The Center on Philanthropy & Public Policy

PHILANTHROPY AND SOCIAL CAPITAL IN LOS ANGELES

Eleanor Brown James M. Ferris

Research Report December 2002

Funded by The John Randolph Haynes and Dora Haynes Foundation

UNIVERSITY OF SOUTHERN CALIFORNIA

PHILANTHROPY AND SOCIAL CAPITAL IN LOS ANGELES

Eleanor Brown James M. Ferris

Research Report December 2002

This research was supported by The John Randolph Haynes and Dora Haynes Foundation.

Eleanor Brown: Professor, Pomona College; 425 North College Avenue, Room 211; Claremont, CA 91711

James M. Ferris: Professor and Director, The Center on Philanthropy and Public Policy; School of Policy, Planning, and Development, University of Southern California, Lewis Hall 210; Los Angeles, CA 90089-0626

ABOUT THE CENTER ON PHILANTHROPY AND PUBLIC POLICY

The Center on Philanthropy and Public Policy promotes more effective philanthropy and strengthens the nonprofit sector through research that informs philanthropic decision making and public policy to advance public problem solving. Using California and the West as a laboratory, the Center conducts research on philanthropy, volunteerism, and the role of the nonprofit sector in America's communities.

In order to make the research a catalyst for understanding and action, the Center encourages communication among the philanthropic, nonprofit, and policy communities. This is accomplished through a series of convenings and conversations around research findings and policy issues to help key decision makers work together more effectively to solve public problems and to identify strategies for action.

The opinions presented in this paper represent those of the authors and not those of The Center on Philanthropy and Public Policy.

Copyright © 2002 by The Center on Philanthropy and Public Policy The Center on Philanthropy and Public Policy School of Policy, Planning, and Development University of Southern California Lewis Hall, Room 210 Los Angeles, California 90089-0626

All rights reserved

Printed in the United States of America

PHILANTHROPY AND SOCIAL CAPITAL IN LOS ANGELES

EXECUTIVE SUMMARY

Philanthropy – private action for the public good – is a critical indicator of the capacity of a community to identify public problems and to develop strategies for addressing them. A community's generosity in providing monetary donations and volunteer time is critical in shaping its nonprofit organizations for public problem solving. Philanthropy provides the margin for experimentation and innovation in nonprofit organizations that are now an integral part of service delivery systems in urban communities. But more than that, philanthropy is a lynchpin in creating and reinforcing connections within communities that engender trust and commitment among individuals, enhancing the ability of communities to govern themselves by building social capital – the networks and norms that build trust, shared values, and reciprocity among individuals.

As designs for governing Los Angeles in the future are considered, recognition of the importance of philanthropy and social capital in the community is critical. Philanthropic behavior is relatively well defined and fairly well understood. Individuals make charitable contributions of money (giving) and time (volunteering) to those in need of such contributions. Selfless or not, these acts involve a degree of compassion and commitment to others. As such, philanthropic behavior is likely to strengthen the bonds between givers and their beneficiaries. What is less understood is the role social capital plays in eliciting philanthropic behavior from members of a community. Thus, this study examines the links between social capital and philanthropy in Los Angeles. The two critical questions addressed are:

- What are the forces that influence the levels of social capital?
- How does social capital influence the levels of charitable contributions and volunteering?

In addressing these questions, we examine the patterns that are observed for Los Angeles, and the extent to which these patterns mirror those found throughout the United States based on the Social Capital Community Benchmark (SCCB) survey. The survey, undertaken in 2000 by an extensive network of foundations and researchers, collects extensive information on individuals' embeddedness in various dimensions of social capital. This, together with the inclusion of data on the giving and volunteering, provides a unique opportunity to explore the nexus between social capital and philanthropy.

Giving And Volunteering

Individuals in Los Angeles tend to contribute less than individuals nationally, whether we are measuring the propensity to give or the amount given. In Los Angeles, 30 percent indicated that they made no contributions to religious causes, compared to 25 percent nationally; and 41 percent indicated that they made no contributions to non-religious causes, compared to 31 percent nationally. Twenty-one percent of individuals in the Los Angeles sample made contributions of \$500 or more and 33 percent made contributions of less than \$500 over the previous twelve months. This compares to 29 percent and 31 percent nationally. Looking at

contributions to non-religious causes, 15 percent of Los Angelenos made contributions of \$500 or more, 34 percent made contributions of less than \$500, and 41 percent gave nothing at all. At the national levels, the comparable numbers are 15 percent, 40 percent, and 31 percent, respectively.

In terms of volunteering, 49 percent of Los Angeles respondents indicated that they had volunteered in the last 12 months, whereas 55 percent indicated they had in the national sample. Those in Los Angeles who volunteered at least once averaged eight times over the last year. In comparison, those who reported volunteering in the national sample averaged 9.5 times. Interestingly, the areas in which individuals volunteered are quite similar for both samples. Among members of religious communities, over three quarters volunteered at their place of worship. Among all volunteers, over half volunteered in school or youth programs, and in activities for the poor or the elderly.

Social Capital

Los Angeles has a social capital deficit in terms of indices of social capital derived from the SCCB survey: social trust; interracial trust; electoral politics; protest politics; civic leadership; associational involvement; informal socializing; diversity of friendships; and faith-based engagement. For seven of the nine indices, Los Angeles' scores are lower than those in the national sample, and these differences are statistically significant. Los Angeles is similar to the national sample in terms of protest politics and diversity of friendships.

Other cities in the southwest – Houston, Phoenix, San Diego, San Francisco, and San Jose/Silicon Valley – tend to have social capital deficits across a wide range of the indices as well. The concentration of social capital deficits in the southwest links Los Angeles to a particular group of cities that share certain features such as rapid population growth and large immigrant populations.

Consolidating these measures of social capital, a factor analysis revealed that the social capital indices are clustered along two dimensions: embeddedness in community networks – referred to here as network-based social capital – and measures of norms and trust – referred to here as norm-based social capital. This result holds for both the Los Angeles and the national samples. The first dimension captures the indices for involvement in formal organizations, community involvement and leadership, and protest politics. The second dimension is most closely related to social and interracial trust indices as well as electoral politics, suggesting buying into the system, i.e., norms of trust and participation that facilitate collective action.

Social Capital: Contributing Influences

Who is woven into networks of engagement, and who buys into the norms of trust and democratic participation that facilitate cooperative action?

In an effort to answer these questions, we examine the costs and benefits of acquiring social capital. We include a variety of individual attributes that are typically associated with contributing to the stock of social capital such as socio-demographic and economic variables: education, income, gender, marital status, number of children, race/ethnicity, and age. In addition, we include variables that reflect the position of the household in the community: citizenship, length of residence, and homeownership. Finally, we include behavioral and attitudinal variables, such as the frequency of attending religious services and expressed trust in community leaders, that are hypothesized in the social capital literature to lead to higher stocks of social capital.

This analysis is revealing.

- The underlying models of the individuals' stocks of social capital are remarkably similar for Los Angeles and the nation. This suggests that there is nothing about individuals' attitudes towards civic engagement that distinguishes Los Angelenos from their countrymen, nor is there anything about Los Angeles that dramatically hinders or abets persons in acquiring social capital. In effect, the sizeable aggregate deficits of social capital observed in Los Angeles seem to reflect the composition of its population rather than differences in inclinations to engage or costs of engaging for members of particular social strata. Education, income, and religiosity are linked to greater stocks of both network-based and norm-based social capital. This suggests that those with greater access to economic opportunities and resources are also able to build social capital. The capacity to generate greater social capital positions these individuals for even greater access to institutions and networks that increase their quality of life.
- The correlation between the equations for the two dimensions of social capital is negative and significant. This result holds for both the Los Angeles and the national sample. This is an unexpected result; we had anticipated that the two forms of social capital would be reinforcing, i.e., that persons who are involved and engaged are those who possess greater trust. This result indicates that there is much to be learned about the processes of social capital formation and the behavioral choices that lead to the creation of different forms of social capital.

Giving And Volunteering: Social Capital And Other Influences

The analysis of the determinants of social capital reveal that some of the critical social, demographic, and economic attributes that are known to shape the philanthropic behavior of individuals – gifts of money and time – are also related to individuals' stocks of social capital. As a consequence, two basic questions arise. First, how important is social capital in explaining charitable behavior? Second, do such salient characteristics as education and race continue to

play important roles in explaining giving and volunteering, once social capital has been controlled for? In this instance, we first examine the determinants of total giving and volunteering, and then we analyze religious giving and secular giving.

- Social capital matters. Network-based social capital matters for total giving, religious giving, secular giving, and volunteering, both in Los Angeles and the national samples. Norm-based social capital influences total giving, religious giving, and volunteering in Los Angeles, while its effect is limited to volunteering in the national sample. This suggests that stocks of social capital that matter for philanthropic behavior are primarily those that emanate from persons who are involved and engaged, i.e., the doers, rather than from those who merely have high degrees of social and interracial trust.
- Education and income, in addition to their impact via social capital, also shape philanthropic behavior directly. Education increases giving, in terms of total giving, religious giving, and secular giving nationally, and in terms of total giving and secular giving in Los Angeles. Income also has an impact on giving total, religious, and secular both in Los Angeles and nationally. But interestingly, neither education nor income has an independent impact on volunteering. This suggests that, while the greater financial resources reflected in these variables matter for monetary giving, they do not capture the forces that shape the costs and benefits of volunteering.
- Race and ethnicity have considerably different impacts in Los Angeles and the national samples. Nationally, Hispanics give less (in terms of total, religious, and secular giving) and volunteer less than whites. There are no significant differences among the two groups in Los Angeles. The different patterns may reflect the fact that, in Los Angeles, Hispanics are a substantial percentage of the population, and as such might have considerably greater opportunities, involvement, and connections to the causes towards which philanthropic behavior is directed, thus not being significantly different from whites. On the other hand, blacks volunteer less, but give more to religious causes and purposes than whites in Los Angeles. This suggests the strong role of faith-based organizations in the black community in Los Angeles, but perhaps less confidence in the secular nonprofit organizations as revealed by their weak propensity to give to secular causes. The importance of faith-based organizations is also evidenced in the Asian-American community, where religious giving is higher among this group than for whites, but lower, in the tobit estimated equation, for secular giving. When a racial/ethnic group is a minority in terms of numbers in Los Angeles, religious institutions seem to be a vehicle for connecting.
- Frequency of attendance at religious services is consistently significant in impacting total giving, religious giving, and volunteering, both in Los Angeles and nationally. This suggests that in addition to networks, education and income, household demographics, and race and ethnicity, those who practice their faith have a greater propensity to be philanthropic in terms of both money and time, and their greater donations to religious causes do not come at the expense of giving to secular purposes. Religious observance brings people together even as it reinforces the psychology of giving the values of caring and compassion that is at the heart of religious teachings.

The Social Capital-Philanthropy Nexus

Individuals' embeddedness in social capital is more highly correlated with their philanthropic behavior in Los Angeles than in the country as a whole. Whatever it is that makes Los Angeles difficult as a community seems to handicap and to advantage the same persons in one form of engagement – social capital – as in the other – philanthropic behavior. To the extent that both contribute in their own way to stronger identification with the larger community and the capacity for collective action, further research is required to see what features of Los Angeles might constitute these barriers (e.g., access to transportation, fears for personal safety, the anonymity of a very large city). An optimistic interpretation of this correlation is that policies that engage Angelenos as citizens may contribute to their development as philanthropists as well.

PHILANTHROPY AND SOCIAL CAPITAL IN LOS ANGELES

INTRODUCTION

There is an increasing recognition that some of the most intractable urban problems are best addressed through a coordination of public and private action. Throughout most of the twentieth century, "public" and "private" referred, respectively, to government and business. In recent years, there has been an increasing awareness of the critical importance of philanthropy and the nonprofit sector to our public problem solving capacity. With this awareness comes a shift in emphasis from the capacities of government to a more broadly based capacity for governance—the ability of communities to work effectively through a variety of institutions and sectors to address collective problems.

Philanthropy – private action for the public good – is a critical indicator of the capacity of a community to identify public problems and to develop strategies for addressing them. A community's generosity in providing monetary donations and volunteer time is critical in shaping its nonprofit organizations for public problem solving. Philanthropy provides the margin for experimentation and innovation in nonprofit organizations that are now an integral part of service delivery systems in urban communities. But more than that, philanthropy is a lynchpin in creating and reinforcing connections within communities that engender trust and commitment among individuals, enhancing the ability of communities to govern themselves by building social capital.

As designs for governing Los Angeles in the future are considered, recognition of the importance of philanthropy and social capital in the community is critical. This analysis is designed to support such efforts by helping to better understand the forces that create social capital – the networks and norms that build trust, shared values and reciprocity among individuals – and, hence, contribute to building a sense of community, and by examining how stocks of social capital help to explain charitable behavior – gifts of money and time.

Philanthropic behavior is relatively well defined and fairly well understood. Individuals make charitable contributions of money (giving) and time (volunteering) to those in need of such contributions. Selfless or not, these acts involve a degree of compassion and commitment to others. As such, philanthropic behavior is likely to strengthen the bonds between givers and their beneficiaries. What is less understood is the role social capital plays in fostering philanthropic behavior among members of a community. Thus, this study examines the links between social capital and philanthropy in Los Angeles. The two critical questions addressed are:

- What are the forces that influence the levels of social capital?
- How does social capital influence the levels of charitable contributions and volunteering?

In addressing these questions, we examine the patterns that are observed for Los Angeles, and the extent to which these patterns mirror those found throughout the United States. We rely upon the Social Capital Community Benchmark (SCCB) survey that was undertaken in 2000 by an extensive network of foundations and researchers. The effort collected and analyzed extensive information on individuals' embeddedness in various dimensions of social capital. This, together with the inclusion of data on giving and volunteering, provides a unique opportunity to explore the nexus between social capital and philanthropy.

This report presents the findings of the study in five parts. As a starting point, we provide background on the Social Capital Community Benchmark survey, including its purpose, its design, and some of the data it generated on social capital and philanthropy. In the next section, we turn our attention to exploring the dimensions of social capital and the extent to which indices generated from the SCCB survey are linked to the theoretical underpinnings of social capital—networks and norms. We then examine the extent to which individual attributes, behaviors, and attitudes contribute to individuals' stocks of social capital. This is followed by an examination of how social capital, along with individual characteristics, shape individuals' giving and volunteering. We conclude the report with observations about the linkages between social capital and philanthropy in Los Angeles and the implications for public policy and future research.

THE SOCIAL CAPITAL COMMUNITY BENCHMARK SURVEY

Social capital encompasses the social networks among individuals and the norms of reciprocity and trustworthiness that arise from them. The term suggests, like other forms of capital – physical, financial, and human – that it leads to greater productivity. It has garnered considerable attention as a strategic element for building viable and sustainable communities, particularly in light of Putnam's documentation of dimensions of its decline in the United States.¹

Given this interest, one would imagine that it would be a fairly well developed, measurable concept with a broad consensus. This is hardly the case.² Despite the contention over Putnam's "bowling alone" hypothesis and the conceptual and measurement issues, there is considerable agreement that social capital does exist and that it matters. As a result, a major effort, known as the Social Capital Community Benchmark Survey, was undertaken in 2000 to document and examine the levels of social capital in communities across the U.S. through survey research. Robert Putnam of the Kennedy School of Government at Harvard University, in collaboration with over thirty community and private foundations across the United States, conducted the survey.

In this section, we describe the SCCB survey and report results on giving and volunteering and indices of social capital that have been developed based on responses to the survey instrument. This serves as a prelude to the examination in the following section of the indices in terms of

¹ Putnam, R. 2000. Bowling Alone: The Collapse and Revival of American Community. Simon and Schuster.

² Dasgupta, P. and I. Serageldin, 2000. Social Capital: A Multifaceted Perspective. The World Bank.

their interpretation and the factors that explain the stocks of social capital that individuals possess.

The Survey

The survey, conducted by phone interview, includes a representative national sample of 3003 individuals as well as representative samples within over 30 particular communities from across the United States. Los Angeles County was among these communities.³ The Los Angeles survey represents a random sample of 515 individuals countywide. Interviews were conducted in English or, at the respondent's request, in Spanish. The data were weighted to be representative of the community.

The interviews elicited information on individual characteristics (e.g., education, age, income, and length of time in residence in the community), a variety of behaviors and activities (e.g., church attendance, voting, and other forms of political participation), and attitudes and perceptions about the local community (e.g., do you trust your elected officials, and do you trust persons of other racial backgrounds). The survey was specially designed to make possible the creation of several indicators of social capital within a community based on the responses of individuals in the community. In addition, it includes information on the respondents' giving and volunteering over the twelve-month period preceding the survey. Thus, the survey provides a wealth of information that enables us to examine the giving and volunteering of individuals and their embeddedness in networks of social capital within Los Angeles. The structure of the survey allows us to examine individuals in Los Angeles and to make comparisons with the national sample. Thus, we can examine whether patterns in Los Angeles reflect local conditions or are consistent with national patterns.⁴

Giving and Volunteering

In terms of philanthropy, the survey asked respondents two questions about charitable contributions and a longer series of questions about volunteer activities. Contributions of "money, property or other assets for a wide variety of charitable purposes" in the past twelve months were queried first for religious causes and then for all "non-religious charities, organizations, or causes." Volunteering was defined as "any unpaid work you've done to help people besides your family and friends or people you work with." The first question asked how many times in the past twelve months the respondent had volunteered. If the respondent indicated a positive amount of volunteering, a series of six questions asked if any of the volunteering was for a specific cause. The six areas of volunteer activity queried were: for one's place of worship; for health care or fighting particular diseases; for school or other youth-centered programs; to help the poor or the elderly; for the arts or other cultural organizations; for any neighborhood or civic group.

³ The Los Angeles survey was undertaken with the support of the California Community Foundation. The authors were the Foundation's "academic partners."

⁴ Selected characteristics of the Los Angeles and the national sample, both unweighted and weighted to reflect the population, are reported in Appendix A.

Giving. Individuals in Los Angeles tend to contribute less than individuals nationally, whether the measure is the propensity to give or the amount of giving. In Los Angeles, 30 percent indicated that they made no contributions to religious causes, compared to 25 percent nationally; and 41 percent indicated that they made no contributions to secular causes, compared to 31 percent nationally. Twenty-one percent of individuals in the Los Angeles sample made contributions of \$500 or more and 33 percent made contributions of less than \$500 over the previous twelve months. This compares to 29 percent and 31 percent nationally. Looking at contributions to non-religious causes, 15 percent of Los Angelenos made contributions of \$500 or more, 34 percent made contributions of less than \$500, and 41 percent gave nothing at all. At the national levels, the comparable numbers are 15 percent, 40 percent, and 31 percent, respectively.

 Table 1: Levels of Religious and Secular Giving, Los Angeles and the U.S.

 Weighted Samples (percent)

Amount		LA		U.S.		
None		30		25		
Less than \$100		12		11		
\$100 to less than \$500		21		20		
\$500 to less than \$1,000	6	<u> </u>	9	20		
\$1,000 to less than \$5,000	0	9)	16		
\$5,000 or more		6		4		
Don't know		12		11		
Refuse to answer				5		
Household giving to non-r	eligiou	4 s causes	in the		onths	
Household giving to non-r	eligiou	s causes	in the	past twelve mo	onths	
Household giving to non-r	eligiou		in the		onths	
<i>Household giving to non-r</i> Amount	eligiou	s causes	in the	past twelve mo	onths	
<i>Household giving to non-r</i> Amount None	religiou	s <i>causes</i> LA	in the	<i>past twelve m</i> o U.S.	onths	
<i>Household giving to non-r</i> Amount None Less than \$100	religiou	s causes LA 41	in the	past twelve ma U.S. 31	onths	
<i>Household giving to non-r</i> Amount None Less than \$100 \$100 to less than \$500	religiou. 7	LA 41 13	<i>in the</i>	<i>past twelve m</i> U.S. 31 18	onths	
<i>Household giving to non-r</i> Amount None Less than \$100 \$100 to less than \$500 \$500 to less than \$1,000		LA 41 13		<i>past twelve m</i> U.S. 31 18	onths	
Household giving to non-r Amount None Less than \$100 \$100 to less than \$500 \$500 to less than \$1,000 \$1,000 to less than \$5,000		LA 41 13 21		<i>past twelve m</i> U.S. 31 18 22	onths	
		LA 41 13 21		<i>past twelve m</i> U.S. 31 18 22 6	onths	

Volunteering. In terms of volunteering, 49 percent of Los Angeles respondents indicated that they had volunteered in the last 12 months, whereas 55 percent indicated they had in the national sample. Of those that did volunteer in Los Angeles, they averaged eight times over the last year. In comparison, those that reported volunteering in the national sample averaged 9.5 times. Interestingly, the areas in which individuals volunteered are quite similar for both samples. For those that were members of a religious community, over three quarters volunteered at their place of worship. For all volunteers, over half volunteered in school or youth programs and in activities for the poor or the elderly.

Frequency	Los Angeles	U.S.
None	51	45
1 to 4 times	15	18
5 to 12 times	19	18
13 times or more	15	19
<i>Organization volunteered for</i> Volunteered in the past twelve months for:	Los Angeles	U.S.
Place of worship ¹	78	79
Health care or fighting diseases	35	35
School or youth programs	58	59
Groups helping the poor or elderly	55	53
Arts or cultural organizations	26	22
Neighborhood or civic group	35	39

Table 2: Frequency and Areas of Volunteer Activity: Los Angeles and U.S. Weighted samples (percent)

Summary. These patterns of giving and volunteering in Los Angeles are generally consistent with perceptions as well as the results of previous surveys that indicate that philanthropy is not quite as robust as in many communities across the nation.⁵ Why this is so remains an unanswered question. As we see in the next section, Los Angelenos have lower than average

⁵ Those who designed the SCCB survey viewed giving and volunteering as a key dimension of social capital. Thus, as part of their efforts to create indices of social capital, they constructed a philanthropy index from the array of questions on giving and volunteering. The purpose was to provide a simple way of comparing philanthropy across communities. For this index, Los Angeles had a score of 4.64, compared to the national average of 5.12. This difference was statistically significant. Interestingly, many other major metropolitan areas had an index score lower than the national average. Among them are the California communities of San Diego, San Francisco, and the Silicon Valley as well as Houston, Phoenix, Boston, Chicago, and Denver. Atlanta had an index greater than the national average, and Seattle was not statistically different. See Brown and Ferris (2001), "Social Capital in Los Angeles: Findings from the Social Capital Community Benchmark Survey," Research Paper 8, The Center on Philanthropy and Public Policy, University of Southern California.

measured stocks of social capital as well, reinforcing the importance of understanding the links between social capital and philanthropy.

SCCB Indices of Social Capital

As social capital has gained in currency as an important concept, there has been an intense effort to define and measure it so as to better understand what factors lead to the creation of the stock of social capital and the range of its impacts. In the case of the Social Capital Community Benchmark survey, considerable efforts were made to design a questionnaire that would make possible the examination of several indices representing a variety of facets of social capital. Here we discuss those indices and how Los Angeles scores on them, then proceed to develop some more useful social capital constructs that enable us to examine patterns of social capital and links to giving and volunteering.

Theoretical understanding of social capital informed the work of Putnam's team as they created indices of social capital based on several survey questions. For example, the answers to six questions about trusting people in various contexts were combined to form a Social Trust index. Preliminary index formulations were then tested against the data to see whether the constituent questions elicited answers that showed high levels of correlation. If the items did not seem to form a cohesive index, the preliminary index was replaced by a reformulation that made theoretical sense and better fit the data. This approach was essential since social capital, with its multiple facets, is not readily captured in response to a single question.

The Harvard team, in the end, developed nine social capital measures, in addition to the philanthropy measure that we discussed previously. They are: social trust; interracial trust; electoral politics; protest politics; civic leadership; associational involvement; informal socializing; diversity of friendships; and faith-based engagement. These indices are discussed in greater detail in Appendix B. Scores of the social capital indices for the weighted Los Angeles sample and the weighted national sample are presented in Table 1. All of the indices are constructed so that a higher value indicates a higher level of social capital.

Los Angeles has a social capital deficit based on these measures. In seven of the nine indices, Los Angeles scores are lower than those in the national sample, and these differences are statistically significant. Los Angeles is similar to the national sample in terms of protest politics and diversity of friendships, where the scores are not statistically different.

Index	Los Angeles	<i>U. S.</i>	Statistically Different?
Formal Group Involvement (FGI)	2.84	3.00	yes
Organizational Activism (OA)	06	02	yes
Faith-based Social Capital (FB)	11	04	yes
Protest Politics (PP)	.99	1.03	no
Electoral Politics (EP)	2.42	2.86	yes
Social Trust (ST)	30	00	yes
Interracial Trust (IT)	1.83	2.04	yes
Informal Socializing (IS)	16	01	yes
Diversity of Friendships (DF)	5.92	6.04	no

Table 3: Social Capital Indices: Mean Scores for Los Angeles and the U.S.

Previous analysis of the SCCB survey data asked the question whether other big cities look like Los Angeles.⁶ The results were quite revealing. Large cities in the southwest (Houston, Phoenix, San Diego, San Francisco, and San Jose/Silicon Valley) tended to have social capital deficits across a wide range of the indices, in terms of the national average. On the other hand, major cities included in the SCCB study outside of the Southwest (Atlanta, Boston, Chicago, Denver, and Seattle) tended to exceed the national average on at least as many dimensions of social capital as the number of dimensions on which they fell short.

Consequently, one cannot conclude that big cities in general lag the nation in their stocks of social capital. Rather, the concentration of social capital deficits in the southwest links Los Angeles to a particular group of cities that may share certain features such as rapid population growth and large immigrant populations. This is important to remember as we consider the implications of the analysis of philanthropy and social capital patterns in Los Angeles.⁷

DIMENSIONS OF SOCIAL CAPITAL

The indices developed by the Putnam-led team are useful for capturing and measuring the many facets of social capital. However, it is worthwhile to consider a variety of measurement issues as we look to develop measures of social capital for this analysis. Our objective is to develop two or three summary measures of social capital that can be used to analyze the factors that explain social capital, as well as the analysis of giving and volunteering patterns.

In sorting through measures of social capital, there are three sets of distinctions worth keeping in mind: unit of analysis, type of data, and stock and flows of social capital. First, the unit of observation may be either the society or the individual. Social capital is often defined as the

⁶ See Brown and Ferris, 2001.

⁷ These community level characteristics may have an important impact on social capital, both in terms of the appropriateness of the measures as well as the processes for the creation of social capital.

networks and norms that form connections among members of a society. As such, social capital does not reside in individuals, but rather inheres between them. Not all social scientists would agree that social capital is well measured by collecting data on individuals, the approach taken by the SCCB survey.

Second, data on individuals can be behavioral or attitudinal. Social scientists vary in the level of confidence they place in attitudinal data. Economists tend to place more faith in data on observed behavior. The SCCB survey includes both behavioral and attitudinal measures of social capital. Social trust and interracial trust are attitudinal constructs, for example, while group involvement and protest politics measure behaviors. The index constructed in the SCCB to reflect religion-based social capital is based on a mix of behavioral and attitudinal survey items, as is the electoral politics index.

Third, since social capital is not directly observable, its presence is inferred in different ways. Measures of social capital capture one or more of the following: its antecedents in the form of behaviors thought to create social capital; its current stock; and behaviors thought to result from the stock of social capital. Charitable giving, for example, is thought to increase as the stock of social capital increases one's regard for the generalized other. It is included in one of the ten indices of social capital in the SCCB even though charitable giving is argued by Putnam to neither create nor constitute social capital itself.⁸ Similarly, participation in electoral politics – "making democracy work" – is often argued to be a result of sufficient stocks of social capital, although it too can be argued to reflect the norm of civic participation that is part of a community's social capital. Measures of trust are proxies for the stock of social capital itself, while measures of involvement in groups capture both the process of building social capital and the extent to which existing networks enmesh the individual.

In short, measures of social capital vary in fundamental ways. How, then, are they related to each other? Are there underlying general types of social capital that are expressed through these various measures?

One hypothesis is that there are two principal types of social capital: networks and norms. Embeddedness in networks of social capital would be reflected in the associational measures of social capital. In terms of the social capital indices constructed in the SCCB survey, associational measures include involvement in formal groups, community leadership, and protest politics. Measures of personal association (as opposed to public association), specifically the extent of one's social life and the diversity of one's friendships, do not necessarily bring an individual into a civic web of social capital. Religion-based association casts a broader net than personal friendships, but it remains an empirical issue whether relatively homogeneous groups embracing religious convictions often at odds with secular values will contribute positively to civic life. Indices of social trust and interracial trust measure norms and expectations of generalized reciprocity, while the attitudes and behaviors captured in the electoral participation index reflect norms of good citizenship. Religion-based social capital, as constructed in the

⁸ One might take exception to this view: regard for the generalized other is certainly a norm that facilitates collective action.

SCCB data, is a hybrid category, reflecting both networks ("Have you taken part in any sort of activity with people at your church or place of worship other than attending services?") and norms ("Religion is very important in my life"). The same is true of personal giving and volunteering: charitable giving reflects norms of regard for others, while volunteering generally involves the individual in associations beyond his or her circle of personal friends.

Factor Analysis of Social Capital Indices

We put the question of underlying notions of social capital to the test by performing a factor analysis on the indices of social capital contained in the SCCB data.⁹ Because we will use these variables to predict giving and volunteering behaviors, we omit the philanthropy index. The purpose of this analysis is to gauge whether the various indices created by Putnam and his team can be summarized in a small number of broader and meaningful measures of critical dimensions of social capital.

Looking at the data for Los Angeles, the factor analysis of the indices indicates that there are two principal dimensions (factors). These are consistent with the hypothesis that the two principal elements of social capital that underlie the Putnam-inspired indices are networks and norms.¹⁰

The first factor is embeddedness in community networks. Highly correlated with it are the three social capital indices that measure involvement in formal organizations: its correlation with the formal group involvement index is .9495, followed by community involvement and leadership with a correlation of .8875, and protest politics with a correlation of .6873. These are the only indices that achieve a correlation of at least .5 with the first factor; the index of diversity in friendships comes close, though, with its correlation of .4847.

The second factor is most closely related to the two trust indices – social and interracial – and to electoral politics. This dimension can be thought of as "buying into the system," or having norms of trust and participation that facilitate collective action. The second factor's correlation with social trust is .8987, with interracial trust .8878, and with electoral politics .5150.

⁹ An alternative hypothesis can be constructed around the notion of bridging versus bonding social capital. Activities that bring together persons of substantially different backgrounds "bridge" social divides, whereas activities that "bond" persons who have much in common to begin with add to intra-subgroup social capital. From this perspective, the diversity of one's friendships captures bridging social capital, as does interracial trust. Bonding social capital might be reflected in the number of formal group involvements, since these are formed around commonalities such as a veteran's group or a reading group, and involvement with people from one's own place of worship. Other indices are not designed to reflect this distinction: political involvement could be on behalf of one's interest group or on behalf of others, for example, and volunteer work could be done either within one's circle of self-identification (at church, for example) or in service of the generalized other (e.g., in a hospital). Unfortunately, the questions in the survey do not enable one to discern whether the associations are with similarly situated individuals or not. Thus, we were not able to test this alternative hypothesis.

¹⁰ The factor analysis results in five factors with positive eigenvalues. The largest two eigenvalues are 3.1 and .89; the third is only .20. Keeping the two factors with sizable eigenvalues and allowing orthogonal rotation yields results consistent with the hypothesis that the two fundamental types of social capital are networks and norms.

The two indices that are not highly correlated with either factor are personal socializing and religion-based social capital. It may be that socializing contributes to social capital only to the extent that it brings a person into contact with a diverse group of friends, as captured by the diversity index. Religious involvement, in contrast, is a variable with predictive power in many contexts; the low correlation here may be due to limitations of the index itself. In particular, it includes an item on church membership, a concept that varies widely across religious traditions and accounting strategies.^{11,12}

Because of the faith-based index's low correlations in the factor analysis and our mistrust of its membership component, we drop the faith-based social capital index and recompute the factors that underlie the other eight indices of social capital. As before, the first factor can be interpreted as networks of social capital: it is highly correlated with involvement in formal groups (.9388), community leadership and involvement (.8909), and protest politics (.7070), and substantially related to diversity of friendships (.5179) as well. The second factor, interpreted as the norms that facilitate collective action, is most strongly correlated with social trust (.9017), interracial trust (.8869), and electoral politics (.5019). In the analysis that follows, we represent the impact of religious involvement with the inclusion of a separate variable measuring religious attendance.

The factor analysis was repeated with the SCCB's nationally representative sample. There are at least two reasons to do this. First, the comparison between Los Angeles and the nation allows us to search for differences in the nature of social capital across the two populations. Second, we test the interpretation of social capital as reducing to two factors, networks and norms, with a second data set.

The results based on the national sample are strikingly similar to the results obtained for Los Angeles. Again, there are two factors with sizable eigenvalues (2.55 and .98). Again, the first factor reflects networks of social capital. It is highly correlated with involvement in formal

¹¹ Further, church membership is unusually low in Los Angeles, where 50 percent of the sample report being members of a congregation or other spiritual community, far less than the national average of 65 percent. The gap is largest for Los Angeles' white and Hispanic populations, with shortfalls of 12 and nine percentage points respectively. These gaps are larger than the gaps in other measures of religious participation. In the national sample, 50 percent report attending church almost once a week or more, only four percentage points higher than in Los Angeles; for Hispanics, the Los Angeles population falls just five percentage points below the national figure of 54 percent. Similarly, when asked whether they do things with people from church outside of services, there is a five percentage points shortfall for Los Angeles overall, and a six point shortfall among the Hispanic population.

¹² Alternatively, its lack of correlation with other social capital measures could indicate that religious involvement constitutes a third aspect of social capital not correlated with the other indices (for example, "compassion," a religious ideal germane to collective action not captured in the trust-centered norms of the other indices). Because this report treats giving and volunteering behaviors separately from social capital, they are omitted from the factor analysis and the religion index is stranded as a sole measure of compassion, largely uncorrelated with the other measures of social capital available in the data. In fact, the faith-based index is more highly correlated (at .5) with the indices of giving and volunteering than with any of the other social capital indices. The former hypothesis can be tested by extracting a third factor in the factor analysis and seeing whether it is dominated by faith-based social capital. This test fails.

groups (.9441), community leadership and involvement (.8854), and protest politics (.7336). As in the Los Angeles data, the fourth and final index with a correlation above .5 is participation in diversity of friendships (.5228). The second factor encompasses norms and behaviors that reflect "buying into the system" and that facilitate collective action: the factor score is highly correlated with social trust (.8990), interracial trust (.8679), and is also significantly correlated with electoral politics (.5124).

We conclude that the results based on Los Angeles data that the social capital indices are related to networks and norms are not peculiar to the Los Angeles data. Conceptually, the social capital indices in Los Angeles measure the underlying stocks of networks and norms in the same way they do for the national sample. Thus, as we analyze patterns of social capital and its impact on giving and volunteering, we will be relying on these two critical dimensions that underlie social capital. We refer to these factors subsequently as network-based social capital and norm-based social capital.

Social Capital Factors and Philanthropy: Simple Correlations

Having extracted from the SCCB indices our measures of network-based and norm-based social capital, we now ask whether individuals' stocks of social capital are related to their giving and volunteering behavior.

The correlations between individuals' stocks of social capital and their levels of giving and volunteering are shown in Table 4. Social capital and philanthropic behaviors are positively and significantly related to each other. Network-based social capital is especially important. The magnitude of the correlation coefficient is 15 to nearly 50 percentage points greater for network-based social capital and the various measures of giving and volunteering, compared to correlations between norm-based social capital and the measures of philanthropic behavior.

Ne	etwork-Bas	sed Social Capital	Norm-Based Social Capital	
	LA	U.S.	LA U.S.	
Giving to religious causes	.43	.38	.28 .21	
Giving to non-religious causes	.47	.37	.18 .15	
Total giving	.51	.44	.28 .22	
Volunteering	.69	.64	.22 .20	

Table 4: Correlations Between Individuals' Stocks of Social Capital and Their Giving and Volunteering

Of particular note is the high degree of correlation between network-based social capital and volunteering. This underscores the importance of active engagement and involvement, as reflected in the network indicator, to an individual's volunteering.

In every instance, the correlation between social capital and the specific measures of philanthropic behavior is greater in the Los Angeles sample than in the United States sample. In

fact, the correlations between network-based social capital and philanthropic behaviors in Los Angeles are as strong as the correlations among the types of philanthropy themselves.¹³

INDIVIDUAL STOCKS OF SOCIAL CAPITAL

Who is woven into networks of engagement, and who buys into the norms of trust and democratic participation that facilitate cooperative action? To address these questions, we seek to examine which individual characteristics explain the amount of the two social capital factors – networks and norms – that individuals possess. While the theories of what contributes to the level of social capital are not fully developed, there is a belief that the opportunities, benefits, and costs of enmeshing oneself in the fabric of social capital are of critical importance. First, we examine the extent to which such forces influence the levels of social capital in Los Angeles. Then, we explore the extent to which such patterns are distinct from national patterns.

The Model

In an effort to capture the costs and benefits of acquiring social capital, we include a variety of individual attributes that are typically associated with contributing to the stock of social capital. We include a series of socio-demographic and economic variables: education, income, gender, marital status, number of children, race/ethnicity, and age. We also include variables that reflect the position of the household in the community: citizenship, length of residence, and homeownership. Finally, we include behavioral and attitudinal variables, such as the frequency of attending religious services and expressed trust in community leaders, that are hypothesized in the social capital literature to lead to higher stocks of social capital. We consider these explanatory variables in turn.

Education is considered to be a socializing influence as well as an occasion for making contacts. Education lowers the costs of identifying specific avenues of participation and, perhaps through increased efficacy, increases the benefits of engagement. We expect both networks and norms of social capital to rise with education. Given the SCCB data, we measure education as a pair of dummy variables representing pursuing any education beyond high school, and completing at least a four-year college degree.

Income facilitates networking. Transportation, for example, is less likely to prove to be a barrier to involvement in households that can afford a car. We also expect higher-income persons to trust and to participate more; high incomes allow residents access to safe neighborhoods, for example, making trust a simpler proposition. Because income is measured with an open-ended top category that makes it difficult to convert from ranges to point estimates, we measure income with a set of dummy variables. A household is classified as lower, middle, or higher income if its annual income lies below, within, or above the range \$30,000 to \$75,000, respectively.

¹³ In Los Angeles, religious giving and secular giving have a correlation coefficient of 0.48; volunteering and religious giving have a correlation coefficient of 0.44; volunteering and secular giving, 0.38; volunteering and total giving, 0.48. The correlations in the United States sample are: religious and secular giving, 0.42; volunteering and religious giving, 0.41; volunteering and secular giving, 0.29; and volunteering and total giving, 0.43.

Under this definition, 36 percent of the Los Angeles sample is classified as lower-income and another 36 percent as middle-income households. Higher-income households constitute the remaining 28 percent of the sample.

The demography of the household also is considered to impact its members' stocks of social capital. Having children draws adults into child-centered networks. While raising children is a time-intensive activity, the data set measures areas of involvement more than hours of involvement. Within this data set, then, we expect the respondent's embeddedness in networks of social capital to increase with the number of children in the household.

We control for marital status, gender and for age. Some networks are heavily dominated by members of one gender, such as veterans' groups and the recent proliferation of largely female book clubs. Putnam has argued at length that successive generations have lower stocks of social capital, ¹⁴ quite apart from their other circumstances; we control for age effects by including age and age squared in the regressions.

Membership in an ethnic group other than the dominant one might limit access to networks, although it might alternatively give impetus to the formation of ethnicity-centered networks. Minority status is expected to reduce expressed levels of trust if persons have had negative experiences related to their status as minorities. Norms of civic participation might be lower among groups whose members feel their concerns have not been addressed by a government shaped by majority rule. Membership in minority ethnic groups is measured by a series of dummy variables indicating whether a respondent self-classifies as black, Asian-American, or Hispanic.

Citizenship, numbers of years in residence, and homeownership are a series of variables that indicate the extent to which an individual is tied into the community. We would expect that citizenship and homeownership would increase the level of social capital. Those new to the community, i.e., being in the community less than five years, may be cautious, expressing less trust, as they learn what to trust and what not to trust, and they may not have fully developed their eventual set of associational ties. We expected new residents to have less social capital.

Although the faith-based social capital index proposed in the SCCB data did not correlate with other social capital indices in our factor analysis, it is quite possible that some aspect of religious involvement will, when other variables are controlled for, explain our stocks of networking and norm-based social capital. The measure of religious involvement that we use is the one that most closely captures religion-based behavior: attendance at religious services. This is measured by converting the ranges in which the data on religious attendance were collected into a continuous measure of attendance per year. Previous work showing that religious activity is related to positive social behaviors such as giving and volunteering suggest that the effect of religious attendance on social capital will be positive.

¹⁴ Putnam, R. Bowling Alone. 2000.

The preceding variables are hypothesized to impact both norms and networks. There are two additional variables that are specific to the two types of social capital: television viewing and political trust.

It has been hypothesized that the rise of television as a socially isolated source of entertainment is a cause of the decline of social capital. We include the number of hours a respondent claims to watch television on a typical weekday. The arguments about the deleterious effect of television on social capital are arguments about time spent with others; thus, it is included in the network equation. We have no reason to link television habits with norms.

We include a political trust measure in the model of norm-based social capital. The measure is based on the response to the survey question, "The people running my community don't really care much what happens to me." Putnam and others have been careful to point out that political trust and social (interpersonal) trust are conceptually distinct.¹⁵ However, given that the social capital factor reflecting norms also captures the norm-reaffirming behaviors of electoral participation, we hypothesize that persons who agree strongly that community leaders are indifferent to their concerns will display lower levels of norm-based social capital.

Estimation

The equations explaining the two social capital factors are estimated in a seemingly unrelated regressions framework. This method is appropriate when unobserved characteristics affect the levels of the variables to be explained and lead to correlation in the error terms across the two equations. In the present case, we are concerned that some people, for reasons we have not captured, are both more (less) embedded in networks and more (less) possessed of pro-social norms. This estimation technique provides a statistical test of the extent to which the network-based social capital and norm-based social capital are actually linked.

The model is estimated on the SCCB survey's Los Angeles sample and its national sample.¹⁶ The two sets of results will indicate the extent to which the individual determinants of social capital in Los Angeles are reflective of patterns across the nation; in effect, is LA different? As we compare the results it is important to remember that, given the considerably larger number of observations in the national sample with all the information needed for this analysis (2039 vs. 365 in the Los Angeles sample), there are likely to be a greater number of statistically significant results in the national sample.

¹⁵ Putnam, R. 2000, *Bowling Alone*, p. 137.

¹⁶ The descriptive statistics of the two samples are presented in Appendix A. The actual number of observations for the various estimations varies due to missing values for specific questions that are used to construct the variables for the model.

The LA Results

The results based on the Los Angeles sample are reported in two left hand columns of Table 5. The model explains 24 percent of the variation in individuals' stocks of network-based social capital and 37 percent of the variation in norm-based social capital.

Six variables are significant predictors of respondents' stocks of networked-based social capital, at a confidence level of .05 or better. The stock of network-based social capital is higher among persons with at least a four-year college degree, incomes in excess of \$75,000, US citizens, males, and those not married. In addition, this dimension of social capital increases with the frequency of attending religious services. Age is positive and marginally significant (p=.10). None of the racial/ethnicity variables are significant.

In terms of norm-based social capital, we find that eight variables are significant predictors at a confidence level of .05 or better. Norm-based social capital increases with education – both some college and those with a college degree, among US citizens and with the frequency of attendance at religious activities as before. However, in this instance, Hispanics, blacks, and those who are politically alienated have lower stocks of social capital, while residents in the community have higher levels of social capital. Unlike in the network-based social capital results, gender and income are not significant.

As we anticipated, education increases both forms of social capital, consistent with the notion that education has a socializing influence (in terms of social and interracial trust) as well as affecting the degree of association via the relative opportunities and net benefits of engagement. In addition, the importance of relative benefits and costs of participation are reflected in the importance of incomes in excess of \$75,000 in the network-based social capital equation.

Individuals who are citizens have higher levels of both types of social capital, suggesting that they have greater engagement, due to greater access to networks and returns to involvement, as well as a greater degree of trust in their institutions and their community and have buy-in to the values of the community.

In terms of norm-based social capital, Hispanic and black respondents scored significantly lower, by roughly equal amounts. The point estimate of the effect of ethnicity for Asian-Americans was less than half the size for other minority groups and was not statistically significant. As noted above, education has a large positive effect, about one and a half times the effect of race, and some college seems to have as large an effect as a college degree. Lack of political trust, i.e., where the respondent strongly agrees with the statement that the community is run by people indifferent to the respondent's concerns, has a negative and significant effect, almost large enough to offset the effect of education beyond high school. Citizenship increases norms of trust and behaviors related to electoral participation, not surprisingly. Finally, in contradiction to its hypothesized influence, being a new resident leads to higher scores on norm-based social capital.

	Los Angeles					United States							
	Network-	Based So	cial Capit	al Norm-E	Based Soci	al Capital	Network	Based So	cial Capit	al Norm-L	Based Soc	ial Capi	tal
	Coefficient	Std Error	z P>	z Coefficient	Std Error	z P> z	Coefficient	Std Error	z P>	z Coefficient	Std Error	z I	P> z
Some College	0.1647		1.37 0.1			4.77 0.000	0.3498		7.850.0		0.0371	4.350	
College Degree	0.5514	0.1308	4.210.0	0 0.4863	0.1061	4.580.000	0.5852	0.0489	11.96 0.0	00 0.2167	0.4047	5.330	0.000
Middle Income	0.1345	0.1130	1.190.2	34 0.0878	0.0916	0.960.337	0.2758	0.0452	6.100.0	0.0668	0.0378	1.760).078
Higher Income	0.3122	0.1385	2.250.0	0.1334	0.1123	1.190.235	0.5206	0.0598	8.710.0	00 0.1084	0.0500	2.17().030
Female	-0.2311	0.0854	2.710.0	0.0299	0.0693	0.430.666	-0.0511	0.0375	-1.360.1	72 -0.0090	0.0313	-0.290).774
Kids	0.0127	0.0294	0.430.6	65 -0.0128	0.0237	- 0.54 0.588	0.0423	0.0157	2.700.0	07 -0.0220	0.0131	-1.690).092
Married	-0.2068	0.0934	2.210.0	27 -0.0120	0.0756	0.160.874	-0.1176	0.0405	-2.900.0	04 0.1063	0.0338	3.14().002
Hispanic	-0.0276	0.1180	0.230.8	15 -0.3105	0.0951	3.27 0.001	0.1057	0.0548	1.930.0	-0.4053	0.0459	-8.830).000
Asian American	-0.1539	0.1679	0.920.3	59 -0.1294	0.1356	0.950.340	-0.1083	0.1541	-0.700.4	82 0.1420	0.1288	1.10().270
Black	-0.0408	0.1473	0.280.7	32 -0.3127	0.1192	2.620.009	0.1825	0.0513	3.560.0	00 -0.4439	0.0426	10.41().000
Age	0.0254	0.0156	1.630.1	04 -0.0083	0.0126	0.66 0.512	0.0156	0.0064	2.440.0	0.0070	0.0053	1.31().191
Age ²	-0.0003	0.0002	1.590.1	13 0.0002	0.0001	1.820.069	-0.0001	0.0001	-1.940.0	0.0000	0.0001	0.120).908
Citizen	0.2566	0.1307	1.960.0	50 0.2278	0.1057	2.160.031	0.2759	0.0825	3.340.0	01 0.5321	0.0689	7.720).000
New Resident	-0.0884	0.0949	- 0.930.3	52 0.1509	0.0770	1.96 0.050	-0.1544	0.0424	-3.640.0	00 0.0139	0.0354	0.390).695
Homeowner	0.0772	0.0960	0.800.4	21 0.0773	0.0785	0.980.325	0.0107	0.0456	0.240.8	0.1171	0.0380	3.080).002
Religious Attendance	0.0098	0.0020	4.930.0	0.0038	0.0016	2.330.020	0.0057	0.0008	6.840.0	00 0.0032	0.0007	4.57().000
TV Viewing	-0.0097	0.0073	1.330.1	33			-0.0048	0.0026	-1.880.0	60			
Political Alienation				-0.4341	0.0922	4.710.000				-0.3592	0.0495	-7.260).000
Constant	-1.0648	0.3749	2.840.0	05 -0.6465	0.3012	2.150.032	-1.2440	0.1620	-7.680.0	00 -0.9869	0.1353	-7.290).000

Table 5: Network-Based and Norm-Based Social Capital: Los Angeles and the United States

16

# of Observations	365	365	2039	2039
R ²	0.2530	0.4131	0.2087	0.2900
	123.847	255.712	538.066	832.533
χ^2	4	2	7	6
Probability	0.0000	0.0000	0.0000	0.0000
Test of Independence				
χ^2		4.9530		3.6510
Probability		0.0250		0.0560

It is interesting to note that the error terms from the two estimating equations are correlated, but unexpectedly, the correlation is negative. Persons who have inexplicably high levels of networkbased social capital tend to have unexpectedly low levels of norm-based social capital, and vice versa. This is a somewhat surprising result given that the social capital literature implies that involvement and engagement lead to trust and shared values. One explanation is that some associational involvement is "ameliorative," in that it is sought in order to offset negative conditions that lead to low levels of trust. A classic example of ameliorative networking is the formation of neighborhood watch groups by residents who feel their neighborhoods to be unsafe. Such individuals might be observed to display low levels of trust and high levels of associational involvement.

The U.S. Results

The results for the national sample are reported in the right hand columns of Table 5. The estimated model explains 21 percent of the variation in network-based social capital and 29 percent of the variation in norm-based social capital. In terms of the network dimension of social capital, there are 14 significant variables, and in terms of norm-based social capital, there are 12. Recall that with the larger sample size, statistical significance is more easily achieved.

In general, the results from the estimation based on the national sample are quite similar to the Los Angeles results, buttressing the patterns that we have previously discussed. In terms of network-based social capital, education and income increase the level of social capital; although in this instance, both education variables and both income variables are significant. Social capital increases with education, both at the level of some college and with a college degree; the point estimate of the effect of a degree is two-thirds again as big as having some college. Similarly, the coefficient on high-income households is 87 percent larger than the coefficient on middle-income households. Other corroborated results on this facet of social capital are the positive impact of citizenship, and attendance at religious services and the negative impact of being married.

In the national model, we find that several additional variables have a significant positive impact on network-based social capital: number of kids, being Hispanic, being black, age, being a relatively new resident (5 years or less) in the community. In addition, the number of hours spent viewing television has a negative and marginally significant effect (p=.06). The only significant variable in the Los Angeles results that is not significant in the national sample is gender.

Social capital increases with the number of children in the home; this is consistent with the view that having children brings opportunities for involvement (the cost of getting involved falls) and increases the benefits of involvement by conferring benefits on additional family members. Being black or Hispanic is associated with increased stocks of social capital relative to being white. One possibility is that the returns to association are higher for minority populations, for whom associations can help to navigate less racially tolerant environments.¹⁷ The level of social

¹⁷ We return to this hypothesis after discussing the results from the national sample for norm-based social capital.

capital increases with age, but at a declining rate. Social capital is lower for new residents, consistent with the view that newcomers lack the personal connections and information about associational opportunities enjoyed by longer-term residents, and these deficits increase the cost of entering associational networks. And we find that, consistent with Putnam's thesis on the decline of social capital, television viewing is negatively related to networked-based social capital.

In terms of norm-based social capital, the national results are also confirming of the Los Angeles findings. The stock of norm-based social capital increases, as expected, with income, education, citizenship, religious attendance, and trust in community leaders. The stock is lower for those respondents who are black or Hispanic.

Blacks and Hispanics, all else being the same, have lower stocks of norm-based social capital. Given the high correlation of the norm-based social capital variable with measures of trust, it is not surprising that belonging to a minority population lowers one's predicted stock of norm-based social capital. Combined with the result cited above, this analysis suggests that the balance between norms and networks for black and Hispanic Americans is skewed more towards networks than it is for white Americans, and the difference is not due simply to lower levels of expressed trust among members of minority groups.

In the national model, there are some significant impacts on norm-based social capital that are not evidenced in the Los Angeles case: homeownership has a positive and significant impact, and the number of kids has a negative and marginally significant effect (p=.09). In contrast, the impact of new residence exhibited in the Los Angeles results is not replicated with the national data.

The error terms across the equations explaining stocks of the two facets of social capital are negative and statistically significant for the national sample, as is the case with the Los Angeles sample. This means that, on average, a person who displays a higher than predicted stock of one sort of social capital displays a lower than predicted stock of the other. As mentioned above, this seems counter-intuitive from the starting point that association breeds trust and political engagement, a view that suggests that unusually large stocks of associational social capital would be associated with unusually large stocks of trust and political involvement, the elements most closely aligned with the norms-based social capital measure. Rational choice models of social capital accumulation might be better equipped to address this result; persons who find it costly to arrange to live in a way that makes trust an easy proposition may find it relatively inexpensive to invest in specific associational networks that mitigate the effects of a broader low-trust environment.

Whatever the explanation for the negative correlation, it does not appear to lie solely in the behavior of minority populations who respond to less racially tolerant environments by trusting less and investing more in associational safety nets (ameliorative social capital).¹⁸ We estimated

¹⁸ The observed negative relationship for blacks and Hispanics in the national results – more network-based social capital and less norm-based social capital – is consistent with the notion that these individuals in these groups possess high degree of bonding social capital, but less bridging social capital.

the model on a subsample composed of the white respondents in the national sample.¹⁹ The significant negative correlation in the error terms persists. While it may be the case that persons who live in low-trust situations may find greater payoffs in additional associational involvements, racial intolerance is not the omitted variable that explains who is susceptible to low-trust situations. Perhaps, alternatively, there is simply some unmeasured personality trait that makes some people "doers" and others "thinkers."

Summary

The analysis of individual stocks of network-based social capital and norm-based social capital are revealing. First, the underlying models of the individuals' stocks of social capital are remarkably similar for Los Angeles and the nation. This suggests that there is nothing about individuals' attitudes towards civic engagement that distinguishes Los Angelenos from their countrymen, nor is there anything about Los Angeles that dramatically hinders or abets persons in acquiring social capital. In effect, the sizeable aggregate deficits of social capital observed in Los Angeles seem to reflect the composition of its population rather than differences in inclinations to engage or costs of engaging for members of particular social strata. The higher correlations between social capital and philanthropic activity in Los Angeles than in the nation as a whole suggest that persons well positioned to overcome the community-wide obstacles to one form of involvement tend to be well positioned to clear the hurdles to the other as well.

Second, education, income, and religiosity are linked to greater stocks of both network-based and norm-based social capital. This suggests that those with greater access to economic opportunities and resources are also able to build social capital. The capacity to generate greater social capital positions these individuals for even greater access to institutions and networks that increase their quality of life.

Third, the correlation between the equations for the two dimensions of social capital is negative and significant. This result holds for both the Los Angeles and the national sample. This is an unexpected result; we had anticipated that the two forms of social capital would be reinforcing, i.e., that those that are involved and engaged are those who possess greater trust. This result indicates that there is much to be learned about the processes of social capital formation and the behavioral choices that lead to the creation of different forms of social capital. An interesting question is how the two factors influence giving and volunteering.

With a better understanding of the factors that affect the personal stocks of two types of social capital, one based on associations and affiliations and one based on trust and values, we now turn our attention to examining the roles of these two dimensions of social capital in the philanthropic behavior of individuals.

¹⁹ This analysis is conducted on the national sample, rather than the Los Angeles sample, due to sample size.

GIVING AND VOLUNTEERING

We now turn to the influences of social capital on giving and volunteering. The analysis of the determinants of social capital reveal that some of the critical social, demographic, and economic attributes that are known to shape the philanthropic behavior of individuals – gifts of money and time – are also related to individuals' stocks of social capital. As a consequence, two sets of questions arise. First, how important is social capital in explaining charitable behavior? Second, do such salient characteristics as education and race continue to play important roles in explaining giving and volunteering, once social capital has been controlled for?

Putnam's emphasis on the importance of engagement suggests that both giving and volunteering will be positively related to the networking form of social capital. Hodgkinson et al.²⁰ emphasize the importance of being asked in determining who gives and volunteers. Persons with more extensive networks of engagement are likely to be asked more frequently than others, and persons who are asked to give or to volunteer have been found to be more likely to do so than are persons who are not asked.

Putnam's arguments about norms suggest that trust leads to the sort of generalized reciprocity that undergirds civil society. Reciprocity is not at the heart of giving and volunteering. We expect that pro-social norms will be correlated with the pro-social behaviors of giving and volunteering, but the causal nature of the relationship is less obvious.

The model for giving and volunteering that we estimate is based on the extensive literature of the determinants of giving and volunteering. In addition to the network and norm measures of social capital, we include education, income, gender, marital status, number of children in the home, categorical variables for Hispanic, Asian-American, and blacks, age, citizenship, and attendance at religious services.

Income represents a flow of resources that enhance a person's ability to give. Both the probability of giving and the amount given have been found to increase with income. Controlling for income, increased educational attainment has also been found to increase giving and volunteering activity. Religious attendance has been associated with increased levels of giving; some studies have claimed that persons who attend services regularly give more to secular causes as well as more to religious ones.²¹ The number of children at home can be expected to increase the number of family-related opportunities to give and to volunteer that parents encounter. Women and men may be socialized differently in terms of the giving and volunteering habits that are expected of them. Andreoni, et. al. find that husbands and wives do have distinct giving behaviors²²; other studies find that women volunteer more than men.²³

²⁰ Hodgkinson, V., et al. (2003), "Individual Giving and Volunteering," in L. Salamon, ed., *The State of Nonprofit America*. Brookings Institution Press.

²¹ Independent Sector and National Council of Churches, 2002.

²² Andreoni, J, E. Brown and Rischall (forthcoming).

²³ Independent Sector, 2002.

Race, ethnicity, and citizenship variables are included as crude proxies for cultural differences that shape giving and volunteering behavior. Some communities, for example, may stress extensive helping and sharing among its members; if these activities are not mediated by formal organizations, they are likely to fall outside mainstream definitions of giving (to organizations) and volunteering (through organizations) used in the SCCB survey.

Estimation

Recall that we have three distinct measures of charitable behavior in the SCCB survey: religious contributions, secular (non-religious) contributions, and volunteering. Computational limitations preclude our estimating simultaneously three equations for three measures. Thus, our strategy is to estimate in a seemingly unrelated regressions framework a pair of seemingly unrelated regressions for giving (religious and secular combined) and volunteering.²⁴ We expect that the equations are not independent, but rather there are forces not captured in the model that have a positive effect on both giving and volunteering. Then we subsequently explore whether the models of giving vary by whether giving is for religious causes or secular purposes.

Total Giving and Volunteering

The LA Results

The results of the estimation based on the Los Angeles sample are reported in the left hand columns of Table 6. Overall, the model explains 46 percent of the variation in giving and 59 percent of the volunteering, signifying a very good "goodness of fit" for the model, given the micro-level data.

The estimated model indicates that individuals with greater levels of social capital give more and volunteer more. Both network-based social capital and norm-based social capital are positive and significantly related to philanthropic behavior. In addition, frequency of attendance at religious services also increases giving and volunteering. This latter impact is not simply a reflection of the fact that a considerable amount of giving is for religious purposes, but also of the fact that increased religiosity develops values that foster caring and compassion.

²⁴ One of the challenges in estimating giving and volunteering equations is that a rather large number of observations are clustered at zero, i.e., those individuals who do not make any charitable contributions or who do not volunteer. In this instance, an alternative estimation technique is often used. While losing the efficiency of seemingly unrelated regression, this method accounts for the large number of observations heaped at zero giving and volunteering. We estimated the two equations separately with tobit. The results are reported in Appendix D. The tobit estimates provide essentially the same results in terms of what individual attributes influence giving and volunteering. In a few instances, some of the variables that we report below as being marginally significant, increase in significance.

But beyond these variables, the factors that explain giving behavior are not generally the same as those that explain volunteering. For example, giving is greater for those with a college degree, those with higher incomes, those who are married, and those who more frequently attend religious services, while volunteering is greater for those with children and less for blacks.

These findings are quite interesting in that education and income have an effect, independent of social capital, on giving but not on volunteering. And while having children increases volunteering and being black decreases volunteering, neither affects giving.

Clearly, giving and volunteering present some very different options for philanthropic behavior among individuals in different circumstances. While the giving and volunteering equations are positively related, the correlation between the giving and volunteering equations is not particularly high, 0.12.

The U.S. Results

Results of the model estimated with the national sample are presented in Table 6. The estimated model accounts for 41 percent of the variation in the giving equation and 50 percent of the variation in volunteering.

Individuals with greater stocks of network-based social capital give more, but norm-based social capital does not lead to an increase in giving. This latter result is at odds with the LA results. In terms of volunteering, both social capital measures have a positive effect on volunteering, as in the LA case.

Beyond the social capital impacts, giving is greater for those with a college degree, those who have middle and high incomes, and those who attend religious services more frequently as well as those who are currently married, and males. Hispanics have lower levels of giving. Volunteering increases with attendance at religious services, being married, and being female, and is lower among Hispanics. These impacts, in general, mirror the effects in the giving equation. However, females volunteer more and give less.

The correlation in error terms across the two equations is .12, indicating that unobserved attributes make people more generous in contributions of both money and time or less generous with both; independence of the error terms is rejected. This value is virtually identical to the value found for the Los Angeles data. It too is statistically significant.

	Los Ai	ngeles	United States			
	Giving	Volunteering	Giving	Volunteering		
	Coefficient Std Error z P> z	Coefficient Std Error z P> z	Coefficient Std Error z P> z	Coefficient Std Error z P> z		
Network SC	798.4739 143.6453 5.56 0.00	0 1.1450 0.0992 11.54 0.000	558.0066 50.7151 11.00 0.000	1.1179 0.0410 27.27 0.000		
Norm SC	339.0092158.1245 2.150.032	2 0.2007 0.1092 1.84 0.066	20.8796 58.4955 0.360.721	0.2400 0.0473 5.080.000		
Some College	-265.3271299.7486-0.890.376	6 0.1969 0.2071 0.950.342	167.5988 102.6443 1.630.103	-0.1055 0.0830 -1.27 0.204		
College Degree	618.0900341.8175 1.810.07	0.2788 0.2362 1.180.238	566.7905 115.3463 0.000	0.0114 0.0932 0.120.903		
Middle Income	-34.3050272.3910-0.130.900	0.0319 0.1882 0.170.865	308.9486 100.6301 3.070.002	0.0871 0.0813 1.070.284		
Higher Income	1340.8180348.1147 3.850.000	0.1153 0.2405 0.480.632	1565.2990 137.3451 11.40 0.000	0.0861 0.1110 0.780.438		
Female	-187.8449212.1797-0.890.376	6 0.1898 0.1466 1.290.195	-318.8571 85.2778 -3.740.000	0.3667 0.0689 5.320.000		
Kids	100.6037 103.1766 0.98 0.330	0.1209 0.0713 1.700.090	-10.7684 36.6440 -0.290.769	0.0456 0.0296 1.540.123		
Married	496.6812243.9539 2.040.042	2 0.1384 0.1686 0.820.412	179.7206 93.0809 1.930.054	0.1365 0.0752 1.810.070		
Hispanic	-402.0265294.6299-1.360.172	2 -0.1156 0.2036 -0.57 0.570	-809.6372 127.2742 -6.360.000	-0.2186 0.1029 -2.130.034		
Asian American	337.4103426.4377 0.790.429	9 -0.1159 0.2946 -0.390.694	-472.1924 348.2603 -1.360.175	0.0979 0.2815 0.350.728		
Black	290.7036350.4125 0.830.407	7 -0.7427 0.2421 -3.07 0.002	-165.3764 116.3634 -1.420.155	6 -0.0780 0.0941 -0.830.407		
Age	-9.0768 37.4271-0.240.808		22.1311 14.6551 1.510.131	0.0030 0.0118 0.250.803		
Age ²	0.1401 0.3814 0.370.713	3 0.0002 0.0003 0.680.497	-0.1589 0.1532 -1.04 0.299	-0.0001 0.0001 -1.160.248		
Citizen	-50.3332315.0117-0.160.873	3 0.0402 0.2176 0.180.853	-92.1464 185.5015 -0.500.619	0.0678 0.1499 0.450.651		
Religious Attendance	14.2079 5.0709 2.80.005	5 0.2603 0.0035 7.430.000	24.5103 1.9999 12.26 0.000	0.0195 0.0016 12.04 0.000		
Constant	712.3677919.4260 0.438	3 0.8573 0.6352 0.177	-118.0767 372.9091 0.752	0.6940 0.3014 0.021		
# of Observations	256	256	1530	1530		
R²	0.4606	0.5945	0.4119	0.5038		
χ^2	218.6230	375.316	1071.6610	1553.56		
Probability	0.0000	0.0000	0.0000	0.0000		
Test of Independence						
χ^2		3.7080		22.1110		
2 Probability		0.0541		0.0000		

Table 6: Giving and Volunteering: Los Angeles and the United States

Religious and Secular Giving

There is an increasing interest in the role of faith and religious communities in fostering social capital and pro-social behavior. The SCCB survey provides measures of both religious giving and secular giving. Thus, it is possible to examine the extent to which different factors, including the two forms of social capital, influence these two types of giving.

The LA Results

The results for religious and secular giving for the Los Angeles sample are reported in the left hand columns of Table 7. The religious giving model explains 35 percent of the variance, while the secular giving model explains 34 percent.

Religious giving increases with both network-based social capital and norm-based social capital. Network-based social capital increases secular giving, but norm-based social capital does not have a significant effect.

Beyond social capital, religious giving increases among individuals with higher incomes, those who frequently attend religious services, who are married, and who are Asian-American or black. In terms of secular giving, there is a greater generosity among those with higher incomes and those who are married.

Unexplained levels of religious giving and secular giving are positively and significantly related. The correlation is .24.

The U.S. Results

Estimation of the national sample reveals a richer model in the sense that many more factors are significant beyond the social capital measures. The religious giving model explains 38 percent of the variation and the secular giving model explains 25 percent of the variations, both relatively good indicators of goodness of fit.

Religious giving and secular giving both increase with higher levels of network-based social capital; neither type of giving is impacted by norm-based measures of social capital. Thus, what matters for giving is less one's attitudes and trust than the range of one's associations and affiliations.

	Los Ar	ngeles	United States				
	Religious	Secular	Religious	Secular			
Network SC		Coefficient Std Error z P> z 426.5953 57.5318 7.410.000		Coefficient Std Error z P> z 277.2810 23.913111.600.000			
Norm SC	248.4276 96.7176 2.570.010	-10.3721 69.4803-0.150.881	-21.1731 36.5935 -0.580.563	17.0840 28.2088 0.610.545			
Some College	-97.4820192.4741-0.510.613	-14.7674138.2701-0.110.915	140.3400 64.2803 2.180.029	41.5547 49.5517 0.840.402			
College Degree	231.7242210.9908 1.100.272	324.8553151.5722 2.140.032	227.1190 71.4641 3.180.001	229.5086 55.0894 4.170.000			
Middle Income	106.6346 167.9196 0.64 0.525	-38.3995 120.6306 -0.32 0.750	220.0175 63.9055 3.440.001	50.5693 49.2627 1.030.305			
Higher Income	751.9499204.1355 3.680.000	369.0363146.6475 2.520.012	773.7634 84.3033 9.180.000	677.4725 64.986810.420.000			
Female	-90.1840132.3366-0.680.496	-23.1381 95.0684 -0.24 0.808	-181.9069 52.9199 -3.440.001	-89.7791 40.7943 -2.200.028			
Kids	92.7578 65.5288 1.420.157	-16.3016 47.0748-0.350.729	1.6046 22.2111 0.070.942	-10.3934 17.1218 -0.610.544			
Married	282.3449152.7955 1.050.065	392.9749109.7657 3.580.000	136.9145 56.9538 2.40.016	69.8231 43.9039 1.590.112			
Hispanic	-204.5715183.9185-1.110.266	-65.6884 132.1239 -0.50 0.619	-525.1244 78.8325 -6.660.000	-171.1538 60.7695 -2.820.005			
Asian American	625.1172256.1026 2.440.015	59.4091 183.9798 0.320.747	-86.7014 225.7248 -0.380.701	-266.0992174.0041 -1.530.126			
Black	441.0759226.5404 1.950.052	-211.9792162.7429-1.300.193	-50.7562 73.6130 -0.690.491	-110.4118 56.7459 -1.950.052			
Age	-8.5767 24.1658-0.350.723	-11.8113 17.3603-0.680.496	15.6756 9.1367 1.720.086	4.4739 7.0432 0.640.525			
Age ²	0.0682 0.2502 0.270.785	0.2021 0.1797 1.120.261	-0.1388 0.0963 -1.440.150	-0.0137 0.0743 -0.180.854			
Citizen	-2.5101202.0773-0.010.990	-30.7778145.1689-0.210.832	96.3453 117.9034 0.820.414	-56.2448 90.8880 -0.620.536			
Religious Attendance	18.4679 3.1676 5.830.000	-1.1243 2.2756-0.490.621	27.8512 1.212622.970.000	-0.5856 0.9348 -0.630.531			
Constant	199.1377581.9983 0.732	345.7953418.0977 0.408	-485.6296 230.5855 0.035	189.7417177.7511 0.286			
# of Observations	338	338	1892	1892			
R²	0.3495	0.3425	0.3786	0.2517			
χ^2	181.5662	176.0637	1152.9720	636.383			
Probability	0.0000	0.0000	0.0000	0.0000			
Test of Independence							
χ^2		20.4570		114.5600			
Probability		0.0000		0.0000			

Table 7: Religious and Secular	Giving, Los A	Angeles and the Un	nited States

In addition to network-based social capital, religious giving increases with education (both some college and a college degree), with income (both middle and high incomes), with frequency of attendance at religious services, and with age. It is higher among males and among married persons. The level of religious giving is lower among Hispanics. Secular giving increases with education (college degree) and income (high income), and is higher among males. The secular giving of blacks and Hispanics is less than that of whites, all else being constant.

The tobit estimates of the national sample reveal some potential influences in terms of secular giving that the seemingly unrelated regression technique does not. Recall, this technique provides more efficient estimates by taking account of the nature of the dependent variable, i.e., it has a sizeable number of observations clustered at zero since there are many individuals who do not give, either for religious or secular purposes. The results are provided in Appendix E. Norm-based social capital has a positive and significant impact on secular giving. In addition, some college education, middle income, and being married exhibit positive impacts on secular giving; and number of kids and being Asian-American (p=.07) have negative impacts.

The correlation in error terms across the two equations is .25, indicating that unobserved attributes make people more generous in both or less generous in both; independence of the error terms is rejected. In spite of the rather different "giving functions" for religious giving estimated in the LA and nationally representative data sets, the correlation in errors for the national sample is .25, virtually identical to the value found for the Los Angeles data. It too is statistically significant. Also, note that the correlation between the two forms of giving is twice that of the correlation between total giving and volunteering.

Summary

What does this analysis of giving and volunteering across the samples and with the focus not only total giving, but religious and secular giving as well, tell us?

First, social capital matters. Given the consistent significance across all models, what matters most is network-based social capital. It matters for total giving, religious giving, secular giving, and volunteering; and it matters for the Los Angeles sample and the national sample. This is not to say that norm-based social capital does not matter. It does. Its influence, however, is not robust across samples and the various dimensions of philanthropic behavior. It seems to have the most influence in Los Angeles in terms of total giving, religious giving, and volunteering. Nationally, its impact is limited to volunteering.

This suggests that stocks of social capital that matter most for philanthropic behavior reside in persons who are involved and engaged, i.e., the doers, rather than those that merely have high degrees of social and interracial trust. Curiously, in addition to engagement, norm-based social capital matters for philanthropic behaviors for Angelenos. This suggests, to the extent there is a lack of trust, that it will negatively affect giving and volunteering behaviors.

Second, education and income, in addition to their impact via social capital, also shape philanthropic behavior directly. Education increases giving, both in terms of total giving,

religious giving, and secular giving nationally, and in terms of total giving and secular giving in Los Angeles. Income also has an impact on giving – total, religious, and secular – both in Los Angeles and nationally. Interestingly, neither education nor income has an independent impact on volunteering. This suggests that, while the greater financial resources reflected in these variables matter to monetary giving, they do not capture the forces that shape the costs and benefits of volunteering.

Third, the one area where there are considerable differences in patterns of impact between the Los Angeles sample and the national sample is in terms of the individual's race and ethnicity. Nationally, Hispanics give less – in terms of total, religious and secular giving – and volunteer less than whites. In Los Angeles, blacks volunteer less but give more for religious purposes than whites, and Asian-Americans give more for religious purposes than whites.

The different patterns may reflect the fact that we are not controlling for the racial mix of the community. In Los Angeles, Hispanics are a substantial percentage of the population, and as such might have considerably greater opportunities, involvement and connections to the causes towards which philanthropic behavior is directed, thus not being significantly different than whites. On the other hand, Hispanics are a rather smaller percentage of the communities in the national sample, suggesting that their access and involvement may be less, leading to lower levels of giving and volunteering.

Interestingly, blacks volunteer less in Los Angeles, but give more to religious causes and purposes. This suggests the strong role of the faith-based organizations in the black community in Los Angeles, but perhaps less confidence in the secular nonprofit organizations as revealed by their weak propensity to give to secular causes. The importance of the faith-based organizations is also evidenced in the Asian-American community, where religious giving is higher among this group than for whites, but lower, in the tobit estimated equation, for secular giving. When a racial/ethnic group is a minority in terms of numbers, religious institutions seem to be a vehicle for connecting.

Fourth, frequency of attendance at religious services is consistently significant in impacting total giving, religious giving, and volunteering, both in Los Angeles and nationally. This suggests that in addition to networks, education and income, household demographics, and race and ethnicity, those who practice their faith have a greater propensity to be philanthropic in terms of both money and time, and for religious and secular purposes.

KEY RESULTS AND THEIR IMPLICATIONS FOR GOVERNANCE

When the Social Capital Community Benchmark survey results were announced in 2001, Los Angeles stood out as a city with striking deficits in its stocks of social capital. Understanding these deficits and their causes and consequences for governance in Los Angeles is critical.

In previous work,²⁵ we have shown that much of Los Angeles' measured deficit is attributable not to defects in the city's institutions so much as to its attractiveness to persons who are in the early stages of building the associational ties that constitute networking social capital. Controlling for length of residence and for citizenship status, for example, leaves Los Angeles looking like a fairly typical American metropolis.

In this paper, we explore further the demographic characteristics that lead Los Angeles residents to be embedded in civic networks and to express trust in their fellow citizens. We also chart for the first time the links between individuals' social capital and their charitable behavior. We highlight several key results of this analysis, and discuss their implications for governing in Los Angeles.

SOCIAL CAPITAL AND PHILANTHROPY

Individuals' embeddedness in social capital is more highly correlated with their philanthropic behavior in Los Angeles than in the country as a whole.

Whatever it is that makes Los Angeles difficult as a community seems to handicap and to advantage the same persons in one form of engagement – social capital – as in the other – philanthropic behavior. Further research is required to see what features of Los Angeles might constitute these barriers (e.g., access to transportation, fears for personal safety, and the anonymity of a very large city). An optimistic interpretation of this correlation is that policies that engage Angelenos as citizens may develop them as philanthropists as well.

SOCIAL CAPITAL

Education is a driving force in levels of social capital.

 Education is a key predictor of an individual's level of engagement in associational networks. In both the Los Angeles and nationally representative samples, having at least a four-year college degree is associated with a level of network-based social capital that is far above--a full six standard deviations above--the sample average.

Formal education has long been known to be a key determinant of workplace success. The results of this study underscore that education affects not only a person's stock of productive human capital, but the stock of associational social capital as well. Educated citizens tend to

²⁵ Brown and Ferris, (2001).

be actively engaged citizens. For Los Angeles, this study emphasizes the importance of an effective school system at all levels up to and including a four-year college degree.

• Education is a key predictor of the extent to which individuals "buy into the system" as measured by their expressions of trust in others and their participation in the electoral system.

In the national data, individuals with some education beyond high school, including those with a college degree or more, had stocks of norm-based social capital more than two standard deviations above the average. In Los Angeles, the relationship between education and norm-based social capital is even stronger. Persons with a college degree or with at least some education beyond high school had stocks of norm-based social capital more than five standard deviations above the average.

There are many possible explanations for the positive relationship between education and networks and norms. The policy recommendation that education receive high priority emerges from the analysis, regardless of whether school is a locus for making contacts (lowering the cost of forging associational bonds), for increasing appreciation of other persons and civic institutions (increasing the perceived benefits of civic engagement), and/or for learning to navigate formal organizations and to compete successfully for limited positions of leadership (lowering the costs of participation).

Self-identification as African-American or Hispanic American is associated with lower levels of norm-based social capital and with higher levels of associational social capital.

The result that, in the nationally representative sample, African-Americans and Hispanics have lower measured trust and participation in electoral politics, and yet higher levels of associational social capital, constitutes an important footnote to the social capital literature. It is generally thought that higher levels of civic engagement are associated with higher levels of expressed trust and electoral participation. This pattern does not hold for the nation's two largest minority groups.

While a detailed exploration of this finding lies outside the scope of the current study, we suggest two possible explanations. First, it may be that minority respondents in the SCCB survey are disproportionately located in cities; it has been shown that levels of expressed trust are lower in large cities (Brown and Ferris 2001), and it may be that cities hold concentrations of minority populations large enough to offer a wealth of opportunities for associational engagement. Second, a rational-choice perspective suggests that if minority status brings with it reasons to harbor less social trust, the optimizing response may be to invest more in networks that can offset the negative effects of a less trust-worthy environment.

In Los Angeles, self-identification as Hispanic or African-American is again associated with lower levels of norm-based social capital, but there is no offsetting higher level of network-based social capital. One possible explanation for the latter observation is that Los Angeles' black and Latino populations center their associational lives around the church to a greater degree than is observed elsewhere. Another possibility is that the vast scale of Los Angeles imposes higher logistical costs to engagement in networks than is found in communities in which distance and transportation form less formidable barriers to association.

PHILANTHROPY

In questions of philanthropy, social capital matters.

 Network-based social capital matters most. It matters to total giving, religious giving, secular giving, and volunteering; it matters in both the Los Angeles sample and the national sample.

Much has been written linking social capital to civic participation and economic growth. A key finding of this study is that embeddedness in a community's social capital is strongly linked to individuals' charitable activity as well. In Los Angeles, a one-standard-deviation increase in a person's embeddedness in associational networks predicts an increase in annual charitable giving of roughly \$700.

 Norm-based social capital exhibits positive links to individuals' philanthropic behaviors as well.

In Los Angeles, norm-based social capital is linked to higher levels of charitable giving, with the effect working through giving to religious causes rather than through support to secular ones. It is also linked to higher levels of volunteering. In the national sample, there is a highly statistically significant relationship between volunteer activity and stocks of norm-based social capital, but no evidence of a relationship between giving money and this dimension of social capital.

These results suggest that philanthropic behavior in the United States is positively related to social capital, and that in the context of philanthropy it is engagement in networks that matters. Curiously, in addition to engagement, norm-based value matters for philanthropic behaviors for Los Angelenos. This suggests that a lack of trust will negatively affect giving and volunteering behaviors. In this light, it is discouraging both that LA has low levels of measured trust overall and that having lived in LA for at least 5 years is associated with less trust than is expressed by those newly arrived.

A college degree continues to be an important predictor of charitable giving, even when social capital is controlled for.

Education is an important predictor of an individual's embeddedness in social capital. Beyond its role in social capital formation, education has an additional positive impact on charitable giving. In the national sample, a college degree is statistically significant in the equations explaining religious, secular, and total giving; obtaining a college degree, all else being equal, is predicted to raise annual charitable giving by \$567. In the smaller Los Angeles sample, the point estimates of college's impact on giving are as large as the estimates in the national sample, but

they achieve statistical significance only in the secular giving equation and marginal significance (p=.071) in the total giving equation.

In contrast, the link between education and volunteering that has been reported elsewhere appears, at least in this data set, to work entirely through the effect of education on social capital. Once social capital has been controlled for, education exerts no further influence on an individual's involvement in volunteering.

Donations of money increase with income.

Income also has an impact on giving – total, religious, and secular – both in Los Angeles and nationally. Like education, income has no independent impact on volunteering. This suggests that while income may represent greater financial resources that enable individuals to be more generous in terms of their charitable contributions, it may also reflect higher wages that make gifts of volunteer time more costly.

Frequency of attendance at religious services is consistently significant in increasing volunteering and religious giving in both Los Angeles and the nation.

While church attendance does not increase secular giving, its effect on religious giving does not come at the expense of other giving; its effect on total giving is significantly positive. This suggests that in addition to networks, education and income, household demographics, and race and ethnicity, those who practice their faith have a greater propensity to be philanthropic in terms of both money and time, and for religious and secular purposes. Religious attendance is an instance in which networks and norms intersect: religious observance brings people together even as it reinforces the psychology of giving – the values of caring and compassion – that lie at the heart of many religious teachings.

The patterns of giving and volunteering for racial and ethnic minorities vary. Hispanics in Los Angeles have giving and volunteering behavior similar to whites, although in the national sample they demonstrate lower levels. On the other hand, blacks and Asian-Americans give more to religious causes than do whites, and blacks volunteer more. This latter result suggests an important role of religious institutions in the public lives of citizens who self-identify as something other than white and are in minority positions.

One area where there are considerable differences in patterns of impact between the Los Angeles sample and the national sample is in terms of the individual's race and ethnicity. Nationally, Hispanics give less (both in terms of total, religious, and secular giving) and volunteer less than whites. There is no compelling evidence of such a difference in Los Angeles. Not only are the coefficients on Hispanics statistically insignificantly different from zero; they have point estimates roughly half the size of the corresponding estimates obtained from the national data. In Los Angeles, blacks volunteer less broadly but give more for religious purposes than whites; and Asian-Americans give more for religious purposes than whites.

The different patterns may reflect the fact that we are not controlling for the racial mix of the community. In Los Angeles, Hispanics are a substantial percentage of the population, and as

such might have considerably greater opportunities, involvement, and connections to the causes towards which philanthropic behavior is directed, thus not being significantly different than whites. On the other hand, Hispanics are a rather smaller percentage of the communities in the national sample, suggesting that their access and involvement is less and hence they have lower levels of giving and volunteering.

The results for blacks suggest the strong role of the faith-based organizations in this community in Los Angeles, but perhaps less confidence in the secular nonprofit organizations as revealed by their propensity to volunteer across a narrower range of activities. The importance of the faith-based organizations is also evidenced in the Asian-American community, where religious giving is higher among this group than for whites, but lower, in the tobit estimated equation, for secular giving. When a racial/ethnic group is a minority in terms of numbers, religious institutions seem to be a vehicle for connecting.

APPENDIX A:

		Los A Unweighted	ngeles Weighted	US Unweighted	Weighted	
	of respondent:					
	% male	46	48	40	48	
(% female	54	52	60	52	
Age:						
	18-34	37	38	32	32	
-	35-49	34	33	33	32	
:	50-64	17	16	21	20	
(65 and older	12	13	14	16	
Languag	ge of interview:					
	% English	84	78	94	96	
(% Spanish	16	22	6	4	
Citizensl	hip:					
	% US citizens	81	74	93	95	
Deco/Etl	huisite					
Race/Eth	% white	42	35	64	75	
	% African American	12	9	17	12	
	% Asian American	8	14	2	2	
	% Latino/Hispanic	39	43	17	11	
			10	1,		
Urban/R		20	20	27	24	
	% central city of MSA	29 71	29 71	37 22	34 21	
	% other, central county of MSA % suburban county of MSA	n/a	/ 1 n/a	22 20	21 20	
	% not in MSA	n/a	n/a	20	20 25	
	/0 not in WSA	11/ a	11/ a		25	
Educational Attainment:						
	Less than high school	14	26	10	17	
	High school diploma/GED	19	15	29	25	
	Some college	25	21	23	20	
	Associate or technical degree	9	7	9	8	
	Bachelors degree	16	16	15	17	
	Some graduate training	5	4	3	3	
	Graduate degree	13	11	11	10	

Selected SCCB Survey Data, Los Angeles and National Samples, Unweighted and Weighted

Income:				
Less than \$30,000	36	41	34	32
\$30,000 to \$75,000	36	33	46	46
\$75,000 or more	28	25	20	21
+·····				
Homeowner status:				
% own	50	48	70	73
Religious preference:	25	25	47	47
Protestant	25	25	47	47
Catholic	39	44	27	26
Other Christian	14	11	11	11
Jewish	4	3	1	1
Other	4	5	3	3
No religion	14	13	11	12
Employment status:				
Working	66	62	65	64
Temporarily laid off	3	2	2	2
Unemployed	4	5	3	3
Retired	12	13	15	17
Permanently Disabled	2	2	4	4
Homemaker	9	12	7	7
Student	5	5	3	4
Marital Status:				
Never married	32	31	23	21
Widowed	6	6	8	21
Divorced	12	9	13	10
Separated	5	5	3	2
Currently married	44	49	53	59
Cohabitation among unmarried:	24	22	21	9.5
% living with partner	26	32	21	25
Kids in household:	~ 4	50	F <i>C</i>	
None	54	50	56	57
1	17	17	18	17
2	18	19	16	15
3-4	11	12	9	9
5 or more	2	2	1	1

APPENDIX B: SOCIAL CAPITAL COMMUNITY BENCHMARK SURVEY INDICES OF SOCIAL CAPITAL

Social Trust. Six questions go into the social trust index. One is the question on general trust, "Would you say that most people can be trusted, or that you can't be too careful in dealing with people?" The other five are about trusting people encountered in specific community-based contexts. Respondents are asked whether they trust "a lot, some, only a little, or not at all" the "people in your neighborhood;" "people you work with;" "people at your place of worship;" "people who work in the stores where you shop;" and "the police in your local community." The questions are weighted equally and scores were standardized by subtracting the mean and then dividing by the standard deviation of the national sample for each question.

Racial Trust. Respondents are asked whether they trust "a lot, some, only a little, or not at all" people in each of four racial/ethnic categories, and the responses to categories other than the respondent's are equally weighted in computing an index of racial trust.

Diversity of Friendships. This index counts how many of eleven types of friends the respondent says are represented in the set of people that includes "everyone that you would count as a PERSONAL FRIEND, not just your closest friends." The eleven categories cover people who: own their own business; are manual workers; have been on welfare; own a vacation home; have a different religious orientation (not Protestant, Catholic, Jewish, depending on the respondent's affiliation, or who is very religious, if the respondent gave "no religion" as an affiliation); are white; are Latino or Hispanic; are Asian; are black /African American; are gay or lesbian; and those who can be described as community leaders.

Formal Group Involvement. This counts the number of kinds of groups the respondent has been involved with in the 12 months prior to the interview. Two versions of this index are calculated, varying in whether they include an item asking about taking part in "any sort of activity with people at your church or place of worship other than attending services." The 18 questions included in both versions of the index cover the following kinds of groups: an organization affiliated with religion other than a place of worship; an adult sports or outdoor activity club or league; youth organizations such as scouts or youth sports leagues; a parents organization or other school support group; a veteran's group; a neighborhood association; organizations for seniors; a service-providing charity organization; a labor union; a professional or trade association; service clubs or fraternal (sorrorital) associations; ethnic, nationality, or civil rights groups; a literary or fine arts group; other hobby or pastime (e.g., investing, gardening) societies; support groups and self-help groups for persons with specific problems; groups that meet only over the Internet; and other clubs or organizations. To avoid duplication of items incorporated into the faith-based social capital index, we use the Formal Group Involvement index that excludes the question on activities with people from the respondent's place of worship.

Faith-Based Social Capital. Four items are used for the construction of this index. They are: whether or not the respondent is a member of a local religious community; frequency of attendance at religious services, measured in five ranges from at least every week to less than a few times per year; whether or not the respondent had participated in an activity other than

services with people from his or her local religious community in the past 12 months; and whether the respondent was involved with a religious group other than his or her congregation.²⁶ An alternative index is available that also includes charitable contributions to religious causes, standardized by the national mean and standard deviation; and number of times volunteered, also standardized by the national sample's mean and standard deviation.

Organizational Activism. This score builds on four items. The first of these is the version of the Formal Group Involvement index (described above) that does not include church-based activities. Also included is the number of times in the past 12 months the respondent attended a club meeting, and the number of times he or she attended any meeting at which school or town affairs were discussed. The fourth item asks whether the respondent has served as an officer or served on a committee of any local club or organization. The index value is described in the codebook as consisting of "the factor score resulting from a principal components analysis" of these four variables.

Informal Social Interactions. This index is based on the answers to five questions about socializing over the past twelve months. Respondents are asked how many times they played cards or board games with others, visited with relatives, entertained friends at home, socialized with friends in public places, and socialized with co-workers outside of work. Their scores on each question are standardized by the national mean and standard deviation. The index is the mean value of the standardized scores.

Giving and Volunteering. Respondents were asked two questions about charitable contributions and a longer series of questions about volunteer activities. Contributions of "money, property or other assets for a wide variety of charitable purposes" in the past twelve months were queried first for religious causes and then for all "non-religious charities, organizations, or causes." Responses were coded into six ranges, from "none" to "more than \$5,000." Volunteering was defined as "any unpaid work you've done to help people besides your family and friends or people you work with." The first question asked how many times in the past month the respondent had volunteered. If the respondent indicated a positive amount of volunteering, a series of six questions asked if any of the volunteering was for a specific cause. The six areas of volunteer activity queried are: for one's place of worship; for health care or fighting particular diseases; for school or other youth-centered programs; to help the poor or the elderly; for the arts or other cultural organizations; for any neighborhood or civic group. The number of volunteer activities is converted to a monthly measure, and the index is computed as the average of the scores on the two contributions questions, number of times volunteered monthly, and, for each of the activity areas, dummy variables indicating whether the individual volunteered.

Electoral Politics. This index is based on five questions relating to interest in and involvement in electoral politics. Two yes-or-no questions are whether the respondent is registered to vote

²⁶ For this analysis we adopted the measure of faith-based engagement that does not contain information on religion-focused giving and volunteering. In a research context that demands the most comprehensive measure of faith-based social capital, the broad index is a natural choice. However, for a study that focuses explicitly on philanthropy and the links to social capital, it is appropriate to the narrower faith-based social capital index so as to avoid having the same questions influence more a social capital index and the giving variable.

and whether he or she voted in the most recent (1996) presidential election. One question asks how many days last week the respondent read a newspaper; this is divided by seven to produce an answer that can range from zero to one. The respondent is asked to name the two senators from her state; partial credit is given for getting close to a correct name, and again the scores are standardized so that getting both correct confers one point and neither even approximately correct confers zero points. The fifth question asks whether the respondent is "not at all interested," "only slightly interested," "somewhat interested," or "very interested" in politics and national affairs. The answers are scaled to range from zero to one. The index is then the average of these five scores.

Activist (or "Protest") Politics. This measures issue-related involvement in politics beyond general electoral participation, with all questions referring to the previous twelve-month period. Respondents are asked whether they have signed a petition; attended a political meeting or rally; and/or have participated in demonstrations, boycotts, or marches. Three further questions ask about involvement with politically active groups such as labor unions; ethnic, nationality or civil rights groups; and other public interest or political action groups or party committees. A seventh question asked whether any group in which the respondent was involved had taken any local action for social or political reform. The index is calculated as the mean of the answers to these questions.

APPENDIX C Correlations Among Eight Indices of Social Capital and the Two Principal Factors, "Networks" and "Norms," Extracted From Them

A. Los Angeles

-	"Net-	"Norms"	racetrst	divrsity	grpinvlv	schmooz	elecpol2	protest	macher	soctrust
	Works"									
"Networks"	1.0000									
"Norms"	0.1271	1.0000								
racetrst	0.1513	0.8869	1.0000							
divrsity	0.5179	0.4246	0.3288	1.0000						
grpinvlv	0.9388	0.2226	0.2553	0.4495	1.0000					
schmooz	0.3617	0.2010	0.1847	0.2921	0.2806	1.0000				
elecpol2	0.4490	0.5019	0.3248	0.3750	0.3951	0.1450	1.0000			
protest	0.7070	0.1783	0.1689	0.3776	0.5994	0.2255	0.4073	1.0000		
macher	0.8909	0.1625	0.2161	0.3979	0.7882	0.3101	0.3461	0.4842	1.0000	
soctrust	0.2038	0.9017	0.6814	0.3096	0.3222	0.1485	0.4124	0.1926	0.2586	1.0000

B. United States

"Networks"	1.0000									
"Nnorms"	0	.0888 1	.0000							
racetrst	0.1086	0.8679	1.0000							
diversity	0.5228	0.2468	0.2037	1.0000						
grpinvlv	0.9441	0.1106	0.1320	0.4126	1.0000					
schmooz	0.2476	0.0393	0.0924	0.2548	0.1560	1.0000				
elecpol2	0.3962	0.5124	0.3116	0.2462	0.3600	-0.0216	1.0000			
protest	0.7336	0.1348	0.1408	0.3490	0.6166	0.0931	0.3620	1.0000		
macher	0.8854	0.1264	0.1466	0.3857	0.7722	0.2212	0.3053	0.5237	1.0000	
soctrust	0.1148	0.8990	0.6219	0.1875	0.1566	0.0373	0.3713	0.1124	0.1789	1.0000

APPENDIX D: Giving and Volunteering: Los Angeles and the United States Tobit Estimates

		Los Ang	jeles	United States			
	Giving		Volunteering	Giving	Volunteering		
	Coefficient	Std Error $z P > t $	Coefficient Std Error z P> t	Coefficient Std Error z P> t	Coefficient Std Error $z P > t $		
Network SC	856.0938	125.3291 5.560.000		621.9637 48.4370 11.00 0.000			
Norm SC	321.2397	157.8272 2.150.043		86.9778 58.7844 0.360.139			
Some College	-49.7936	311.3581-0.890.873		236.9141 102.5395 1.630.021	0.0223 0.1657 -1.27 0.893		
College Degree	702.8660	335.9996 1.810.037		550.4654 112.2856 0.000			
Middle Income	342.2854	272.3061-0.130.210	0.7284 0.5020 0.170.148	412.6270 102.6021 3.070.000	0.2312 0.1663 1.070.165		
Higher Income	1411.4090	328.1774 3.850.000	0.5038 0.6257 0.480.421	1637.7560 132.9020 11.40 0.000	0.2396 0.2155 0.780.266		
Female	-175.9351	211.1575-0.890.405		-294.9140 83.9051 -3.740.000	0.6278 0.1382 5.320.000		
Kids	141.5839	105.3022 0.980.180	0.2137 0.1063 1.700.045	-30.0884 35.5674 -0.290.398	0.0887 0.0578 1.540.125		
Married	659.1051	245.3820 2.040.008	0.2043 0.4040 0.820.613	264.0421 90.4116 1.930.004	0.3352 0.1520 1.810.028		
Hispanic	-436.4939	293.7045-1.360.138	-0.5858 0.4794 -0.570.223	-776.7518 126.2591 -6.360.000	-0.5560 0.2086 -2.130.008		
Asian American	656.6985	402.5907 0.790.104	0.1280 0.6341 -0.390.840	-512.9721 365.6185 -1.360.161	-0.3019 0.5778 0.350.601		
Black	287.8234	354.2359 0.830.417	-1.8863 0.5892 -3.07 0.002	-126.0779 116.4674 -1.420.279	-0.1067 0.1819 -0.830.557		
Age	-19.8997	39.4306 -0.24 0.614	0.0164 0.0733 -0.950.824	23.6839 14.5212 1.510.103	-0.0082 0.0235 0.250.726		
Age ²	0.2535	0.4075 0.370.534	-0.0004 0.0008 0.680.632	-0.1678 0.1523 -1.04 0.271	-0.0002 0.0002 -1.16 0.498		
Citizen	196.5207	953.8915-0.160.558	0.8720 0.6207 0.180.161	48.7299 192.6374 -0.500.800	0.7003 0.3515 0.450.047		
Religious Attendance	24.6042	5.0591 2.80.000	0.0708 0.0095 7.430.000	33.7903 1.9143 12.26 0.000	0.0457 0.0034 12.04 0.000		
Constant	-323.9671	919.4260 0.734	-4.3284 1.8358 0.019	-963.8409 368.4504 0.009	-1.9559 0.6291 0.002		
# of Observations		338	285	1892	1728		
Pseudo R ²		0.0400	0.2949	0.0359	0.1921		
χ^2		205.10	227.63	1065.9400	1039.94		
Probability> χ²		0.0000	0.0000	0.0000	0.0000		
Log likelihood	-	2462.2221	-272.0795	-14325.8840	-2187.0523		

APPENDIX E: Religious Giving and Secular Giving: Los Angeles and the United States Tobit Estimates

	Los A	ngeles	United States			
	Religious	Secular	Religious	Secular		
Network SC Norm SC Some College College Degree Middle Income Higher Income Female Kids	Coefficient Std Error z P> t 422.9372 103.7616 4.08 0.000 303.4071 130.9601 2.57 0.021 -141.9308 256.4875 -0.51 0.580 222.1549 278.2925 1.10 0.425 344.7044 226.7153 0.64 0.129 972.0491 278.0224 3.68 0.001 -148.3539 176.6498 -0.68 0.402 103.0742 62.8603 1.42 0.102	Coefficient Std Error z P> t 585.0513 81.7908 7.410.000 35.5814 106.1504 0.150.738 74.2159 214.2250 0.110.729 613.2303 227.5556 2.140.007 219.4098 187.0226 0.320.242 658.6627 218.2868 2.520.003 -57.8120 140.4115 0.240.681 -8.0122 68.5954 0.350.907	Coefficient Std Error z P> t 347.6760 38.6124 7.610.000 28.9963 47.1168 -0.580.538 146.7501 82.1763 2.180.074 203.9153 90.1162 3.180.024 314.3125 82.6782 3.440.000 936.2380 107.1271 9.180.000 -224.3621 67.3644 -3.440.001 6.2217 28.4116 0.070.827	Coefficient Std Error z P> t 433.9352 31.0688 1.60 0.000 129.4019 38.8266 0.61 0.001 164.4555 66.3303 0.84 0.013 365.7306 72.3594 4.17 0.000 194.3612 67.0294 1.03 0.004 873.2697 85.6774 10.42 0.000 -105.8380 54.2517 -2.20 0.051 -46.1786 23.6596 -0.61 0.051		
Married Hispanic Asian American Black Age Age ² Citizen Religious Attendance Constant		418.1273 159.6191 3.580.009 -145.5275 188.7172 -0.50 0.441 55.9292 265.0434 0.32 0.833 -353.2395 235.2401 -1.30 0.134 1.6691 26.7154 -0.68 0.950 0.1124 0.2750 1.12 0.683 479.6491 244.7689 -0.21 0.051 -1.0158 3.3976 -0.49 0.765 -1205.4840 657.8073 0.068	-673.7936 102.4742 -6.66 0.000 -129.1120 275.3514 -0.38 0.639 51.7008 92.3013 -0.69 0.575 14.5129 11.5117 1.72 0.208 -0.1081 0.1201 -1.44 0.368 47.4029 153.3296 0.82 0.757 39.9282 1.5600 22.97 0.000			
# of Observations Pseudo R² χ² Probability> χ²	343 0.0376 163.53 0.0000	349 0.0475 181.15 0.0000	1922 0.0420 1072.59 0.0000	1968 0.0305 711.27 0.0000		
Log likelihood	-2093.0902	-1814.5754	-12220.8	-11309.059		