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# Wealth, Human Capital and Family across Racial/Ethnic Groups: Integrating Models of Wealth and Locational Attainment

Rachael A. Woldoff

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#### Abstract

This is a US investigation of the relationship between individuals' neighbourhood characteristics and their familial and socioeconomic resources—with special emphasis on wealth. Spatial assimilation theorists propose that racial/ethnic differences in where people live can be explained by the demographic, economic and familial characteristics of individuals, while place stratification theorists argue that group differences in neighbourhood characteristics are not fully explained by personal resources. There is evidence for the persisting effects of race/ethnicity on locational attainment, but support is also found for wealth influences on locational attainment. In addition, there is evidence of an interaction effect between race and wealth in predicting neighbourhood racial composition and neighbourhood SES, but the nature of the interaction varies by group and outcome.

# Introduction

Residential neighbourhoods are not just places where people live. In the US, neighbourhoods are often the gateways to quality in housing, environmental and health conditions, schools, services, levels of crime and violence, economic opportunities and environments for raising children (Brooks-Gunn *et al.*, 1993; Massey, 1996; Sampson and Morenoff, 2000; Wilson, 1987). Yet good neighbourhoods remain out of reach for some groups—specifically African Americans and Latinos. The debate surrounding the reasons that African Americans and Latinos live in different neighbourhoods from Whites requires a better understanding of how both what we have and who we are affect where we live.

Past sociological analyses of racial/ethnic groups' residential experiences have focused on differences in the ways that adults' levels

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of income and education increase their access to desirable communities. Yet even with the socioeconomic gains that African Americans and Latinos have made in recent decades, US communities remain characterised by high levels of segregation (Charles, 2003; Logan et al., 2004; Massey and Denton, 1993), with racial/ethnic minority groups having lower evaluations of neighbourhood quality (Woldoff, 2002) and facing various forms of housing discrimination (Squires and O'Connor, 2001; Turner et al., 2002; Yinger, 1995). Given that recent studies show large racial/ethnic differences in wealth (Aizcorbe et al., 2003; Gittleman and Wolff, 2000; Kochhar, 2004; Wolff, 2002a, 2002b) and suggest that wealth may be a key factor in the persistence of housing and residential neighbourhood differences (Haurin et al., 1997; Savage, 1999), this study asks how wealth and other aspects of adult socioeconomic status (SES), family of origin and adult family characteristics influence where Whites, African Americans and Latinos reside in adulthood. In doing so, these analyses use geo-coded NLSY79 data linked to 2000 US census tract data to explore the effects of individual resources on two residential locational outcomes: neighbourhood racial composition and neighbourhood SES.

### Wealth and Race/Ethnicity

Most studies of the racial/ethnic wealth gap in the US compare Whites with African Americans, with only a few studies examining Latinos. In general, the racial/ethnic differences in wealth between Whites and African Americans and Whites and Latinos are far greater than the income gaps (Kochhar, 2004; Wolff, 2002a). Even when comparing African Americans and Latinos with Whites having similar incomes, Whites are far more likely to have financial assets (Choudhury, 2002; Shapiro, 2004). Indeed, African Americans and Latinos are less likely than Whites to have

a transaction or bank account of any kind (Aizcorbe et al., 2003). Additionally, those who do own assets tend to hold different kinds of assets than Whites. For instance, Whites are more likely than African Americans and Latinos to invest in high-risk/high-return assets, such as stocks (Choudhury, 2002; Keister, 2000). Also, racial/ethnic wealth disparities exist for every age-group and remain even after accounting for educational attainment differences (Scholz and Levine, 2002) and parental wealth is lower for African Americans and Latinos (Conley 1999). Given these disparities, the racial/ethnic wealth gap may contribute to group differences in locational attainment.

In their 1995 landmark book, Black Wealth/White Wealth: New Perspectives on Racial Inequality, Oliver and Shapiro show that, throughout history, institutional discrimination and government policies have provided African Americans with fewer opportunities to become entrepreneurs, accumulate assets and purchase homes. Racial/ethnic group differences in human capital and labour market participation have also inhibited wealth building. For instance, in the US, large racial/ethnic gaps exist in maths and in reading achievement (Ralph and Crouse, 1997), rates of high school dropout (Kaufman et al., 2001) and unemployment (McKinnon, 2003). These human capital disadvantages contribute to wealth and income gaps and prevent African Americans and Latinos from accumulating a surplus of economic resources. Additionally, Whites have benefited more from intergenerational transmission of wealth because they have not suffered through slavery, Jim Crow and other forms of racial/ ethnic discrimination that affect people of colour.1 Thus, over time, Whites have been able to accumulate higher levels of assets.

The housing consequences of the racial/ ethnic wealth gap have incited a heated controversy. Some researchers take issue with studies that claim that racial/ethnic differences in residential location are attributable to housing discrimination or institutional causes of segregation, specifically citing selfsegregation and racial/ethnic differentials in wealth as possible reasons for the locational differences (Clark, 1986, 1991; Patterson, 1997; Thernstrom and Thernstrom, 1997). Such critics argue that studies have inadequately measured the human capital characteristics that affect residential location patterns by relying on data about individual levels of income and education (Clark, 1986, 1991).

Clearly, racial/ethnic disparities in wealth may perpetuate residential stratification as the lack of economic resources available for rent, loans and downpayments renders certain housing and neighbourhoods less affordable than others. Desirable neighbourhoods are associated with higher rents and housing prices, so living in such areas requires financial resources to pay the rent or mortgage. Yet, the affordability of housing is not determined solely by current income, but is also affected by the combination of the housing cost with other household economic characteristics, such as assets, employment and credit history (Listokin et al., 2001) with many first-time homebuyers receiving downpayment funds from relatives (Mayer and Engelhardt, 1996). Having assets and savings also shows lenders that borrowers are stable and have reserves of resources in case of an emergency. In most cases, lenders want to know where the money to finance a home comes from and they require documentation of asset holdings to determine the degree to which the borrower is a risk. Indeed, a recent study shows that one-third of renters could afford monthly mortgage payments, but could not purchase a home because they did not possess the wealth required for downpayments and closing costs (Collins and Dylla, 2001). In addition, for renters, wealth may provide a financial cushion that allows residents to use greater amounts of their income for rent to

secure a better neighbourhood.

### Theory and Past Research: the **Locational Attainment Approach**

Researchers have long theorised that neighbourhood characteristics, such as racial composition and socioeconomic status, are important for the lives of adults and children (Toennies, 1887/1963). For instance, social disorganisation theory emphasises the importance of structural neighbourhood characteristics for creating safe and livable communities that meet residents' collective needs (Sampson and Groves, 1989; Shaw and McKay, 1942). According to this theory, neighbourhood racial composition, neighbourhood socioeconomic status and residential stability are key predictors of neighbourhood problems (such as crime). Given that neighbourhood factors are associated with a variety of outcomes related to lifechances, researchers continue to devise theories to understand how households translate their resources into access to 'better' residential neighbourhoods. The locational attainment approach has been an important research framework for pursuing this line of enquiry.

The locational attainment approach argues that residential neighbourhoods are commodities that are arranged hierarchically, such that some neighbourhoods are more desirable and offer better life-chances to residents than others (see Logan and Molotch, 1987, for an explanation of place hierarchies). Accordingly, people may have higher or lower levels of locational attainment as measured by neighbourhood characteristics, such as suburban versus urban residential location (Alba and Logan, 1991; Alba et al., 1999; Logan and Alba, 1993, 1995), racial composition (Alba and Logan, 1993; Alba et al., 2000b; Logan, Alba and Leung, 1996; Massey and Mullan, 1984; South and Crowder, 1998), crime rate (Alba et al., 1994), homeownership

level (Alba and Logan, 1992; Krivo, 1995), socioeconomic status (Alba and Logan, 1992; Rosenbaum and Friedman, 2001) and property values (Harris, 1999).

The locational attainment approach consists of two different sub-models explaining racial/ethnic group differences in locational returns to individual levels of economic/familial resources. The first part of the locational attainment approach, the spatial assimilation model, examines the relationships between individual resources (such as levels of income, education and cultural assimilation) and individual residential outcomes that are associated with better amenities and improved lifechances. Massey (1985) posited that economic mobility and acculturation (i.e. acquiring a new culture) drive assimilation and cause racial/ethnic minorities and immigrants to overcome earlier patterns of segregation. Thus, any observed racial/ethnic group differences in locational attainment are seen as attributable to racial/ethnic group differences in the human capital that is needed to gain access to better areas.

This model is consistent with the argument that racial/ethnic differences in individuals' neighbourhood characteristics are an affordability issue. For instance, some propose that African Americans' and Latinos' lower levels of wealth have not been measured in past locational attainment studies (Clark, 1986, 1991; Patterson, 1997; Thernstrom and Thernstrom, 1997). From this perspective, the role of racial/ethnic discrimination in contemporary housing and neighbourhood issues is likely to be minimal. Instead, these scholars are optimistic about the prospects of African Americans and highlight the relative improvements in their lives in terms of opportunities, jobs, politics, education and housing (Patterson, 1997; Thernstrom and Thernstrom, 1997).

The second part of the locational attainment approach, the place stratification model, indirectly posits that institutional variables

(such as housing discrimination) should prevent individuals' human capital characteristics from fully explaining racial/ethnic group differences in locational attainment (Logan, 1978). The place stratification model argues that 'minority' racial/ethnic groups are less likely than Whites to gain access to neighbourhoods that match their socioeconomic characteristics. Accordingly, when socioeconomic characteristics are controlled. race will still have a significant effect and minority group members will still be more likely to live in lower-status neighbourhoods than Whites. Thus, the racial/ethnic differences in the explanatory power of human capital are seen as limitations in the explanatory power of the spatial assimilation model and may be interpreted as supporting evidence for the place stratification model.

A more detailed look at the place stratification model suggests two different relationships between wealth, race/ethnicity and locational outcomes. First, it suggests that the main effects of being a member of a minority group are negative, such that African Americans and Latinos are less likely to live in neighbourhoods with higher percentages of Whites and higher-income residents. This is the relationship that many researchers have hypothesised and found (Alba and Logan, 1991, 1992, 1993; Alba et al., 1994; Logan, Alba and Leung, 1996; Friedman and Rosenbaum, 2004; Logan, Alba, McNutty and Fisher, 1996). Some partial explanations for this disparity include demographic (for example, age), socioeconomic (for example, income, education) and cultural (for example, immigrant status) factors that contribute to residential location. The evidence of discriminatory practices in the real estate industry (Galster and Keeney, 1988; Hirsch, 1983; Turner et al., 2002; Yinger, 1995) also suggests that institutional factors contribute to racial/ethnic differences in residential characteristics for individuals who have similar socioeconomic backgrounds.

Secondly, it is important to consider the place stratification model in light of the spatial assimilation model. The place stratification model does not deny the wealth effects proposed by the spatial assimilation model, but rather suggests that race is a significant moderator of the relationship between wealth and locational attainment. That is, even if a rising tide of wealth lifts all people to better residential outcomes, the place stratification model predicts that wealth will still have different effects on locational attainment across groups. Given the limited research on the relationship between wealth and locational attainment, it is unclear exactly what form the interaction will take. However, if one considers wealth to be a barrier to access to more-White and higher-SES neighbourhoods, then the most obvious prediction is that Whites would need less wealth to gain access to such neighbourhoods. So, for African Americans and Latinos, wealth may provide some degree of support in overcoming any negative effects of their race/ethnicity on locational attainment. Indeed, Alba and Logan (1993) have presented a 'weak' version of this theory that argues that while housing discrimination has a major impact on locational outcomes for non-Whites, wealth and other socioeconomic factors are likely to benefit people of colour more because Whites have better access to quality neighbourhoods regardless of their socioeconomic status. There is some evidence to support this version of the theory (see Woldoff 2006 for example).

To date, only a few studies have incorporated measures of wealth into analyses of locational attainment. One such study uses the Panel Study of Income Dynamics (PSID) to examine neighbourhood migration patterns and finds only modest wealth effects (Crowder *et al.*, 2006). Two other studies use the MultiCity Study of Urban Inequality (MCSUI) combined with survey data from the early 1990s and 1990 census data.

Adelman (2005) found no wealth effect on neighbourhood racial composition when examining middle-class African Americans and Whites in four cities. Freeman (2000) used a combined sample of households in Boston and Los Angeles and found that wealth had a positive effect on proximity to Whites for African Americans and Latinos. However, Freeman also found place-related differences in these effects when he analysed the cities separately. Specifically, wealth had a positive effect on proximity to Whites for both groups in Los Angeles, but wealth had a negative effect on proximity to Whites for African American Bostonians and no effect for Latino Bostonians. While informative, the wealth measures and data in the prior papers included housing-related wealth items, used categorical wealth effects (with different category cut-off points in each paper) and used datasets with a large amount of missing wealth information that was found to be significantly influential for African Americans.<sup>2</sup> Including housing-related wealth items in a composite wealth measure is especially problematic when predicting neighbourhood outcomes because it can lead to circular arguments that confound independent variables, like housing wealth, with dependent variables, like neighbourhood quality (one measure of which is home values, according to Harris, 1999).

In addition to adding a wealth component to the locational attainment approach, one could argue that both the spatial assimilation model and the place stratification model should include family-related variables as predictors of locational attainment.<sup>3</sup> For instance, the structure and economic status of one's family of origin and current family impact one's access to high-quality neighbourhoods. Thus, people from married families or higherincome families may be able to attain a home in a better location than those who are single parents or come from single-parent or lowerincome families. Determining whether there are such relationships between family and neighbourhood outcomes is one of the foci of this research.

## **Contribution of the Current Study**

This study examines the effects of wealth, as well as other key economic and familial factors, on locational outcomes for Whites, African Americans and Latinos and it is one of the few national-level studies to explore the relative influence of wealth on the types of neighbourhood in which people live. It is important to point out that this analysis fills gaps in the literature that are theoretical, substantive and data-related and uses methods that are more appropriate than those previously used in the literature.

First, this paper adds depth to the locational attainment approach by integrating the concepts of wealth and family of origin into the approach. By testing for interactions between race and wealth, these analyses make a theoretical contribution because they show that the spatial assimilation and place stratification models can be understood in terms of main effects and moderators. While the spatial assimilation model predicts the relationship between wealth and location, the place stratification approach provides information about the conditions under which those relationships exist. This is in contrast to studies that simply use racespecific models, but do not control for the effects of the component parts (wealth and race) while testing for interactions. Thus, this study extends the research on locational attainment by incorporating insights from the literature on wealth to examine whether wealth opens neighbourhood opportunities at all and whether wealth benefits people of colour and Whites in a similar fashion-for two locational outcomes.

Secondly, this paper addresses past data limitations by using a *secure version* of the NLSY data with address-based information

on US tract location, including a unique combination of indicators of family of origin, economic characteristics, wealth assets, adult family characteristics and residential location for Whites, African Americans and Latinos. By using this dataset, I analyse important information about respondents' histories and thus have greater confidence about causal assertions. Prior national-level research on the locational impact of wealth for Whites, African Americans and Latinos has been difficult to conduct because only two datasets link household addresses to wealth data and the use of these datasets is highly restricted. As a result, many of the existing studies of wealth and locational attainment are placespecific and examine geographical units that are much larger than neighbourhoods (such as politically incorporated towns), thus limiting their generalisability and applicability to neighbourhoods and to the US as a whole. Generally, locational attainment studies that analyse national samples tend to contain a narrow array of indicators (for example, from the census) or are limited to samples that contain adequate numbers of African Americans and Whites, but not other minority groups, such as Latinos (for example, some samples of the Panel Study of Income Dynamics). Also, many data sources do not include information about family of origin or other personal characteristics at various points in time.

Thirdly, the actual wealth data and measures are more appropriate than those found elsewhere. This paper's measure of wealth makes good use of the data by using a constructed non-housing wealth variable that includes information about various kinds of assets, but excludes housing-related forms of wealth that would be confounded with the locational outcomes.<sup>4</sup> Given that location helps to determine the price of real estate, housing wealth (for example, house value) should not be used in wealth measures that predict locational outcomes. For instance, homes in neighbourhoods that are wealthier and have higher concentrations of Whites tend to have higher property values, so including house value in a wealth measure does not make sense when predicting a locational outcome (Harris, 1999). Also, this paper's use of a continuous measure of wealth eliminates the use of arbitrary or sample-specific cutoff points that are used in categorical measures, while improving comparability across studies (Stewart 2002). Researchers often use categorical variables because continuous measures are not available or because categorical items contain less missing data. With regard to missing data, this study is an improvement over past studies because it carefully handles missing data by employing the method of multiple imputation (see Allison, 2000, 2002). The fact that Freeman (2000) found that the missing data on wealth in his sample had a significant effect in his analysis of racial differences in locational attainment highlights the importance of treating missing data seriously. Deleting missing data, treating missing values as zeros and using dummy variable adjustment tend to lead to biased estimates of the coefficients (Allison, 2002). By addressing these limitations, the current study represents an important step towards a more inclusive, nuanced and detailed understanding of the effects of wealth on where people live and the ways in which the effects of wealth vary by race and type of locational outcome.

### Hypotheses

The preceding review identifies several factors that may help to explain why locational attainment differs in terms of the degree to which people co-reside with the majority group in the US (Whites) and neighbours of higher SES. This study answers four overarching questions about the two forms of locational attainment under study. First, which sets of individual familial and socioeconomic characteristics predict locational attainment? Secondly, is wealth a significant predictor of locational attainment even after controlling for a wide range of personal and geographical characteristics? Thirdly, does the influence of wealth vary by race/ethnicity? Fourthly, do wealth and other predictors of locational attainment explain neighbourhood racial composition and neighbourhood socioeconomic status in a similar fashion? The core ideas proposed by the locational attainment approach are modified and restated in the following hypotheses

- *Hypothesis 1*: Consistent with the place stratification model, African Americans and Latinos will have lower levels of locational attainment than Whites.
- *Hypothesis 2*: As argued by the spatial assimilation model as well as literature on the effects of family structure, individuals who come from families with more resources will have greater locational attainment as adults. In general, being raised by parents who were married, more educated, better employed, more assimilated (as measured by family of origin's use of foreign language in the home) and had higher incomes should increase respondents' locational attainment.
- *Hypothesis 3*: Following the spatial assimilation model, people who have more resources in adulthood will have higher levels of locational attainment than their more disadvantaged counterparts. As with family of origin characteristics, social mobility in the form of education, income and employment should increase locational attainment.
- *Hypothesis 4*: Respondents with more disadvantaged or fragile family structures (single parents and those of lower SES) will have lower levels of locational attainment.

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- *Hypothesis 5*: As with the other human capital characteristics, wealth will increase locational attainment. This is an especially stringent test of the independent effect of wealth because wealth is introduced to the model after controlling for a wide range of factors.
- Hypothesis 6: Consistent with the weak version of the place stratification model, I predict that an interaction effect between race/ ethnicity and wealth will affect locational attainment. I expect that wealth will benefit African Americans and Latinos more than Whites because wealth is relatively recent for these groups and they may follow more of an 'immigrant' assimilation model with this characteristic. In contrast, lack of wealth will not be as much of a barrier to White assimilation.

# Data, Measurement and Analysis

I used geo-coded data from the National Longitudinal Survey of Youth (NLSY) matched to 2000 US census tract data. Census tracts are small spatial sub-divisions within counties that are used to approximate neighbourhoods. They usually contain between 2500 and 8000 people. The NLSY79 is a longitudinal survey of US residents. This nationally representative sample includes 12 686 men and women who were aged 14 to 22 when they were first surveyed in 1979. Respondents participated in interviews every year from 1979 to 1994 and biannually thereafter. The final sample used in this paper contains the 7879 non-Latino White, non-Latino African American and Latino respondents to the 2000 survey who lived in the US in that year.5 This sample excludes the small number of Asians, a few cases that had very inconsistent information and those cases that the NLSY lost due to attrition. In 2000, the total retention rate (in-scope) was 80.6 per cent. The sample under study is also ideal in that all respondents were in the middle-age stage of life. This is a time when people make important lifedecisions about getting married, buying first and second homes, becoming parents and investing money. Table 1 shows the means and standard deviations for all variables.

#### **Dependent Variable Measurement**

Neighbourhood racial composition. This is a variable indicating the percentage of the White population in the census tract where the respondent resided in 2000. As displayed in Table 1, on average, Whites in this sample live in communities with populations that are about 86 per cent White, African Americans live in neighbourhoods that are about 40 per cent White and Latinos live in areas that are 65 per cent White. Notably, the residential neighbourhood of the average African American has less than half as many Whites as that of the average White. Neighbourhood racial composition is one of many characteristics that can be investigated using the locational attainment approach, but it is especially important since Black-White segregation (and to a lesser extent, Latino-White segregation) has persisted across time in the US with only moderate improvements (Logan et al., 2004; Massey and Denton, 1993). Consistent with past research (Alba and Logan, 1991, 1993; Logan, Alba, and Leung, 1996; Gross and Massey, 1991; Ihlanfeldt and Scafidi, 2002; Massey and Denton, 1985), neighbourhood racial composition is operationalised by the percentage of Whites in the respondent's residential census tract. This is a standard measure of residential integration in the locational attainment literature, so maintaining this measure eases comparison across studies. Additionally, this is a measure that reflects the degree to which respondents share a neighbourhood with Whites and have the potential to interact and build neighbourly relationships with them. This is not to say that living in close proximity to Whites

	Total (N = 7879)		W	hite	African.	American	Latino	
			( <i>n</i> =	( <i>n</i> = 3968)		2413)	( <i>n</i> = 1498)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Dependent variables								
Percentage White in tract	77.89	24.82	85.86	15.27	39.83	29.98	64.97	22.75
Median income in tract	46.64	19.96	48.98	19.95	35.62	16.12	42.57	19.00
Independent variables								
Race/ethnicity								
White	0.79	0.41						
African American	0.14	0.35						
Latino	0.07	0.25						
Wealth								
Non-housing wealth	112.27	336.84	132.05	369.65	28.55	130.98	56.46	143.91
Male	0.51	0.50	0.51	0.50	0.51	0.50	0.52	0.50
Region								
Urban	0.68	0.47	0.64	0.48	0.84	0.37	0.86	0.35
Northeast	0.17	0.38	0.18	0.38	0.15	0.35	0.15	0.36
Midwest	0.28	0.45	0.32	0.47	0.18	0.39	0.08	0.27
South	0.37	0.48	0.33	0.47	0.59	0.49	0.34	0.47
Own home	0.62	0.48	0.69	0.46	0.34	0.47	0.47	0.50
Family of origin								
1979 family income	51.44	39.46	56.68	40.49	30.21	26.38	34.59	28.88
Parent(s) some college	0.33	0.47	0.37	0.48	0.18	0.39	0.16	0.36
Parent(s) work full time	0.86	0.35	0.90	0.31	0.71	0.45	0.73	0.45
Foreign language at home	0.13	0.34	0.09	0.29	0.03	0.18	0.89	0.31
Lived with single parent	0.13	0.33	0.09	0.29	0.30	0.46	0.20	0.40
Adult SES								
High school graduate	0.42	0.49	0.42	0.49	0.48	0.50	0.40	0.49
Some college only	0.22	0.41	0.21	0.41	0.25	0.43	0.26	0.44
Four years college/BA	0.14	0.35	0.16	0.36	0.08	0.27	0.06	0.25
More than college	0.10	0.30	0.11	0.31	0.04	0.20	0.05	0.22
Family income in 1998	68.01	64.88	71.80	64.15	49.83	66.08	62.09	63.83
Number of weeks worked	41.12	19.45	42.11	18.71	37.08	21.76	37.95	21.25
Current family								
Single parent	0.06	0.23	0.02	0.15	0.22	0.42	0.08	0.27
Married without children	0.09	0.29	0.10	0.30	0.04	0.20	0.05	0.23
Married parent	0.53	0.50	0.58	0.49	0.32	0.47	0.51	0.50
Divorced parent	0.14	0.35	0.13	0.34	0.22	0.41	0.18	0.39
Divorced without children	0.07	0.25	0.05	0.23	0.12	0.32	0.08	0.27

Table 1. Means and standard deviations by race/ethnicity

*Notes*: For this table, variables are weighted and the weights for the total sample and racial/ ethnic group sub-samples are normalised. Median income in tract, wealth and income are in \$1000s (CPI-adjusted).

makes a community inherently 'good'. Indeed, many non-White neighbourhoods are vital places in which to live. However, Whites are the racial/ethnic group with the largest population size in the US and with the greatest economic and political dominance, power, and status in the American social structure (Lenski, 1966). Having networks with them or living in close proximity to them may be valuable to members of minority groups.

#### Neighbourhood socioeconomic status

(SES). This is operationalised as the median income level of the census tract in which the respondent lived in 2000 (in \$1000s). As Table 1 shows, average neighbourhood median income levels differ substantially across racial/ ethnic groups with White respondents living in neighbourhoods with the highest median incomes (\$48 979), followed by Latinos (\$42 572) and African Americans (\$35 616). Neighbourhood SES is an important locational attainment outcome because it is linked to life-chances for adults and children. For instance, neighbourhood SES is associated with children's IQ, teenagers' births, schooldrop-out patterns, infant mortality, low birth weight and child maltreatment (Brooks-Gunn et al, 1993; Sampson and Morenoff, 2000). Adults in low-SES communities are more likely to be victims of homicide and other crimes, as well as depression, heart disease and allcause mortality (Sampson and Morenoff, 2000). Residents of low-income communities are also more likely to be exposed to pollution and environmental hazards (Faber and Krieg, 2001) and are three times more likely to be rejected for conventional housing purchase loans (US Department of Housing and Urban Development, 2000). Several studies of locational attainment have examined tract SES and use neighbourhood median income as a dependent variable (see Alba and Logan, 1992; Logan, Alba, McNulty and Fisher, 1996; South and Crowder, 1997).

#### Independent Variable Measurement

**Race/ethnicity.** Respondents' race/ethnicity is measured using three categories: non-Latino White, African American, and Latino.<sup>6</sup>

This is the logged sum of respond-Wealth. ents' self-reported non-housing assets in 1998.7 Locational outcomes are, by definition, related to the housing stock and the housing values in their locations, so these analyses use a wealth measure that excludes housing wealth. The non-housing wealth measure includes the sum of the values of the following items (in \$10 000s): money assets, stocks and bonds, CDs, IRAs, estates, 401Ks, vehicles, farms, businesses, real estate and any valuable items. I used the CPI to adjust the value of wealth to 2004 dollars. This sample's wealth patterns reflect the economic disparities between the groups and show large racial/ethnic differences in wealth with Whites having the highest average wealth levels (\$132 048). The mean non-housing wealth for Latinos is 43 per cent that of Whites (\$56 456), while African Americans have merely 22 per cent of White wealth (\$28 553).8

Family of origin. Recently, some have suggested that family of origin is an underemphasised aspect of adult outcomes (Conley, 1999; Solon, 1992). Researchers in the social and natural sciences have shown that family of origin influences the life-chances of individuals. Early research by Blau and Duncan (1967) established that parental education, occupation and income are important predictors of children's socioeconomic outcomes as adults. Generally, researchers have concluded that socioeconomic status is transmitted across generations for reasons other than genetics (Bowles and Gintis, 2001). These intergenerational socioeconomic effects persist in contemporary society and recent research shows that education levels. occupational status, income and wealth levels

remain correlated across generations (Conley, 1999; Solon, 1992).

The family of origin measures tap three dimensions of childhood household situations: socioeconomic, structural and cultural. Socioeconomic status is measured by family income, parental education and parental employment in 1979. White respondents reported the highest family incomes with an average of \$56 682 at this time in their lives. Latinos follow Whites with \$34 590 and African Americans trail with an average of \$30 205. Parental education is coded 1 for respondents who had at least one parent who had attained some college by 1979. Most respondents did not have a parent who had attained any college education, but White respondents had the most educated parents with 37 per cent having had at least some college. Only 18 per cent of African Americans came from families with some college education, closely followed by 16 per cent of Latinos. Parental employment is a dummy variable coded 1 if at least one parent was working full time in the year 1978/79. The vast majority of respondents had a parent who worked full time, but Whites also take the lead here with 90 per cent of Whites having a parent who worked full time. Latinos follow with 73 per cent of families having a parent who worked full time and 71 per cent of African Americans are in that category.

To capture cultural assimilation, I include a dummy variable to distinguish respondents who spoke a foreign language at home at the age of 14. As expected, Latinos were most likely to be in this category with 89 per cent having spoken a foreign language at home compared with only 9 per cent of Whites and 3 per cent of African Americans. Acculturation variables are unlikely to have a large effect in these analyses, but often have effects when researchers conduct group-specific analyses.

Finally, family structure is a dummy variable coded 1 if respondents lived with a single parent at age 14. Most respondents did not live with a single parent at that time, but African Americans were most likely to experience this type of family structure. At age 14, only 9 per cent of Whites lived with a single parent, compared with 30 per cent of African Americans and 20 per cent of Latinos.

Adult socioeconomic status/human capital. In general, locational attainment research has focused on the effects of individuallevel characteristics on residential location with a specific emphasis on the socioeconomic and acculturation characteristics of adults. However, the effects of human capital have been found to vary by race and ethnicity. To isolate this, I include a set of variables representing respondents' non-wealth human capital. Education is measured by a set of dummy variables denoting the maximum level of education that the respondent completed in 1998: high school degree, some college, college degree or post-college. The reference category is less than a high school degree. Whites (27 per cent) are more than twice as likely as African Americans (12 per cent) and Latinos (11 per cent) to have completed college or attained advanced schooling. Income is measured by the respondents' reported family income in the year 1997/98. On average, Whites have the highest family income levels (\$71 796). Latinos have about 86 per cent of the average White income (\$62 088), while African Americans trail behind with 69 per cent of the income of Whites (\$49 831). Employment is measured by the number of weeks respondents worked during 1997/98. On average, Whites worked the greatest number of weeks per year (42), followed by Latinos (38) and African Americans (37).

Adult family characteristics. The life-cycle approach to residential mobility has yielded many conclusions about the role of family transitions in neighbourhood location. Peter Rossi (1955) may have provided the best-known framework used in this line of research.

According to Rossi, families move to adjust to their residential needs as they marry and procreate. Specific family and housing types often characterise high-status areas: families with children, homeowners, single-family dwellings (Speare et al., 1974). These patterns are shaped by selections people make over the life-course and life-cycle stage has been shown to be a central factor in decisions to move (Webber, 1983). In addition, research shows that family structures can lead to residential disadvantages. For instances, single parents tend to have high levels of residential mobility and this has negative consequences for children (McLanahan and Sandufur, 1994). Family structure is measured by a set of dummy variables indicating marital status/parental status combinations for the respondent in 1998: single parent, married without children, married with children, divorced with children, divorced without children. The reference category is single without children. On average, only 2 per cent of Whites were single parents, followed by 8 per cent of Latinos, while African Americans were most likely to be single parents with 22 per cent in that group. A small percentage of respondents were married without children, but Whites were most represented in this group (10 per cent), while African Americans (4 per cent) and Latinos (5 per cent) were almost equally represented.

**Controls.** The sex of the respondent is included as a control because women may be at a disadvantage in gaining access to good neighbourhoods due to the fact that they earn less than men, on average (male = 1). Homeownership is used to isolate better the effects of wealth on neighbourhood location. Controlling for this variable provides a better test for the hypothesis that wealth has independent effects. I control for the effects of urban residence and region to eliminate the possibility that racial/ethnic differences in locational outcomes are attributable to

group differences in geographical location (Glaeser and Vigdor, 2001). To control for the effects of population and geographical factors on locational attainment, I use dummy variables to distinguish between urban and non-urban residence. Those who lived in a county that was 50-100 per cent urban are coded as "urban" by the NLSY. On average, Latinos (86 per cent) and African Americans (84 per cent) are more likely to live in cities than Whites (64 per cent), so controlling for urban residence addresses this difference. I control for regional differences in 2000 by including dummy variables for Northeast, Midwest and Southern location (West is the reference category). About 18 per cent of Whites lived in the Northeast in 2000, while 15 per cent of African Americans and Latinos lived there. Approximately 32 per cent of Whites lived in the Midwestern area, while 18 per cent of African Americans and 8 per cent of Latinos lived there. About 33 per cent of Whites lived in the South, while 59 per cent of African Americans and 34 per cent of Latinos lived there.

### Analyses of Data

I estimate ordinary least-squares regressions to model neighbourhood racial composition (tract percentage White) and neighbourhood SES (tract median income). Before running the final models, I used collinearity diagnostics to check for potential collinearity problems among the covariates. For each dependent variable, I run the same models to test whether the model predicts the two different locational outcomes to the same extent. In the primary model, model 1, I incorporate race, region and all three sets of predictors (family of origin, adult socioeconomic status and adult family structure) to determine which are associated with locational attainment, net of the others.9 The second model introduces wealth to the regression model and shows whether the effects of race/ethnicity and other

characteristics remain even after estimating the effects of wealth. Model 3 adds an interaction term between individual race/ethnicity and wealth to allow for estimations of group differences in locational returns to wealth.<sup>10</sup>

As is true with income data, non-response on the value of wealth is a common problem in wealth surveys (Fries et al., 1998; Zagorsky, 1999). I correct for non-response in 1998 wealth and 1979 and 1998 income items by using multiple imputation (MI) to handle missing data. This procedure is one of the best ways to deal with missing data in multivariate analyses (Allison, 2000, 2002) and uses a regression model to impute missing values while also adding a random variation component. The MI procedure in SAS creates five complete imputed datasets using a series of predictors and a second procedure performs regressions on all of the datasets. In the third step, the regression parameters are combined into a single set of estimates.11

#### Results

#### **Neighbourhood Racial Composition**

Table 2 shows the results of analyses predicting the first locational attainment outcome, neighbourhood racial composition. This table answers important substantive questions about which factors are associated with the racial composition of respondents' place of residence.

As hypothesised (hypothesis 1) and consistent with Table 1, model 1 shows large racial/ ethnic disparities in residential exposure to Whites. African Americans and Latinos live with significantly lower percentages of Whites in their neighbourhoods than Whites do. Also, the effect of race/ethnicity is larger for African Americans than for Latinos. It is notable that even with a wide range of economic, familial and geographical factors controlled, the racial/ethnic disparities are quite large.<sup>12</sup>

Other interesting findings relate to the control variables. The sex of respondent has

no effect, but there are differences in the effects of the regional categories. Urban residents are more likely to live in neighbourhoods with fewer Whites than their non-urban counterparts. This is expected since urban areas tend to be more racially heterogeneous than non-urban areas. Additionally, net of a variety of variables, the neighbourhoods of Midwesterners and Southerners tend to have more Whites than those in the West. Western states have the lowest levels of residential segregation for all groups and the majority of Whites live in the South and Midwest, so these findings are not surprising (Grieco, 2001; Logan et al., 2004; McConville et al., 2001). Also, homeowners tend to live in communities with a higher percentage of White residents.

According to hypothesis 2, socioeconomic, familial and cultural resources related to family of origin are expected to have positive effects on residence in neighbourhoods with more Whites. Only one family of origin characteristic is a significant predictor of residence in neighbourhoods with higher White proportions: parental employment status. Being from a family with at least one parent who was employed on a full-time basis is positively associated with living as an adult in areas with more Whites. The structure and acculturation of one's family of origin has no effect on neighbourhood racial composition in adulthood. This means that coming from a single-family home does not place individuals at a residential disadvantage in adulthood. The other family of origin variables do not help to predict residential racial composition, so hypothesis 2 is only minimally supported when examining neighbourhood racial composition. This finding is surprising given the social and economic influence of parents in other realms of life. These results do not support the spatial assimilation model, but it may be that family of origin influences are too far in the past to matter in adult residential experiences.

Table 2. Regression of neighbourhoc	od proximity to Whi	tes (percentage	White in tract) (N	= 7879)		
	Mode	el 1	Mod	el 2	Mode	13
	9	S.E.	<i>p</i>	S.E.	<i>b</i>	S.E.
Race/ethnicity						
African American <sup>a</sup>	-37.7418***	1.5704	-37.6718***	1.5732	-38.6402***	1.6536
Latino	-12.2355***	1.2279	-12.1899***	1.2277	-13.2998***	1.3358
Sex	0.2312	0.4620	0.1975	0.4623	0.1152	0.4576
Wealth						
Non-housing wealth			$0.0182^{*}$	0.0072	0.0034	0.0065
African American $ imes$ wealth					$0.2136^{*}$	0.1014
Latino x wealth					0.1573**	0.0512
Own home	2.6125***	0.6073	2.5385***	0.6057	2.3694***	0.6009
Region						
Urban	-12.9558***	0.8481	$-12.9456^{***}$	0.8484	$-12.8763^{***}$	0.8461
Northeast	2.9778	1.6869	2.9917	1.6855	3.0915	1.6779
Midwest	7.5206***	1.3903	7.5354***	1.3871	7.5830***	1.3765
South	3.6652**	1.1944	3.6658**	1.1908	3.7320**	1.1873
Family of origin						
1979 family income	0.0196	0.0108	0.0161	0.0109	0.0159	0.0108
Parent(s) some college	0.3072	0.6738	0.2650	0.6729	0.2552	0.6684
Parent(s) work full time	3.5767***	0.8330	3.5655***	0.8328	3.4344***	0.8257
Foreign language at home	8601	1.0183	-0.8458	1.0201	-0.7845	1.0133
Lived with single parent	-1.2866	0.8374	-1.2880	0.8361	-1.272	0.8319

Adult SES							
High school graduate	1.2207	0.7474	1.2088	0.7477	1.1507	0.7488	
Some college only	$2.0251^{*}$	0.9049	$1.9910^{*}$	0.9029	$1.8686^{*}$	0.9057	
Four years of college/BA	4.4815***	1.0218	4.3744***	1.0155	3.9813***	1.0130	
More than college	4.0209***	1.1912	3.8449**	1.1853	$4.1220^{**}$	1.1818	
Family income 1998	0.0084	0.0053	0.0065	0.0055	0.0066	0.0054	
Number of weeks worked last year	0.0026	0.0135	0.0230	0.0135	0.0281	0.0132	
Current family							
Single parent	-5.2389***	1.2494	$-5.2531^{***}$	1.2498	$-5.0370^{***}$	1.2573	
Married without children	$2.0620^{*}$	0.8294	2.0121*	0.8309	2.7181*	0.8227	
Married parent	.1614	0.8301	.1560	0.8296	1.1328	0.8288	
Divorced parent	8308	0.8581	8410	0.8575	7171	0.8499	
Divorced without children	-1.1465	1.0093	-1.1388	1.0094	-1.0775	1.0034	
Intercept	80.4724	1.5668	80.5408	1.5692	81.2417	1.5531	
$R^2$	0.5070		0.5072		0.5097		
<sup>a</sup> Compared with non-Latino White. The ii Notes: $*p < 0.05$ , $**p < 0.01$ , $***p < 0.001$ (	nteraction effect was (two-tailed test).	not significantly	y different between /	African America	ıs and Latinos.		

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Before turning to wealth, hypothesis 3 posits, consistent with the spatial assimilation model, a positive effect of human capital characteristics on locational attainment. The coefficients in model 1 show that three out of six adult socioeconomic characteristics significantly predict proximity to Whites. In fact, everything else being equal, more educated people (those with some college, four years of college and post-college education) tend to live in neighbourhoods with higher percentages of Whites compared with those who have not graduated from high school. Interestingly, the number of weeks worked and family income have no significant impact, contradicting the spatial assimilation hypothesis. Overall, the pronounced effects of education provide support for the hypothesis that adult human capital/SES enables individuals to live in communities with larger representations of Whites.

Hypothesis 4 predicts that characteristics of individuals' family structures may be important predictors of locational attainment. Consistent with hypothesis 4, model 1 indicates that single parents have significantly fewer Whites in their communities. While not a focus of this paper, people who are married but childless tend to reside in areas with a greater proportion of Whites. These associations are consistent with the spatial assimilation model and the literature about the effects of family structure on life outcomes.

Model 2 adds wealth as an explanatory variable to the model. As predicted in hypothesis 5 and consistent with the spatial assimilation model, the amount of wealth one has is positively and significantly associated with White neighbourhood racial composition. However, consistent with the place stratification model, the negative effects of being African American and Latino on the percentage of Whites in one's neighbourhood remain significant even with the addition of wealth. Still, it is notable that wealth and race/ethnicity remain significant even after controlling for a wide range of individual characteristics, including region, homeownership, family of origin and adult SES and family characteristics.

Model 3 introduces an interaction effect between race/ethnicity and wealth to explore the possibility that Whites, African Americans and Latinos experience different levels of integration with Whites per unit of wealth. Table 2 presents the components of the race/ethnicity-wealth interaction that are statistically significant. The locational returns to wealth are higher for African Americans and Latinos than Whites and there is no difference between African Americans and Latinos. That is, the positive link between individual levels of wealth and the percentage of Whites in one's neighbourhood is stronger for African Americans and Latinos. Model 2 showed that wealth provides an advantage in gaining access to neighbourhoods with more Whites. However, model 3 shows that wealth is clearly more critical for African Americans and Latinos, who have faced a long history of housing discrimination and reduced wealth accumulation. As expected, the effects of wealth are greater for people of colour than for Whites. This interaction effect may seem small to some, but effect sizes for interactions are generally small because of many factors that bias them downward (Aguinis et al., 2005). Thus, the effect found here is likely to understate the true population value. Accordingly, this interaction effect is notable and supports hypothesis 6. These patterns reinforce an aspect of the spatial assimilation perspective in that wealth among minority groups encourages residential integration with Whites, the majority group in the US, but it is clear that race/ethnicity remain important predictors of neighbourhood racial composition.

#### Neighbourhood SES

Table 3 presents results of regressions of the same models as earlier, but these regressions

test hypotheses about locational attainment using neighbourhood median income as the dependent variable of interest. As with models of neighbourhood racial composition, model 1 supports hypothesis 1 and shows that African Americans and Latinos tend to live in neighbourhoods with lower tract median incomes than Whites. These findings are consistent with the means in Table 1. Also, these data show the same racial/ethnic group hierarchy that was observed in the models of residential integration with the negative effect of race/ethnicity being larger for African Americans. Also, as model 1 indicates, the effects of race/ethnicity remain even with the additional measures of region, homeownership, family of origin, SES and current family structure. These findings support the place stratification model, but there are two noticeable differences between these results and those for neighbourhood racial composition.

Turning to the control variables, the sex of the respondent has no effect, but the regional estimates suggest several conclusions about geographical processes that lead to higherincome neighbourhoods. Controlling for a wide range of indicators, urban residence has no effect on neighbourhood SES. This is in contrast to models of neighbourhood racial composition. Additionally, living in the Midwest or South is associated with living in lower-income neighbourhoods. This suggests that, in these regions, it is more difficult to gain access to a middle-class neighbourhood. Perhaps, socioeconomic segregation at the neighbourhood level is more pronounced in these regions, preventing people from penetrating middle-class communities. Additionally, the table shows that homeownership is associated with residence in higherincome neighbourhoods.

Model 1 also shows family of origin effects on neighbourhood SES. In contrast to models of co-residence with Whites, most of these characteristics have significant effects, suggesting that family of origin factors predict neighbourhood SES better than they explain neighbourhood racial composition. For instance, those whose parents reported higher 1979 incomes live in higher SES areas as adults. Also, respondents from more educated and better-employed families live in higher SES neighbourhoods. However, as with the analyses of proximity to Whites, parental family structure and acculturation are not associated with neighbourhood SES in adulthood. Thus, hypothesis 2 is better supported for models of neighbourhood income than neighbourhood racial composition.

With regard to locational returns to human capital, hypothesis 3 suggests that SES effects will be positive and significant predictors of neighbourhood income levels. This hypothesis is supported in that most SES characteristics are significantly and positively associated with tract median income. As with models of neighbourhood racial composition, moreeducated people (having some college, four years of college or advanced education) live in higher-income communities, while employment has no effect. Also, higher-income respondents tend to live in neighbourhoods with higher median incomes, but as mentioned earlier, income is not associated with neighbourhood racial composition. Thus, for both dependent variables, many of the adult human capital variables significantly predict locational attainment.

The findings with respect to adult family structure are more limited in models of neighbourhood SES. As hypothesised and as shown in models of integration, being a single parent is negatively associated with neighbourhood income levels. However, none of the other adult family structure coefficients is significant. It is notable that those who are married without children are no more likely to live in high SES areas, but they are more likely to live in areas with more Whites. In general, the findings about family structure in adulthood suggest that it

	Мос	del 1	Mode	el 2	Model 3	
	Ь	<i>S.E</i> .	b	<i>S.E</i> .	b	S.E.
Race/ethnicity						
African American <sup>a</sup>	-6.0949***	0.7186	-5.8085***	0.7080	-6.1550***	0.7722
Latino	-2.7078**	1.0175	-2.5200*	0.9994	-3.7511***	1.0324
Wealth						
Non-housing wealth			0.0749***	0.0140	0.0660***	0.0141
African American x wealth					0.0375	0.0767
Latino x wealth					0.1749**	0.0563
Sex	0.5178	0.3697	0.3800	0.3653	0.3380	0.3623
Own home	2.6890***	.4171	2.3838***	.4087	2.2951***	.4132
Region						
Urban	0.7981	0.6381	0.8418	0.6350	0.9141	0.6378
Northeast	1.5967	1.1549	1.6567	1.1493	1.6773	1.1480
Midwest	-2.7501*	1.0977	-2.6890*	1.0871	-2.7374*	1.0870
South	-3.9708***	0.9465	-3.9669***	0.9253	-3.9820***	0.9184
Family of origin						
1979 family income	0.0626***	0.0093	0.0592***	0.0092	0.0585***	0.0092
Parent(s) some college	2.9443***	0.5312	2.7697***	.5402	2.7665***	.5391
Parent(s) work full time	2.6160***	0.5236	2.5699***	.5159	2.4737***	.5196
Foreign language at home	.2754	0.7945	.3323	.7873	.4478	.7778
Lived with single parent	.1816	0.5837	.1774	.5762	.1832	.5727
Adult SES						
High school graduate	0.2093	0.4968	0.1602	0.4925	0.0957	0.4938
Some college only	2.7346***	0.6280	2.5947***	0.6226	2.4879***	0.6251
Four years of college/BA	8.7363***	0.8722	8.2967***	0.8471	8.0276***	0.8505
More than college	8.4746***	1.1964	7.7515***	1.1862	7.6568***	1.1828
Family income 1998	0.0530***	00.0095	0.0450***	0.0089	0.0440***	0.0089
Number of weeks worked	-0.0059	00.0111	-0.0044	0.0108	-0.0059	0.0108
Compare fourily						
Current family	2 0150***	0.9160	2 0025***	0.8072	2 9104***	0.0100
Single parent	-5.8450	0.8169	-5.9025	0.8075	-5.8104	0.8189
Married without children	0.0950	0.9770	-0.1104	0.9670	-0.1377	0.95/5
Divorced parent	-0.0070	0.0000	-0.0071	0.0044	-0.0919	0.0025
Divorced without children	-0.7002 -0.4702	0.0014	-0.3009	0.0352	-0.7546	0.0301
	24.0657	1.2200	-0.4379	1.0170	-0.4200	1.2045
Intercept	54.8657	1.2288	35.1460	1.2179	35.6592	1.2045
K		0.2594		0.2688		0.2722

 Table 3.
 Regression of neighbourhood SES (median income in tract) (N = 7879)

<sup>a</sup>Compared with non-Latino White. The interaction effect was not significantly different between African Americans and Latinos.

*Notes*: \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001 (two-tailed test).

does matter, but the most consistent effect occurs for single parents, who face locational disadvantages.

The results in model 2 show the effects of wealth on neighbourhood SES and support hypothesis 5. On average, wealthier people live in higher-income neighbourhoods, as well as neighbourhoods with higher percentages of Whites. Are these effects stronger for non-White groups than Whites? Model 3 adds the interaction term. As shown in Table 3, the interaction is significant, such that the positive effect of wealth on locational attainment is higher for Latinos than for the other groups. This partially supports hypothesis 6, which predicts that race and wealth interact, but the effect is only present for Latinos. For African Americans, the wealth effects are no different from those for Whites. It is evident that the locational gap caused by wealth varies by group and, for African Americans, it is dependent on the locational outcome under study. In addition, the total explained variance is smaller in models of neighbourhood income than models of racial composition.

The use of wealth data to examine neighbourhood outcomes has highlighted the importance of researchers' efforts in continuing to test the locational attainment model and to explore racial/ethnic disparities in access to certain kinds of neighbourhood. Overall, the wealth results provide support for both the spatial assimilation and place stratification models. The results in Tables 2 and 3 indicate that, for all groups, wealth has positive effects on locational outcomes even though the African Americans and Latinos remain at a disadvantage. In addition, the effects of wealth on residential neighbourhood outcomes vary by race. Clearly, having higher levels of wealth is optimal for non-Whites seeking to escape racial segregation, but the effect of wealth on the social class of one's community only differs between Latinos and Whites.

#### Conclusions

Some scholars have argued that wealth is the great equaliser because it eliminates the key factor that segregates non-Whites into their own communities: affordability. The implication in turn is that no matter how much disadvantage is associated with one's racial/ethnic background, the acquisition of wealth earns a person entry into 'good' neighbourhoods. The findings from this paper suggest that wealth is no smoking gun when it comes to neighbourhood issues and highlight and *clarify* the role of individual resources in residential outcomes. In general, I find substantial evidence in support of the place stratification model for neighbourhood racial composition and more limited support of this model for neighbourhood socioeconomic status. First, in support of place stratification, I find evidence for the persisting effects of race/ ethnicity on locational attainment. Secondly, I find support for wealth influences on locational attainment, revealing a process of spatial assimilation. Thirdly, there is evidence of an interaction effect between race and wealth in predicting neighbourhood racial composition and neighbourhood SES, but the nature of the interaction varies by group and outcome. Indeed, African Americans and Latinos have far less wealth than Whites, but depending on the locational outcome, they may need it more.

While previous research on locational attainment and racial/ethnic gaps in human capital has shown that residential location in the US is not simply a matter of affordability, this body of work has been incomplete as a result of the omission or limited treatment of wealth. Results from this national study show that wealthier individuals live in 'whiter' and more middle-class communities, but the effects of wealth are not as large as some have suggested (Clark, 1986, 1991; Patterson, 1997; Thernstrom and Thernstrom, 1997). These

wealth effects differ from prior findings which either show no wealth effect (Adelman 2005) or mixed effects (some of which are negative) depending on the city, group and wealth cutoff point (Freeman, 2000).

Two groups with low levels of wealth may especially need wealth to improve their locational attainment: African Americans and Latinos. Why does wealth sometimes have a greater effect for these groups than for Whites? Because racial and ethnic minorities face discrimination in the housing market, wealth may be more of a necessity to gain access to desirable areas and avoid those with fewer amenities. For Latinos, the impact of wealth on neighbourhood outcomes is greater whether looking at neighbourhood racial composition or SES, thus they fit into the spatial assimilation ideal better than African Americans. For African Americans, having more wealth may be a greater advantage in gaining access to 'whiter' neighbourhoods, but wealth does not provide a relative advantage when they seek to live in richer neighbourhoods. In other words, to be near Whites, African Americans need wealth more than Whites do, but in the struggle for access to middle-class communities, wealth has similar effects for Whites and African Americans. These findings make sense given that African American middle-class neighbourhoods continue to exist-even if they tend to be lower middle class, with substantial poor populations, and are often located adjacent to lower-income urban African American neighbourhoods (Pattillo, 2005; Pattillo-McCoy, 1999). Perhaps, wealth is less of a barrier to a more middle-class neighbourhood than to a 'whiter' community. This is not an optimistic finding given that African Americans' often express preferences to live in integrated neighbourhoods (Bobo and Zubrinsky, 1996), possibly because of the amenities associated with them that may not be found in many African American neighbourhoods.

In terms of policy, the findings imply that financial security can especially improve African Americans' and Latinos' residential outcomes. Accordingly, these groups would be likely to benefit from government programmes that encourage wealth-building. Such programmes could come in the form of tax deductions or increased investment opportunities that target African Americans and Latinos. This may help to compensate for discrimination, as well as help to offset current and historical obstacles to wealth accumulation and homeownership.

Securing a home in a 'good' community is an important goal for most US citizens. The results of this study clarify the relative importance of various human capital and family-related factors for individuals' residential outcomes. Future research needs to answer more questions about the role of wealth for other forms of locational attainment and researchers should examine more closely the timing of wealth accumulation and include more varied wealth measures and samples with larger numbers of Asians. Researchers interested in wealth and status attainment models may also consider the results of this research enlightening as it demonstrates the effects and limitations of human capital and wealth explanations for understanding racial/ethnic group differences in life-chances. Clearly, wealth is a dimension of social and economic prosperity that requires further attention.

#### Notes

- 1. This is not to suggest that White ethnic groups have not faced discrimination historically.
- 2. In the analyses, the dummy variables that represented the missing data were shown to be significant.
- 3. I thank an anonymous reviewer for suggesting that I make this more explicit.
- 4. Non-housing wealth is a common measure of wealth holdings (see, for example, Choudhury, 2002; Dawkins, 2005; Hoynes and McFadden,

1997; McCarthy *et al.*, 2001; and Retsinas, 1999).

- 5. Tracts are a very small spatial unit of analysis and in this large, national dataset there is minimal clustering of respondents within tracts.
- 6. These designations are based on a variable constructed by the US National Opinion Research Center (NORC). The NORC conducted the NLSY interviews and uses this item to weight the data. The NORC used two separate items to construct this variable: a race question based on the interviewer's trained observation of the respondent's race during the 1978 screening; and, an ethnicity question in which respondents self-identify as a member of an ethnic group. In these analyses, 'Whites' include all non-Black/non-Hispanics, excluding Asians. This includes those whom the NORC screener coded as 'White' and who did not self-identify as Black or Hispanic in the ethnicity question. African Americans' include those whom the NORC coded 'Black' and who had an ethnic origin that was 'non-Hispanic'. African Americans also include those for whom ethnic origin was coded Black, Negro or Afro-American regardless of the race coding. 'Latinos' include those who self-identified as Hispanic for the ethnicity question, as well as those who did not self-identify as Hispanic, but selfidentified as Filipino or Portuguese. Latinos also include those for whom the householder or householder's spouse reported speaking Spanish at home as a child, as well as those with a surname that is listed on the census list as Spanish.
- 7. When logged variables had values less than 1, a constant was added to move the minimum value of the distribution to a positive value.
- 8. In separate analyses (not shown), I also included a dummy variable for people with zero wealth, but the coefficient was not statistically significant.
- 9. All independent variables were measured temporally before the dependent variables. Given this cross-sectional design, significant findings may be interpreted as 'associations'.
- Most locational attainment studies use the subgroup regression analysis method to estimate models rather than testing for interactions or

moderators by controlling for main effects and estimating effects of product terms. One advantage of the sub-group method is that one can examine racial/ethnic differences in the effects of all independent variables on locational attainment. However, Aiken and West (1991) and Jaccard and Turrisi (2003) suggest that the sub-group method is inappropriate because it does not partial out main effects.

- 11. Also, all regressions control for the primary sampling unit (PSU) clusters because the data are from a stratified sample (see Eberwein *et al.*, 2003).
- 12. In other analyses of both dependent variables(not shown), I ran equations with wealth as the only predictor and with only wealth and race/ethnicity as predictors. In these models, wealth was significantly and positively related to locational attainment (p and <0.001) and being non-White was negatively associated with locational attainment (p and <0.001). Of course, in the bivariate models that contained wealth as the only predictor, the coefficients for wealth were much larger than in the models that also included race/ethnicity and the full models that are presented in this paper.

# References

- Adelman, R. M. (2005) The roles, of race, class, and residential preferences in the neighborhood's racial composition of middle-class Blacks and Whites, *Social Science Quarterly*, 86(1), pp. 209–228.
- Aguinis, H., Beaty, J. C., Boik, R. J. and Pierce, C. A. (2005) Effect size and power in assessing moderating effects of categorical variables using multiple regression: a 30-year review, *Journal* of *Applied Psychology*, 90(1), pp. 94–107.
- Aiken, L. S. and West, S. G. (1991) *Multiple Regression: Testing and Interpreting Interactions.* Newbury Park, CA: Sage.
- Aizcorbe, A. M., Kennickell, A. B. and Moore, K. B. (2003) Recent changes in U.S. family finances: evidence from the 1998 and 2001 survey of consumer finances, *Federal Reserve Bulletin*, 89, pp. 1–32.
- Alba, R. D. and Logan, J. R. (1991) Variations on two themes: racial and ethnic patterns in the

attainment of suburban residence, *Demography*, 28, pp. 431–453.

- Alba, R. D. and Logan, J. R. (1992) Analyzing locational attainments: constructing individuallevel regression models using aggregate data, *Sociological Methods and Research*, 20(3), pp. 367–397.
- Alba, R. D. and Logan, J. R. (1993) Minority proximity to whites in the suburbs: an individual analysis of segregation, *American Journal* of Sociology, 98(6), pp. 1388–1427.
- Alba, R. D., Logan, J. R. and Bellair, P. E. (1994) Living with crime: the implications of racial/ ethnic differences in suburban location, *Social Forces*, 73(2), pp. 395–434.
- Alba, R. D., Logan, J. R. and Stults, B. J. (2000a) How segregated are middle-class African Americans?, *Social Problems*, 47(4), pp. 543–558.
- Alba, R. D., Logan, J. R. and Stults, B. J. (2000b) The changing neighborhood contexts of the immigrant metropolis, *Social Forces*, 79(2), pp. 587–621.
- Alba, R. D., Logan, J. R., Stults, B. J. *et al.* (1999) Immigrant groups and suburbs: a reexamination of suburbanization and spatial assimilation, *American Sociological Review*, 64(3), pp. 446–460.
- Allison, P. D. (2000) Multiple imputation for missing data: a cautionary tale, *Sociological Methods and Research*,, 28(3), pp. 301–309.
- Allison, P. D. (2002) *Missing Data*. Thousand Oaks, CA: Sage.
- Blau, P. and Duncan, O. D. (1967) *The American Occupational Structure*. New York: Wiley.
- Bobo, L. and Zubrinsky, C. L. (1996) Attitudes on residential integration: perceived status differences, mere in-group preference, or racial prejudice?, *Social Forces*, 74, pp. 883–909.
- Bowles, S. and Gintis, H. (2001) The inheritance of economic status: education, class, and genetics, in: M. W. Feldman and R. Wehner (Eds) *International Encyclopedia of the Social and Behavioral Sciences: Genetics, Behavior and Society.* Oxford: Elsevier Science.
- Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K. and Sealand, N. (1993) Do neighborhoods influence child and adolescent development?, *American Journal of Sociology*, 99(2), pp. 353–395.
- Charles, C. Z. (2003) The dynamics of racial residential segregation, *Annual Review of Sociology*, 29, pp. 167–207.

- Choudhury, S. (2002) Racial and ethnic differences in wealth and asset choices, *Social Security Bulletin*, 64(4), pp. 1–15.
- Clark, W. A. V. (1986) Residential segregation in American cities: a review and interpretation, *Population Research and Policy Review*, 5, pp. 95–127.
- Clark, W. A. V. (1991) Residential preferences and neighborhood racial segregation: a test of the Schelling segregation model, *Demography*, 28(1), pp. 1–19.
- Collins, J. M. and Dylla, D. (2001) *Mind the gap: issues in overcoming the information, income, wealth, and supply gaps facing potential buyers of affordable homes.* Local Initiatives Support Coalition (LISC), Center for Home Ownership, Washington, DC.
- Conley, D. (1999) Being Black, Living in the Red: Race, Wealth, and Social Policy in America. Los Angeles, CA: University of California Press.
- Crowder, K., South, S. J. and Chavez, E. (2006) Wealth, race, and inter-neighborhood migration, *American Sociological Review*, 71(1), pp. 72–94.
- Dawkins, C. J. (2005) Racial gaps in the transition to first-time homeownership: the role of residential location, *Journal of Urban Economics*, 58(3), pp. 537–554.
- Eberwein, C., Olsen, R. J. and Reagan, P. B. (2003) Intracluster correlation and complex sampling: do geographic data lessen the problem? Working Paper, Ohio State University.
- Faber, D. R. and Krieg, E. J. (2001) Unequal exposure to ecological hazards: environmental injustices in the Commonwealth of Massachusetts. A Report by the Philanthropy and Environmental Justice Project, Northeastern University, Boston, MA.
- Freeman, L. (2000) Minority housing segregation: a test of three perspectives, *The Journal of Urban Affairs*, 22(1), pp. 15–35.
- Friedman, S. and Rosenbaum, E. (2004) Nativity– status differences in access to quality housing: does home ownership bring greater parity?, *Housing Policy Debate*, 15(4), pp. 865–901.
- Fries, G., Starr-McCluer, M. and Sundén, A. E. (1998) *The measurement of household wealth using survey data*. Federal Reserve Board of Governors, Washington, DC.
- Galster, G. C. and Keeney, M. W. (1988) Race, residence, discrimination, and economic opportunity: modeling the nexus of urban

racial phenomena, *Urban Affairs Quarterly*, 24(1), pp. 87–117.

- Gittleman, M. and Wolff, E. N. (2000) *Racial wealth disparities: is the gap closing?* Working Paper No. 34, Economics Working Paper Archive, The Jerome Levy Economics Institute, Bard College, Annandale-on-Hudson, New York.
- Glaeser, E. L. and Vigdor, J. L. (2001) *Racial* segregation in the 2000 census: promising news. Brookings Center on Urban and Metropolitan Policy, Washington DC.
- Grieco, E. (2001) *Census 2000 brief: the white population 2000.* US Bureau of the Census, Washington, DC
- Gross, A. B. and Massey, D. S. (1991) Spatial assimilation models: a micro-macro comparison, *Social Science Quarterly*, 72(2), pp. 347–360.
- Harris, D. R. (1999) Property values drop when Blacks move in, because ...: racial and socioeconomic determinants of neighborhood desirability, *American Sociological Review*, 64(3), pp. 461–479.
- Haurin, D. R., Hendershott, P. H. and Wachter, S. M. (1997) Borrowing constraints and the tenure choice of young households, *Journal of Housing Research*, 8(2), pp. 137–154.
- Hirsch, A. R. (1983) *Making the Second Ghetto: Race and Housing in Chicago*. New York: Cambridge University Press.
- Hoynes, H. W. and McFadden, D. L. (1997) The impact of demographics on housing and non-housing wealth in the United States, in:
  M. D. Hurd and N. Yashiro (Eds) *The Economic Effects of Aging in the United States and Japan*, pp. 153–194. Chicago, IL: University of Chicago Press.
- Ihlanfeldt, K. R. and Scafidi, B. (2002) Black selfsegregation as a cause of housing segregation: evidence from the multi-city study of urban inequality, *Journal of Urban Economics*, 51(2), pp. 366–390.
- Jaccard, J. and Turrisi, R. (2003) *Interaction Effects in Multiple Regression*. Newbury Park, CA: Sage Publications.
- Kaufman, P., Alt, M. N. and Chapman, C. (2001) Dropout rates in the United States: 2000. National Center for Education Statistics, US Department of Education, Washington, DC.
- Keister, L. A. (2000) *Wealth in America: Trends in Wealth Inequality.* New York: Cambridge University Press.

- Kochhar, R. (2004) *The wealth of Hispanic households:* 1996–2002. Pew Hispanic Center, Washington, DC.
- Krivo, L. J. (1995) Immigrant characteristics and Hispanic-Anglo housing inequality, *Demography*, 32(4), pp. 599–615.
- Lenski, G. (1966) *Power and Privilege*. New York: McGraw-Hill.
- Listokin, D., Wyly, E. K., Schmitt, B. and Voicu, I. (2001) The potential and limitations of mortgage innovation in fostering homeownership in the United States, *Housing Policy Debate*, 12(5), pp. 465–513.
- Logan, J. (1978) Growth politics and the stratification of places, *American Journal of Sociology*, 84, pp. 404–416.
- Logan, J. and Alba, R. D. (1993) Locational returns to human capital: minority access to suburban community resources, *Demography*, 30(2), pp. 243–268.
- Logan, J. and Alba, R. D. (1995) Who lives in affluent suburbs? Racial differences in eleven metropolitan regions, *Sociological Focus*, 28, pp. 353–364.
- Logan, J. R. and Molotch, H. L. (1987) Urban Fortunes: The Political Economy of Place. Berkeley, CA: University of California Press.
- Logan, J. R., Alba, R. D. and Leung, S. (1996) Minority access to White suburbs: a multiregional comparison, *Social Forces*, 74(3), pp. 851–881.
- Logan, J. R., Alba, R. D., McNulty, T. and Fisher, B. (1996) Making a place in the metropolis: locational attainment in cities and suburbs, *Demography*, 33(4), pp. 443–453.
- Logan, J. R., Stults, B. J. and Farley, R. (2004) Segregation of minorities in the metropolis: two decades of change, *Demography*, 41(1), pp. 1–22.
- Massey, D. (1985) Ethnic residential segregation: a theoretical synthesis and empirical review, *Sociology and Social Research*, 69, pp. 315–350.
- Massey, D. S. (1996) The age of extremes: concentrated affluence and poverty in the twentyfirst century, *Demography*, 33, pp. 395–412.
- Massey, D. S. and Denton, N. A. (1985) Spatial assimilation as a socioeconomic outcome, *American Sociological Review*, 50, pp. 94–106.
- Massey, D. S. and Denton, N. A. (1993) American Apartheid: Segregation and the Making of the

*Underclass.* Cambridge, MA: Harvard University Press.

- Massey, D. S. and Mullan, B. P. (1984) Processes of Hispanic and Black spatial assimilation, *American Journal of Sociology*, 89(4), pp. 836–873.
- Mayer, C. J. and Engelhardt, G. V. (1996) Gifts, down payments, and housing affordability, *Journal of Housing Research*, 7(1), pp. 59–77.
- McCarthy, G., Zandt, S. van and Rohe, W. M. (2001) *The economic benefits and costs of home ownership: a critical assessment of the research.* Working Paper No. 01-02, Research Institute for Housing America, Washington, DC.
- McConville, S., Ong, P., Houston, D. and Rickles, J. (2001) *Census 2000 fact sheet: examining residential segregation patterns*. Lewis Center for Regional Policy Studies, University of California, Los Angeles.
- McKinnon, J. (2003) *The Black population in the United States: March 2002.* Current Population Survey Reports, US Bureau of the Census, Washington, DC.
- McLanahan, S. and Sandufur, G. (1994) *Growing Up with a Single Parent: What Helps, What Hurts?* Cambridge, MA: Harvard University Press.
- Oliver, M. L. and Shapiro, T. M. (1995) *Black Wealth/White Wealth: New Perspectives on Racial Inequality.* New York: Routledge.
- Osborne, J. (2002) Notes on the use of data transformations, *Practical Assessment, Research & Evaluation*, 8(6) (http://pareonline.net/getvn. asp?v=8&n=6; accessed 28 August 2006).
- Patterson, O. (1997) The Ordeal of Integration: Progress and Resentment in America's Racial Crisis. New York: Civitas/Counterpoint.
- Pattillo, M. (2005) Black middle class neighborhoods, *Annual Review of Sociology*, 31, pp. 305–329.
- Pattillo-McCoy, M. (1999) Black Picket Fences: Privileges and Peril among the Black Middle Class. Chicago, IL: The University of Chicago Press.
- Ralph, J. and Crouse, J. (1997) *Reading and mathematics achievement: growth in high school.* National Center for Education Statistics, Washington, DC.
- Retsinas, N. P. (1999) Lower-income homeowners: struggling to keep the dream alive, *Housing Facts and Findings*, 1(3), p. 3.
- Rosenbaum, E. and Friedman, S. (2001) Differences in the locational attainment of immigrant and

native–born households with children in New York City, *Demography*, 38(3), pp. 337–348.

- Rossi, P. H. (1955) *Why Families Move*. New York: Macmillan.
- Sampson, R. and Groves, W. B. (1989) Community structure and crime: testing socialdisorganization theory, *American Journal of Sociology*, 94, pp. 774–802.
- Sampson, R. and Morenoff, J. (2000) Public health and safety in context: lessons from community-level theory on social capital, in:
  B. D. Smedley and S. L. Syme (Eds) *Promoting Health: Intervention Strategies from Social and Behavioral Research*, pp. 366–389. Washington, DC: The National Academies Press.
- Savage, H. A. (1999) Who could afford to buy a house in 1995? Series H121/99-1, Household Economic Studies, US Bureau of the Census, US Government Printing Office, Washington, DC.
- Scholz, J. K. and Levine, K. (2002) US Black–White wealth inequality: a survey. Working Paper, Institute for Research on Poverty, University of Wisconsin-Madison.
- Shapiro, T. M. (2004) *The Hidden Cost of Being African American*. New York: Oxford University Press.
- Shaw, C. R. and McKay, H. D. (1942) *Juvenile Delinquency and Urban Areas.* Chicago, IL: University of Chicago Press.
- Solon, G. (1992) Intergenerational income mobility in the U.S., *The American Economic Review*, 82(3), pp. 393–408.
- South, S. J. and Crowder, K. D. (1997) Escaping distressed neighborhoods: individual, community, and metropolitan influences, *American Journal of Sociology*, 102(4), pp. 1040–1084.
- South, S. J. and Crowder, K. D. (1998) Leaving the 'Hood': residential mobility between Black, White, and integrated neighborhoods, *American Sociological Review*, 63(1), pp. 17–26.
- Speare, A., Goldstein, G. and Frey, W. H. (1974) *Residential Mobility, Migration, and Metropolitan Change*. Cambridge, MA: Ballinger.
- Squires, G. and O'Connor, S. D. (2001) Color and Money: Politics and Prospects for Community Reinvestment in Urban America. Albany, NY: State University of New York Press.
- Stewart, J. (2002) *Economic status*. MacArthur Network on SES & Health (http://www.macses. ucsf.edu/Research/Social%20Environment/

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- Thernstrom, S. and Thernstrom, A. M. (1997) America in Black and White: One Nation, Indivisible. New York: Simon and Schuster.
- Toennies, F. (1887/1963) *Gemeinschaft und Gesellschaft* [Community and Society] trans. and ed. by C. P. Looomis. New York: Harper and Row.
- Turner, M. A., Ross, S., Galster, G. C. and Yinger, J. (2002) Discrimination in metropolitan housing markets: national results from phase 1 of the housing discrimination study (HDS2000). US Department of Housing and Urban Development, Washington, DC.
- US Bureau of the Census (2000) *Census of population and housing, 2000.* Summary File 3, US Bureau of the Census, Washington, DC.
- US Department of Housing and Urban Development (2000) *Unequal burden: income and racial disparities in subprime lending in America*. US Department of Housing and Urban Development, Washington, DC.
- Webber, M. J. (1983) Life-cycle stages, mobility, and metropolitan change: 1. theoretical issues, *Environment and Planning A*, 15, pp. 293–306.

- Wilson, W. J. (1987) *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy.* Chicago, IL: University of Chicago Press.
- Woldoff, R. A. (2002) The effects of local stressors on neighborhood attachment, *Social Forces*, 81(1), pp. 87–116.
- Woldoff, R. A. (2006) Living where the neighbors are invested: wealth and racial/ethnic differences in individuals' neighborhood homeownership rate, in: J. G. Nembhard and N. Chiteji (Eds) Wealth Accumulation and Communities of Color in the United States: Current Issues, pp. 267–293. Ann Arbor, MI: University of Michigan Press.
- Wolff, E. N. (2002a) Inheritances and wealth inequality trends, 1989–1998. Paper presented at the 2002 Meeting of the American Economic Association.
- Wolff, E. N. (2002b) *Top Heavy: The Increasing Inequality of Wealth in America and What Can Be Done About It.* New York: The New Press.
- Yinger, J. (1995) Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. New York: Russell Sage Foundation.
- Zagorsky, J. L. (1999) Young baby boomers' wealth, *Review of Income and Wealth*, 45, pp. 135–156.