

# **The Relationship between Social Capital and Income Generation amongst Indians in South Africa:**

**an exploratory and comparative study in  
post-Apartheid South Africa**



Assignment presented in partial fulfilment of the requirements for the degree of Master of  
Philosophy (Political Management) at the University of Stellenbosch

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## Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

## Abstract

Despite the abolition of Apartheid in 1994, the entrenched effects of discriminatory policies remain prevalent in terms of socio-economic inequalities between racial groups in South Africa. Nevertheless, throughout the Apartheid era the Indian population of South Africa seems to have maintained a distinct economic advantage when compared to Africans and Coloureds. This dynamic is indeed puzzling as these three racial groups were all subject to discriminatory Apartheid legislation. In an attempt to find an appropriate explanatory variable for this trend, I turn to the notion of social capital (social networks and the norms of reciprocity and trustworthiness that arise from them). Arriving in South Africa in 1860 as indentured labourers on Natal's sugar plantations, the Indian community in South Africa indeed continues to display distinct dynamics with regards to social organization in the post-Apartheid era. In light of these dynamics, this study aims to assess the relationship between levels of social capital and income generation amongst the African, Coloured and Indian communities in South Africa. It is hypothesized that a distinct set of associational networks within the Indian community, shaped by a specific historical trajectory, are directly related to the heightened income generation capacity of this racial group.

The various dimensions of social capital assessed in this study include: membership of voluntary organizations, informal social ties, participation in religious organizations and trust. Findings indicate that it is particularly within the realm of informal social ties that Indians derive a distinct economic advantage. The effect remains once the impact of education is taken into consideration. This exploratory study therefore makes a valuable contribution towards the analysis of social capital within South Africa's different race groups, allowing for more valid indicators to be developed in the future. Future studies will need to identify the seeds which need to be planted if social capital is to grow organically, not only *within*, but more importantly *between* race groups. This will no doubt make a lasting contribution towards addressing the widespread socio-economic challenges currently faced by South Africa's emerging democracy.

## Opsomming

Ten spyte van die afskaffing van Apartheid in 1994, is die gevolge van diskriminerende wetgewing in terme van sosio-ekonomiese ongelykhede tussen bevolkingsgroepe in Suid Afrika nog steeds sigbaar. Nietemin het die Indiër bevolking van Suid Afrika, in vergelyking met Kleurlinge en Swartes, gedurende Apartheid 'n duidelike ekonomiese voorsprong behou. Hierdie dinamika is inderdaad verwarrend aangesien al drie hierdie bevolkingsgroepe aan diskriminerende Apartheidswetgewing onderworpe was. In 'n poging om 'n toepaslike verklarende veranderlike vir hierdie tendens te vind, ondersoek hierdie studie sosiale kapitaal (sosiale netwerke en norme van wederkerigheid en vertroue). Die Indiër bevolking, wat in 1860 as kontrakarbeiders op Natal se suikerplantasies in die land aangekom het, toon inderdaad selfs na die afskaffing van Apartheid nog spesifieke tendense met betrekkeng tot hulle onderlinge sosiale bande. Teen die agtergrond van hierdie dinamika het hierdie studie ten doel om die verband tussen vlakke van sosiale kapitaal en inkomstegenerering onder Swartes, Kleurlinge en Indiërs te ontleed. Die hipotese word gestel dat 'n duidelike stel gemeenskaplike netwerke onder Indiërs, gevorm deur spesifieke historiese gebeure, direk verbandhou met hierdie bevolkingsgroep se verhoogde kapasiteit vir inkomstegenerering.

Die verskillende dimensies van sosiale kapitaal wat in hierdie studie ontleed word, sluit in: lidmaatskap van vrywillige organisasies, informele sosiale bande, deelname aan Godsdienstige aktiwiteite en vertroue. Die studie bevind dat veral informele sosiale bande aan Indiërs 'n duidelike ekonomiese voorsprong bied. Hierdie bevinding bly onveranderd selfs nadat die invloed van opvoeding in ag geneem word. Hierdie verkennende studie lewer dus 'n waardevolle bydrae tot die ontleding van sosiale kapitaal tussen verskillende bevolkingsgroepe in Suid Afrika en baan sodoende die weg vir die ontwikkeling van meer geldige aanwysers in die toekoms. Sulke studies sal die saad moet identifiseer wat geplant moet word om die organiese groei van sosiale kapitaal te stimuleer, nie net *binne* nie, maar meer belangrik *tussen* bevolkingsgroepe. Dit sal sonder twyfel 'n blywende bydrae lewer om die sosio-ekonomiese uitdagings wat Suid Afrika se ontwikkelende demokrasie tans ondervind, volledig aan te spreek.

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# Contents

<b>Chapter 1: Introduction: Social capital in post-Apartheid South Africa.....</b>	<b>1.</b>
<b>1.1 Background</b>	1.
<b>1.2 Literature Overview</b>	2.
<b>1.3 Research Question</b>	7.
<b>1.4 Research design and methodology</b>	7.
<b>1.5 Conceptualisation</b>	8.
1.5.1 Independent variables	8.
1.5.1.1 Social capital	8.
1.5.1.2 Human capital	8.
1.5.2 Dependent Variable	9.
1.5.2.1 Income generation	9.
<b>1.6 Operationalization</b>	9.
1.6.1 Independent variables	9.
1.6.1.1 Social Capital	9.
1.6.1.1.1 Participation in voluntary civic organizations	10.
1.6.1.1.2 Participation in religious organizations	11.
1.6.1.1.3 Informal Social ties	12.
1.6.1.1.4 Trust	13.
1.6.1.2 Human capital	14.
1.6.2 Dependant Variable	14.
1.6.2.1 Income	14.
<b>1.7 Overview</b>	15.
 <b>Chapter 2: Historical analysis of path-dependency: the evolution of social capital amongst three racial groups.....</b>	 <b>16.</b>
<b>2.1 Introduction</b>	16.
<b>2.2 Indian arrival in Natal</b>	17.
<b>2.3 The reconstitution of the caste system on foreign soil</b>	18.
<b>2.4 Group formations within a hostile external environment</b>	21.
2.4.1 Political formations	21.
2.4.2 Spatial dimension of Indian group formation	23.
2.4.3 Coloured vs. Indian group integration	24.
<b>2.5 The role of education</b>	26.
<b>2.6 The aftermath of Apartheid</b>	27.
<b>2.7 Subgroups within the Indian Community: Bonding or bridging</b>	29.
<b>2.8 Applicability of middleman theory in South Africa:     implications for social capital</b>	30.
<b>2.9 Social capital amongst Africans in South Africa</b>	31.
<b>2.10 Overview</b>	33.

<b>Chapter 3: Empirical analysis.....</b>	<b>35.</b>
<b>3.1 Introduction</b>	35.
<b>3.2 Dimensions of Social Capital: Trust</b>	36.
3.2.1 Measuring trust without context: possible pitfalls	36.
3.2.2 Findings	37.
<b>3.3 Dimensions of Social Capital: Membership of voluntary organizations</b>	39.
3.3.1 Findings	39.
<b>3.4 Dimensions of Social Capital: Religious participation</b>	40.
3.4.1 Findings	40.
<b>3.5 Dimensions of Social Capital: Informal social ties</b>	41.
3.5.1 Justifying the use of informal social ties	41.
3.5.2 Findings	42.
3.5.3 Relative importance of different dimensions within racial groups	42.
3.5.4 A closer look at informal social ties	44.
<b>3.6 Controlling for education</b>	46.
<b>3.7 Analyzing the impact of religion within the Indian population</b>	48.
<b>3.8 Determining the unit of analysis</b>	49.
<b>3.9 The need for triangulation</b>	51.
 <b>Chapter 4: Conclusion.....</b>	 <b>53.</b>
<b>4.1 Key findings, limitations and future recommendations</b>	53.
 <b>Bibliography.....</b>	 <b>57.</b>
 <b>Appendix A</b>	 <b>65.</b>
<b>Appendix B</b>	<b>66.</b>
<b>Appendix C</b>	<b>67.</b>

## List of Tables and Figures

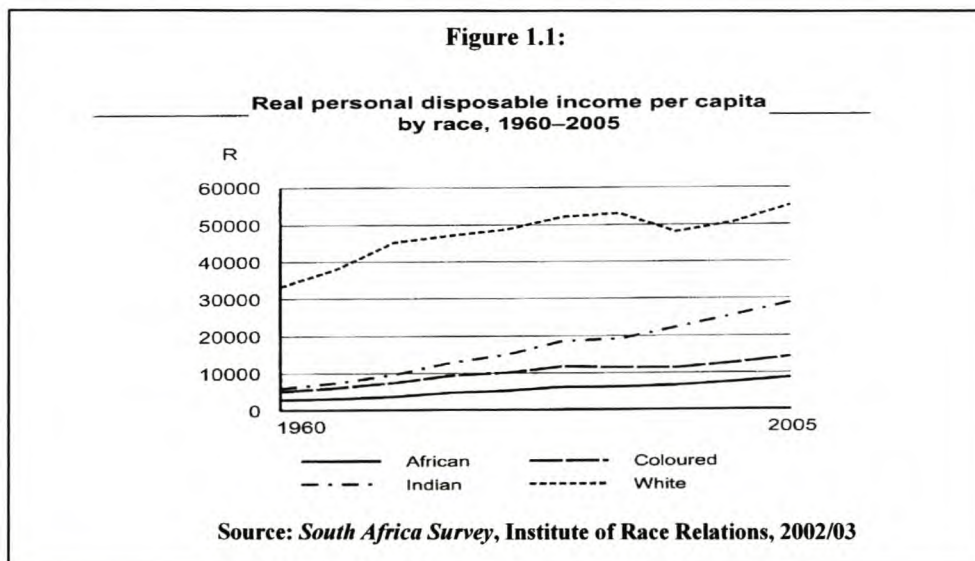
<b>Table 2.1: Per Capita expenditure on education in South Africa</b>	26.
<b>Table 3.1: Trust (a)</b>	38.
<b>Table 3.2: Trust (b)</b>	38.
<b>Table 3.3: Membership of voluntary organizations</b>	39.
<b>Table 3.4: Religious Participation</b>	40.
<b>Table 3.5: Informal Social Ties</b>	42.
<b>Table 3.6: Relative strengths of dimensions of social capital amongst racial groups</b>	43.
<b>Table 3.7: Different types of Informal Social Ties and their relative importance amongst racial groups (Full sample)</b>	45.
<b>Table 3.8: Different types of Informal Social Ties and their relative importance amongst racial groups (Chief wage earners)</b>	45.
<b>Table 3.9: OLS regression of Income (Africans)</b>	47.
<b>Table 3.10: OLS regression of Income (Coloureds)</b>	47.
<b>Table 3.11: OLS regression of Income (Indian)</b>	47.
<b>Table 3.12: OLS regression of Income (Indian)</b>	49.
<b>Table 3.13: Informal Social Ties (Means on a 5-point scale)</b>	50.
 <b>Figure 1.1: Real personal disposable income per capita by race 1960-2005</b>	 1.
<b>Figure 2.1: The ratio of the Number of University Students per 1 000 population</b>	27.
<b>Figure 3.1: Individual Sources of start-up assistance for South African Entrepreneurs</b>	51.

# 1. Introduction: Social capital in post-Apartheid South Africa

## 1.1 Background

After the abolition of Apartheid policies in 1994, the entrenched effect of this segregated legacy continues to define the everyday lived reality of millions of South Africans. It is particularly within the socio-economic realm that inequalities both within and between racial groups remain a salient feature of the South African landscape. In the figure below, published in the *South Africa Survey* (2002/03) of the Institute of Race Relations, the racially defined nature of income distribution in South Africa once again becomes strikingly clear. Simultaneously, however, the figure reveals some interesting trends which call for closer analysis.

The fact that the real per capita income of white South Africans far surpasses that of the other three racial groups is self-evident in light of South Africa's discriminatory past<sup>1</sup>. Yet a comparison between the remaining three racial groups (Africans, Coloureds and Indians)<sup>2</sup> seems to reveal some interesting trends. Why, one may ask, does the Indian population show a consistent trend of higher per capita income, despite having been subjected to similar discriminatory policies during the Apartheid era?<sup>3</sup> More surprising perhaps, is the fact that even after 1994, where at least on an official level the playing field was levelled, the Indian population continues on its upward trend in relation to the African and Coloured communities in South Africa<sup>4</sup>.



<sup>1</sup> Amongst the copious literature on Apartheid see Beinart and Dubow (1995) and Meredith (1988).

<sup>2</sup> The use of the terms African, Coloured, White and Indian does not signify the author's approval of the categorization of people into racial groups. Race, however, remains an important source of social and political division in South Africa and it is in this context that the abovementioned terms are applied.

<sup>3</sup> Also see Appendix A (AMPS Survey) for an analysis of household income categories and race in 2002 and 2004, which clearly shows that Indians enjoy considerable socio-economic advantage over Africans and Coloureds. For further statistics on income distribution amongst different racial groups in South Africa, see Van den Berg and Louw (2003:1-20).

<sup>4</sup> A recent South African Institute of Race Relations study (2004/05) has shown that Indian household income has even overtaken whites in five provinces. This study, however, has been widely criticized for its methodological shortcomings by an array of Indian academics. Further analysis of the shortcomings of this survey is undertaken in Chapter 4.

In an attempt to find an appropriate explanatory variable for this trend, I turn to the notion of social capital. Arriving in South Africa in 1860 as indentured labourers on Natal's sugar plantations, the Indian community in South Africa indeed continues to display distinct dynamics with regards to social organization in the post-Apartheid era. It is these internal dynamics and their relationship to income generation which this study wishes to address. It is hypothesized that a distinct set of associational networks within the Indian community, shaped by a specific historical trajectory, are directly related to the heightened income generation capacity of this racial group in the aftermath of Apartheid.

## 1.2 Literature Review

It was the work of Robert Putnam that first launched the concept of social capital as a focus of intensive research and policy discussion<sup>5</sup>. Putnam *et al.*'s book-length study of Italy, *Making Democracy Work* (1993), showed how centuries-old regional differences in civic culture and social capital impacted on the success of regional government reforms that were initiated in 1970. This study clearly demonstrated the importance of social capital in ensuring economic development as well as the effective functioning of democracy.

So too, Putnam's *Bowling Alone* (2000) caught the world's attention with its quantitative evidence of the steady decline in social capital in America since the 1960s<sup>6</sup>, as measured by participation in many different kinds of civil and political activities. These trends are especially striking in view of the steady increase in levels of education over the same period (Putnam, 2000: 18).

The central premise of social capital is that social networks have value. Social capital refers to the collective value of all social networks (who people know) and the inclinations that arise from these networks to do things for each other (norms of reciprocity). The term therefore emphasises a wide variety of specific benefits that flow from the trust, reciprocity, information, and cooperation associated with social networks (Cohen and Prusak, 2001:65). In this way value is created for people that are connected and - at least sometimes - for bystanders as well. Indeed, there is considerable evidence that communities

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<sup>5</sup> Although the concept only reached widespread salience in 1990s through the work of Putnam, the theories of social capital originated in the nineteenth-century classics of sociology and became prevalent through the works of sociologists Pierre Bourdieu (1970) and James Coleman (1988, 1990). For a discussion of the history of the 'social capital' concept, see also Baron *et al.* (2000).

<sup>6</sup> For contrary evidence to Putnam about the vigour of civil society in America, see Wuthnow (1996).

with a good stock of social capital are more likely to benefit from lower crime figures, better health, higher educational achievement, and better economic growth (Putnam, 2000: 296-306, 307-318)<sup>7</sup>.

The concept of social capital has also been utilized by the World Bank which has argued that “increasing evidence shows that social cohesion is critical for societies to prosper economically and for development to be sustainable” (The World Bank, 1999: 12). It is within this context that this study will attempt to analyze social capital in South Africa, hoping to gain some clarity on the impact of this elusive concept on income generation within different racial groups. In short, to what extent is the development of social ties within and between communities a necessary prerequisite if development objectives in South Africa are to be met and equality amongst racial groups is to be achieved? In light of the extreme social dislocation which Apartheid brought about, this is indeed of extreme relevance.

The link between social capital and income generation is derived from the fact that reciprocal human interactions have proven to be highly productive: two farmers exchanging tools can get more work done with less physical capital; rotating credit associations can generate pools of financial capital for increased entrepreneurial activity; and job searchers can be more efficient if information is embedded in social networks. Indeed, the popularity of the concept seems to be directly linked to the growing idea amongst economists that there is more to understanding economics than simply calculating the effects generated by rational economic behaviour of individual consumers and producers. It has become increasingly evident that economics seems to be more embedded in social structure than previously given credit for (Schoorman, 2003:991-992)<sup>8</sup>. Among the most enthusiastic supporters it therefore became commonly accepted that social capital provided, perhaps not the most important explanatory variable, but at least the missing link in terms of achieving developmental objectives.

Although research on social capital has largely been limited to the United States, its relevance with regards to development objectives is clearly international in scope<sup>9</sup>. In America, urban renewal and public housing policies, along with the exodus of black middle classes from the inner city, have depleted stocks of available social capital, and thus impaired school performance, job referral as well as drug and crime

<sup>7</sup> For an interesting analysis of the effect of social capital on education, see Brofenbrenner *et al.* (1984:64-72) as well as Coleman and Hoffer (1987). For contrary evidence to Coleman and Hoffer, see Morgan and Sorensen (1999:661-81). See also The World Bank (1999) for the impact of social capital on developmental objectives. Sampson and Morenoff (1997:1-22) give insight into the relationship between crime and social capital in American neighbourhoods. Social capital also has a crucial role to play in democratic consolidation, see Kotzé and Du Toit (2005:243-334).

<sup>8</sup> This point is also emphasized by Cohen and Prusak (2001:66).

<sup>9</sup> Although Putnam's (2000) study of social capital in American communities is one of the most dominant studies in the field, equally interesting studies have been undertaken in the developing world, see Narajan and Pritchett (1999:871-97) as well as Grootaert (1999:1-28).

avoidance. It has also been shown that equal opportunity strategies and social welfare programmes are unlikely to succeed unless they can be coupled with ways to replenish remaining stocks of social capital such as those represented by the black church (Sirianni and Friedland, 2003:1-7)<sup>10</sup>. Valuable lessons can therefore be learnt from these American studies with regards to dealing with social problems in South Africa.

Another study which has particular relevance in the South African context is an in-depth and perceptive analysis of community organizing in America. It examines the Texas network of the Industrial Areas Foundation (IAF)<sup>11</sup>, and emphasizes the benefits of mobilizing social capital through religious institutions and building new social capital across communities, particularly across racial lines (Warren, 1995). Indeed, alliances that cross race and class lines have proven extremely important to the success of social and political movements (Tarrow, 1994; Skocpol, 1992). It is in line with this dynamic that Putnam's (2000:22)<sup>12</sup> notion of bridging (between communities) and bonding (within communities) social capital is of extreme relevance. Portes and Landolt (1996:18-21) also highlight this "downside of social capital" in which social ties simply promote parochial interests, thereby essentially becoming a liability<sup>13</sup>.

It becomes clear that not all analysts view social capital as the proverbial holy grail, with divisive criticisms having emerged<sup>14</sup>. Research was therefore undertaken by Maluccio *et al.* (1999) which contributed to this debate in the South African context. The goal of this study was to determine the strength of the causal relationship, if any, between one proxy for social capital, membership to formal and informal groups, and household welfare in South Africa between 1993 and 1998. A similar methodology was followed to Grootaert (1999) and Narayan and Pritchett (1999) who investigated the link between social capital and income in Indonesia and Tanzania respectively.

<sup>10</sup> For more insight into the role of the church within the African American community, see Harris (1994:42-68); Lincoln and Mamiya (1990); Pattillo-McCoy (1998:767-84).

<sup>11</sup> The IAF is a national network of over forty community-based organizations in urban centers, considered to be one of the most successful community organizing networks in America. IAF professional organizers work with church leaders to build local organizations that address such issues as affordable housing, job training, school reform, and community policing. The 'members' of the local organizations are churches; but they are not coalitions in the usual sense. The IAF draws leaders (mostly women) out of the community through church networks. These participants then become active in the local organization directly, not as representatives of their churches (Warren, 1995:65).

<sup>12</sup> Putnam (2000:22) ascribes the first usage of the terms 'bonding' and 'bridging' to Gittel and Vidal (1998:8).

<sup>13</sup> This dynamic will be analyzed further in Chapter 2, with particular reference to South Africa.

<sup>14</sup> For an in-depth analysis of some of the most salient criticisms of the social capital concept, see Schuurman (2003:991-1010). See also Portes and Landolt (1996:18-21).

As Maluccio *et al.* (1999:4) note, there are a number of reasons why one might expect social capital to contribute towards income generation in South Africa in the 1990s. The notion of 'ubuntu'<sup>15</sup>, which loosely translates into "I am because you exist", is ingrained throughout many cultures in South Africa and is seen as an expression of community life and collective responsibility (Maluccio *et al.*, 1999:5). Although this notion has been invoked in support of several post-1994 government initiatives, years of Apartheid, appear to have undermined this "conceptualisation of humanness" (Maluccio *et al.*, 1999:6) to some extent. Conradie (1992:57), for instance, has shown that 'ubuntu' has been severely eroded by the enforcement of pre-1994 Apartheid legislation, with the imposition of institutions designed to ensure the political control of African communities.

Maluccio *et al.*'s (1999) research drew on a panel data set of 1,200 Kwa-Zulu Natal households interviewed in 1993 and then again in 1998. It found that household-level social capital had no significant impact on expenditures in 1993, but a positive and significant one in 1998, with returns to education also having increased over the period. Comparing the impact of a 10% change in 1998 household-level social capital, with that of the same change in education, however, indicated that the latter had an effect three times as large. Thus, while the impact of social capital is strong, it did not appear to be as large as that of human capital (i.e. education) in this setting (Maluccio *et al.*, 1999:7).

A major weakness of Maluccio *et al.*'s (1999) study, however, was that it merely focussed on households in Kwazulu Natal, making wider inferences to the South African population as a whole highly problematic. So too, the study fails to distinguish between different racial groups in South Africa, preventing a more contextualized analysis of findings. A further weakness in the above study was that the formulation of an index of group membership was all-inclusive and did not distinguish between different dimensions of social capital<sup>16</sup>. In the current study I thus wish to create indices analyzing different dimensions of social capital *individually*, which is naturally useful for the development of effective policy responses.

When analyzing social capital in South Africa, a note of caution is however once again necessary. As stated above, it is important to note that despite the apparent usefulness of the concept of social capital in explaining certain societal trends, various critiques have increasingly cast a shadow over the initial

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<sup>15</sup> For more insight into the concept of 'ubuntu', see Harber (2004), Louw (2002) and Mbigi (2000)

<sup>16</sup> Mallucio *et al.* (1999:2) highlight this weakness.

euphoria of having found the missing link in the process of underdevelopment. Critics argued that from a politico-emancipatory point of view the use of social capital in either academic and/or policy-oriented research, in fact involved a denial of the importance of power inequality and struggle over resources (Schuurman, 2003:992). Harris (2002:120) warns that the usage of the social capital construct is “consistent with the neo-liberal agenda of reducing the role of the state, partly in order to make possible large cuts in public expenditure”. He goes on to note that social capital can be seen as a good example of what Ferguson (1990) baptized as the “anti-politics machine”.

Schuurman (2003:997-8) argues that in the aftermath of the Cold War, the failure of the ‘blessings’ of free trade and capitalism in bringing relief to developing countries left the West seeking a form of justification. Western nations increasingly started pointing out the internal political and cultural deficiencies within the Southern countries which played a role in the continuation of poverty, corruption and warfare. Social capital therefore started to play a role in a sort of Western triumphalism towards the South in the sense that Western culture apparently harboured the ‘right’ kind of social capital, which sustained capitalist development and the creation of democracy. The alleged absence of civic virtue, or having the ‘wrong’ kind of social capital, on the other hand, became emphasised as a convenient developmental explanatory factor<sup>17</sup>.

In order to avoid getting trapped in such essentialist notions of ‘deficient’ cultures, I wish to place my study within a historical framework which takes full cogniscence of the structural, political and cultural dimensions of poverty within South Africa’s different racial groups. Putnam *et al.* (1993) also embraced the idea of path dependence as a sort of epistemological-methodological framework in their study of social capital in Italy. As noted previously, they found that social patterns plainly traceable from early medieval Italy to today turned out to be decisive in explaining why, on the verge of the 21<sup>st</sup> century, some communities are better able than others to manage collective life and sustain effective institutions. An amusing and telling passage in Putnam’s book relates the story of how a good-willed civil servant desperately wonders what can be done when the roots of the problem date back to the 12<sup>th</sup> century (Putnam *et al.*, 1993:120). It is therefore vital that in this proposed study of the relationship between social capital and income generation in South Africa, the trends which emerge are placed within a historical framework that allows for a more nuanced analysis.

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<sup>17</sup> See also Fine (2001) with regards to how the World Bank embraced the social capital concept, leading to what Schuurman (2003:997) refers to as the “domestication of critical social science”.

### 1.3 Research Question

In light of the above cursory overview, I wish to assess the relationship between levels of social capital and income generation amongst the African, Coloured and Indian communities in South Africa. The main focus will be on the Indian population, with Africans and Coloureds included for comparative purposes. I thus wish to understand to what extent differential levels of income generation in post-Apartheid South Africa can be explained in terms of the effective utilization of social ties within these previously disadvantaged racial groups.

### 1.4 Research design and Methodology

This exploratory study<sup>18</sup> will rely on secondary data analysis<sup>19</sup> of the World Values Survey (WVS)<sup>20</sup> undertaken in South Africa in 2001, two years after the second democratic election. The WVS survey utilized a probability sample, with all South Africans 16 years and older having an equal chance of being selected. Stratified sampling was used with individuals being drawn from homogenous subsets of the population. Due to the Indian population forming a relatively small component of the South African population (3% according to 2001 census), it was necessary to oversample the Indian sub-group, therefore allowing significant effects regarding parameters such as social capital within the Indian community to emerge<sup>21</sup>. The fieldwork for this study took place between March and May 2001 and involved face to face interviews with 3000 individuals.

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<sup>18</sup> In an exploratory study, the researcher's goal is to formulate more precise questions for future researchers to address (Neuman, 1994:18). Indeed, in Chapter 3 and 4, various shortcomings with regards to the operationalization of key concepts within the field of social capital are identified and recommendations made to address these. As Neuman (1994:18) notes, in an exploratory study, researchers need to ask creative questions and take advantage of *serendipity*, those unexpected or chance factors that have larger implications.

<sup>19</sup> When undertaking secondary data analysis, the researcher makes use of previously collected information (Neuman, 1994:29) - in the current study, WVS data was used. This type of analysis, however, proves problematic in that one has no control over the operationalization of key concepts within the survey. So too, the quality of one's data is highly dependent on whether the survey company followed stringent data collection methods. In the case of the WVS in South Africa, data was collected by Markinor.

<sup>20</sup> For more on the World Values Survey, see [www.worldvaluessurvey.org](http://www.worldvaluessurvey.org).

<sup>21</sup> A more detailed explanation is perhaps necessary here: When one is faced with drastically unequal population sizes of important groups (as is the case with racialized groups in South Africa), then, in order to have sufficient numbers of cases in the less well represented groups, one oversamples them. The consequence of this is that one must use weighted data whenever one wishes to estimate any parameter for the society as a whole. However, the whole reason for oversampling Indians in the first place was to have sufficient numbers of cases to compare parameters estimated for this group. Hence, when comparing the effects of social capital for Indians with those of other groups, it is necessary to use unweighted data, especially if one is relying on tests of significance as these are a function of the *actual* sample sizes, rather than the *weighted* sample sizes. To reiterate, the use of unweighted data is justified as my results are not being inferred to the entire South African population, but rather to the individual race groups. An important limitation which should be noted, however, is that the sample was stratified not only according to race, but also in relation to other features such as gender, province etc. As a result, slight distortions may be prevalent in the unweighted data with regards to these dimensions. As noted above, the study is therefore to a certain extent subject to the limitations posed by secondary data analysis. Nevertheless, it is believed that in spite of these limitations, the approach which was taken will yield reliable and valid results (Thiessen, 2005, personal communication).

## 1.5 Conceptualization

### 1.5.1 Independent variables

#### 1.5.1.1 Social capital

A concise conceptual definition of social capital is provided by Putnam (2000:19):

Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections amongst individuals – *social networks and the norms of reciprocity and trustworthiness that arise from them* (emphasis added).

Putnam also notes that social capital is closely related to what some have called ‘civic virtue’. Yet the difference is that social capital focuses on the fact that civic virtue is most powerful when embedded in a network of “reciprocal social relations”. Indeed “a society of many virtuous but isolated individuals is not necessarily rich in social capital” (Putnam, 2000:19)<sup>22</sup>

A further succinct conceptual definition of social capital is provided by Cohen and Prusak (2001:36):

Social capital consists of the stock of active connections among people: the trust, mutual understanding, and shared values and behaviours that bind the members of human networks and communities and make cooperative action possible.

#### 1.5.1.2 Human capital (Education)

In any study wishing to explain differential income levels, the concept of human capital (in the form of education<sup>23</sup>) cannot be ignored. This concept will therefore be one of the major controls in assessing the relationship between social capital and income amongst racial groups. The best known application of the idea of human capital in economics can be found in the works of Mincer (1958) and Becker (1964). According to this view, human capital is similar to physical means of production, e.g. factories and machines. One can invest in human capital (via education, training etc.) and one’s income depends partly on the rate of return on the human capital one owns (Becker, 1964:98-100).

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<sup>22</sup> This ‘relational’ aspect of social capital is also highlighted by Norris (2002:3)

<sup>23</sup> It should be noted that other researchers have conceptualized education as ‘cultural capital’ - forms of knowledge, skills, education or any other advantages a person may have which gives them higher status in society. Bourdieu (1986) identified different dimensions of cultural capital, with parents providing children with the ‘embodied’ dimension: the attitudes and knowledge that makes the educational system a comfortable and familiar place in which they can succeed easily. This is indeed a fascinating dynamic which could yield interesting results within the South African context, particularly when analyzed in relation to social capital.

## **1.5.2 Dependent Variable:**

### **1.5.2.1 Income generation**

Within the scope of this study, I will limit myself to a single dependent variable (monthly income of households). Although the list of social issues which have become directly or indirectly linked to social capital has grown rapidly in recent years<sup>24</sup>, I will be dealing with income generation due to its direct link to developmental objectives in South Africa and the crucial role which it has to play in bringing about equality between racial groups. Yet it is clear that there is also an inherent weakness in this approach. As Cohen and Prusak (2001:9) have commented, not everything of value should be measured in economic terms. There is thus the acute danger of skewing our assessment of social phenomenon and goods towards purely monetary considerations. Indeed, the notion of social capital brings with it a whole set of discourses and inevitably links it (although perhaps incorrectly) to capitalism. Nevertheless, given the exploratory nature of this study and the limitations inherent in the data, the use of the income variable was seen as the most appropriate.

## **1.6 Operationalization**

### **1.6.1 Independent variables**

#### **1.6.1.1 Social Capital**

The operationalization of the social capital concept has varied extensively across studies<sup>25</sup>, yet within this “terminological jungle” (Nohria, 1992:3) I have decided to loosely follow Putnam’s (2000) division of social capital into various dimensions. These include participation in voluntary organizations<sup>26</sup>, religious organizations, informal social ties<sup>27</sup> as well as levels of trust<sup>28</sup>.

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<sup>24</sup>See the literature review for an overview of the many benefits ascribed to social capital.

<sup>25</sup> Norris (2002:9) notes that there is considerable uncertainty regarding the most appropriate operationalization of social capital. Nevertheless, she opts for creating a social capital index, combining the ‘membership to voluntary organizations’ and ‘trust’ items of the 1995 WVS. The Index correlated fairly evenly across the two items, although slightly more strongly towards social trust. By contrast, Maluccio *et al.* (1999) measured household social capital in South Africa with an index consisting of the following dimensions: density (the number of group memberships in the household), gender heterogeneity (percentage of the groups which were mixed gender), performance (the average reported performance of these groups). Critical insights are also given by Edwards and Foley (1998:124-139), who make a convincing case for restricting empirical research on social capital to the structural dimensions (i.e. associational ties) and eliminating the cultural components (i.e. trust and reciprocity).

### 1.6.1.1.1 Participation in voluntary organizations

Putnam found participation in voluntary organizations to be a crucial dimension of social capital, with participation in these “social structures of cooperation” constituting what may be termed civic engagement (Putnam *et al.*, 1993:89-89). This notion of civic engagement corresponds with Shils’ (1991:14) conception of “norms of civility” in which individuals give “precedence to the interest of the collectivity over the individual or parochial interest”.

An index was constructed using an array of organizations listed in the 2001 WVS:

*Please look carefully at the following list of voluntary organizations and activities and say...which, if any, do you belong to?*

- |   |   |
|---|---|
| 1) Social welfare services for elderly,<br>handicapped or deprived people                 | 8) Professional Associations                      |
| 2) Education, arts, music or cultural activities  | 9) Youth Work (e.g. scouts, guides, youth clubs)  |
| 3) Labour Unions  | 10) Sports or recreation                          |
| 4) Political parties or groups  | 11) Women’s groups                                |
| 5) Local community action on issues like<br>poverty, employment, housing, racial equality | 12) Peace movement                                |
| 6) Third World development or human rights  | 13) Voluntary organizations concerned with health |
| 7) Conservation, the environment, ecology, animal rights                                  | 14) Other groups                                  |

**(Yes answers coded 1, Not Mentioned coded 0)**

<sup>26</sup> This dimension is inherently problematic in that the types of voluntary organizations may vary extensively in terms of their purpose and functions. Putnam (2000:49) therefore divided voluntary organizations into three categories: community based (social, civic and leisure groups), church-based (church attendance etc.) and work-based (labour unions, professional associations etc.). For simplicities sake, the current study combines work-based and community-based organizations into a single ‘voluntary organization’ category, while, due to the distinctive dynamics attached to religious participation, it is measured separately.

<sup>27</sup> These informal social ties are distinguished from participation in voluntary organizations as they take place outside of an official organizational structure.

<sup>28</sup> In addition to ‘trust’, Putnam (2000:350-363) also analyzed another important dimension of social capital, namely ‘tolerance’. Indeed one could argue that the ‘tolerance’ item has particular relevance in South Africa with regards to building bridging social capital between different racial groups. However, due to the fact that this study addresses the relationship between social capital and income generation rather than between social capital and democratization, the ‘tolerance’ item was excluded. Although tolerance indeed has a role to play in democratic consolidation processes (see Kotzé and Du Toit, 2005:265), it is doubtful that the mere “willingness to put up with ones opponents” would lead to an increased propensity to engage in commercial activity with them. After all, what is at stake here is an individual’s livelihood. Indeed, it is far more likely that generalized social trust would elicit such commercial interactions, hence the inclusion of the ‘trust’ item in the analysis.

The index was constructed using standard scores<sup>29</sup> for the above items (Chronbach's Alpha<sup>30</sup> = .669)<sup>31</sup>. The index provides a mean score for each case (i.e. total score for all of the items divided by the number of items).

#### 1.6.1.1.2 Participation in religious organizations

Putnam (2000) found that faith communities in which people worship together are arguably the single most important repository of social capital in America. The church consists of people: "It's not a building; it's not an institution even. It is a relationship between one person and the next" (Putnam, 2000:66). Churches therefore provide an important incubator for civic skills, civic norms, community interests, and civic recruitment. As Putnam (2000:66) notes, religiously active men and women learn to give speeches, run meetings, manage disagreements, and bear administrative responsibility. They also befriend others who are in turn likely to recruit them into other forms of community activity. Churchgoers are therefore substantially more likely to be involved in secular organizations, participate politically, and to have deeper informal social connections (Putnam, 2000:236). This indeed makes religious involvement a crucial dimension of social capital<sup>32</sup>. Although these findings originate from studies conducted in the US, the role of the church during Apartheid may lead one to speculate that it has similar relevance within the South African context<sup>33</sup>.

The following items from the 2001 WVS were used to construct a religious participation index (Cronbach's Alpha = .748). Due to the different response categories, standard scores were once again used.

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<sup>29</sup> For insight into the use of standard scores, see Thiessen (1993: 130).

<sup>30</sup> See Cronbach (1951:297-334). The Cronbach Alphas were calculated using the full weighted sample.

<sup>31</sup> It should be noted that these items did not cluster around a single factor, pointing to the conclusion that there are indeed different dimensions to the 'participation in voluntary organizations' concept. Nevertheless, the items have a relatively high Alpha (.669), with the use of an index therefore being justified.

<sup>32</sup> See also Lipset (1991:12-22); Peterson (1992:123-39) Harriss (1994:42-68) and Hodgkinson *et al.* (1990:93-114). For partially contradictory evidence, see Wilson and Janoski (1995:137-52)

<sup>33</sup> For the role of the church during and in the aftermath of Apartheid see Laloo (1998:39-55), Gaitskell (2004:299-97), Amstutz (1995:8-29), van der Merwe (2003:269-81).

***a) How often do you spend time with people at your church, mosque or synagogue?***

1 = not at all; 2 = only a few times a year; 3 = once or twice a month 4 = weekly/nearly every week

***b) Do you belong to a religious or church organization?***

1 = not mentioned; 2 = belong

***c) Apart from weddings, funerals and christenings, about how often do you attend religious services these days?***

1 = never, practically never; 2 = less often; 3 = once a year; 4 = only on special holy days; 5 = once a month; 6 = once a week; 7 = more than once a week.

### **1.6.1.1.3 Informal Social ties**

The above dimensions of social capital all focussed on formal ways in which individuals connect with their communities. Yet far more frequent are the informal connections we strike up - getting together for drinks after work, having coffee with the regulars at a restaurant, having friends over to watch TV. "Like pennies dropped in a cookie jar, each of these encounters is a tiny investment in social capital" (Putnam, 2000:93).

The following indicators were used to construct an index measuring levels of informal social ties (Cronbach's Alpha = .314). Although the low<sup>34</sup> Alpha of this index is worrying, there still seemed to be justification for including it in the analysis<sup>35</sup>. This will be explained in detail in the empirical analysis (Chapter 3).

***a) How often do you spend time with friends?***

***b) How often do you spend time socially with colleagues from work or your profession?***

***c) How often do you spend time socially with people at sports clubs or voluntary or service organizations?***

***d) How often do you spend time with parents or other relatives?***

1 = not at all; 2 = only a few times a year; 3 = once or twice a month; 4 = weekly/nearly every week<sup>36</sup>

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<sup>34</sup> There seems to be much disagreement regarding the cut-off point for Alpha scores, although values above .6 are usually seen to be acceptable (Thiessen, 2005, personal communication).

<sup>35</sup> Despite the low Alpha, the items did cluster around a single factor, signifying that an underlying dimension with regards to informal social ties is present.

#### 1.6.1.1.4 Trust

As Putnam (2000:134) notes, the touchstone of social capital is the principle of generalized reciprocity: “I’ll do it for you now, without expecting anything immediately in return and perhaps without even knowing you, confident that down the road you or someone else will return the favour”. It is this generalized reciprocity that allows for the “transaction costs – the costs of the everyday business of life, as well as the costs of commercial transactions – to be reduced”. Indeed, economists have increasingly come to the conclusion that trusting communities seem to have a distinct economic advantage<sup>37</sup>. A society that relies on generalized reciprocity can therefore in many ways be seen as more efficient than a distrustful society as “honesty and trust lubricate the inevitable frictions of social life” (Putnam, 2000:135)<sup>38</sup>.

In *Trust: The Social Virtues and the Creation of Prosperity*, Fukuyama (1995b) also highlights the role of trust in the creation of social capital, particularly in relation to economic development. The core argument is that there are high trust and low trust societies and cultures. High trust societies tend to develop greater social capital, and consequently enjoy greater economic growth. He sees social capital as the glue that holds the otherwise centrifugal structures of the market together<sup>39</sup>.

In an enlightening contribution to the 2002 Exeter conference on social capital, Pippa Norris (2002:3) also emphasized the importance of including the trust dimension when operationalizing social capital. Using data from the World Values Survey and the UNDP Human Development Index, she noted that “social capital is associated with socio-economic development...but this link appears to operate through social trust not civic society<sup>40</sup>”. It would be interesting to test this finding in the South African context i.e. Does trust show a higher correlation with income than other dimensions of social capital?

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<sup>36</sup> Once again, standard scores were used to ensure equal weighting of all the items in the index.

<sup>37</sup> See La Porta *et al.* (1997:333-38), Knack and Keefer (1997:1251-88) and Arrow (1972:343-62).

<sup>38</sup> For a fascinating analysis of the distinction between trust (trust in the absence of evidence to the contrary) and gullibility (trust in the presence of evidence to the contrary), see Rotter (1980:1-7).

<sup>39</sup> Fukuyama (1995a:45) argues that the most successful nations in the new free-market world will be those with the religious and cultural underpinnings that prepare people to work cooperatively in large organizations, with trust being a critical dimension.

<sup>40</sup> By civic society she means membership of voluntary organizations. Norris (2002:5) argues that there are essentially two dimensions of social capital: the structural dimension (i.e social networks) and the cultural dimension (i.e trust) which both need to be taken into consideration when operationalizing the concept.

The indicators below were used to measure generalized trust<sup>41</sup>. There was, however, no empirical justification for including these items in an index as Cronbach's Alpha was exceedingly low (.18).

*a) Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?*

1 = Need to be very careful; 2 = Most people can be trusted

*b) Do you think most people would try to take advantage of you if they got a chance, or would they try to be fair?*

1 = Would take advantage; 2 = Need to be very careful

### **1.6.1.2 Human capital**

The most effective way to measure returns on education would be operationalize education in terms of the years of education individuals have completed. Unfortunately such a variable was not included in the 2001 WVS. Type of education was therefore recoded into an approximation of the years of schooling such a qualification would require. It should be noted, however, that these are mere approximations, naturally open to dispute.

**Respondents were asked: *What is the highest educational level that you have achieved?***

#### **PRE-MATRIC - MATRIC**

- 1) No schooling (Recoded into 0 years)
- 2) Some primary school (Recoded into 4 years)
- 3) Primary school completed (Recoded into 7 years)
- 4) Some high school (Recoded into 9 years)
- 5) Matric (Recoded into 12 years)

#### **POST-MATRIC**

- 6) Artisan (Recoded into 13 years)
- 7) Technical (Recoded into 14 years)
- 8) Secretarial (Recoded into 14 years)
- 9) Technikon diploma completed (Recoded into 15 years)
- 11) Professional (Recoded into 16 years)
- 12) University degree (Recoded into 16 years)

## **1.6.2 Dependent Variable**

### **1.6.2.1 Income**

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<sup>41</sup> Williams (1988:14) makes the distinction between 'thick' trust (directed towards specific people which are known to the individual) and 'thin' trust (generalized trust directed towards people who are not personally known to the individual). See also Granovetter (1973, 1985) with regards to 'strong' and 'weak' ties. The fact that the WVS only allows us to measure 'thin' (i.e. generalized trust) is indeed problematic and will be addressed further in Chapter 3.

**Respondents were asked:**

*Here is a scale of income. We would like to know in what group your household is, counting all wages, salaries, pensions and other incomes that come per month, before taxes and other deductions.*

As this variable was utilized in a regression analysis, it was necessary to recode this item from an ordinal to an interval variable, using the mean score within each category (the recodes are presented in brackets).

1) R20 000 +	(22 000)	11) R5 000 – R5 999	(5 500)
2) R18 000 – R19 999	(19 000)	12) R4 000 – R4 999	(4 500)
3) R16 000 – R17 999	(17 000)	13) R3 000 – R3 999	(3 500)
4) R14 000 – R15 999	(15 000)	14) R2 500 – R2 999	(2 750)
5) R12 000 – R13 999	(13 000)	15) R1 400 – R2 499	(1 950)
6) R10 000 – R11 999	(11 000)	16) R1 200 – R1 399	(1 300)
7) R9 000 – R9 999	(9 500)	17) R900 – R1 199	(1 059)
8) R8 000 – R8 999	(8 500)	18) R500 – R899	(700)
9) R7 000 – R7 999	(7 500)	19) Up to R499	(250)
10) R6 000 – R6 999	(6 500)		

**1.7 Overview**

Using the operationalization of key concepts as set out in this chapter, this study will attempt to shed some light on the extent to which differential levels of income generation amongst Coloureds, Africans and Indians in post-Apartheid South Africa can be explained in terms of the social ties within these previously disadvantaged racial groups.

In order to provide insights into the institutional and structural constraints which impacted on the formation of social networks within South Africa, Chapter 2 will provide an in-depth analysis of the historical trajectories followed by these three racial groups. This will be followed by an analysis of the data in Chapter 3, where the significance of social capital (measured in terms of distinct dimensions) will be assessed in relation to other factors such as education<sup>42</sup>. Chapter 4 will set out the limitations of the study as well as provide recommendations for further research in the field.

<sup>42</sup> In the case of Indians, the economic distinction between Muslim and Hindu individuals will also be assessed.

## **2. Historical analysis of path-dependency: the evolution of social capital amongst three racial groups**

### **2.1 Introduction**

As noted in Chapter 1, Putnam *et al.* (1993) make use of the path-dependence approach to analyze social capital differentials in Italy. They trace the absence of civic virtue in the Italian South back to the 12<sup>th</sup> century, when the region had a feudal monarchy characterized by vertical patronage relations which proved to be devastating to the creation of civic virtue (Putnam *et al.*, 1993:84). By contrast, the North developed as a region of independent mercantile states, characterized by a horizontal distribution of power and trust between merchants. These merchants lived off credit, which can only function well if there is a generalized amount of trust – not only between persons but also between the different guilds (Putnam, 1993:86). Putnam goes on to trace these organizational characteristics through to the 20<sup>th</sup> century, where these differences in civic virtue continue to produce significantly more efficient and democratic regional governments in the Italian North than in the South.

In attempting to explain income differentials amongst the three previously disadvantaged racial groups in South Africa, I wish to apply the path-dependency approach within the South African context. In doing so, I hope to avoid falling into the trap of perpetuating essentialist notions of culture, instead taking full cogniscence of the institutional and structural constraints which impacted on the formation of social networks within these diverse racial groups.

Indeed it is clear that many analyses of social networks, especially in the developing world have proven to be both essentialized, under-theorized and ahistorical. As organization theorist Nohria (1992:3) points out:

Anyone reading through what purports to be network literature will readily perceive the analogy between it and a terminological jungle in which any newcomer may plant a tree. This indiscriminate proliferation of the network concept threatens to relegate it to the status of an evocative metaphor, applied so loosely, it ceases to mean anything.

By attempting to provide an historical overview of the evolution of social capital in South Africa, I hope to provide a solid foundation on which to base a quantitative analysis in the following chapter. Thus, while I may perhaps simply find myself being another newcomer ‘planting a tree’, I hope that this will be done within a contextualized framework which avoids recourse to cultural determinism in explaining income

differentials. In the overview below I will mainly focus on the development of social capital within the Indian community, interspersed with reference to the Coloured and African groups in order to aid comparative analysis. Indeed, before any conclusions can be drawn about the possible relationship between the elevated earning capacity of Indians and the nature of their associational life, a nuanced analysis of their historical trajectory upon arrival in South Africa is necessary.

## 2.2 Indian arrival in Natal

Indian indentured labour was introduced to Natal in 1860 and became increasingly indispensable to the colonial economy throughout the nineteenth and early twentieth century. On the sugar plantations, the indentured could be worked up to fourteen hours a day, with the pitiful wages further reduced through excessive fines for minor transgressions (Calpin, 1949:43)<sup>43</sup>. By the time indenturing was discontinued in 1911, 152,184 Indians had been imported to the country (62% men, 25% women and 13% children) and the Indian population in Natal exceeded the white by 3.2% (Meer, 1985:47).

After the expiration of their five-year contract, many indentured labourers were forced to reindenture, with this being due to there being no free or cheap land available for their settlement. So too, they would have had to wait another five years to qualify for a free return passage to India. Nevertheless, some did manage to flee indenture and set themselves up on their own account – as small shopkeepers and hawkers, peasant farmers or skilled artisans (Ginwala, 1985:5).

The passenger Indians constituted the second wave of Indian immigration to South Africa. These were Gujarati traders who, by paying their own passages, entered the country as free immigrants, establishing themselves as merchants and small shop owners (Palmer, 1957:14)<sup>44</sup>. They came mainly between 1875 and 1897, at which stage their entry into the colony was restricted. By 1911 the number of passenger Indians in South Africa was estimated at 30 000 (Meer, 1985:57). While the majority of indentured Indians had been Hindu, these passenger Indians were mostly Muslim. It had been the arrival of indentured labourers that had triggered the interest of these Indian traders, who could foresee the potential for a commercial network. Indeed, some merchant communities from Gujarat are popularly known for their business skills and their tendency to travel to commercially promising destinations (Ebr.-Valley, 2001:65).

<sup>43</sup> See also Kuper (1960) on the arrival of indentured labourers in Natal

<sup>44</sup> See Bhana and Brain (1990) on the arrival of Gujarati traders in Natal.

## 2.3 The reconstitution of the caste system on foreign soil

In addition to the overtly visible socio-economic cleavage between the indentured and passenger Indians which arrived in South Africa, the caste system which these individuals brought with them from India also brought about distinct differentiation within the Indian community. It was this caste system which was transformed in new and surprising ways on South African soil, having widespread implications for the development of social capital within the Indian community as a whole.

It is interesting to note that as much as caste as a social category is essential to Indian culture, the word itself is Portuguese in origin and can be traced back to the 16<sup>th</sup> century when Portuguese explorers used it to designate the Hindu castes (Ebr.-Valley, 2001:87). When dealing with this construct one thus needs to be constantly aware that one runs the risk of being conditioned by a Western mind, with its concomitant societal notions and values.

The spiritual axis of the caste system consists of four varnas, of which the Brahmins form the apex. Within these varnas thousands of subcastes known as jaatis are contained. The Indian experiences jaati as a personal and social identity, as the closest social formation holding person, family and community together (Ebr.Valley, 2001:89). The jaati is the group within which marriages are arranged, wedding feasts shared, funerals attended and rituals performed (Meer, 1985:62). These subcastes are themselves divided into fraternities called in Hindi biradari or bhaiband. A fraternity consists of an average of three to four generations, and is a male-dominated structure. Individuals belonging to different fraternities of a subcaste can intermarry, but individuals would almost never marry outside their subcaste or caste (Ebr.-Valley, 2001:86).

The status of the subcaste within the caste is determined by a purity/impurity continuum, with the notion of purity essentially being the backbone of the entire caste system. The crossing of the boundaries established by the caste and the subcaste is therefore regarded as a threat to the balance of the entire society (Meer, 1985:60). As Ebr.-Valley (2001:75) states, the main observation from the study of the caste system is that the Indian exists not as an individual, but as a member of a group. A caste should therefore not be seen as a political association but as a tangible representation of a group's – and therefore of an individual's – place in the cosmic order.

An investigation of Indians in South Africa with regard to their social formations therefore indeed brings fascinating dynamics to the fore. The central question which will be analyzed further below is the extent to which the caste system amongst these Indians survived, or perhaps even transformed itself, once transplanted onto foreign soil.

It is interesting that the Natal colonial authorities kept a rather precise account of the caste origins of Indian immigrants (Meer, 1985:52). Yet the notion of caste and the duties and treatment derived from it only seemed to be respected until the emigrants boarded the ships. Indians were treated according to their caste and rank throughout the recruitment process and up until they were in the depot waiting for departure (Ebr.-Valley, 2001:86). Yet during the sea journey across the Kala Pani ('black waters'), there was simply no room to adhere to these caste codes, resulting in unprecedented friendships between people who would not have been seen together in villages (Meer, 1985:53). Caste stratification was therefore momentarily swept aside and unheard of levels of 'caste promiscuity' were experienced. Indeed, the emigrants started developing traveller friendships or links known as *jehajbhais* (ship brothers). These were equivalent to fraternal links, transgressing caste and religious frontiers (Ebr.-Valley, 2001:65-70).

This abandonment of caste codes continued once Indians were dispatched to farm estates and plantations. Here they had to share shacks and eat the same food regardless of their caste status. So too, demographics (40 women for every 100 men) also contributed to the destabilizing social observance of caste hierarchy (Meer, 1985:53). As explained above, the caste system was essentially a mechanism which Indians referred to in order to situate themselves in their social environment. However, once on African soil, the reduced numbers of people and forced proximity necessarily separated the indentured Indians' conception of the world from the subcaste they knew they belonged to.

In spite of this, however, the caste system formed such an integral component of the daily life of Indian individuals that they soon found new ways to reconstitute themselves on foreign soil. In this respect the notion derived from the caste system that the individual does not have an intrinsic value outside of the group structure, made the emergence of new social formations almost inevitable (Ebr.-Valley, 2001:65). Therefore, what may have seemed to some as the disappearance of caste amongst Indian South Africans is indeed far more complex.

The characteristic dynamics of the caste system that organizes the Indian world indeed provided the tools to create three distinct categories upon arrival in South Africa: *Madrassi*, *Calcuttie* (denoting port of origin from India) and *passenger Indians*. There was also further stratification through the creation of smaller

linguistic groups, with sub-caste practices such as endogamy essentially being transposed to these linguistic groups (Ebr.-Valley, 2001:68).

As noted above, a further distinction which existed amongst Indians was the indentured/passenger divide. These two groups essentially belonged to two different categories: the indentured and free – a prejudice surprisingly still observed in the Indian community today (Ebr.-Valley, 2001:69)<sup>45</sup>. There were substantial linguistic, religious, educational and economic differences between the two groups: the passengers had independent means of income, had come to Natal of their own free will and were more used to business than the ex-indentured (Meer, 1985:57). So too, they had not undergone the class-promiscuity which the indentured had experienced on their journey to South Africa and in this sense were not seen as being ‘polluted’. The passenger Indians therefore increasingly started constituting a type of petit bourgeoisie within the Indian community (Ebr.-Valley, 2001:87).

Religious differences also played a crucial role in the Indian conception of the world, with there being a stark distinction between Muslim and Hindu Indians in South Africa<sup>46</sup>. Contrary to their Hindu counterparts who adhere to the caste system one would assume that the Muslim Indian community would display greater homogeneity within its ranks. This would be consistent with Islam egalitarian precept according to which there is no social stratification within the Umma (Ebr.-Valley, 2001:92). Nevertheless, very powerful linguistic, territorial and traditional distinctions have also become evident within this Muslim community. This in many respects can be seen to be the outcome of the stratified Indian social system that Muslims must have experienced before migrating to South Africa. Indeed, endogamic practices within subgroups of the Muslim community seem to have been a result of the influence of the caste system, with a certain Hindu ‘collective memory’ seemingly still operating (Vahed, 2001:221). It is interesting to note that in India, Hindu conversion to Islam took place at the subcaste level - with few exceptions, entire subcastes and fraternities were converted, not individuals. Upon conversion these Muslims became impure for Hindus because they had extracted themselves from Hinduism. However, unlike the ‘untouchables’ they could live side by side with Hindus because they were not a source of pollution (Ebr.-Valley, 2001:98). In essence then, the conversion to Islam did not wipe out the cohesive subcaste structure but rather modified it in order to welcome a new faith. All converted Muslim Indian

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<sup>45</sup> Godsell (1991:87) also notes that these early ties continue to bind children and grandchildren with obligations and rewards – “favours owed and trust offered”.

<sup>46</sup> As the data in Chapter 3 shows, there continues to be a distinct economic differentiation between Muslims and Hindus to this day.

communities in India and elsewhere have therefore at least retained the family and fraternity structure through endogamy (Vahed, 2001:222).

In the above analysis of the transformation of the caste system on South African soil, one crucial element seems to become evident. Upon arrival, Indians did not renounce their need to be identified as a group, a principle which was simply too deeply ingrained in their social fabric. Instead, the system was transformed in fascinating ways in order to face the new challenges which the foreign environment posed. This necessarily has widespread implications for the development of an associational life amongst Indians and the stocks of social capital which this community was able to foster within this new environment.

## **2.4 Group formations within a hostile external environment**

### **2.4.1 Political formations**

It is also necessary to take full cognisance of the power relations which defined the external environment of the Indian community in South Africa. Indeed it can be said that the hostility encountered in the new society upon arrival was the trigger for the formation of these new groups around village of origin and language. Nevertheless, despite this internal group differentiation, increasingly the hostile external environment also necessitated the formation of a homogenous Indian group identity, making it crucial to understand the environment in which this Indian political consciousness developed.

During the days of Ghandi (who founded the Natal Indian Congress (NIC) in 1894), opposition to colonial policies was largely driven by the merchant class who often took an accommodationist stance towards the colonial authorities in order to further their own interests (Padayachee, 2000:685). When a more radical faction emerged amongst the ranks of the NIC in the 1940s, these individuals (mostly educated professionals and trade union leaders) interestingly had great difficulty in building a homogenous Indian identity in order to confront the State more forcefully. Often this translated into these leaders emphasizing the separateness of the four nations in South Africa in order to foster at least a semblance of Indian solidarity (Moodley, 1980:232)<sup>47</sup>.

In the late 1940s there was however also an increasing tendency amongst the leaders of the NIC to build networks across racial lines. The signing of the Doctor's Pact in 1947 between the leadership of the

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<sup>47</sup> For more on the early development of Indian political movements in South Africa, especially between 1924 and 1946, see Pahad (1972).

African National Congress (ANC), NIC and Transvaal Indian Congress (TIC) marked such an occasion. This Pact was geared towards “basic human rights and full citizenship for all sections of the South African people” (Desai, 1996:56). However, according to Desai (1996:9), this Pact once again seemed to reinforce the conception that South Africa is composed of distinct racial units. He argues that campaigns largely continued to be organised along sectional lines, with unity not seen as a grassroots movement forged in common struggles between racial groups. So too, the formation of the Congress Alliance seemed to reinforce the principle of having separate organizations mobilizing the different racial groups (Desai, 1996:18). Nevertheless, the adoption of the Freedom Charter in 1955 by the NIC and TIC marked a significant shift from the insular politics of the early 1940s. The Congresses seemed to be proclaiming their struggles as bound to the freedom of the African majority. However this tendency had barely taken root when the state intervened through increased repression (Desai, 1996:19).

Union unrest in 1972, among other factors, provoked the NIC's revival and many of its members, together with the TIC<sup>48</sup>, joined the United Democratic Front in 1983 to oppose the tricameral parliament<sup>49</sup> which had separate chambers for Indians and Coloureds, but excluded Africans (Padayachee and Morrell, 1991:74). In this battle the NIC once again emphasized the need for a collective Indian struggle and in this way contributed to a collective Indian consciousness. Although the NIC did try to build a broader non-racial identity through the UDF, it was however never able to truly breach Apartheid divides and build a non-racial political movement (Desai, 1996:62-63). This can also to a certain extent be said to be true of the TIC which, despite advocating a *non-racial* South Africa free from all discrimination, launched an active campaign in 1984 *specifically geared towards dissuading Indians*<sup>50</sup> from participating in the first election of the House of Delegates (Kotzé and Greyling, 1994:279), labelling all those who participated in the election as “cowardly supporters of Apartheid”.

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<sup>48</sup> The NIC and TIC can be seen as the most prominent of the Anti-Apartheid organizations within the Indian community. Nevertheless, there was also differentiation in terms of Indian engagement towards Apartheid. In 1963 the South African Indian Council was created to 'advise' the Apartheid government on matters affecting Indians. These formal links with the Apartheid regime proved profitable to some businessmen and obviously found a measure of support within the Indian community (Padayachee, 2000:45).

<sup>49</sup> The 1983 Constitution established the Tricameral Parliament with three houses. These were: the House of Assembly for whites, the House of Representatives for Coloureds and the House of Delegates for Indians. These reforms were met with a great deal of protest from around the country; many people saw them as a deliberate attempt by the government to cling to power and to divide African, Coloured and Indian opposition to white rule. The effect was thus increased mobilization and organization of popular resistance across racial and class lines. The United Democratic Front formed in August 1983, shortly after the proposed constitutional changes, launching national campaigns against the regime (Desai, 1996:54).

<sup>50</sup> This Indian exclusivity was once again highlighted when, in 1991 the TIC president Cassim Saloojee claimed that the Indian community “was not finding a comfortable organizational home in the ANC”, and that the TIC should therefore persist in representing the Indian community in the liberation struggle (Kotzé and Greyling, 1994:279).

According to Desai (1996:62), part of the problem lay in the NIC and TIC's organizing style, placing emphasis on the exclusive mobilization of Indians under its banner as the best strategy to oppose Apartheid. Nevertheless, NIC radicals allied with the ANC ensured that Indians played a prominent role in negotiations culminating in the unbanning of the ANC in 1990 (the NIC was never banned)<sup>51</sup>. After the ANC victory in the 1994 elections, six Indian ministers were appointed to the cabinet (a proportion many times higher than the Indians' share of the national population) (Padayachee, 2000:68)<sup>52</sup>.

Moodley (1980:220), on the other hand, emphasizes the fact that both Coloureds and Indians indeed allied themselves with Africans at various stages during the Apartheid struggle, pointing to the notable role played by various black voluntary associations with significant Indian and Coloured membership. Nevertheless, he also emphasizes that the political organizations of Indians, Coloureds and Africans remained largely separate for tactical reasons (Moodley, 1980:221). In light of these dynamics it becomes clear that a distinct Indian political identity did develop during the Apartheid era, necessarily also having implications for the development of social capital within this racial group.

#### **2.4.2 Spatial dimension of Indian group formation**

Another factor contributing to the evolution of an Indian supra-identity was the extreme social dislocation experienced by Indians during Apartheid. Although legislative discrimination against Indians began well before the advent of Apartheid, it was the Group Areas Act which had a definitive impact (Vahed, 2001:193). In this context it is interesting to note that the value attached to the group among Indians fitted in an odd way into Apartheid's obsession with ethnic groups (Ebr.-Valley, 2001:79). Apartheid was in essence an ideology where groups were classified, defined and given limited rights and restricted physical boundaries. In terms of defining the cultural specificity of each group, Indians were easy to categorize because they had obvious phenotypical features and common territorial origin (Ebr.-Valley, 2001: 78). The Apartheid government therefore did not bother to further fragment them into ethnic subgroups based

<sup>51</sup> Interestingly, in 1990, NIC vice-president Newa Ramgogan declared that it was "no secret" that the NIC acted under the leadership of the ANC, and that it consulted the ANC before formulating its own policy. He also stated that the Doctor's Pact meant that the NIC and the ANC "basically had the same policy" (Kotzé and Greyling, 1994:193). The rift which arose after the idea of incorporating the NIC and TIC into the ANC was abandoned in 1991, however, made it clear that underlying tensions did exist.

<sup>52</sup> However, during the 1994 elections, it is estimated that over 60% of Indians voted for the NP and about 25% for the ANC (Carrim, 1996:41). Carrim gives an in-depth analysis of how the ANC failed to mobilize substantial support amongst the Indian working class. He notes that the NPs policies on key issues preoccupying major sections of the Indian community were much clearer than the ANC's – particularly on the protection of property, language, cultural and religious rights. Carrim (1996:42) explains this voting pattern in terms of a "minority psychosis" experienced by working class Indians, in which they essentially felt that their identity was being threatened by the African majority. This dynamic will be analyzed further in section 2.8 below.

on language. This was in sharp contrast to the homeland strategy employed to divide African groups along ethnic lines. This strategy, which was inherently based on the notion of 'divide and rule', was directly aimed at breaking the potential strength that resided in the African population *vis a vis* the white group (Ginwala, 1985:18). In this respect the limited size of the Indian population counted in its favour. When Apartheid was put in place in the early 1950s, the Asiatic group consisted of a mere 366 664 people, while in 1960, when Indians were about to be recognized as a permanent South African population, they comprised only 477 125 individuals, or 3% of the population (Ebr.-Valley, 2001:76).

As noted above, Indians registered huge losses as a result of the implementation of the Groups Areas Act which caused many to lose their business and properties. Nevertheless, the legislated segregation introduced by the Act also seemed to facilitate the Indian community's tendency to reproduce family life within their extended families and fraternities. Isolated from other groups, they could once again resume their community's life according to accepted principles and social behaviours that defined their identity (Ebr.-Valley, 2001:65). Nevertheless, Moodley (1980:225) argues that The Group Areas Act also had a significant negative effect on Indian social cohesion and resulted in a noticeable increase in crime, divorce rates and other indicators of traditional disorganization within the community. He however also emphasizes that in spite of this, Indians seemed to have remained a far more cohesive unit than Coloureds and Africans during the Apartheid era (Moodley, 1980:226).

In short, the abovementioned dynamics seem to clearly illustrate that the advent of Apartheid once again brought about the re-arrangement and re-definition of Indian supra-identity as well as intra-communal identity, with this process being driven by broader societal processes while being reinforced by internal communal dynamics.

### **2.4.3 Comparing Coloured and Indian group integration**

It is clear that Apartheid policies created various cleavages between racial groups which impeded the development of inter-group 'bridging' social capital. In addition to the abovementioned spatial dimension, job reservation, the obstacles to African trade Union activity as well as Africans' limited access to specialized training all contributed to a higher concentration of skilled workers among Coloureds and Indians (Moodley, 1980:224). Furthermore, unlike Africans, Indians and Coloureds were allowed to own land in urban areas, notwithstanding numerous restrictions and the impact of the Group Areas Act. So too, although there were great difficulties for Indians and Coloureds to obtain trading licenses, their petty bourgeoisie was allowed much greater scope than its African counterpart (Moodley, 1980:223).

Indeed, in the social science literature on South Africa, Indian and Coloured South Africans are frequently lumped together by virtue of their common intermediate situation between the numerical majority of Africans and politically dominant Whites (Sonn and Fisher, 2003:220). However, Moodley (1980:67) notes that the discrimination experienced by Indians was always more severe than that which the indigenous Coloureds endured, thus essentially reinforcing greater bonds of communality within the Indian community. He highlights the fact that within the Indian community “religion, music, customs, traditions and distinctive food tastes formed part of a womblike structure to act as a bulwark against a hostile environment” (Moodley, 1980:234)<sup>53</sup>.

Moodley (1980:225) therefore notes that the greater upward mobility of Indians in relation to Coloureds was not unrelated to the Indians’ high degree of group integration, which manifested itself in comparatively high health standards, low crime rates, divorce rates and illegitimate birth rates. To a greater extent than Coloureds, Indians seemed to retain a close-knit family and community structure and used it to good effect in an essentially hostile environment. While Indians had a common territorial origin which at least partially aided this process, Coloureds constituted a mixed racial group descended from Malaysian slaves, Khoi, Khoi-San and early white Settlers. The Coloured group indeed had a much more diffuse culture – “part African, part white, part Malaysian” which seemed to mitigate against the establishment of a solid communal identity (Morse and Peele, 1974: 320).

It was therefore also the diverging historical origins of Indians and Coloureds which seemed to explain the greater group integration within the Indian community. As Moodley (1980:78) notes, political change during the struggle years had different connotations for the Indians than it did for Coloureds. He highlights the fact that, although the Indian community would have benefited from an egalitarian status and political freedoms in South Africa, political change and joining decolonizing African forces presented the trauma of loss of identity for Indians (Moodley, 1980:227). It was precisely this preservation of identity that had enabled them to survive white oppression, thus the perpetuation of this hived off identity become synonymous with security<sup>54</sup>.

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<sup>53</sup> See also Vahed (2002:77-93) who gives an interesting analysis of how the festival of Muhurram played an important role in forging a pan-Indian ‘Indianness’ within colonial South African society.

<sup>54</sup> It is clear that a more in-depth analysis of coloured group dynamics needs to be undertaken before more definite claims can be made. Although by no means comprehensive, section 2.4 has merely attempted to give a brief overview of Coloured identity dynamics in order to aid comparison with Indians. For greater insight into Coloured identity and reactions to Apartheid, see du Pré (1994); Carrim (1996); Goldin (1987). Also see Barnard (2000) and van Deventer (2000) on the Erika Theron commission (1973-76), which investigated the socio-economic position of Coloureds during Apartheid.

## 2.5 The role of education

In an analysis of the relationship between social capital and income generation within racial groups in South Africa, it is important to note that a higher degree of social integration amongst Indians should perhaps not be seen as the sole explanatory variable in terms of income generation. Indeed, differential levels of education amongst the three previously disadvantaged racial groups may also prove to be significant.

Amongst Africans, Coloureds and Indians, it was African education which received the lowest priority during Apartheid, with the Bantu education system essentially geared towards meeting the needs of the homelands<sup>55</sup>. Table 2.1 below, which indicates per capita educational expenditure amongst the different racial groups, is indeed telling. The table also highlights the fact that in relation to educational expenditure on Coloureds and Africans, Indians seemed to experience relative advantage.

**Table 2.1: Per Capita expenditure on education in South Africa**

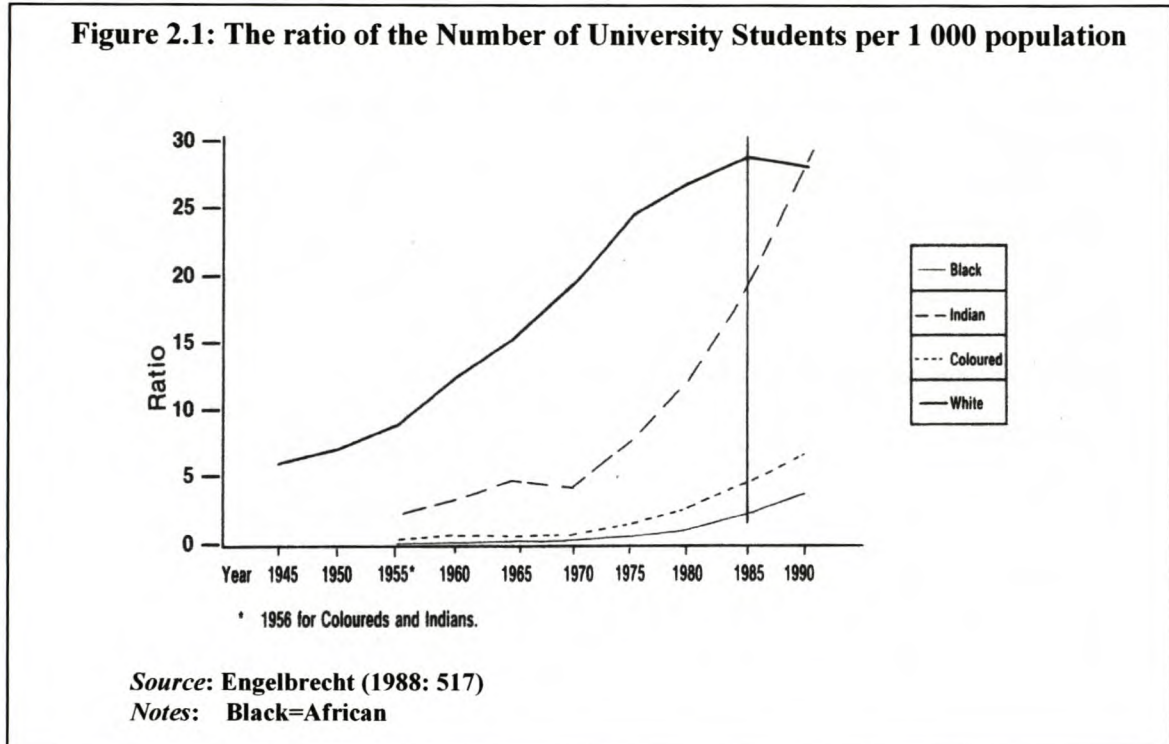
<b>Year</b>	<b>African</b>	<b>Coloured</b>	<b>Indian</b>	<b>White</b>
1953-4	R17	R40	R40	R128
1969-70	17	73	81	282
1975-6	42	140	190	591
1977-8	54	185	276	657
1980-1	139	253	513	913
1982-3	146	498	711	1211
1984-5	227	639	1112	1702
1986-7	369	887	1714	2299
1988-9	656	1221	2067	2882

Source: Christie (1991:108), compiled from annual SAIRR surveys

In addition, it is interesting to note that of the three previously disadvantaged racial groups, Indians also seemed to place the highest priority on formal Western education, having a disproportionately high number of students enrolled at universities. Moodley (1980:226) goes on to state that “like the Jews and

<sup>55</sup> Separate schools were part of the overall plan for the social, economic and political development of Apartheid. Laws legally and forcefully segregated schools: the Bantu Education Act of 1953, the Coloured Persons Education Act of 1963, and the Indian Education Act of 1965 (Christie, 1991:54). For more information on education during the Apartheid era, see Kallaway (1984), Dreijmanis (1988) and Engelbrecht (1988).

Palestinians in the diaspora, Indians as an insecure minority view higher education as a crucial portable asset and the best insurance for a potential crisis". The following figure clearly illustrates this:



It will therefore be interesting to trace these trends in 2001, seven years after the demise of Apartheid, and examine whether it is social capital or human capital (education) which has the greatest explanatory power in terms of income generation in South Africa.

## 2.6 The aftermath of Apartheid

Ebr.-Valley (2001:87) refers to the abolition of Apartheid as simultaneously constituting an "abolition of ethnic space". Thus, once Indians were liberated from the imposed Apartheid group identity they were once again forced to reconstitute themselves within this new environment. Two essential factors seem to have emerged in the post-Apartheid era. Firstly, the Indian community has experienced the increasing disappearance of the vernacular languages in favour of English. Although Indians still identify themselves as members of a linguistic community, the common vernacular language that gave the group its name no

longer seems to be the preferred language of communication amongst its members (Ebr.-Valley, 2001:76). Secondly, religion is seemingly acquiring an increasingly prominent role in defining contemporary Indian identity<sup>56</sup>. Although the Indian community is still in its vast majority endogamous, endogamy within each subgroup increasingly seems to matter less, with endogamy increasingly evolving towards being confined to the larger Indian religious communities (Ebr.-Valley, 2001:77).

The older Indian generation has also been witnessing the diminishing relevance of their specific traditions amongst a youth which is increasingly longing for a more individualistic lifestyle. In this context religion is regarded as the last bastion of actual 'Indianness', able to save both Muslims and Hindus from the loss of this identity (Ebr.-Valley, 2001:80). In the aftermath of Apartheid, the 'Indian' name thus now no longer simply constitutes a boundary between one group of South Africans and another, with societal processes once again necessitating Indian identity markers to evolve in new directions.

Nevertheless, Desai (1996:54) states that while the extended family might have eroded in the aftermath of Apartheid, the Indian family is indeed as tight a unit in the New South Africa as before. He argues that, unlike African families, the Indian family has not been changed much by Apartheid or the fight against it. He emphasizes that there were different levels of oppression under Apartheid and different responses. During Apartheid the African family – already a social unit somewhat more open and extended in its traditional form – was further decentered through harsh economic times, the migrant labour system as well as the tactic of ungovernability which was employed in the townships (Desai, 1996:58). Indeed, the ethos of the struggle in many urban areas was one of the youth in the lead, with the riots of 1976 in the African townships across South Africa having an anti-authoritarian element to it that continued throughout the days of the UDF (Desai, 1996:60)<sup>57</sup>. By contrast, the Indian community seemed to retain the absolute centrality of the family during the struggle years. With regards to the current study, the question which emerges is whether these distinct historical trajectories continue to have a significant impact *in terms of income generation* in the Aftermath of Apartheid.

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<sup>56</sup> Carrim (1996:48) also affirms that the main dividing line within the Indian community is religion: Hindus constitute 62%, Muslims 19% and Christians 13%. Language differences, particularly where they coincide with religious differences are also noted as being significant.

<sup>57</sup> See also Godsell (1993:93) on the extent to which violent youth activism during the struggle years served as an impediment to the evolution of entrepreneurial activity within African townships.

## 2.7 The subgroups within the Indian community: bonding or bridging?

As the above analysis has shown, the various structures imposed by Apartheid necessarily prevented the extensive development of 'bridging' social capital between different racial groups. Yet one could argue that even within the Indian community the dynamics of the caste system formed a formidable barrier in the formation of bridging networks within the Indian community itself and thus the formation of productive social capital.

As noted above, Putnam's (2000) notion of 'bridging' (inclusive) and 'bonding' (exclusive) social capital is of particular relevance here. The latter may be inward looking and have the tendency to reinforce exclusive identities within homogenous groups. By contrast, the former is outward looking and encompasses people across different social divides. As Putnam (2000:22) puts it:

Bonding capital is good for undergirding specific reciprocity and mobilizing solidarity...Bridging networks, by contrast, are better for linkage to external assets and for information diffusion...Moreover, bridging social capital can generate broader identities and reciprocity, whereas bonding social capital bolsters our narrower selves.

This notion of bonding and bridging social capital can also be stated in terms of 'strong' and 'weak' ties (Granovetter, 1985). According to Fukuyama (1995a:64), there is something of a trade-off in many cultures between the strength of family ties and the strength of non-kinship bonds. Inherent in the concept of 'strong' ties is the notion that while networks can provide an informal framework for greater economic efficiency; they can also operate as mechanisms of parochialism or collusion that disrupt economic development. As Meagher (2005) puts it "just as economic efficiency can be limited by too little embeddedness in networks of trust and reciprocity, it can also be stifled by too much embeddedness".

The question which therefore emerges is whether the inherent tendency of the Indian community to constitute themselves within closed formations (such as linguistic and religious groupings) may have indeed prevented the development of wider social ties within the Indian community, not to mention with other racial groups.

Indeed, in India businesses are often characterized by 'selective trust' due to the dominance of private, family control and resistance to management accountability. Platteau (1994: 797) draws from anthropological literature to argue that there is in Indian society a "persisting lack of [...] a common code of generalized morality" which crosses community boundaries. Saberwal (quoted in Harriss, 2003:756),

relates this 'weakness' to "the cellularity characterizing Indian society [reflected in the primacy of caste, community, and regional identities]". In light of these dynamics, Harriss (2003:758) argues that heavy reliance on 'specific' or 'selective trust' as developed within personal networks – often groups of family and kin or caste – has become a constraint on industrial growth in India.

Yet as illustrated above, the caste system amongst South African Indians was significantly transformed upon arrival on African soil. Once again attention thus needs to be paid to social and historical processes without simply succumbing to notions of 'dysfunctional' cultural values. Meer (1985:57), for instance, argues that the relationship between the Indian subgroups in South Africa was generally friendly and cooperative. She emphasizes the fact that this interdependence was probably even more pronounced among the indentured due to the relatively high proportion of mixed marriages (between endogamies).

Meer (1985: 43-46) goes on to state that the caste system is often wrongly interpreted in terms of Western notions of hierarchy and exclusion. She argues that jaati consciousness is not only mutually supportive but also prepares its members to coordinate with others in a community of interests. She makes the valid point that if it had been personally and communally destructive, it would have been quickly shed by those degraded by it, particularly the indentured, who were drawn from the very depressed sectors of Indian society. The very fact of its restructuring within the new South African environment therefore suggests its positive and productive value. It would thus seem that the caste consciousness of the South African Indian community did not seem to inhibit the formation of broader alliances within its ranks.

## **2.8 Applicability of middleman theory in South Africa: implications for social capital**

Rinder's (1958) middleman theory could be said to have distinct applicability to South African Indians. As Desai and Maharaj (1994:120) note, the distinguishing feature of middlemen within society is the economic role they play. Unlike most ethnic minorities, they occupy an intermediate rather than low-status position. Rinder (1958:254) argues that middleman groups arise in societies where there is a status gap, defining this gap as the "yawning social void which occurs when superior and subordinate positions are not bridged by continuous, intermediate degrees of status." This status gap produces an economic gap because elites fear that through direct trade relationships their prestige could be reduced. The middlemen in society therefore often become viewed as scapegoats par excellence, which naturally also brings with it

a certain sense of vulnerability<sup>58</sup>. Indeed, in terms of their economic status by the end of the 1980s, Indians seemed to assume a distinct in-between role in South Africa, often being seen as blocking African aspirations (Desai, 1996:82). The Cato Manor riots of 1949, a violent confrontation between Indians and Africans, can be seen as a direct manifestation of this dynamic<sup>59</sup>.

Yet, as noted above, although the Indian community seemed to maintain the most cohesive associational structure of the three disadvantaged groups during Apartheid, significant differentiation was, and continues to be<sup>60</sup>, evident within their ranks. There is a large Indian working class in South Africa, with many of these workers having little in common with affluent Indians as far as life-style is concerned. Nevertheless, although there were significant economic disparities inherent in the Indian community which seemed to militate against commonality, Desai (1996:89) argues that there were certain factors outside of the economic realm which nevertheless continued to position Indians as middlemen. Some of the determinants external to the workplace included appeals to traditions of resistance, communitarian and family values, ethnicity, language, religion and experiences of persecution (Desai, 1996:45). Indeed it is this in-between character which may have been yet another factor contributing to increased levels of trust and associational life, mobilized defensively, within the Indian community. It is however precisely this defensive mobilization which may prove problematic in building broader networks in post-Apartheid South Africa.

## **2.9 Social Capital amongst Africans in South Africa**

Much has been written about the apparent inability of Africans to form effective social networks in order to further developmental objectives<sup>61</sup>. This is necessarily also of great relevance to this study as it is indeed the African racial group within South Africa, that even in the aftermath of Apartheid, consistently displays the lowest income levels. Yet once again it is necessary to analyze the full ambit of structural factors which defined the evolution of this group's associational life.

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<sup>58</sup> As Godsell (1991:95) notes, the exclusiveness of Indian interaction "carried the penalty of envy and hostility from other groups, and the threat of ultimate political exclusion as has happened elsewhere in Africa".

<sup>59</sup> For more on the Cato Manor riots, see Desai (1996:9-15).

<sup>60</sup> See Appendix A for an analysis of economic differentiation within the Indian community. This differentiation will be analyzed further in the concluding chapter.

<sup>61</sup> See Granovetter (1995), Nadvi and Schmitz (1994), Ngau and Keino (1996) and Rasmussen (1992).

As noted in the introductory chapter, the notion of 'ubuntu'<sup>62</sup> (which ascribes to the tenet of 'I am because you exist') forms an important element of many indigenous cultures in South Africa and one would indeed expect this world view to aid the development of effective associational networks within African communities (Shutte, 2001:12). Yet Apartheid policies towards the African population, particularly the imposition of homelands based on ethnic divisions, as well as the migrant labour system which dislocated families, may have undermined this notion to a significant extent (Conradie, 1992:57). Speaking of social networks in Africa in general, Fukuyama (1995b:94) states that "it would appear that in many contemporary African cities, older political structures and family ties have broken down with rapid urbanization but have not been replaced with strong voluntary associations outside of kinship. Needless to say, this kind of atomized society does not provide fertile ground for economic activity, supporting neither large organizations nor family business."

Others argue that Africans form the wrong type of kinships, owing to the redistributive and parochial character of African social institutions<sup>63</sup>. It is claimed that primordial networks and redistributive values characteristic of African informal economies may facilitate engagement in trade and survival activities, but tend to undermine the productive investment, contract enforcement and innovation necessary for productive development to occur (Meagher, 2005:18). Some, such as Brautigam (2003:452) also suggest that the prominence of ethnicity in African business organization limits the ability of Africans to form ties across ethnic boundaries.

It becomes clear, however, that many of these views blatantly fail to take adequate account of the historical context in which these social networks were formed. In an article on social networks and economic restructuring in South Africa, Gillian Hart condemns the essentialism of contemporary network analyses due to their failure in grasping the "enormous diversity, complexity and fluidity of social institutions in 'third world' [...] settings" (Hart, 1998:334). She argues that "diverse local trajectories also display unexpected twists and turns that defy notions of embeddedness and path-dependency, but are a

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<sup>62</sup> Basing her analysis on interviews conducted amongst Afrikaners, Indians and Africans, Godsell (1991:93) notes that within the African community, the notion of 'ubuntu' does indeed play a role in community structure. However, it does not seem to be beneficial in terms of promoting entrepreneurial activity. Interviews with Africans revealed that the provision of employment to others was often regarded as the main justification for running a business. This contrasted to the Indian approach where the offering of help was reciprocal. As one Indian respondent noted: "We know in our minds that we are helping a person but while you're helping him you are building yourself" (Godsell, 1991:94).

<sup>63</sup> See Barr (1999:121-131), Callaghy (1988, 1994), Fafchamps (1996:427-48), Fafchamps and Minten (1999), Lyon (2000:663-81), Van Donge (1995).

central element of conflicting efforts to bring about social change or maintain the status quo” (Hart, 1998:341).

As Meagher (2005:15) succinctly puts it, in many analyses of network formations in African societies,

...the possibilities that variations in ethnicity, class, gender and regional history may produce varied network outcomes within African societies, or that regulatory failures may derive from the chaotic formal institutional context of liberalization and state decline, rather than from intrinsic deficiencies of African cultural institutions, are never entertained.

In an investigation of the relationship between social capital and income generation in South Africa, emphasis should thus perhaps be placed on more institutionally-sensitive perspectives that reconnect social networks with issues of history, power and institutional process. So too, the analysis needs to remain cogniscent of the fact that the impact of social capital may only be peripheral in terms of income generation, with other factors such as education and religion perhaps having far greater explanatory power.

## **2.10 Overview**

In the above analysis I have hoped to highlight some of the historical and structural factors which have facilitated or hampered the development of social capital within different racial groups in South Africa. For more than a century Indians endured a racial politics of segregation which forced them inwards to become a closed corporate community, a small minority squeezed between South Africa's Whites and Africans. While the state fostered a collective Indian identity from above, this was reinforced by impulses emanating from within the Indian community itself. Nevertheless, although the Indians have long taken on the character of a closed community, they have been internally differentiated by religion, occupation, politics and class. As analyzed in this chapter, Indians reconstituted themselves in new and interesting ways upon arrival in South Africa, never abandoning the centrality of distinct group formations in their ranks. Yet it was the primacy of this group dynamic which to a certain extent also allowed Indians to overcome internal differentiation, developing an Indian group identity in opposition to a hostile external environment.

As analyzed above, throughout the history of Indian settlement in South Africa, the antagonism of the rulers towards them was expressed in varying degrees of severity – from informal discrimination to

legislative exclusion. Nevertheless, they managed to build up a commerce which thrived within the limits of an inward-looking apartheid economy<sup>64</sup>, resulting in Indian per capita income surpassing that of both Africans and Coloureds throughout the Apartheid era (Padayachee, 2000:684).

As Apartheid unravelled in the last quarter of the 20<sup>th</sup> century, Indians have indeed been faced with new challenges. The questions Indians face today, as individuals and collectively seem to be directly related to rediscovering the capacity for movement in a more open world after having adapted to the institutions of closure for so long. As Padayachee (2000:690) argues, some elements of the Indian community are well-suited to this new phase; but many find themselves facing greater uncertainty with fewer resources than before.

Nevertheless, I argue that the centrality given to the group formation within the South African Indian community has resulted in Indians being able to make more effective use of the accumulated social capital within their ranks. I hypothesize that these associational networks, shaped by distinct historical processes, continue to operate within the Indian community today, being directly related to the heightened income generation capacity of this group in the aftermath of Apartheid. Nevertheless, social capital will not be analyzed as the sole explanatory variable. Taking the historical dynamics explored above into account, it can be expected that education and religion may also prove to have significant explanatory power in terms of income generation within the Indian community. The empirical analysis which follows in Chapter 3 will aim to shed some light on these matters.

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<sup>64</sup> Godsell (1991:89) puts it succinctly: "Religious and community approval provided the spiritual capital: networks were the means, and survival and even prosperity the result."

### 3. Empirical analysis

#### 3.1 Introduction

Before examining any evidence, considerable attention needs to be paid to the many conceptual and methodological dangers littering the pathway of any attempt to measure trends in social capital. As Norris (2002:14) notes: “There should be flashing signs posted: ‘Beware all who enter here’”. Indeed, attempts to capture this phenomenon from existing empirical data remain frustratingly elusive. Norris goes on to state that social capital may prove an example of where “a battery of sophisticated techniques are being widely employed, generating more heat than light, before social scientists have honed valid, consistent and reliable measures of the phenomenon under investigation” (Norris, 2002:1).

As noted previously, one of the major pitfalls of Mallucio *et al.*’s (1999) study of social capital and income generation in South Africa was that it failed to differentiate between different dimensions of social capital, simply constructing an index which incorporated the following three components: density (the number of group memberships in the household), gender heterogeneity (percentage of groups which are mixed gender), performance (the average reported performance of groups). Yet if effective policy responses are to be developed in South Africa, it is clear that greater attention needs to be paid to the actual components constituting the concept of social capital. The current study therefore wishes to undertake a more multi-dimensional approach in measuring social capital among the different racial groups in South Africa.

One of the major limitations in testing the relationship between social capital and income generation with the available data is that the WVS measures the ‘household’ income of individuals without including ‘household size’ as a variable. In measuring household income at an individual level, this variable is therefore highly vulnerable to being affected by the number of economically active people in that household. The best available mechanism to control for household size would therefore be to include only those individuals in the analysis who are the chief wage earners, as these are also the individuals who would theoretically be most likely to draw on social ties during the income generation process. However, this presents a number of methodological problems in itself, particularly as the sample size is reduced to such an extent that significant results may remain elusive.

What follows below is an analysis of the various components of social capital (as operationalized in Chapter 1) amongst the three previously disadvantaged racial groups in South Africa, with Whites being included for comparative purposes. The different dimensions of social capital were entered separately into Ordinary Least Squares (OLS) regression equations<sup>65</sup> within each race group, allowing the relative strength of the relationships between each dimension of social capital and income generation to be assessed. What is reported below are the betas<sup>66</sup>, both for the full sample and for the chief wage earners (thereby indirectly controlling for household size).

### 3.2 Dimensions of social Capital: Trust

#### 3.2.1 Measuring trust without Context – possible pitfalls

As noted in the literature review, Putnam (2000) operationalized social capital by not only measuring social networks (gauged by active membership of voluntary organizations etc.) but by also focusing on the cultural norms of *social trust*. The 2001 WVS measures generalized social trust (where trust is extended beyond face to face interactions and includes people not known personally) with the following two questions:

- 1) *“Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?”*<sup>67</sup> 1 = Need to be very careful; 2 = Most people can be trusted
- 2) *“Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair?”* 1 = Would take advantage; 2 = Need to be very careful

It becomes clear that these measures remain limited for many reasons. Firstly, it gives respondents the option of a simple dichotomy, whereas most modern survey items today present more subtle continuous scales. Secondly, the double negative in the latter half of question 1 may be confusing to respondents. Most significantly, however, no social context is presented to respondents, nor can they distinguish between different categories, such as relative levels of trust in friends, colleagues, family, strangers, or

<sup>65</sup> Regression is a statistical technique designed to predict values of a dependent variable from knowledge of the values of one or more independent variables (George and Mallery, 2003:375). Ordinary Least Squares is the most common form of regression analysis, in which the squared vertical distances between the observed and predicted values of Y are minimized (Thiessen, 1993:265). For an insightful analysis of the logic of developing regression models, see Thiessen (1993:280-91).

<sup>66</sup> For more insight into betas, see George and Mallery (2003:188,193, 204)

<sup>67</sup> This trust question was recoded so that a higher score would indicate a more trusting nature.

people of a different race. This indeed is highly problematic in measuring social capital, where context needs to be constantly considered if accurate measures are to be developed, particularly with regards to in-group, out-group relations<sup>68</sup>. Edwards and Foley (1998:124-139), following Coleman's (1990:84) conceptualization, also stress that social capital is essentially contextually-specific; it exists in the social relations within groups that facilitate cooperative action, but it is not necessarily transferable to other contexts. For example, Coleman (1990:65) suggests that much of the work of the diamond trade in New York is based on relations of reciprocity and mutual trust among a close-bound community of merchants, but that these norms do not persist beyond this context, so that traders are not necessarily more trusting of members of the general public outside the market. Due to its inherent contextual character, it therefore makes no sense to measure social trust at the individual-level *outside of the specific community*. In the South African case, the WVS operationalization prevents us from precisely determining whether this trust is extended to people of different race groups or simply towards unknown people of the same race. Hence no definite conclusions regarding the bonding or bridging nature of social capital (in the form of trust) between race groups in South Africa can be drawn.

Nevertheless, the trust items, as utilized in the WVS have become accepted as the standard indicators of social or interpersonal trust, following their use in the American GSS since the early 1970s (Norris, 2002:2). However, due to their inherently problematic nature, all findings should be analyzed with caution.

### 3.2.2 Findings

Interestingly, the two trust items do not correlate very well (Chronbach's Alpha =.18), therefore preventing the formation of a single index. Seeing that these two items at face value seem to be measuring the same concept (generalized trust), it is surprising that the intercorrelation of the two items is so low. This once again seems to highlight the lack of reliability and validity of these measures.

The two trust items were entered into regression equations separately, with Tables 3.1 and 3.2 reporting the betas (both for the full sample and for the chief wage earners) amongst the different racial groups.

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<sup>68</sup> Putnam's (2000:22) notion of 'bonding' and 'bridging' social capital is naturally of relevance here.

**Table 3.1: Trust (a) “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” (betas amongst racial groups)**

	<b>Beta Full Sample</b>	<b>N</b>	<b>Beta chief earners</b>	<b>N</b>
<b>African</b>	-.087**	1303	-.113*	514
<b>Coloured</b>	.011	499	.035	181
<b>White</b>	.084*	899	.106	429
<b>Indian</b>	.014	299	.095	104
<b>TOTAL</b>		3000		1228

\* p&lt;.05

\*\* p&lt;.01

**Table 3.2: Trust (b) “Do you think most people would try to take advantage of you if they got the chance, or would they try to be fair?” (betas amongst racial groups)**

	<b>Beta Full sample</b>	<b>N</b>	<b>Beta Chief earners</b>	<b>N</b>
<b>African</b>	-.061*	1303	-.101*	514
<b>Coloured</b>	.040	499	.038	181
<b>White</b>	-.002	899	.044	429
<b>Indian</b>	.125	299	-.001	104
<b>TOTAL</b>		3000		1228

\* p&lt;.05

\*\* p&lt;.01

As can be expected (judging from the low Alpha), the two trust items seem to react quite differently when related to income. A significant positive relationship is revealed in Table 3.1 amongst the White full sample, yet in Table 3.2, an insignificant negative relationship emerges for this group. In addition, most of the other associations are too weak to merit any conclusions about the relative importance of trust. Indeed, it seems that the data is simply not capable of providing conclusive insights into the relationship between trust and income generation amongst the different racial groups. Once again, this may be related directly back to inadequate operationalization. Indeed, no definite claims can be made about the nature of this trust (i.e. towards whom it is being extended).<sup>69</sup>

<sup>69</sup> This has been partly remedied in the 2005/06 version of the WVS, in which respondents are asked how much trust they place in the following groups: ‘your family’, ‘your neighbourhood’, ‘people you know personally’, ‘people you meet for the first time’, ‘people of another religion’, ‘people of another nationality’. However, the exclusion of the ‘people of another race’ category, specifically within the South African context, is a limitation which needs to be addressed.

### 3.3 Dimensions of Social Capital: Membership of voluntary organizations

#### 3.3.1 Findings

**Table 3.3: Membership of Voluntary Organizations<sup>70</sup>**

	<b>Beta full sample</b>	<b>N</b>	<b>Beta Chief earners</b>	<b>N</b>
<b>African</b>	.195**	1303	.240**	514
<b>Coloured</b>	.353**	499	.293**	181
<b>White</b>	.158**	899	.205**	429
<b>Indian</b>	.121	299	.127	104
<b>TOTAL</b>		3000		1228

\*  $p < .05$

\*\*  $p < .01$

In terms of the relationship between membership to voluntary organizations and income, all betas are significant except for those of the Indians, with this most likely due to the relatively small sample size amongst the Indians, particularly amongst the chief earners (N=104). As is evident, the relationship between membership to voluntary organizations and income is stronger amongst Coloureds than amongst Africans and Indians. This is also the case amongst the chief wage earners (although the difference is not as large). These findings seem to run contrary to the initial hypothesis that it is the greater utilisation of social networks amongst Indians that is related to their greater earning capacity. Yet once again, the pitfalls in this measure need to be highlighted. As noted in Chapter 1, the index contains a summary measure of membership to widely diverging organizations, without making a distinction with regards to degree or nature of involvement. Professional associations and labor unions, for example, often have a bureaucratic form of organization characterized by official membership rules, a hierarchical and bureaucratic structure, legal recognition and fulltime officials. In contrast, as Norris (2002:4) notes, it is far more difficult to pin down evidence for the more informal sense of belonging and identification with social movements like feminists, pacifist groups, and environmentalists, where it is often difficult to know

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<sup>70</sup> This index includes the following items: Social welfare services for elderly, handicapped or deprived people; Professional Associations; Youth Work (e.g. scouts, guides, youth clubs); Education, arts, music or cultural activities; Sports or recreation; Labour Unions; Women's groups; Political parties or groups; Peace movement; Local community action on issues like poverty, employment, housing, racial equality; Voluntary organisations concerned with health; Other groups; Third World development or human rights; Conservation, the environment, ecology, animal rights.

what it means ‘to join’, even for the most committed. As Woody Allen once quipped: “Eighty percent of life, is simply showing up” (quoted in Putnam, 2000:18).

A further pitfall is that, as in the case of the trust item, the actual racial composition of these groups (i.e. with people of which racial group are these individuals interacting when joining these organizations) cannot be adequately gauged from the available data. Indeed, knowledge of the racial composition of these groups is crucial if conclusions regarding bonding and bridging social capital are to be drawn from the data.

### 3.4 Dimensions of Social Capital: Participation in Religious Organizations

#### 3.4.1 Findings

**Table 3.4: Religious Participation<sup>71</sup>**

	<b>Beta full sample</b>	<b>N</b>	<b>Beta chief earners</b>	<b>N</b>
<b>African</b>	.049	1303	.015	514
<b>Coloured</b>	.058	499	.051	181
<b>White</b>	.002	899	.027	429
<b>Indian</b>	.142*	299	.096	104
<b>TOTAL</b>		3000		1228

\* p<.05

\*\* p<.01

Participation in religious organizations constitutes a particularly interesting dimension of social capital, especially due to the prominent role which religion continues to play within the Indian community as a mode of social organization. As Ebr.-Valley (2001:67) notes, religion is seemingly acquiring an

<sup>71</sup> This index consists of the following items: 1) How often do you spend time with people at your church, mosque or synagogue? (1 = not at all; 4 = weekly/nearly every week); 2) Do you belong to a religious or church organisation? (1= not mentioned; 2 = belong); 3) How often do you attend religious services? (1 = never; 7 = more than once a week). Due to the different response categories, standard scores were used.

increasingly prominent role in defining contemporary Indian identity. She goes on to state that although the Indian community is still in its vast majority endogamous, endogamy within each subgroup seems to matter less, with endogamy increasingly evolving towards being confined to the larger Indian religious communities. Interestingly, in accordance with the prominent role which religion seems to be playing in the Indian community, it is only within this racial group that the relationship between participation in religious organizations and income is significant<sup>72</sup>. Although it is no longer significant amongst the chief wage earners, Indians still present the strongest relationship with regards to this dimension. This interesting religious dynamic will be analyzed further below.

### 3.5 Dimensions of Social Capital: Informal Social Ties

#### 3.5.1 Justifying the use of the informal social ties item

The low Alpha (.314) of the social ties index is indeed worrying. Nevertheless the use of this index was seen to be justified, as the individual items clustered around a single factor when placed in a factor analysis. All the individual factor loadings exceeded .6<sup>73</sup>. One can therefore conclude that there is indeed an underlying dimension relating to informal social ties which seems to link these four items. Regarding the low reliability (Alpha = .314), this is in a sense to be expected as the various items measure *different types* of informal engagement, therefore increasing the likelihood of low intercorrelations between the items. In fact, the low reliability of the index is important in its own right, as it suggests that within the different racial groups, the *type of tie* is perhaps more important than the *actual number* of different sources of ties. In addition to using informal social ties as a summary measure, it will therefore also be necessary to *individually* assess the relationship between the different items in the informal ties index and income generation. This will be analyzed in section 3.5.4.

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<sup>72</sup> A value less than  $p = .05$  is considered as being significant. For more on significance, see George and Mallery (2003:384)

<sup>73</sup> For more on factor analysis, see George and Mallery (2003:245-259).

### 3.5.2 Findings

**Table 3.5: Informal Social Ties<sup>74</sup>**

	<b>Beta full sample</b>	<b>N</b>	<b>Beta chief earners</b>	<b>N</b>
<b>African</b>	.140**	1303	.179**	514
<b>Coloured</b>	.189**	499	.203**	181
<b>White</b>	.184**	899	.115*	429
<b>Indian</b>	.259**	299	.223*	104
<b>TOTAL</b>		3000		1228

\* p<.05

\*\* p<.01

Informal social ties is the only dimension which gains significance amongst Indians, Coloureds, Africans and Whites, therefore providing an ideal measure of the relative strength of these relationships amongst the different race groups. Indeed the findings are consistent with the initial hypothesis that the greater income generation capacity of Indians can be related back to their more effective utilisation of social capital (in this case, the informal social ties dimension). The beta is significantly higher for Indians than amongst the other two previously disadvantaged race groups (even exceeding the relationship amongst Whites). This effect remains once household size is controlled for.

### 3.5.3 The relative importance of informal social ties *within* the different racial groups

What has been analyzed above is the relative importance of the various dimensions of social capital *amongst* the different racial groups. Although none of the relationships here are particularly strong, the emphasis in this study is on the *relative* importance of the different dimensions amongst the racial groups. The findings seem to indicate that it is particularly within the realms of informal social ties and religion that the Indians show a stronger relationship to income than other racial groups. The hypothesis, however, does not hold for membership to voluntary organizations or trust. Yet as explained above, the

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<sup>74</sup> The index consists of the following items: 1) How often do you spend time with friends?; 2) How often do you spend time socially with colleagues from work or your profession?; 3) How often do you spend time socially with people at sports clubs or voluntary or service organisations?; 4) How often do you spend time with parents or other relatives? (1 = not at all; 4 = weekly/nearly every week).

operationalization of these two concepts remains highly dubious, preventing any definite conclusions from being drawn. Further analysis will therefore be restricted to the informal social ties dimension<sup>75</sup>.

Although basic trends have now been identified with regards to the importance of informal social ties amongst all the different racial groups (Table 3.5), what remains to be seen is whether this dimension also plays the most salient role *within* each racial group. The different dimensions of social capital were thus also entered simultaneously into regression equations for each racial group, therefore indicting which dimension (relative to the other dimensions) shows the strongest relationship with income.

**Table 3.6: Relative strengths of dimensions of social capital *within* racial groups with regards to income generation (full sample)<sup>76</sup>**

	<b>Trust 1<sup>77</sup></b>	<b>Social ties</b>	<b>Religious Organizations</b>	<b>Voluntary Organizations</b>
<b>African</b>	-.083**	.112**	.043	.17**
<b>Coloured</b>	-.03	.105*	.012	.324**
<b>White</b>	.074*	.154**	-.033	.12**
<b>Indian</b>	.002	.231**	.090	.053

\* p<.05  
\*\* p<.01

Table 3.6 shows that within the African population it is membership to voluntary organizations which emerges as having the strongest relationship with income generation, although only slightly stronger than informal social ties. Within the Coloured population, membership to voluntary organizations seems substantially stronger than the other dimensions, with informal social ties showing the second strongest relationship. The high beta for Coloureds with regards to membership of voluntary organizations is particularly interesting and deserves further attention, although falling outside the scope of this research. Within the Indian population, informal social ties are substantially stronger than any of the other dimensions, also being the only dimension that is significant within this group. For Whites, it is also

<sup>75</sup> In addition, the religious dimension will be addressed in Section 3.7 by analyzing the Muslim/Hindu distinction within the Indian community.

<sup>76</sup> The analysis amongst the chief earners yielded similar results with regards to the relative importance of the different dimensions within the race groups.

<sup>77</sup> Due to the divergent results which the two trust items produced, one item was randomly chosen for inclusion in this analysis.

informal social ties, followed by membership to voluntary organizations, which displays the strongest relationship.

Taking the findings both *amongst* and *within* the race groups into consideration, it becomes clear that informal social ties emerge as the most meaningful dimension of social capital in terms of a comparative analysis between racial groups in South Africa. Not only is it significant *amongst* all the racial groups (both in the full sample and amongst chief earners – Table 3.5), but it also emerges as the strongest (for Indians and Whites) or the second strongest (amongst Coloureds and Africans) dimension *within* each racial group. On face value the fact that the relationship between informal social ties and income is strongest amongst the Indian population seems to confirm the initial hypothesis, yet it is clear that further controls<sup>78</sup> have to be inserted before more conclusive claims can be made. This will be undertaken in sections 3.6 and 3.7.

### 3.5.4 A closer look at informal social ties

The most common approach in past studies on social capital, has been the measurement of social networks in structural terms (i.e. formal associational membership)<sup>79</sup> rather than more informal and intangible social bonds. Yet this approach has severe limitations, particularly in countries such as South Africa. As Norris (2002:5) notes, it has become increasingly clear that in poorer developing societies, “grassroots networks of community activists coming together with informal ties produced by friends and family, to work on local problems of schools, clean water or food production, are rarely characterized by the Weberian bureaucratic organization and formal membership”.

Thus although much of the work on social capital has regarded the membership of formal associations as proxy indicators of social networks, it is possible that informal linkages like daily meals eaten together, workplace discussions over the water-cooler, or extended family ties may prove richer and denser ways to generate the social norms of mutual trust and reciprocity than ‘card-carrying’ membership. As Norris (2002:5) notes, formal organizational affiliation is therefore only one indicator of community networking, and not necessarily the most important. In line with Fukuyama’s (1995a:53) reasoning, people of certain

<sup>78</sup> Education and religion are the two major controls which will be inserted i.e.: Does social capital in the form of informal social ties still have an effect once the influence of education and type of religion is taken into consideration?

<sup>79</sup> As noted by Norris (2002:4) most studies replicating *Bowling Alone* (2000) have focused on the official records of membership of voluntary organizations like social clubs and philanthropic societies. Yet this strategy faces multiple challenges, see Baumgartner and Walker (1988:910).

cultures may indeed rely more on close-knit extended family ties, or bonds of blood and belonging, rather than more bureaucratic interest-based groups.

The seeming importance which these informal social ties seem to have, particularly in the South African context (as revealed by Table 3.5) warrants a closer look at the actual items making up this index. This analysis was once again undertaken both amongst the full sample and the chief wage earners.

**Table 3.7: Different types of Informal Social Ties and their relative importance in relation to income amongst racial groups (full sample)**

	<b>Parents or relatives Beta</b>	<b>Friends Beta</b>	<b>Colleagues from work Beta</b>	<b>People from sports clubs or voluntary, service orgs Beta</b>
<b>African</b>	.047	.056	.085*	.144**
<b>Coloured</b>	.007	.047	.230	.184**
<b>White</b>	.014	.142**	.146**	.162**
<b>Indian</b>	.148*	.133*	.239**	.161*

\*  $p < .05$

\*\*  $p < .01$

**Table 3.8: Different types of informal social ties and their relative importance in relation to income amongst racial groups (Chief wage earners)**

	<b>Parents or relatives Beta</b>	<b>Friends Beta</b>	<b>Colleagues from work Beta</b>	<b>People from sports clubs or voluntary, service orgs Beta</b>
<b>African</b>	.037	.084	.133**	.167**
<b>Coloured</b>	.118	.002	.195*	.166*
<b>White</b>	-.028	.085	.076	.174**
<b>Indian</b>	.119	.143	.252*	.074

\*  $p < .05$

\*\*  $p < .01$

Within the full sample it is particularly interesting that it is only within the Indian population that there is a significant effect between informal family ties and income<sup>80</sup>. This is in line with the centrality which the Indian family continues to play in terms of social organization within the Indian community (see Chapter 2).

Interestingly it is also only the Indian and White groups that gain significance on the informal social ties with friends item, although no longer significant amongst the chief wage earners. Informal social ties with people from sports clubs or voluntary service organizations seems to be more or less equally important amongst all the racial groups, although once again losing its significance within the Indian population amongst the chief wage earners. It also becomes evident that informal social ties with colleagues from work play a significant role within all three previously disadvantaged race groups (particularly amongst the chief wage earners)<sup>81</sup>. Yet it is within the Indian population that these workplace ties show the strongest correlation with income. These ties are second-strongest for Coloureds (although not significant in the full sample) and weakest for Africans.

Ultimately it can therefore be reasoned that Indians get their competitive advantage from the informal ties they strike up at work as well as ties with relatives and friends. As mentioned above, although these relationships are all relatively weak, it is the *relative* strength of these ties which needs to be assessed in order to prove or disprove the hypothesis that it is the effective utilization of social capital which is related to the greater income generating capacity of Indians.

### 3.6 Controlling for education

It is clearly not sufficient to simply look at the relative strengths of the relationships between a dimension of social capital such as informal social ties without controlling for a crucial ingredient in the income generation process, namely human capital in the form of education.

Tables 3.9-3.11 show two regression models, run for each racial group separately. The first model simply includes informal social ties, while in the second model, education is controlled for<sup>82</sup>.

<sup>80</sup> Amongst the chief earners, however, Indians do not achieve significance on this item. This may, however, simply be a function of the severely reduced sample size. (N=104)

<sup>81</sup> This strong relationship with income is, however in a sense to be expected as work is an economic activity whereas the other three items are not.

**Table 3.9: Ordinary Least Squares Regression of Income (African)**

	Model 1		Model 2	
	b	Beta	b	Beta
<b>Constant</b>	1741.512**		94.768	
<b>Social Ties</b>	403.664**	.140	111.191	.039
<b>Education</b>			202.175**	.439
<b>Adjusted R<sup>2</sup></b>	.019		.201	

\* p&lt;.05

\*\* p&lt;.01

**Table 3.10: Ordinary Least Squares Regression of Income (Coloured)**

	Model 1		Model 2	
	b	Beta	b	Beta
<b>Constant</b>	3912.128**		-582.543	
<b>Social Ties</b>	1121.253**	.189	619.229*	.104
<b>Education</b>			489.937**	.441
<b>Adjusted R<sup>2</sup></b>	.033		.220	

\* p&lt;.05

\*\* p&lt;.01

**Table 3.11: Ordinary Least Squares Regression of Income (Indian)**

	Model 1		Model 2	
	b	Beta	b	Beta
<b>Constant</b>	5992.014**		1208.007	
<b>Social Ties</b>	2021.508**	.260	1100.112*	.142
<b>Education</b>			485.667**	.351
<b>Adjusted R<sup>2</sup></b>	.064		.170	

\* p&lt;.05

\*\* p&lt;.01

<sup>82</sup> This analysis was only undertaken amongst the full sample, as the reduced sample size amongst the chief earners, precluded significant effects from being found.

In Tables 3.9-3.11 it becomes evident that even once education is controlled for, informal social ties amongst Indians still have the strongest relationship with income of all three racial groups. Indeed, the returns on informal social ties remain almost twice as high ( $b=1100$  for Indians as opposed to  $b=619$  for Coloureds) once education is controlled for. More strikingly, however, the returns on informal social ties amongst Indians are almost ten times higher than amongst Africans ( $b=111$ ). In fact, the relationship between social ties and income loses its significance for Africans in the second model. This can perhaps be attributed directly back to the intense social dislocation which took place during the Apartheid era, disproportionately affecting Africans, while Indians were to a large extent able to retain a sense of social cohesion within the family as well as broader endogamous units (see Chapter 2).

Nevertheless, what becomes clear is that it is education, rather than informal social ties which has the greatest explanatory power in terms of income generation amongst all three previously disadvantaged racial groups within South Africa. When the betas are compared within each racial group, education emerges as the stronger predictor of income amongst Coloureds, Indians and Africans. Tellingly, within all the racial groups the total explained variance rises significantly when education is introduced (Africans: 2% to 20%; Coloureds: 3% to 22%; Indians: 6% to 17%). This is in line with conclusions drawn by Mallucio *et al.* (1999:12) who found, in contrast to earlier studies (such as those by Narajan and Pritchett (1999), that the effects of social capital, while large, are generally smaller than the effects of education.

Interestingly, the returns on education are very similar for Indians ( $b = 486$ ) and Coloureds ( $b=490$ ) while the returns are reduced by more than half in the case of blacks ( $b=202$ ). This can be traced directly back to the Bantu education system which promoted the instruction of Africans in low-skilled professions, with this effect still visible in 2001, seven years after the end of Apartheid.

### **3.7 Analyzing the impact of religion within the Indian population**

Chapter 2 focused extensively on the historical trajectory of the different racial groups and how these historical dynamics continue to have bearing on group dynamics in post-Apartheid South Africa. An aspect which emerged as particularly important was the crucial role which religion played in the social

organization of Indians. In order to discern whether the Muslim/Hindu distinction<sup>83</sup> continues to play a role in explaining income differentials amongst Indians in 2001, 141 years after the first Indians arrived on African soil, a further regression model was introduced.

**Table 3.12: Ordinary Least Squares Regression of Income (Indian)**

	Model 1		Model 2		Model 3	
	b	Beta	b	Beta	b	Beta
<b>Constant</b>	<b>5992.014**</b>		<b>1208.007</b>		<b>106.114</b>	
<b>Social Ties</b>	<b>2021.508**</b>	<b>.260</b>	<b>1100.112*</b>	<b>.142</b>	<b>1217.582*</b>	<b>.157</b>
<b>Education</b>			<b>485.667**</b>	<b>.351</b>	<b>474.255**</b>	<b>.343</b>
<b>Religion</b>						
Muslim					<b>2415.936**</b>	<b>.206</b>
Hindu					<b>1452.297*</b>	<b>.157</b>
<b>Adjusted R<sup>2</sup></b>	<b>.064</b>		<b>.170</b>		<b>.197</b>	

\* p<.05

\*\* p<.01

Table 3.12 shows that in terms of monthly household income, Muslim Indians, on average, earn almost R1000 more than Hindu Indians. This is in line with the Muslim/ Hindu distinction which emerged upon arrival on African soil (see Section 2). The data therefore seems to indicate that this monetary dimension attached to religious organization is still prevalent within the Indian community today<sup>84</sup>. Although not substantial, the R<sup>2</sup> increases by close to 3% in the final model, giving further credence to the relationship between religious denomination and income amongst Indians in South Africa.

### **3.8 Determining the unit of analysis: *Individual or Diffuse-level Effects?***

The above regression analyses necessarily used the individual as the unit of analysis. Yet according to Norris (2002:5), dimensions of social capital such as associational networks and trust should only be measured on the aggregate *societal* level, arguing that social capital is a *relational* phenomenon that can

<sup>83</sup> According to Godsell (1991:87), although only 20% of Indians in South Africa are Muslim, about 70 % of Indian enterprises are run by Muslims.

<sup>84</sup> Godsell (1991:89) also notes that the Islamic belief system seems to incorporate specific business-conducive practices. As noted by one of the interviewees in her study: "We buy cheap and sell cheap – a ruling which has its foundations in the Islamic way of thinking – that is why we are successful".

be the property of groups, local communities, and nations, but not individuals. She puts it plainly: “We can be rich or poor in social capital, I can’t”. It is clear that it is possible to follow this approach when analyzing a wide range of countries (47 in the case of Norris’s study), allowing one to aggregate data and draw conclusions at the societal level. Yet clearly, analyzing the relationship between social capital and income generation amongst merely three South African race groups (i.e. N=3) on the aggregate level will simply not yield significant results. As the above analysis illustrates, it was therefore necessary to analyze social capital on an individual level within each racial group, enabling a comparison of how effectively Indian *individuals* (compared to Coloured and African *individuals*) are able to convert social capital into income.

On a descriptive level, however, it is also necessary to compare the accumulated social capital within the different race groups on an aggregate level i.e. while it has been shown that Indians are more effectively able to convert social capital (in the form of informal social ties) into income, Indians as a group may have a low ‘amount’ of social capital to begin with, rendering this variable less meaningful in terms of a comparative analysis of income generation.

It is therefore necessary to also present a table of mean scores of levels of informal social ties amongst the different race groups.

**Table 3.13: Informal Social Ties (Means on a 5-point scale)**

	Informal Social Ties
African	2.7155
White	2.8393
Coloured	2.7825
Indian	2.7977

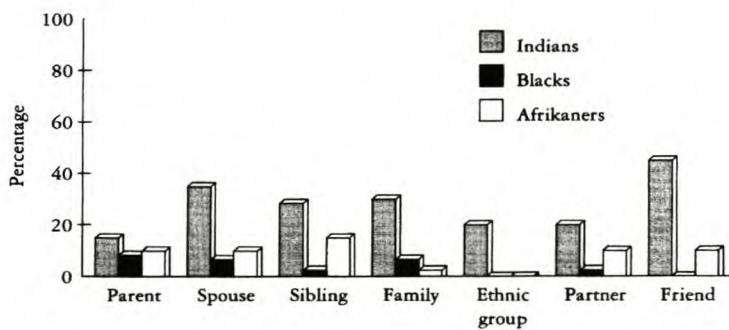
It is particularly interesting that the aggregate levels of informal social ties are relatively similar amongst the different racial groups. Therefore it is not the actual level of *accumulated* informal social ties within the Indian community which gives them an advantage, but rather the ability of Indian *individuals* to more effectively (than Africans and Coloureds) convert these ties into income. Indeed, quality, rather than quantity of informal social ties seems to be the determining factor within the Indian community. As shown above, this ability of Indians to make effective use of their stocks of social capital and surely be traced back to their distinct historical trajectory.

### 3.9 The need for triangulation<sup>85</sup>

In light of the fact that the above analysis provides only quantitative evidence, this study would clearly benefit greatly from qualitative insights gathered within the Indian community. Such a study was undertaken in the early 1990s by Gillian Godsell (1991), including both group discussions and individual interviews with forty Indians, thirty-seven Africans and twenty Afrikaners who were running a business in the Vaal Triangle at the time. The central theme which emerged in this qualitative study was that Indian family businesses seem to provide an interesting model of the meshing of individual entrepreneurial responsibility with the provision of community support and resources (Godsell, 1991:97-98).

In line with the arguments put forward with regards to path-dependence in Chapter 2, Godsell (1991:86) found that the “organic network”<sup>86</sup> was a fundamental tool of Indian business survival, referring specifically to family networks, religious networks and friendship networks<sup>87</sup>. The figure below displays data collected through the interviews with regards to start-up assistance for entrepreneurs within the different racial groups: It can be seen that Indians derive support from family and friends<sup>88</sup> to a greater extent than Africans and Afrikaners, a finding which concurs with the quantitative findings of this Chapter (see Table 3.7)

**Figure 3.1: Individual Sources of start-up assistance for South African entrepreneurs**



**Notes:** Assistance means financial and other help. The number of cases interviewed are Indian = 40, Afrikaners = 20 and Blacks = 37; Blacks = African

**Source:** Godsell, 1991:88

<sup>85</sup> The principle of triangulation is based on the notion that many diverse observations provide stronger evidence than one or very similar observations. See Neuman (1994:140).

<sup>86</sup> Godsell (1991:86) states that this organic network “is not consciously developed for a specific purpose, but is one of many reciprocal networks developing within a community and covering different functions”. Linkages therefore flow under, over, and through discrete sociological categories.

<sup>87</sup> This contrasted sharply with Godsell’s (1991:90) findings in the African community where no such diffuse relationships were found. So too, business did not seem to enjoy the same high status in the African community as it did amongst Indians.

<sup>88</sup> Unfortunately the ‘colleagues from work’ item was not included in Godsell’s (1999) analysis.

It is hoped that this brief overview of a qualitative analysis undertaken in the field, has highlighted the necessity of approaching the research problem from a wide range of angles. Indeed, the qualitative dimension adds a depth and richness to the findings which simply cannot be revealed through answers to single-line items on a survey questionnaire.

Further qualitative studies would also contribute greatly towards establishing the extent to which bridging social networks are developing in South Africa and contributing to the income generating capacity of South Africans *as a whole*. Indeed, racially based analyses (of which Godsell's qualitative study as well as the current quantitative study are examples) may simply no longer provide an appropriate unit of analysis for assessing social change in South Africa in future studies. Although the salience of race and its importance in the formation of distinct modes of social organization cannot be disregarded, one should remain cogniscent of the fact that this trajectory is unfolding in new and unexpected ways in the current democratic dispensation. In order to adequately understand these dynamics, it is therefore crucial for both qualitative and quantitative techniques to be employed.

## 4. Conclusion

### 4.1 Key findings, limitations and future recommendations

It is clear that even after a decade of democratic rule, racial inequality remains rampant in South Africa. An important component of the South African anti-poverty policy therefore continues to focus on the provision of a wide range of assets to those previously disadvantaged by Apartheid, along with reforms intended to provide opportunities to use these assets. In this context, the following question needs to be asked: How important an asset is social capital in helping individuals increase their welfare and how might it operate within South African society?

The empirical evidence seems to indicate that of the four dimensions of social capital identified (trust, membership of voluntary organizations, informal social ties and involvement in religious organizations) it is informal social ties that emerge as either the most important (Indians and Whites) or second-most important (Coloureds and Africans) dimension of social capital *within* the different racial groups. When the strengths of the relationships between informal social ties and income are compared *amongst* racial groups, it is indeed amongst the Indians that it has the greatest effect (both amongst the chief earners and the full sample). This effect remains once education is controlled for. However, the data indicates that ultimately it is education, rather than social capital (in the form of informal social ties) which continues to have the strongest relationship with income amongst all three previously disadvantaged racial groups.

An important concern in this study, however, is the direction of causality between income and the measurement of social capital based on group membership and trust. While it may be that joining groups (both informal and formal) helps augment one's income, it is also possible that some groups are akin to consumption goods and thus having more income, leads one to join more groups. So too, having a higher income might lead to greater social integration which may lead to a more trusting nature. What is therefore urgently needed is longitudinal panel data, which would allow previously accumulated income to be adequately controlled for. This approach was taken by Mallucio *et al.* (1999), who re-interviewed households after a five-year period. Due to the lack of longitudinal panel data in this study, however, the arguments which have been made regarding the relationship between social capital and income are just that – arguments. The statistics indeed help us very little in establishing causal sequence.

A further shortcoming of this study is that it simply fails to take account of the widespread variation currently present within the Indian population<sup>89</sup>. Especially in light of the rapid increase in intra-racial income inequality, this would seem highly problematic. Indeed, the regression equations simply provide findings regarding the ‘average Indian’ with vast levels of internal differentiation therefore essentially being masked<sup>90</sup>.

In line with this view of the increasing intra-racial differentiation within racial groups, Indian academics have recently questioned the validity of a study released by the South African Institute of Race Relations (2005) which revealed that Indian household incomes had overtaken whites in five provinces. The survey was conducted in Limpopo, North West, Northern Cape, Eastern Cape and Western Cape by Global Insight Southern Africa and was said to be based on 11 different official and commercial sources. Yet according to Desai, making comparisons between racial groups is an inappropriate way of looking at transformation in South Africa: "We are increasingly moving away from a racial society to a class-based one. The result is that there is an ever deepening divide within communities" (Khan, 2005: 2)<sup>91</sup>.

The Global Insight Southern African study also highlights a methodological pitfall related to the use of the highly problematic notion of ‘household income’. This study simply measured household income without taking heed of the *actual size* of the household: Desai puts it succinctly:

Speaking literally, a [Indian] cousin of mine who went to Limpopo as a lawyer earns R380 000 a year. Much of that money is sent back home to an extended family, who are not doing well. You cannot compare her earnings for an extended household to that of her white colleagues who also live in Limpopo, but who might only have two or three members and no need to redistribute their earnings (Khan, 2005:3).

Indeed, the lack of a ‘household size’ variable in the 2001 WVS left this study facing a similar dilemma. Although this was partly remedied by the use of chief wage earners in the analysis, the reduced sample size proved problematic.

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<sup>89</sup> This internal differentiation is discussed in Chapter 2.

<sup>90</sup> This dynamic is also highlighted by Desai (1996:62) who states that “the truly disadvantaged of the Indian community have long been masked by the privileged faces that head their political and religious organizations”. See also an analysis of the Gini coefficient within the South African Indian population by Van den Berg and Louw (2003:18) (Appendix B).

<sup>91</sup> See Appendix A. Schlemmer (2005:4) notes the general trend that there are very large economic overlaps between the races today, particularly in the income categories R1 400 to R12 000, indicating very widely shared class-based circumstances.

Finally, as noted above, it is important to note that this study failed to address the extent to which social ties are emerging *between* racial groups in South Africa. Indeed, even though social capital (in the form of informal social ties) was found to have a significant effect *within* racial communities, the extent to which this will impact positively on development objectives for South Africa as a whole remains questionable. The fact that definite conclusions regarding bridging social capital within South Africa could not be drawn can once again be traced back to inadequate operationalization. Of the items making up the informal social ties index, the 'family' item was the only one where definite conclusions could be drawn about the nature of the bond (in this case 'bonding' based on kinship). Yet no definite assessments about the racial make-up of any of the other items (friends, colleagues from work, people from sports clubs or voluntary service organizations) could be made.

To draw definite conclusions with regards to bonding versus bridging social capital, it would therefore be necessary to include variables measuring the racial composition of various types of associational networks in South Africa. Indeed such insights are crucial in order to gain a better understanding of the democratic consolidation process as it is currently taking shape. As Kotzé and Du Toit (2005:251) note, "if common citizenship is not secured during the process of democratic consolidation, then communities at the local level can be expected to mobilize social capital in a defensive strategy, as a mechanism to protect their vulnerable position". Instead of being mobilized to promote the common good, social capital becomes a tool to "further partisan objectives", essentially becoming "unsocial" capital. In economic terms this means that if social capital within South Africa remains restricted to intra-racial networks this can be seen as seriously curtailing the diffusion of economic gains to all segments of South African society. Although quantitative techniques will be incredibly valuable in tracking these trends, the value which qualitative studies can add should not be underestimated.

Despite the shortcomings listed above, it is nevertheless hoped that a greater understanding of the internal dynamics of Indian group formations and their relationship to income generation has been provided by this study. As noted by Edwards and Foley (1998:137), studies need to examine societal-level patterns of cooperation, tolerance and civility in divergent settings, suggesting that "careful...research attentive to differences in political and economic contexts" is most appropriate to test the claims of the role of social capital within societies. By focusing on the historical trajectories of different racial groups in South Africa and relating this to their internal modes of social organization, I hope to have made a contribution towards this 'contextualized' approach to the measurement of social capital.

Ultimately, however, the art of ‘arguing with numbers’ involves making subjective value judgments at almost every stage of the statistical process. Inherently certain aspects are simply glossed over in order to avoid the trap of getting stuck in the detail. Yet, what truths these details hold about social reality remains a frustrating dilemma in the back of ones mind, casting doubt on whether the path one has chosen illuminates or merely obscures. Nevertheless, it is believed that this study has indeed generated more ‘light’ than ‘heat’, enabling more reliable and valid measures to be produced in the future. This will allow for future studies to deliver more conclusive arguments regarding the functioning of the ever-elusive concept of social capital in South Africa. Such studies will need to identify the seeds which need to be planted if social capital is to grow organically, not only *within*, but more importantly *between* race groups. This will no doubt make a lasting contribution towards addressing the widespread socio-economic challenges currently faced by South Africa’s emerging democracy.

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## Appendix A

### Distributions of individuals according to household income categories and race: late 2002 and late 2004

Categories of household income per month and rough class equivalents	African		Coloured		Indian		White	
	2002 %	2004 %	2002 %	2004 %	2002 %	2004 %	2002 %	2004 %
<b>The poor</b>								
Under R500 per month	11.7	9.3	4.0	2.1	0.5	0.5	0.4	0.4
R500 – R1 399	45.3	40.5	24.4	20.6	10.3	8.4	3.5	3.2
<b>The not so poor</b>								
R1 400 – R3 999	28.4	35.2	32.8	34.7	29.5	25.6	14.1	12.5
<b>Skilled working and lower middle classes</b>								
R 4 000-R11 999	13.1	13.1	33.7	35.1	48.6	50.9	52.4	47.1
<b>Middle and upper middle classes</b>								
R12 000 – R19 999	1.1	1.3	4.0	5.7	7.4	8.6	18.0	20.7
R20 000 – R39 999	0.4	0.5	1.0	1.6	2.8	4.2	9.5	13.2
R40 000 and over	0.1	0.1	0.2	0.2	0.9	1.8	2.1	2.9
<b>Total</b>	100	100	100	100	100	100	100	100
Note: deviations from 100% are due to rounding								

Source: AMPS surveys, representative stratified probability samples, size 25 000 each (published in Schlemmer, 2005:3)

# Appendix B

Gini coefficients estimated from various surveys and censuses for intra-group distribution (income or expenditure per capita)

	African	Coloured	Indian	White
1970	-	.53	.42	.43
1975	.49	-	-	-
1993	.56	.47	.5	.47
1995	.57	.52	.49	.47
1996	.68	.57	.53	.52
2000	.59	.55	.51	.49

Notes: Gini coefficient: scale of 0-1; 1=perfect inequality; 0=perfect equality.

Source: Van den Berg and Louw (2003:18)

## Appendix C: syntax

```
GET FILE='M:\Thesis\wvs2001.SAV'.
```

\*use only those individuals that are chief wage earners.

```
USE ALL.
```

```
COMPUTE filter_$=(v231 = 1).
```

```
VARIABLE LABEL filter_$ 'v231 = 1 (FILTER)'.
```

```
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
```

```
FORMAT filter_$ (f1.0).
```

```
FILTER BY filter_$.
```

```
EXECUTE .
```

\*Missing values.

```
MIS VAL v236 (20) v25 TO v31 (9) v226 (12) v184 (1) v242(5).
```

\*Convert income into interval variable.

```
RECODE v236
```

```
  (1=22000)
```

```
  (2=19000)
```

```
  (3=17000)
```

```
  (4=15000)
```

```
  (5=13000)
```

```
  (6=11000)
```

```
  (7=9500)
```

```
  (8=8500)
```

```
  (9=7500)
```

```
  (10=6500)
```

```
  (11=5500)
```

```
  (12=4500)
```

```
  (13=3500)
```

```
  (14=2750)
```

```
  (15=1950)
```

```
  (16=1300)
```

```
  (17=1059)
```

```
  (18=700)
```

```
  (19=250) INTO hhincr.
```

\*DIFFERENT DIMENSIONS OF SOCIAL CAPITAL: CREATION OF INDEXES.

\*Creating an index for trust.

```
RECODE v25
```

```
  (2=1)
```

```
  (1=2) INTO v25_r.
```

\*Construction of index not justified.

```
RELIABILITY
```

```
  /VARIABLES=v26 v25_r
```

```
  /FORMAT=NOLABELS
```

```
  /SCALE(ALPHA)=ALL/MODEL=ALPHA
```

```
  /STATISTICS=SCALE CORR .
```

\* Create index for participation in voluntary civic organizations.

```
RECODE v39 TO v53  
  (2=0).
```

```
FACTOR  
  /VARIABLES v39 v41 TO v53  
  /PRINT UNIVARIATE INITIAL CORRELATION EXTRACTION ROTATION  
  /CRITERIA MINEIGEN(1) ITERATE(25)  
  /EXTRACTION PC  
  /CRITERIA ITERATE(25)  
  /ROTATION VARIMAX  
  /METHOD=CORRELATION .
```

```
RELIABILITY  
  /VARIABLES=v39 v41 TO v53  
  /FORMAT=NOLABELS  
  /SCALE(ALPHA)=ALL/MODEL=ALPHA  
  /STATISTICS=SCALE CORR .
```

\*Change into standard scores for index.

```
DESC v39 v41 v42 v43 v44 v45 v46 v47 v48 v49 v50 v51 v52 v53  
  /SAVE.
```

```
COMPUTE volorgindex = MEAN (v39, v41, v42, v43, v44, v45, v46, v47, v48, v49, v50, v51, v52, v53).
```

\*Create index for participation in religious organizations.

```
FACTOR  
  /VARIABLES v30 v40 v185  
  /PRINT UNIVARIATE INITIAL CORRELATION EXTRACTION ROTATION  
  /CRITERIA MINEIGEN(1) ITERATE(25)  
  /EXTRACTION PC  
  /CRITERIA ITERATE(25)  
  /ROTATION VARIMAX  
  /METHOD=CORRELATION .
```

```
RELIABILITY  
  /VARIABLES=v30 v40 v185  
  /FORMAT=NOLABELS  
  /SCALE(ALPHA)=ALL/MODEL=ALPHA  
  /STATISTICS=SCALE CORR .
```

```
RECODE v30  
  (1=4)  
  (2=3)  
  (3=2)  
  (4=1) INTO v30_r.
```

```
RECODE v40  
  (2=1)  
  (1=2) INTO v40_r.
```

```
RECODE v185  
  (7=1)  
  (6=2)  
  (5=3)
```

```
(4=4)
(3=5)
(2=6)
(1=7) INTO v185_r.
```

\*Create standard scores.

```
DESC v30_r v40_r v185_r
/SAVE.
```

```
COMPUTE religionindex = MEAN (Zv30_r, Zv40_r, Zv185_r).
```

\*Create index for informal social ties.

```
FACTOR
/VARIABLES v27 v28 v29 v31
/PRINT UNIVARIATE INITIAL CORRELATION EXTRACTION ROTATION
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION .
```

```
RELIABILITY
/VARIABLES=v27 v28 v29 v31
/FORMAT=NOLABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=SCALE CORR .
```

```
RECODE v27
(1=4)
(2=3)
(3=2)
(4=1) INTO v27_r.
```

```
RECODE v28
(1=4)
(2=3)
(3=2)
(4=1) INTO v28_r.
```

```
RECODE v29
(1=4)
(2=3)
(3=2)
(4=1) INTO v29_r.
```

```
RECODE v31
(1=4)
(2=3)
(3=2)
(4=1) INTO v31_r.
```

\*Change into standard scores for index.

```
DESC v27_r v28_r v29_r v31_r
```

/SAVE.

COMPUTE socialtiesindex = MEAN (zv27\_r, zv28\_r, zv29\_r, zv31\_r).

\* Recode education to make it represent years of schooling.

RECODE v226

(1=0)

(2=4)

(3=7)

(4=9)

(5=12)

(6=13)

(10, 11=14)

(7=15)

(8, 9=16) INTO yearsed.

\* Regressions

\* 1) Assessing strength of different dimensions of social capital between racial groups (each dimension included in a separate regression equation for each racial group).

\* 2) Assessing the relative importance of dimensions within race groups.

REG

/SELECT v242 EQ 1

/DEP hhincr

/ENTER socialtiesindex religionindex volorgindex v25\_r.

REG

/SELECT v242 EQ 2

/DEP hhincr

/ENTER socialtiesindex religionindex volorgindex v25\_r.

REG

/SELECT v242 EQ 3

/DEP hhincr

/ENTER socialtiesindex religionindex volorgindex v25\_r.

REG

/SELECT v242 EQ 4

/DEP hhincr

/ENTER socialtiesindex religionindex volorgindex v25\_r.

\* 3) Assessing the strength of the different components of informal social ties between race groups (each component entered in a separate regression equation for each race group).

\* 4) Regressions within different race groups controlling for education.

REG

/SELECT v242 EQ 1

/DEP hhincr

/ENTER socialtiesindex

/ENTER yearsed.

REG

/SELECT v242 EQ 2

/DEP hhincr

```

/ENTER socialtiesindex
/ENTER yearsed.
REG
/SELECT v242 EQ 3
/DEP hhincr
/ENTER socialtiesindex
/ENTER yearsed.
REG
/SELECT v242 EQ 4
/DEP hhincr
/ENTER socialtiesindex
/ENTER yearsed.

```

\* The impact of type of religion within the Indian population.

```

RECODE v184
(6=1)
(7=2)
(2, 3, 4, 5, 8, 9, 10, 11 = 3) INTO v184_r.

```

```

COMPUTE #k=0.
DO REPEAT i= Muslim Hindu other.
COMPUTE i=0.
COMPUTE #k=#k+1.
IF (v184_r=#k) i=1.
END REPEAT.

```

\*Regression controlling for religion.

```

REG
/SELECT v242 EQ 4
/DEP hhincr
/ENTER socialtiesindex
/ENTER yearsed
/ENTER Muslim Hindu.

```