.8 percent and 24 percent to 11.1 percent and 14.3 percent between 1980 and 1990.

Although the descriptive analysis provides some insights into the changes in immigrants' housing market status over time, it does not necessarily tell us about the factors that determine these changes. Therefore, one cannot rely solely on the descriptive analysis. The multivariate analysis in the next section intends to address this question.

#### IV. Model Specification

The homeownership propensity is modeled as a multinomial logit model.<sup>7</sup>

$$\Pr(H_m = m) = \frac{\exp(X_i' \beta_j)}{\sum_{m=1}^M \exp(X_i' \beta_j)}, \quad \text{for all } m (= 1, 2, 3) \quad \text{Eq. (1)}$$

where,  $H$  = homeownership propensity;  $X_i$  = a vector of measured explanatory variables of the  $i$ th individual; and  $\beta$  = the vector of unknown regression parameters associated with the explanatory variables ( $X$ ). The vector  $X$  includes measures of permanent and transitory incomes, a set of age dummies, gender, geographical locations, marital status, household size, place of birth and year of arrival.

##### *Permanent Income*

Since the data report only the current income, the permanent and transitory income measures were derived from the human capital method (Goodman 1988; Myers and Lee 1998; Gyourko and Linneman 1996, Long and Caudill 1992, Cameron 1986, Bourassa 1994). In this method,

---

<sup>7</sup> This is because the individual characteristics used in this analysis do not vary across alternatives. The nested logit model is sometimes preferred to multinomial logit model (MNL) because it takes care of IIA limitation. However, it is considered to be inefficient since information is omitted in the estimation of the lower level. Moreover, the amount of calculation needed to pass information between the initial and subsequent estimates is excessive (Daly 1987).

current disposable income is regressed on human capital and non-human capital variables and the fitted values are used to proxy permanent income. The residual, which is the difference between current and permanent income is used as a proxy for transitory income. Table 3 presents the estimated coefficients where the dependent variable is a Box-Cox transformation of current disposable income with  $\lambda = 0.5$ .

The results of the estimations support the human capital hypothesis, which suggests that the human capital variables are positively related to permanent income. For example, age, age squared, and education have the correct signs and are significantly different from zero. The individual coefficients of the remaining variables (e.g., residential locations and gender) also appear to perform as expected for both immigrants and Norwegians.

## V. The Estimation Results

Tables 4 and 6 report the results from the multinomial logit model (MNL) of homeownership, Equation (1) for immigrants and Norwegians. Tables 5 and 7 present the derivatives of the estimated coefficients with respect to each variable. The dependent variable for the first set of coefficients is the log of the odds of being in co-op housing versus being in a rented dwelling; the second set refers to the log of the odds of being in privately owned housing versus being in a rented dwelling. The interpretation of the MNL coefficients is now well known. That is, an addition of one unit in an explanatory variable reduces (if a negative coefficient) or increases (if a positive coefficient) the likelihood of being in co-op housing or a privately owned home relative to being in a rented dwelling.

Three models were estimated separately for immigrants and Norwegians. Each of the models has a different measure of income as one of its explanatory variables. For example, the initial model (1) includes current income, while model (2) includes measures of permanent and transitory incomes. Model 3 includes a variant of the permanent income.<sup>8</sup> This was to test the hypothesis that using both permanent and transitory incomes together in the tenure choice equation is a better predictor than using the current income. A likelihood ratio test indicates a

---

<sup>8</sup> Following Silberman, Yochum and Ihlanfeldt (1982), an alternative measure of permanent income variable was formed by averaging the 1980 and 1990 disposable incomes.

slight improvement of the fit of model (2) over models (1) and (3). For this reason, only model (2) is analyzed in the remainder of the paper. Unless otherwise stated, only the statistically significant parameters of the tenure choice equations for 1980 and 1990 would be interpreted.

### *MNL Estimates of Tenure Choice of Immigrants*

The MNL model indicates that an unmarried immigrant who arrived in Norway in 1970–79 is less likely to be in co-op housing relative to a rented dwelling. The marginal effect for permanent income indicates that an increase in permanent income by NoK.1,000 decreases the probability of being in co-op housing by 1 percentage and 6 percentage points in 1980 and 1990, respectively. The coefficients of the age dummies are significantly positive only in 1980. Similarly, the coefficient of the never-married dummy is significantly negative, implying that immigrants who are not married are less likely to be in co-op housing relative to a rented dwelling. A set of regional dummies was included in the estimates of tenure choice to control for the variation in housing prices across geographical locations. The results show that being a resident of a large metropolitan area (Greater Oslo or Bergen/Stavanger/Trondheim municipalities) increases the likelihood of being in co-op housing relative to a rented dwelling. The effect of being from an OECD country on the likelihood of being in co-op housing relative to a rented dwelling is positive in 1980, but negative in 1990 ( $t = 1.985$ ).

Next, consider the likelihood of an immigrant being in privately owned housing relative to rented dwelling. As shown in Table 5, the signs of the marginal effects for the permanent income are consistent with the associated coefficients in the MNL model. An increase in permanent income by NoK.1, 000 increases the probability of being in privately owned housing by 1 percentage points in both 1980 and 1990 respectively. Being a resident of Greater Oslo municipality reduces the likelihood of being in a privately owned home relative to a rented dwelling. Compared to their married counterparts, immigrants who are never married or are divorced/separated/widow are less likely to be in a privately owned home relative to rented dwelling. Couples tend to have higher preferences to become homeowners

compared to individuals who are not married because of economies of scale or stability in family situation (Clark et al. 1994).

The marginal effects calculations indicate that increasing the number of persons in an immigrant household by one increases the probability of being in a privately owned home by 8.1 and 4.7 percentage points in 1980 and 1990, respectively. The results show that being from an OECD or NOECD country increases the likelihood of being in a privately owned home relative to a rented dwelling. Generally, the transitory income tends to be statistically insignificant, which is consistent with Goodman's (1988) argument that transitory income may not have a significant impact on tenure choice, since it might not cover transaction costs that are associated with home purchase.

#### *MNL Estimates of Tenure Choice of Norwegians*

Having analyzed the tenure choice function for immigrants, I now turn to the estimates of tenure choice for Norwegians. Having analyzed the tenure choice function of immigrants, I now turn to the estimates of tenure choice of Norwegians. The negative sign on the permanent income variable is somewhat surprising, but reflects the fact that an increase in permanent income significantly decreases the likelihood of being in co-op housing relative to a rented dwelling. The marginal effect for permanent income indicates that increasing permanent income by NoK.1, 000 decreases the probability of being in co-op dwelling by 2 percentage points in 1980 and 1990. Contrary to *a priori* expectation, the results show that an increase in transitory income increases the probability of being in a co-op dwelling in 1980.

The likelihood of being in co-op housing relative to a rented dwelling increases with age within each age group. This implies that the homeownership rate increases at a decreasing rate towards the end of the life cycle. Similarly, being a resident of a large municipality (Greater Oslo or Bergen/Stavanger/Trondheim) increases the likelihood of being in co-op housing relative to a rented dwelling.

Now, considering the likelihood of being in a privately owned home relative to a rented dwelling, the results show that transitory income and marital status (divorced) reduce the likelihood of being in a privately owned home relative to a rented dwelling. Similarly,

aging increases the likelihood of being in a privately owned home relative to a rented dwelling. Moreover, the marginal effect for household size indicates that an increase in the number of people in a household by one person increases the probability being in a privately owned home by 10.7 and 6.4 percentage points in 1980 and 1990.

## VI. Decomposition Analysis

Both the descriptive and the multivariate analyses indicate a change in tenure status (i.e., a shift from a rented dwelling to owner-occupied housing) over time. To assess the contribution of changes in endowment to changes in tenure status over time, the following decomposition equation was used (Yates 2000).

$$(2) \quad \bar{P}_{t+10}^J - \bar{P}_t^J = \underbrace{(\bar{P}_{t+10}^J - \bar{P}_{t+10}^J | \bar{X}_t)}_{\text{Endowment Effect}} + \underbrace{(\bar{P}_{t+10}^J | \bar{X}_t - \bar{P}_t^J)}_{\text{Homeownership Propensity Effect}} \quad t = 1980; j = N, I.$$

Where  $\bar{P}_t^J$  is the  $j$ th group's average probability in year  $t$ .  $\bar{X}_t$  is mean characteristics in year  $t$ .  $N, I$  represent Norwegians and immigrants respectively. The first component on the right hand side of Equation (2) shows the portion of the probability gap ( $\bar{P}_{t+10}^J - \bar{P}_t^J$ ), which is due to changes in endowment over time, i.e., "endowment effect," while the last component is the residual, or "homeownership propensity effect."

The results are reported in Table 8 for Norwegians and immigrants. Since the objective of this paper is to investigate the sources of change in tenure status over time, I decomposed the homeownership probability gap ( $\bar{P}_{1990}^j - \bar{P}_{1980}^j$ ) separately for immigrants and Norwegians respectively. The figures in column (4) with a negative sign indicate a decline in the probability of being in a rented dwelling and co-op housing, while the positive sign indicates an increase in the probability of being in a privately owned home between 1980 and

---

<sup>9</sup> Equation 2 can be written as  $\bar{P}_{t+10}^J - \bar{P}_t^J = \hat{\beta}_{t+10}(\bar{X}_{t+10} - \bar{X}_t) + \bar{X}_t(\hat{\beta}_{t+10} - \hat{\beta}_t)$ . This is similar to the well-known Blinder/Oaxaca (1973) decomposition technique, which has been used extensively by social scientists to decompose earnings gap between groups.

1990. Column 5 shows the percentage contribution (in parentheses) of changes in endowment to changes in tenure status between 1980 and 1990, while column 6 shows the residual. The residual may reflect variations in individual behavior with respect to, for example, changes in government housing policies, housing prices or some unmeasured characteristics.

Consider for example, the changes in the probability of immigrants being in a rented dwelling and a privately owned home between 1980 and 1990. In both cases, as noted in Table 8, one sees a much smaller impact of endowment (4.2 percent) and (7.6 percent) on the probability of being in rented and privately owned dwellings respectively. This implies that 95.8 percent of the decline in the probability of being in a rented dwelling, and 92.4 percent of the increase in the probability of being in a privately owned home are due to residual or some unmeasured characteristics. Table 9 indicates the rate at which individual tenure statuses changed between 1980 and 1990. This change is found to be higher for immigrants than for Norwegians, reflecting the differences in the steepness of the slope of the Norwegian-immigrant homeownership curves.

The second objective is to measure the progress made by immigrants relative to Norwegians in the Norwegian housing market between 1980 and 1990. This was done by comparing immigrants' homeownership propensity with that of Norwegians in both periods. As shown in Table 10, the gap between the probability of Norwegians and immigrants being in a privately-owned home dropped from 30.6 percentage points in 1980 to 11 percentage points in 1990, thus indicating a rapid convergence between the homeownership rates of immigrants and Norwegians over time. Figure 1 provides additional support for this finding. The results also indicate that 75.4 percent of the decline in the gap is due to endowment effects, while 24.6 percent is due to a residual "homeownership propensity" effect.

## **VII. Summary and Conclusions**

In this paper I use 1980 and 1990 Norwegian census data to examine the housing market outcomes of immigrants in Norway. First, using a descriptive analysis, I found that a higher percentage of Norwegians and immigrants had moved from rented housing to owner-occupied housing between 1980 and 1990. Moreover, I used a multinomial logit model (MNL) to

examine the factors that determine the growth in immigrants' homeownership attainment over time. I found permanent income, age and household size variables to be important determinants of homeownership attainments of both immigrants and Norwegians.

Two decomposition exercises were made. In the first decomposition, I asked: Are the observed changes in individual tenure status between 1980 and 1990 a result of changes in endowment, or due to a variation in individual behavior as a result of changes in housing market conditions, government policies, etc. over time? The results show that the endowment effect was relatively small, implying that a greater proportion of the observed changes in individual tenure status over the decade was due to some unmeasured characteristics, or "homeownership propensity effect".

Finally, in the second decomposition analysis I also asked whether the rapid convergence between the homeownership rates of immigrants and Norwegians was due to a growth in immigrant endowment or due to some unmeasured characteristics over time. The results show that changes in endowment, particularly in 1990, explained 75 percent of this convergence, leaving 24.6 percent unexplained.

In summary, the results suggest that both immigrants and Norwegians tend to move from rented dwellings into privately-owned homes and not co-operative housing. However, readers should interpret these results with caution, since the paper has some weaknesses. For example, the data lacks information about Norwegian language proficiency, which has been shown in the literature to be positively correlated with homeownership attainment. However, it is hoped that the inclusion of a set of period-of-arrival dummies might mitigate the effect of a possible omitted variable bias. Moreover, while the immigrant sample is free of attrition bias, the Norwegian sample is not. The 1980 and 1990 samples do not necessarily contain the same Norwegians.

## References

- Baker M., and D. Benjamin. 1994. The performance of immigrants in the Canadian labour market. *Journal of Labour Economics* 3 (4): 369–405
- Beggs J.J., and B.J. Chapman. 1988. Immigrant wage adjustment in Australia: Cross-section and time-series estimates. *Economic Record* 64 (184): 161–67.
- Blinder, A. 1973. Wage discrimination: Reduced form and structural estimates. *Journal of Human Resources* 8: 435–55.
- Bloom, D.E., G. Grenier, and M. Gunderson. 1994. The changing labour market position of Canadian immigrants (including a comparison with United States immigrants). Paper presented at Workshop on Immigration, for Canadian Employment Research Forum (CERF), March 11, Hull, Quebec.
- Borjas, G. 1985. Assimilation, changes in cohort quality, and earnings of immigrants. *Journal of Labour Economics* 3 (4): 463–89.
- . 1994. The Economics of Immigration. *Journal of Economic Literature* 32 (4): 667–1717.
- Bourassa, S. 1994. Immigration and housing tenure choice in Australia. *Journal of Housing* 5 (1): 117–37.
- Cameron, T.A. 1986. Permanent and transitory income in models of housing demand. *Journal of Urban Economics* 20: 205–10.
- Chiswick, B.R. 1978. The effect of Americanization on the earnings of foreign-born men. *Journal of Political Economy* 86 (5): 897–921.
- Clark, W.A.V., M.C. Deurloo, and F.M. Dieleman. 1994. Tenure changes in the context of micro-level family and micro-level economic shifts. *Urban Studies* (31): 137–154.
- Coulson, E.N. 1999. Why are Hispanic- and Asian-American owner-occupancy rates so low? Immigration and other factors. *Journal of Urban Economics* 45: 209–27.
- Daly, A. 1987. Estimating three logit models. *Transportation Research B*, 251–67.
- Goodman, A.C. 1988. An economic model of housing price, permanent income, tenure choice and housing demand. *Journal of Urban Economics* 12: 214–37.
- Gyourko, J., and P. Linneman. 1996. Analysis of the changing influences on traditional households' ownership patterns. *Journal of Urban Economics* 12: 327–353.
- Hayfron, J. 1998a. The performance of immigrants in the Norwegian labour market. *Journal of Population Economics* 11: 293–303
- Hayfron, J. 1998b. The labour market experience of immigrants in Norway. Ph.D. diss., University of Bergen, Norway.
- Ihlanfeldt, K., and J. Silberman. 1985. Differential response to change: The case of home purchase. *Journal of Urban Economics* 17: 127–44.



- Krivo, L. 1986. Homeownership differences between Hispanics and Anglos in the United States. *Social Problems* 33: 319–34.
- . 1995. Immigrant characteristics and Hispanic-Anglo housing inequality. *Demography* 43: 599–616.
- Laryea, S. 1999. Housing ownership patterns of immigrants in Canada. RIIM Working paper #99-19. 1–37
- Lewin-Epstein, N., Y. Elmelech, and M. Semyonov. 1997. Ethnic inequality in homeownership and the value of housing: The case of immigrants in Israel. *Social Forces* 75 (4): 1439–62.
- Long, E., and S. Caudill. 1992. Racial differences in homeownership and housing wealth. *Economic Inquiry*, 83–100.
- Myers, D., and Lee S.W. 1998. Immigrant trajectories into homeownership: A temporal analysis of residential assimilation. *International Migration Review* 32 (3): 593–625
- Myers, D., I. Megbolugbe, and S.W. Lee. 1998. Cohort estimation of homeownership attainment among native-born and immigrant populations. *Journal of Housing Research* 9 (2): 237–68.
- Oaxaca, R. 1973. Male-female wage differentials in urban labour markets. *International Economic Review* 9: 693–709.
- Ray, K.K., E. Moore. 1991. Access to homeownership among immigrant groups in Canada. *Canadian Review of Sociology and Anthropology* 28 (1): 1–20.
- Schill, M.H., S. Friedman, and E. Rosenbaum. 1998. The housing conditions of immigrants in New York City. *Journal of Housing Research* 9 (2): 201–35.
- St. meld nr 7. 1996–97. *Om innvandring og det flerkulturelle Norge* (About immigration and multicultural Norway).
- Silberman, J., G. Yochum, and K. Ihlanfeldt. 1982. Racial differences in home purchase: The evidence from a newly formed household. *Economic Inquiry* 22: 443–47.
- Turner, B. 1999. Social housing finance in Sweden. *Urban Studies* 36 (4): 683–97.
- Wachter S., and I. Megbolugbe. 1992. Racial and ethnic disparities in homeownership. *Housing Policy Debate* 3: 333–70.
- Weekly Bulletin of Statistics no. 2. 1999. Statistics Norway.
- Yates, J. 2000. Is Australia's homeownership rate really stable? An examination of change between 1975 and 1994. *Urban Studies* 37, no. 2.

## APPENDIX

### *Description of Data*

The census data do not distinguish between male and female household heads, therefore, each is counted as a household head when either or both own or rent a dwelling unit. Similarly, the census data do not report directly years since migration (or year of arrival). However, using the personal identification number in the data, a set of year of arrival dummies for immigrants was created. According to Norwegian law, only individuals who are residents of Norway for at least six months prior to each census, can participate in the population census. For example, immigrants in the pre-1960 cohort reported participation in the 1960 Census. Immigrants in the 1960-69 cohort reported participation in the 1970 Census, while those in the 1970-79 cohort reported participation in the 1980 Census. For Norwegians, only those who participated in all the censuses were included in the analysis, thus reducing the possibility of census attrition.

The 1990 census file reports immigrant's country of birth and current citizenship, while the 1980 file reports only the latter. However, since the same individuals can be identified in both data files, the birthplace variable would apply to immigrants in 1980 file as well. Individuals who reported Norway as the country of birth were categorized as second-generation immigrants.<sup>10</sup>

---

<sup>10</sup> Statistics Norway usually classify immigrants born in Norway as immigrants on the basis of their father's nationality.

**Table A1****Age Cohort**


---

Age 17–25	= Reference category
Age 26–35	= One, if individual belongs to this age group; otherwise zero
Age 36–45	= One, if individual belongs to this age group; otherwise zero
Age 46–57	= One, if individual belongs to this age group; otherwise zero
Age 58–67	= One, if individual belongs to this age group; otherwise zero

**Educational Level**

Elementary School	= Zero, if 0–10 years of schooling (reference category)
High School	= One, if 11–12 years of schooling; otherwise zero
College/University	= One, if 14+ years of schooling; otherwise zero

**Income Measures**

Income	= Disposable income earned in period $t$ .
Permanent Income	= Fitted values
Transitory Income	= Current income – permanent income

**Geographic location**

Oslo	= One, if resides in Oslo and Akershus Municipality; otherwise zero
Bergen	= One, if resides in Metropolitan cities Municipalities; otherwise zero
Rest of the country	= Reference

**Marital status**

Never married	= One, if never married; otherwise zero
Other	= One, if separated, divorced or widow(er); otherwise zero
Married	= Zero, if currently married (Reference category)

Gender	= One, if male; otherwise zero
Self-employed	= One, if self-employed; otherwise zero
Household size	= Number of persons in the household

**Place of birth**

Nordic	= One, if place of birth is Denmark, Finland, Sweden; otherwise zero
OECD	= One, if place of birth is OECD country; otherwise zero
NOECD	= One, if place of birth is NOECD country; otherwise zero
Second Generation	= Zero, if place of birth is Norway (Reference category)

**Arrival Cohort**

1970–79	= One, if arrived in Norway in the 1970s; otherwise zero
1960–69	= One, if arrived in Norway in the 1960s; otherwise zero
Pre–1960	= Zero, if arrived in Norway before 1960 (Reference category)

---

**Table 1.** Distribution of Tenancy/Ownership. 1980-1990

	1980				1990			
	Owner-occupation			N	Owner-occupation			N
	Rented dwelling	Co-op housing	Privately Owned home		Rented dwelling	Co-op housing	Privately Owned home	
Norwegians	20.0	17.6	62.4	3753	12.5	15.3	72.2	3753
All immigrants	40.2	21.0	38.8	1360	16.0	21.6	62.4	1360
Year of Arrival in Norway								
1970 – 1979	54.2	18.1	27.7	733	19.0	22.1	58.9	733
1960 – 1969	23.8	23.3	52.8	369	11.1	19.5	69.4	369
Pre -1960	24.0	50.4	25.6	258	14.3	23.3	62.4	258

*Source.* Author's calculations from the census data.

**Table 2. Mean Characteristics**

	Immigrant sample		Norwegian sample	
	1980	1990	1980	1990
Permanent Income (Average Income)	51,639.63	51,639.63	51,618.97	51,618.97
Permanent Income (Fitted Values)	47,072.8	50,534.1	48,359.15	51,467.41
<u>Transitory Income (Residual)</u>	-1123.5	6,798.9	-2,948.87	6,360.50
Current Income (After Tax)	45,946.32	57,332.94	45,410.28	57,827.66
Age Cohort				
17-25				
26-35	.361		.311	
36-45	.298	.361	.243	.309
46-57	.181	.298	.247	.224
58-67		.181		.164
Marital status				
Never married	.208	.118	.253	.181
Divorced/Separated/Widow	.064	.151	.053	.117
Married				
Self-employed	.067	.067	.104	.104
Residential location				
Greater Oslo	.398	.406	.201	.198
Bergen/ Stavanger/Trondheim	.118	.107	.149	.148
Rest of the county				
Gender ( <i>Male</i> = 1)	.604	.604	.622	.544
Household size	3.275	3.156	3.617	3.147
Place of Birth				
Nordic	.101	.101		
OECD	.379	.379		
Non-OECD	.346	.346		
Norway				
Arrival Cohort				
1970-79	.539	.539		
1960-69	.271	.271		
Pre-1960	.190	.190		

**Table 3.** Permanent Income Regression. (Dependent variable is a Box-Cox transformation of Disposable income with  $\lambda = 0.5$ ).

	Immigrant sample			Norwegian sample		
	Coefficient	t-statistic	Mean	Coefficient	t-statistic	Mean
Age	13.120	6.111	40.68	13.108	6.837	39.61
Agesq	-.1439	5.970	1774.9	-.1450	6.799	1701.5
Educational level						
Elementary school						
High School	12.354	2.285	.3937	34.435	6.284	.218
College/University	39.834	5.077	.2577	69.007	6.802	.210
Residential Location						
Oslo	18.148	3.525	.4022	34.043	5.727	.200
Bergen/Stavanger/Trondheim	39.052	4.233	.1129	10.206	3.315	.149
Rest of the country						
Gender (Male = 1)	63.635	6.828	.6037	74.896	7.007	.583
Marital Status						
Never married	-6.139	.964	.1629	-8.116	2.686	.217
Separated/Divorced/Widow (er)	7.589	1.112	.1074	34.767	5.852	.085
Currently married						
Self-employed	-55.384	5.123	.0676	-28.927	5.820	.104
Country of origin						
Nordic	17.796	1.796	.1015			
OECD	11.206	1.651	.3794			
NOECD	20.078	2.841	.3456			
<i>Second generation</i>						
Arrival Cohort						
1970-79	4.436	.620	.5390			
1960-69	-5.583	.854	.2713			
Pre-1960						
Constant	84.042	3.019		99.303	7.645	
R-sq.	.476			.490		
Sample size	2720			7506		

*Source:* Author's calculations based on the 1980 and 1990 Population and Housing censuses of Norway.

*Note:* The 1990 mean income was converted into 1980 Norwegian kroner by deflating with the consumer price index (CPI), 2.312.

**Table 4.** Multinomial Logit Model of Housing Tenure Choice. Immigrant sample.

	1980			1990		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<u>Co-op housing</u>						
Current Income ( <i>After Tax</i> )	-.00007 (1.509)			-.000005 (1.317)		
Permanent Income ( <i>Fitted Values</i> )		-.00005 (2.559)			.00002 (.081)	
<u>Transitory Income (Residual)</u>		-.00005 (1.033)			-.000003 (.082)	
Permanent Income (Average Income) <sup>1</sup>			-.00003 (1.303)			-.000001 (.053)
Age Cohort <sup>2</sup>						
26-35	.1280 (.492)	.6042 (1.807)	.0667 (.261)			
36-45	.5208 (1.836)	1.279 (2.903)	.4258 (1.541)	-.0987 (2.768)	-.3308 (1.025)	-.0312 (1.140)
46-57	.4185 (1.278)	1.1581 (2.517)	.3008 (.939)	-.0276 (.797)	.1751 (.528)	.2374 (.809)
58-67				-.0950 (2.093)	-.4920 (1.339)	-.4647 (1.350)
Marital status <sup>3</sup>						
Never married	-.5934 (2.567)	-.7273 (3.038)	-.6007 (2.598)	.0173 (.450)	-.5611 (1.855)	-.5686 (1.889)
Divorced/Separated/Widow	-.4040 (1.297)	-.2999 (.951)	-.4132 (1.326)	.5732 (1.677)	-.6868 (2.512)	-.7026 (2.627)
Self-employed	-.5571 (1.453)	-1.0727 (2.412)	-.5394 (1.409)	-.0893 (1.558)	-.1499 (.267)	-.1423 (.300)
Residential location <sup>4</sup>						
Greater Oslo	.7672 (4.462)	.9777 (4.994)	.7686 (4.458)	.1959 (5.851)	1.0474 (4.424)	1.0555 (5.110)
Bergen/ Stavanger/Trondheim	.3634 (1.375)	.7623 (2.403)	.3625 (1.367)	.1393 (3.282)	1.081 (2.596)	1.090 (3.084)
Gender ( <i>Male = 1</i> )	.2073 (1.178)	.4041 (2.403)	-.2446 (1.443)	.0510 (2.042)	-.4870 (1.214)	-.4921 (2.265)

Continued.../

**Table 4.** (Continued)

Household size	.1588 (2.845)	.1553 (2.795)	.1586 (2.856)	-.0251 (2.732)	.0317 (.432)	.0235 (.318)
Country of Birth <sup>5</sup>						
Nordic	.7930 (2.258)	1.061 (2.864)	-.1860 (.613)	-.2171 (4.028)	-.6614 (1.495)	.0752 (.206)
OECD	.5951 (2.602)	.7927 (3.231)	-.5780 (1.797)	-.2377 (5.658)	-.5930 (1.985)	.1876 (.482)
Non-OECD	.1968 (.883)	.5246 (1.982)	-.8147 (2.315)	-.2521 (5.947)	-.5054 (1.533)	.6952 (1.665)
Arrival Cohort <sup>6</sup>						
1970-79	-.7654 (2.845)	-.6016 (2.162)	-.7584 (2.819)	-.0610 (1.604)	-.9186 (2.693)	-.9319 (2.837)
1960-69	.0513 (.019)	-.0141 (.053)	.1113 (.042)	-.0398 (1.113)	-.2623 (.812)	-.2893 (.902)
Constant	-1.0344 (2.191)	-.1170 (.186)	-.2333 (.534)	.1313 (2.013)	1.1746 (1.279)	.6424 (1.244)
<u>Privately-owned home</u>						
<i>Permanent Income (Average Income)</i> <sup>1</sup>			.00002 (1.036)			.00003 (1.438)
<i>Permanent Income (Fitted Values)</i>		.00004 (2.015)			.00005 (2.203)	
<u><i>Transitory Income (Residual)</i></u>		-.00003 (.812)			.00003 (1.012)	
<i>Current Income (After Tax)</i>	-.00002 (.383)			.00004 (1.342)		
Age Cohort <sup>2</sup>						
26-35	.0892 (.353)	-.2953 (.955)	.0624 (.250)			
36-45	.6336 (2.334)	.0295 (.075)	.5970 (2.242)	.3923 (1.595)	.0974 (.340)	.3733 (1.514)
46-57	.8881 (2.932)	.2988 (.735)	.8688 (2.924)	.4450 (1.673)	.1678 (.559)	.4125 (1.519)
58-67				.1205 (.376)	.1866 (.577)	.1706 (.560)
Marital status <sup>3</sup>						
Never married	.5811 (2.638)	-.4717 (2.098)	-.5728 (2.597)	-.8218 (3.146)	-.7637 (2.907)	-.8201 (3.135)
Divorced/Separated/Widow	-.7433 (2.506)	-.8232 (2.754)	-.7497 (2.530)	-1.2876 (5.574)	-1.3971 (5.873)	-1.2922 (5.588)

Continued.../



**Table 4.** (Continued)

Self-employed	.0519 (.187)	.4864 (1.415)	.0967 (.348)	.4923 (1.307)	1.017 (2.226)	.5164 (1.370)
Residential location <sup>4</sup>						
Greater Oslo	-.4111 (2.563)	-.6040 (3.297)	-.4429 (2.747)	-.2545 (1.431)	-.4679 (2.272)	-.2614 (1.468)
Bergen/Stavanger/Trondheim	.1096 (.490)	.4498 (1.639)	-.1586 (.704)	.2376 (.770)	.1575 (.433)	.2238 (.725)
Gender ( <i>Male</i> = 1)	-.5834 (3.676)	1.0918 (3.844)	-.6460 (4.217)	-.9647 (5.191)	-1.5622 (4.488)	-.9970 (5.296)
Household size	.4071 (7.696)	.4077 (7.706)	.4022 (7.603)	.2344 (3.480)	.2285 (3.392)	.2332 (3.452)
Country of Birth <sup>5</sup>						
Nordic	2.1716 (5.763)	1.9478 (4.995)	-.1978 (.651)	.8890 (2.370)	.6298 (1.592)	.2557 (.818)
OECD	2.1318 (7.401)	1.9593 (6.571)	-.5961 (1.852)	1.1525 (4.422)	.9685 (3.526)	.4974 (1.491)
Non-OECD	2.0834 (7.399)	1.8025 (5.835)	-.7930 (2.258)	1.3863 (5.365)	1.0614 (3.518)	-.8849 (2.358)
Arrival Cohort <sup>6</sup>						
1970-79	-.6795 (2.855)	-.8202 (3.321)	-.7654 (2.845)	-.6502 (2.285)	-.8102 (2.749)	-.6221 (2.199)
1960-69	.0935 (.397)	.11076 (.468)	.0514 (.019)	-.0384 (.136)	-.0519 (.018)	-.0805 (.029)
Constant	-2.4966 (5.140)	-3.3021 (5.346)	-.4634 (1.148)	.5180 (1.017)	-.7879 (.958)	1.3614 (2.971)
-2 * <i>LLR</i>	443.2	460.6	445.6	351.0	357.9	352.6
<i>L</i> <sub>max</sub>	-1221.5	-1212.8	-1220.3	-1073.1	-1248.6	-1072.3
Significance level	.0000000	.0000000	.0000000		.0000000	.0000000
Prediction rate (percentage)	58.7	59.2	59.3	66.6	66.5	67.0
Sample size	1360	1360	1360	1360	1360	1360

Note: Author's calculations are based on Table 15. The *t*-statistics are in parentheses.

<sup>1</sup> This was calculated by averaging the 1980 and 1990 disposable incomes.

<sup>2</sup> Reference age cohort is 17-25 (26 - 35) for the 1980 (1990) sample respectively

<sup>3</sup> Reference marital status is Married

<sup>4</sup> Reference location is the Rest of the country

<sup>5</sup> Reference country of birth is Norway

<sup>6</sup> Reference arrival cohort is Pre-1960

**Table 5.** The Marginal Effects. Immigrant sample.

	1980			1990		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<u>Rented Dwelling</u>						
<u>Current Income (After Tax)</u>	.000009 (1.019)			-.000004 (1.056)		
Permanent Income ( <i>Fitted Values</i> )		-.000004 (.108)			-.00005 (1.753)	
<u>Transitory Income (Residual)</u>		-.000010 (1.071)			-.000003 (.787)	
Permanent Income (Average Income)			.0000001 (.026)			-.000003 (1.130)
Age Cohort <sup>1</sup>						
26-35	-.0253 (.500)	-.0141 (.220)	-.0155 (.312)			
36-45	-.1425 (2.508)	-.1262 (1.497)	-.1282 (2.315)	-.0289 (.997)	-.0024 (.007)	-.0273 (.937)
46-57	-.1700 (2.586)	-.1543 (1.747)	-.1560 (2.432)	-.0479 (1.507)	-.0209 (.590)	-.0462 (1.425)
58-67				.0027 (.071)	-.0043 (.114)	-.0036 (.099)
Marital status <sup>2</sup>						
Never married	.1418 (3.101)	.1387 (2.960)	.1414 (3.088)	.0944 (2.869)	.0886 (2.704)	.0946 (2.867)
Divorced/Separated/Widow	.1474 (2.348)	.1498 (2.357)	.1493 (2.376)	.1425 (4.383)	.1527 (4.517)	.1437 (4.400)
Self-employed	.0457 (.691)	.0305 (.388)	.0375 (.567)	-.0424 (.920)	-.0933 (1.654)	-.0457 (.987)
Residential location <sup>3</sup>						
Greater Oslo	-.0132 (.390)	-.0411 (.108)	-.0087 (.256)	-.0048 (.227)	.0160 (.659)	-.0040 (.190)
Bergen/ Stavanger/Trondheim	-.0187 (.380)	-.0636 (.107)	-.0115 (.232)	-.0531 (1.405)	-.0146 (.336)	-.0516 (1.365)
Gender ( <i>Male</i> = 1)		.1223 (1.996)	.1180 (3.3438)	.1053 (4.037)	.1630 (3.514)	.1094 (4.110)

Continued.../

**Table 5. (Continued)**

Household size	-.0748 (5.956)	.0748 (5.947)	-.0741 (5.917)	-.0233 (2.790)	-.0228 (2.734)	-.0231 (2.753)
Country of Birth <sup>4</sup>						
Nordic	-.3937 (5.088)	-.3879 (4.813)	.0229 (.373)	-.0667 (1.493)	-.0421 (.903)	-.0268 (.712)
OECD	-.3637 (6.747)	-.3640 (6.337)	.0703 (1.091)	-.0943 (2.941)	-.0765 (2.316)	-.053 (1.302)
Non-OECD	-.3237 (6.303)	-.3154 (5.381)	.3916 (5.051)	-.1195 (3.611)	-.0878 (2.396)	.0659 (1.472)
Arrival Cohort <sup>5</sup>						
1970-79	.1726 (3.145)	.1781 (3.139)	.1754 (3.188)	.0881 (2.446)	.1029 (2.735)	.0858 (2.398)
1960-69	-.0142 (.266)	-.0141 (.053)	-.0152 (.286)	.0117 (.344)	.0077 (.227)	.0088 (.260)
Constant	.4643 (4.870)	-.1170 (.186)	.0901 (1.058)	-.0849 (1.372)	.4319 (.445)	-.1487 (2.521)
<u>Co-op Housing</u>						
<u>Permanent Income (Average Income)</u>			-.000007 (1.788)			-.000004 (1.412)
Permanent Income ( <i>Fitted Values</i> )		-.00001 (3.454)			-.000006 (1.922)	
<u>Transitory Income (Residual)</u>		-.000006 (.760)			-.000004 (1.060)	
Current Income ( <i>After Tax</i> )	-.00001 (1.467)			-.000005 (1.317)		
Age Cohort <sup>1</sup>						
26-35	.0155 (.346)	.1313 (2.277)	.0067 (.154)			
36-45	.0404 (.849)	.2244 (2.967)	.0266 (.573)	-.0987 (2.768)	-.0635 (1.588)	-.0955 (2.684)
46-57	.0010 (.019)	.1808 (2.357)	-.0182 (.350)	-.0276 (.797)	.0057 (.145)	-.0157 (.446)
58-67				-.0950 (2.093)	-.0997 (2.184)	-.0934 (2.183)

Continued.../

**Table 5.** (Continued)

Marital status <sup>2</sup>						
Never married	-.0578 (1.451)	-.0902 (2.167)	-.0598 (1.500)	.0173 (.450)	.0103 (.267)	.0162 (.422)
Divorced/Separated/Widow	-.0105 (.205)	.0144 (.280)	-.0117 (.229)	.0573 (1.677)	.0713 (2.019)	.0553 (1.621)
Self-employed	-.1039 (1.657)	-.2301 (3.032)	-.1043 (1.668)	-.0893 (1.558)	-.1523 (2.211)	-.0875 (1.528)
Residential location <sup>3</sup>						
Greater Oslo	.1712 (5.234)	.2229 (5.680)	.1739 (5.271)	.1959 (5.851)	.2211 (5.808)	.1962 (5.859)
Bergen/Stavanger/Trondheim	.0740 (1.703)	.1720 (3.160)	.0778 (1.784)	.1393 (3.282)	.1869 (3.598)	.1398 (3.293)
Gender ( <i>Male</i> = 1)	.0114 (.405)	.1612 (2.974)	.0098 (.364)	.0510 (2.042)	.1231 (2.526)	.0504 (1.989)
Household size	-.0054 (.619)	-.0059 (.679)	-.0050 (.570)	-.0251 (2.732)	-.0241 (2.633)	-.0259 (2.801)
Country of Birth <sup>4</sup>						
Nordic	-.0387 (.689)	.0282 (.474)	-.0303 (.663)	-.2171 (4.028)	-.1821 (3.271)	-.0210 (.495)
OECD	-.0707 (1.766)	-.0202 (.479)	-.0947 (1.897)	-.2377 (5.658)	-.2145 (5.048)	-.0342 (.760)
Non-OECD	-.1378 (3.370)	-.0549 (1.204)	.0319 (.567)	-.2377 (5.658)	-.2128 (4.701)	.2196 (4.063)
Arrival Cohort <sup>5</sup>						
1970-79	-.0803 (1.950)	-.0394 (.918)	-.0772 (1.841)	-.2521 (5.947)	-.0390 (.988)	-.0648 (1.691)
1960-69	-.0068 (.175)	-.0116 (.296)	-.0060 (.154)	-.0612 (1.604)	-.0398 (1.114)	-.0437 (1.217)
Constant	.0225 (.290)	.2502 (2.432)	-.0033 (.047)	-.0398 (1.113)	.2814 (2.591)	-.0734 (1.215)

Continued.../

**Table 5. (Continued)**

<u>Privately-owned Home</u>							
Current Income ( <i>After Tax</i> )	.000002 (.260)			.000009 (1.825)			
Permanent Income ( <i>Fitted Values</i> )		.00001 (3.220)			.00001 (2.813)		
<u>Transitory Income (Residual)</u>		-.000004 (.434)			.000007 (1.424)		
Permanent Income ( <i>Average Income</i> ) <sup>1</sup>			.000007 (1.744)				.000008 (1.959)
Age Cohort <sup>1</sup>							
26-35	.0098 (.178)	-.1173 (1.741)	.0088 (.161)				
36-45	.1021 (1.743)	-.0982 (1.181)	.1016 (1.765)	.1276 (2.890)	.0637 (1.270)	.1228 (2.778)	
46-57	.1690 (2.623)	-.0265 (.312)	.1743 (2.745)	.0755 (1.646)	.0151 (.296)	.0619 (1.328)	
58-67				.0924 (1.650)	.1040 (1.842)	.0970 (1.820)	
Marital status <sup>2</sup>							
Never married	-.0840 (1.735)	-.0485 (.990)	-.0816 (1.684)	-.1117 (2.334)	-.0989 (2.060)	-.1108 (2.313)	
Divorced/Separated/Widow	-.1369 (2.161)	-.1642 (2.553)	-.1376 (4.583)	-.1998 (4.683)	-.2240 (5.067)	-.1990 (4.657)	
Self-employed	.0582 (1.025)	.1995 (2.760)	.0668 (1.178)	.1318 (2.046)	.2456 (3.135)	.1332 (2.067)	
Residential location <sup>3</sup>							
Greater Oslo	-.1580 (4.441)	-.2188 (5.152)	-.1652 (4.583)	-.1911 (6.008)	-.2372 (6.370)	-.1922 (6.027)	
Bergen/Stavanger/Trondheim	-.0553 (1.191)	-.1657 (2.831)	-.0664 (1.419)	.0863 (1.760)	-.1723 (2.897)	-.0882 (1.796)	
Gender ( <i>Male</i> = 1)	-.1166 (3.415)	-.2835 (4.425)	-.1278 (3.851)	-.1564 (4.994)	-.2861 (4.765)	-.1599 (5.020)	
Household size	.0802 (6.226)	.0808 (6.250)	.0791 (6.159)	.0484 (4.069)	.0469 (3.946)	.0490 (4.096)	

Continued.../

**Table 5.** (Continued)

Country of Birth <sup>4</sup>						
Nordic	.4323	.3596	.0074	.2838	.2242	.0479
	(4.672)	(3.914)	(.137)	(4.269)	(3.229)	(.914)
OECD	.4396	.3843	.0244	.3320	.2910	.0873
	(5.491)	(4.872)	(.433)	(6.640)	(5.662)	(1.575)
Non-OECD	.4616	.3703	-.4235	.3715	.3006	-.2855
	(5.723)	(4.607)	(4.598)	(7.409)	(5.438)	(4.291)
Arrival Cohort <sup>5</sup>						
1970-79	-.0923	-.1307	-.0982	-.0269	-.0638	-.0210
	(1.950)	(2.757)	(2.066)	(.580)	(1.313)	(.453)
1960-69	.0210	.0265	.0213	.0281	.0321	.0349
	(.468)	(.585)	(.473)	(.629)	(.716)	(.781)
Constant	-.4868	-.7476	-.0869			.2221
	(4.046)	(4.802)	(1.026)			(2.989)
Probability Distribution						
Rented Dwelling	.411	.413	.411	.144	.144	.145
Co-op Housing	.233	.230	.233	.191	.191	.191
Privately-Owned Home	.357	.356	.356	.664	.665	.664
Sample size	1360	1360	1360	1360	1360	1360

*Note:* Author's Calculations are based on Table 15. *T-statistics* in parentheses. The Marginal effects of all the variables can be obtained from the author.

**Table 6.** Multinomial Logit Model of Housing Tenure Choice. Norwegian sample.

	1980			1990		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<u>Co-op Housing</u>						
<u>Current Income (After Tax)</u>	-.00002 (.582)			00006 (1.892)		
Permanent Income ( <i>Fitted Values</i> )		-.00002 (2.343)			-.00002 (2.423)	
<u>Transitory Income (Residual)</u>		.000005 (.126)			.00009 (2.863)	
Permanent Income ( <i>Average Income</i> ) <sup>1</sup>			-.000002 (.121)			.00004 (1.679)
Age Cohort <sup>2</sup>						
26-35	.2963 (1.762)	.4881 (2.609)	.2833 (1.711)			
36-45	.6902 (3.485)	.9656 (4.186)	.6708 (3.467)	.3321 (1.944)	.4877 (2.742)	.3356 (1.965)
46-57	.9032 (4.440)	1.1340 (5.023)	.8856 (4.435)	.7355 (3.751)	.8663 (5.582)	.7373 (3.759)
58-67				.6405 (2.854)	.5147 (2.254)	.6258 (2.797)
Marital status <sup>3</sup>						
Never married	.0888 (.576)	.0204 (.130)	.0961 (.625)	-.5394 (2.917)	-.6120 (3.276)	-.5386 (2.916)
Divorced/Separated/Widow(er)	.2894 (1.385)	.4212 (1.943)	.2870 (1.375)	-.3684 (1.877)	-.1437 (.689)	-.3627 (1.848)
Self-employed	-.6773 (2.589)	-.7941 (2.983)	-.6592 (2.547)	-.1561 (.763)	-.3767 (1.740)	-.1389 (.679)
Residential location <sup>4</sup>						
Greater Oslo	.9458 (7.446)	1.0862 (7.716)	.9360 (7.442)	1.4344 (9.203)	1.6582 (9.640)	1.4406 (9.247)
Bergen/Stavanger/Trondheim	.6313 (4.197)	.6843 (4.494)	.6246 (4.160)	1.0375 (5.545)	1.1483 (6.011)	1.036 (5.535)
Gender ( <i>Male</i> = 1)	.0083 (.066)	.3119 (1.731)	-.0155 (.135)	-.3268 (2.399)	.1997 (.938)	-.3121 (2.306)

Continued.../

**Table 6.** (Continued)

Household size	.2388 (5.033)	.2324 (4.884)	.2394 (5.052)	.0031 (.049)	-.002 (.039)	.0037 (.058)
Constant	-1.6330 (4.694)	-1.1596 (3.359)	-1.6897 (5.735)	.6222 (1.950)	.4789 (1.019)	-.6752 (1.968)
<u>Privately-Owned Home</u>						
Current Income ( <i>After Tax</i> )	-.00007 (2.264)			.00007 (2.725)		
Permanent Income ( <i>Fitted Values</i> )		-.00005 (.726)			-.000008 (.096)	
<u>Transitory Income (Residual)</u>		-.00007 (2.284)			.00008 (2.938)	
Permanent Income ( <i>Average Income</i> ) <sup>1</sup>			.000009 (.624)			.00006 (2.996)
Age Cohort <sup>2</sup>						
26-35	.2230 (1.605)	.1989 (1.285)	.1610 (1.179)			
36-45	1.0255 (6.302)	.9916 (5.212)	.9432 (5.940)	.7724 (5.510)	.8139 (5.582)	.7716 (5.502)
46-57	1.5245 (9.058)	1.4919 (8.004)	1.4540 (8.807)	1.1362 (6.818)	1.1725 (6.885)	1.1411 (6.844)
58-67				1.3702 (7.270)	1.3328 (6.984)	1.3597 (7.238)
Marital status <sup>3</sup>						
Never married	.3166 (2.489)	.3249 (2.504)	.3519 (2.786)	-1.1291 (7.618)	-1.1541 (7.703)	-1.1234 (7.581)
Divorced/Separated/Widow (er)	-.4057 (2.005)	-.4250 (2.042)	-.4290 (2.119)	-1.2461 (7.492)	-1.1857 (6.715)	-1.2496 (7.511)
Self-employed	.2791 (1.589)	.2968 (1.637)	.3570 (2.070)	-.2785 (1.645)	-.3408 (1.907)	-.2525 (1.490)
Residential location <sup>4</sup>						
Greater Oslo	-.7754 (6.682)	-.7914 (6.244)	-.8112 (7.045)	-.2923 (2.052)	-.2307 (1.490)	-.2982 (2.093)
Bergen/Stavanger/Trondheim	-.4092 (3.189)	-.4163 (3.207)	-.4331 (3.384)	.0341 (.209)	.0698 (.420)	.0292 (.179)
Gender ( <i>Male = 1</i> )	.0039 (.037)	-.0281 (.188)	-.1138 (1.192)	-.1774 (1.541)	-.0332 (.186)	-.1826 (1.595)

Continued.../



**Table 6. (Continued)**

Household size	.5869 (14.756)	.5859 (14.712)	.5877 (14.799)	.3724 (7.169)	.3680 (7.081)	.3718 (7.161)
Constant	-1.0640 (4.694)	-1.1170 (3.868)	-1.3536 (5.606)	.2496 (.955)	.5662 (1.442)	.0932 (.329)
$-2 * LLR$	880.3	889.8	875.2	913.0	925.3	914.9
$L_{max}$	-3018.4	-3013.6	-3020.9	-2481.0	-2474.8	-2480.0
Significance level	.000000	.000000	.000000	.000000	.000000	.000000
Sample size	3753	3753	3753	3753	3753	3753

Note: Author's Calculations are based on Table 15. *T-statistics* in parentheses.

<sup>1</sup>This was calculated by averaging the 1980 and 1990 disposable incomes.

<sup>2</sup>Reference age cohort is 17-25 (26 - 35) for the 1980 (1990) sample respectively

<sup>3</sup>Reference marital status is Married

<sup>4</sup>Reference location is the Rest of the country

**Table 7.** The Marginal Effects of the Human and Non-human Capital Variables on Housing Tenure Choice. Norwegian sample.

	1980			1990		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
<u>Rented Dwelling</u>						
<i>Current Income (After Tax)</i>	.000009 (2.030)			-.000006 (6.615)		
Permanent Income ( <i>Fitted Values</i> )		.00001 (1.227)			.000003 (.490)	
<i>Transitory Income (Residual)</i>		.000009 (1.671)			-.000008 (2.927)	
Permanent Income ( <i>Average Income</i> )			.000001 (.496)			-.000006 (2.803)
Age Cohort <sup>1</sup>						
26-35	-.0350 (1.810)	-.0380 (1.769)	-.0273 (1.436)			
36-45	-.1418 (5.737)	-.1464 (5.190)	-.1316 (5.486)	-.0649 (4.721)	-.0701 (4.872)	-.0648 (4.718)
46-57	-.2073 (7.524)	-.2107 (7.113)	-.1986 (7.383)	-.0986 (5.681)	-.1031 (5.777)	-.0989 (5.696)
58-67				-.1158 (5.881)	-.1113 (5.659)	-.1147 (5.860)
Marital status <sup>2</sup>						
Never married	-.0402 (2.237)	-.0392 (2.138)	-.4471 (2.491)	.0955 (6.224)	.0984 (6.302)	.0950 (6.201)
Divorced/Separated/Widow	.0401 (1.445)	.0385 (1.345)	.0430 (1.546)	.1026 (5.924)	.0951 (5.348)	.1027 (5.931)
Self-employed	-.0140 (.545)	.0633 (3.505)	-.0238 (.941)	.0239 (1.569)	.0315 (1.952)	.0216 (1.422)
Residential location <sup>3</sup>						
Greater Oslo	.0655 (3.968)	.0633 (3.505)	.0701 (4.260)	.0048 (.382)	-.0027 (.193)	.0052 (.412)
Bergen/ Stavanger/Trondheim	.0308 (1.690)	.0301 (1.630)	.0339 (1.859)	-.0158 (1.076)	-.0199 (1.327)	-.0154 (1.049)

Continued.../

**Table 7. (Continued)**

Gender ( <i>Male</i> = 1)	-.0007 (.047)	-.0061 (.295)	.0140 (1.037)	.0181 (1.748)	.0001 (.007)	.0183 (1.779)
Household size	-.0767 (9.836)	-.0765 (9.808)	-.0769 (9.854)	-.0293 (5.510)	-.0289 (5.456)	-.0292 (5.509)
Constant	.1733 (5.207)	.1651 (3.996)	.2096 (5.825)	-.1175 (.501)	-.0505 (1.429)	.0012 (.048)
<u>Co-op Housing</u>						
<u>Current Income (After Tax)</u>	-.0000004 (1.077)			-.0000006 (.234)		
Permanent Income ( <i>Fitted Values</i> )		-.00002 (2.193)			-.00002 (2.991)	
<u>Transitory Income (Residual)</u>		.0000008 (1.913)			.0000002 (.908)	
Permanent Income ( <i>Average Income</i> )			-.000001 (.622)			-.000002 (.799)
Age Cohort <sup>1</sup>						
26-35	.0161 (.789)	.0431 (1.925)	.0285 (1.035)			
36-45	-.0154 (.682)	.0231 (.892)	-.0094 (.425)	-.0382 (2.5860)	-.0251 (1.666)	-.0378 (2.558)
46-57	-.0393 (1.680)	-.0070 (.274)	-.0342 (1.495)	-.0293 (1.873)	-.0185 (1.164)	-.0296 (1.891)
58-67				-.6225 (3.351)	-.0719 (3.773)	-.0628 (3.387)
Marital status <sup>2</sup>						
Never married	-.0213 (1.167)	-.0308 (1.661)	-.0240 (1.320)	.0500 (3.035)	.0442 (2.702)	.0496 (3.011)
Divorced/Separated/Widow	.0081 (3.254)	.1001 (3.852)	.0830 (3.341)	.0799 (4.583)	.0980 (5.187)	.0809 (4.632)
Self-employed	-.1193 (3.773)	-.1174 (3.742)	-.1250 (3.976)	.0098 (.561)	-.0082 (.445)	.0092 (.524)
Residential location <sup>3</sup>						
Greater Oslo	.2070 (10.364)	.2270 (10.252)	.2094 (10.464)	.1846 (9.775)	.2017 (9.677)	.1858 (9.804)
Bergen/Stavanger/Trondheim	.1268 (6.749)	.1346 (6.991)	.1284 (6.821)	.1099 (6.365)	.1177 (6.624)	.1101 (6.374)

Continued.../

**Table 7.** (Continued)

Gender ( <i>Male</i> = 1)	.0007 (.049)	.0434 (2.149)	.0098 (.772)	-.0185 (1.595)	.0248 (1.387)	-.0164 (1.428)
Household size	-.0296 (5.322)	-.0302 (5.418)	-.0296 (5.323)	-.0356 (5.768)	-.0355 (5.773)	-.0354 (5.758)
Constant	-.1060 (3.197)	-.0386 (.993)	-.0833 (2.386)	-.0919 (3.340)	-.0023 (.061)	-.0826 (2.840)
<u>Privately-Owned Home</u>						
Current Income ( <i>After Tax</i> )	-.00001 (2.342)			.000007 (2.121)		
Permanent Income ( <i>Fitted Values</i> )		.000008 (.645)			.00002 (1.961)	
<u>Transitory Income (Residual)</u>		-.00002 (2.823)			.000005 (1.554)	
<u>Permanent Income (Average Income)</u> <sup>1</sup>			.000002 (.833)			.000007 (2.656)
Age Cohort <sup>1</sup>						
26-35	.0189 (.678)	-.0051 (.167)	.0064 (.234)			
36-45	.1573 (5.018)	.1232 (3.441)	.1410 (4.617)	.1031 (5.397)	.0953 (4.821)	.1026 (5.370)
46-57	.2467 (7.552)	.2177 (6.120)	.2329 (7.287)	.1279 (6.017)	.1215 (5.616)	.1285 (6.044)
58-67				.1780 (7.244)	.1832 (7.357)	.1775 (7.238)
Marital status <sup>2</sup>						
Never married	.0616 (2.475)	.0700 (2.770)	.0687 (2.780)	-.1456 (6.733)	-.1427 (6.632)	-.1446 (6.733)
Divorced/Separated/Widow	-.1211 (3.120)	-.1386 (3.466)	-.1260 (3.246)	-.1825 (7.972)	-.1931 (7.950)	-.1836 (8.020)
Self-employed	.1333 (3.940)	.1323 (3.920)	.1489 (4.476)	-.0337 (1.459)	-.0234 (.966)	-.0308 (1.332)

Continued.../

**Table 7.** (Continued)

Residential location <sup>3</sup>						
Greater Oslo	-.2725 (11.674)	-.2903 (11.388)	-.2795 (11.989)	-.1894 (10.083)	-.1990 (9.756)	-.1910 (10.175)
Bergen/Stavanger/Trondheim	-.1576 (6.672)	-.1647 (6.867)	-.1623 (6.878)	-.0941 (4.634)	-.0978 (4.760)	-.0947 (4.666)
Gender ( <i>Male</i> = 1)	.00001 (.000)	-.0372 (1.344)	-.0239 (1.345)	.0005 (.030)	-.0249 (1.046)	-.0018 (.121)
Household size	.1064 (13.952)	.1068 (13.993)	.1065 (13.987)	.0649 (9.049)	.0644 (9.015)	.0647 (9.027)
Constant	-.0672 (1.538)	-.1265 (2.323)	-.1263 (2.683)	.1037 (3.026)	.0529 (1.034)	.0814 (2.201)
<i>Probability Distribution</i>						
Rented Dwelling	.180	.180	.180	.102	.102	.101
Co-op Housing	.158	.158	.158	.125	.124	.125
Privately-Owned Home	.662	.662		.774	.775	.662
Sample size	3753	3753		3753	3753	3753

*Note:* Author's Calculations are based on Table 15. *T-statistics* in parentheses.

**Table 8.** Decomposition of changes in housing tenure between 1980 and 1990.

	$\bar{P}_{1980}$	$\bar{P}_{1990}$	$\bar{P}_{1990} - \bar{P}_{1980}$	=	$(\bar{P}_{1990} - \bar{P}_{1990 \bar{X}_{1980}})$	+	$(\bar{P}_{1990 \bar{X}_{1980}} - \bar{P}_{1980})$
					<i>Changes in Characteristics</i>		<i>Changes in Homeownership Propensities</i>
<b><u>Norwegians</u></b>							
Rented Dwelling	.1803	.1015	-.0788		.0167 (-21.3%)		-.0955 (121.2%)
Co-op Housing	.1572	.1236	-.0336		.0171 (-50.9%)		-.0507 (150.9%)
Privately-Owned Home	.6624	.7749	.1125		-.0338 (-30.0%)		.1463 (130.0%)
<b><u>All Immigrants</u></b>							
Rented Dwelling	.4135	.1440	-.2695		-.0113 ( 4.2%)		-.2581 (-95.8%)
Co-op Housing	.2303	.1909	-.0394		-.0122 (31.0%)		-.0273 (-69.0%)
Privately-Owned Home	.3562	.6651	.3089		.0235 ( 7.6%)		.2854 ( 92.4%)
<b><u>Arrival Cohort</u></b>							
<u>1970-1979</u>							
Rented Dwelling	.5009	.1955	-.3054		-.0106 ( 3.7%)		-.2910 ( 95.3%)
Co-op Housing	.2122	.1822	-.0300		-.0106 ( 3.5%)		-.0194 ( 96.5%)
Privately-Owned Home	.2869	.6223	.3354		.0250 ( 7.4%)		.3105 ( 92.6%)
<u>1960-1969</u>							
Rented Dwelling	.3110	.1008	-.2102		-.0086 ( 4.1%)		-.2015 ( 95.9%)
Co-op Housing	.2371	.1811	-.0560		-.0127 (22.7%)		-.0433 ( 77.3%)
Privately-Owned Home	.4519	.7180	.2661		.0213 ( 8.0%)		.2449 ( 92.0%)

Note: Author's Calculations are based on Tables 4 and 6.

**Table 9.** The rate of change in tenure status between 1980 and 1990

	Arrival Cohort			
	Norwegians	Immigrants	1960-1969	1970-1979
Rented Dwelling	- 43.7%	- 65.2%	- 67.6%	- 61.0%
Co-op Housing	- 21.4%	- 17.1%	- 23.6%	- 14.1%
Privately-Owned Home	+ 17.0%	+ 86.7%	+ 58.9%	+ 117.0%

*Note.* The rate of change in tenure status was calculated as  $(\frac{\bar{P}_{1990} - \bar{P}_{1980}}{\bar{P}_{1980}}) \times 100$ .

**Table 10.** Decomposition of changes in housing tenure between immigrants and Norwegians in 1980 and 1990.

	1980					1990				
	$\bar{P}_{NORW}$	$\bar{P}_{IMM}$	$\bar{P}_{NORW} - \bar{P}_{IM}$	Endowment Effect	Propensity Effect	$\bar{P}_{NORW}$	$\bar{P}_{IMM}$	$\bar{P}_{NORW} - \bar{P}_{IM}$	Endowment Effect	Propensity Effect
Rented Dwelling	.1803	.4135	-.231 (100%)	.095 (- 41.1%)	-.326 (58.9%)	.1015	.1440	-.042 (100%)	-.036 (85.7%)	-.006 (14.3%)
Co-op Housing	.1572	.2303	-.072 (100%)	-.123 (171.0%)	.051 (-71.0%)	.1236	.1909	-.067 (100%)	-.047 (70.1%)	-.020 (29.9%)
Privately-Owned Home	.6624	.3562	.306 (100%)	.029 (9.5%)	.277 (90.5%)	.7749	.6651	.110 (100%)	.083 (75.4%)	.027 (24.6%)

*Note.* Percentages in bracket.

### Working paper series

<b>Number</b>	<b>Author(s)</b>	<b>Title</b>	<b>Date</b>
96-01	James W. Dean & Don J. DeVoretz	The Economic Performance of Jewish Immigrants to Canada: A Case of Double Jeopardy?	5/96
96-02	Kris Olds	Developing the Trans-Pacific Property Market: Tales from Vancouver via Hong Kong	8/96
96-03	Krishna Pendakur & Ravi Pendakur	The Colour of Money: Earnings Differentials Among Ethnic Groups in Canada	4/96
96-04	Alan Green David Green	The Economic Goals of Canada's Immigration Policy, Past and Present	
97-01	John E. Hayfron	Language Training, Language Proficiency and Earnings of Immigrants: Lessons from Norway	2/97
97-02	Daniel Hiebert	The Colour of Work: Labour Market Segmentation in Montreal, Toronto and Vancouver, 1991	3/97
97-03	Abul Shamsuddin & Don J. DeVoretz	Wealth Accumulation of Canadian and Foreign-Born Households in Canada	6/97
97-04	Abul Shamsuddin	The Double-Negative Effect on the Earnings of Foreign-Born Females in Canada	6/97
97-05	Abul F. M. Shamsuddin	Savings, Tax Contributions and Australian Immigration	6/97
97-06	Peter Sheldon	Estimation of Labour Market Participation Rates for Canadian-Born and Foreign-born Families Resident in the Vancouver Census Metropolitan Area Circa 1991	8/97
97-07	John E. Hayfron	Estimating Immigrants' Occupational Choice and Occupational Wages with Selectivity Bias	9/97
97-08	David Ley & Heather Smith	Is there an immigrant "underclass" in Canadian cities?	10/97
97-09	Dominique Gross	Immigration Flows and Regional Labour Market Dynamics	10/97
97-10	Krishna Pendakur & Ravi Pendakur	Speak and Ye Shall Receive: Language Knowledge as Human Capital	11/97
98-01	Karl Froschauer	East Asian Immigrant Entrepreneurs in Vancouver: Provincial Preference and Ethnic Strategy	01/98
98-02	June Beynon & Kelleen Toohey	Careers in Teaching: Participation Rates and Perceptions of Two Minority Groups in British Columbia	01/98
98-03	Iris Geva-May	Immigration to Israel: Any Lessons for Canada?	01/98
98-04	Rebeca Raijman & Moshe Semyonov	Best of Times, Worst of Times, and Occupational Mobility: The Case of Russian Immigrants in Israel	02/98
98-05	Fernando Mata & Ravi Pendakur	Immigration, Labour Force Integration and the Pursuit of Self- employment	02/98
98-06	Samuel A. Laryea	The Impact of Foreign-born Labour on Canadian Wages: A Panel Analysis	02/98



<b>Number</b>	<b>Author(s)</b>	<b>Title</b>	<b>Date</b>
98-07	Gordon Dicks & Arthur Sweetman	Education and Ethnicity in Canada: An Intergenerational Perspective	02/98
98-08	Steven Globerman	Immigration and Health Care Utilization Patterns in Canada	03/98
98-09	Samuel A. Laryea	The Substitutability and Complementarity of Canadian and Foreign-born Labour: Circa 1990	04/98
98-10	John E. Hayfron	Panel Estimates of the Gender Gap in Norway: Do Female Immigrants Experience A Double Earnings Penalty?	04/98
98-11	Thomas Bauer and Klaus F. Zimmermann	Occupational Mobility of Ethnic Migrants	07/98
98-12	Gillian Creese	Government Restructuring and Immigrant/Refugee Settlement Work: Bringing Advocacy Back In	07/98
98-13	Abul Shamsuddin	Labour Supply of Immigrant Women in Australia	07/98
98-14	Yitchak Haberfeld, Moshe Semyonov and Yinon Cohen	Ethnicity and Labor Market Performance among Recent Immigrants from the Former Soviet Union to Israel	08/98
98-15	Daniel Hiebert	Immigrant Experiences in Greater Vancouver: Focus Group Narratives	09/98
98-16	Daniel Hiebert	The Changing Social Geography of Immigrant Settlement in Vancouver	09/98
98-17	Arti Nanavati	Labour Market Experiences of South Asia-born Women in Vancouver	09/98
98-18	Don DeVoretz and Samuel Layrea	Canadian Human Capital Transfers: The USA and Beyond	10/98
98-19	Trinidad L. Vicente	Undocumented Migrants: A Social and Political Issue in Spain	10/98
98-20	James Dunn and Isabel Dyck	Social Determinants of Health in Canada's Immigrant Population: Results from the National Population Health Survey	10/98
98-21	Keith Head, John Ries, and Don Wagner	Immigrants and the Trade of Provinces	12/98
99-01	Eran Razin	Immigrant Entrepreneurs and the Urban Milieu: Evidence from the United States, Canada and Israel	1/99
99-02	Marvin Wideen and Kathleen A. Barnard	Impacts of immigration on Education in British Columbia: An Analysis of Efforts to Implement Policies of Multiculturalism in Schools	1/99
99-03	Joseph Schaafsma and Arthur Sweetman	Immigrant Earnings: Age at Immigration Matters	1/99
99-04	Harold Coward	Hindus in Canada	2/99
99-05	K. Toohey, B. Waterstone and A. Julé	Performing carnival: Language learning in a Punjabi Sikh school	2/99

<b>Number</b>	<b>Author(s)</b>	<b>Title</b>	<b>Date</b>
99-06	Don DeVoretz and Yunus Ozsomer	Immigrants and Public Finance Transfers: Vancouver, Toronto and Montreal	2/99
99-07	Jennifer Hyndman and Margaret Walton-Roberts	Transnational Migration and Nation: Burmese Refugees in Vancouver	2/99
99-08	Kangqing Zhang	Problems and Strategies of Chinese Immigrants: A Study of Restaurant Sector in the Dutch Labor Market	3/99
99-09	David Ley and Judith Tutchener	Immigration and Metropolitan House Prices in Canada	3/99
99-10	Gillian Creese, Isabel Dyck, and Arlene McLaren	Reconstituting the Family: Negotiating Immigration and Settlement	3/99
99-11	Linda LaRocque	The Changing Role of Administrators in Ethnically Diverse Schools	4/99
99-12	Kris Olds and Henry Wai-chung Yeung	(Re)shaping 'Chinese' Business Networks in a Globalizing Era	4/99
99-13	Ravi Pendakur and Fernando Mata	Where do immigrants work? Tracking industrial location propensities of 1960s immigrants	5/99
99-14	J. Anderson, S. Tang, and C. Blue	Health Systems Renewal: 'Writing in' Cultural Plurality	5/99
99-15	John Rose	Immigration, Neighbourhood Change, and Racism: Immigrant Reception in Richmond, B.C.	5/99
99-16	Randal G. Tonks and Anand C. Paranjpe	Am I a Canadian, an Ethnic, or an Ethnic-Canadian?: Dilemmas of Second Generation Immigrant Youth	6/99
99-17	Margaret Walton-Roberts	(Post)colonial Constellations of History, Identity and Space: Sikhs and the Royal Canadian Legion	6/99
99-18	Parin Dossa	The Narrative Representation of Mental Health: Iranian Women in Canada	7/99
99-19	Samuel A. Laryea	Housing Ownership Patterns of Immigrants in Canada	7/99
99-20	Diane Dagenais and Catherine Berron	A Case Study of Multilingualism and Educational Choices in Immigrant Families	7/99
99-21	Carl Mosk	Convergence and Divergence in The Asia-Pacific: Economic and Demographic Integration between Asia and Pacific Canada	8/99
99-22	John E. Hayfron	A Double Cohort Analysis of Residential Overcrowding among Immigrants in Norway	9/99
99-23	Noah Lewin-Epstein and Moshe Semyonov	Migration, Ethnicity and Inequality in Homeownership	9/99
99-24	Jörgen Hansen and Magnus Lofstrom	Immigrant Assimilation and Welfare Participation: Do Immigrants Assimilate Into or Out-of Welfare?	11/99

<b>Number</b>	<b>Author(s)</b>	<b>Title</b>	<b>Date</b>
99-25	Don DeVoretz and Christiane Werner	A Theory of Social Forces and Immigrant Second Language Acquisition	12/99
00-01	J. Atsu Amegashie	A Political Economy Model of the Permissible Number of Immigrants	01/00
00-02	David Ley	Seeking <i>Homo Economicus</i> : The Strange Story of Canada's Immigration Program	05/00
00-03	Chieko Tanimura	Immigration of Nikkeijin to Ease the Japanese Aging Crisis	05/00
00-04	Eden Nicole Thompson	Immigrant Occupational Skill Outcomes and the Role of Region-Specific Human Capital	05/00
00-05	Christiane Werner	A Taste of Canada: An Analysis of Food Expenditure Patterns for Canadian-born and Foreign-born Consumers	05/00
00-06	Don DeVoretz and Chona Iturralde	Probability of Staying in Canada	08/00
00-07	Ravi Pendakur, Fernanda Mata, Stan Lee and Natalie Dole	Job Mobility and Promotion in the Federal Public Service. A Joint Project with Strategic Research and Analysis, Multiculturalism Program, Canadian Heritage and Research Directorate. Public Service Commission.	05/00
00-08	Barry R. Chiswick and Paul W. Miller	The Complementarity of Language and Other Human Capital: Immigrant Earnings in Canada	07/00

**Back issues of working papers are available for \$5 from**

Vancouver Centre of Excellence: Immigration, WMX4653, Simon Fraser University, 8888 University Drive, Burnaby, B.C, Canada V5A 1S6. Tel: (604) 291-4575 Fax: (604) 291-5336

**E-mail: [riim@sfu.ca](mailto:riim@sfu.ca)**

**<http://www.riim.metropolis.net/>**