Measuring the impact of social cash transfers on poverty and inequality in Namibia

Sebastian Levine*, Servaas van der Berg† and Derek Yu‡

20 November 2009

Abstract This paper reviews the system for social cash transfers in Namibia, a middleincome country with a long experience in making available a universal and non-contributory old age pension, child grants using means-testing and quasi-conditionalities and other cash transfers. The paper traces the origins of the cash transfers back to the country's past annexation into apartheid South Africa and shows how Namibia's system is now faced with a set of distinct challenges that are particularly pertinent as the authorities are rapidly scaling-up access. Notably, in the years after the remaining elements of racial discrimination were eliminated, and the value of the transfers were equalised across the ethnic groups, new discrepancies have developed in the values of the different grants. Moreover, using newly available household data the paper finds inefficiencies in the means-testing for the child grants – especially when compared to South Africa. In spite of these challenges the paper also shows that social cash transfers have a large effect on poverty reduction and that the effects are particularly positive for the poorest of the poor. The transfers also tend to reduce inequality but this impact is more limited. Simulations indicate the fiscal sustainability of an expanded system of social cash transfers and highlight the potential cost-savings that would accrue from a more effective means-test of the child grants. In the analysis the effects of using income and expenditure data as the basis for the welfare variable are discerned.

Keywords: Namibia, sub-Saharan Africa, social protection, social transfers, old age pension, disability grants, child grants.

JEL Classification: H55 (Social Security and Public Pensions), O1 (Economic Development)

Acknowledgements: This paper was prepared for the Central Bureau of Statistics in Windhoek. We are grateful to the Bureau for access to the data and for guidance in interpretation and methodology. We are also grateful for administrative data and helpful information on the systems of social transfers from Ministries of Gender Equality and Child Welfare, of Labour and Social Services, and of Veterans Affairs, and the Office of the Prime Minister. Fabio Veras Soares provided helpful comments to an earlier version of the paper as did participants at the Poverty Reduction, Equity and Growth Network Conference on "Policies for Reducing Inequality in the Developing World" 3-4 September 2009 Institute of Social Studies, The Hague. The opinions expressed in this paper are those of the authors and not the organisations they work for nor the Central Bureau of Statistics.

^{*} United Nations Development Programme, 38-44 Stein Street, Private Bag 13329, Windhoek, Namibia. E-mail: sebastian.levine@undp.org

[†] Department of Economics, University of Stellenbosch, Private Bag X1, 7602 Matieland, South Africa. E-mail svdb@sun.ac.za

[‡] Department of Economics, University of Stellenbosch, South Africa. E-mail dereky@sun.ac.za

1. Introduction

There is growing focus in developing countries on the role of social protection programmes in general and cash transfers in particular towards reducing poverty and meeting the Millennium Development Goals. In sub-Saharan Africa, where progress towards the global poverty goals has been particularly slow, the African Union has called on member states to: make social transfers "a more utilised policy option", integrate costed programmes into national budgets and development plans, and share information and experiences across countries (African Union 2006: 2). Namibia's experiences are particularly relevant as it is one of just a few countries in sub-Saharan Africa with a long history of state provision of cash transfers to needy population groups. This is linked to the country's past annexation into South Africa, whose programmes for social protection have been described extensively (Devereux 2007; van der Berg 1997; Lund 1993). However, even if the programmes for social protection in the two countries share their point of origin and many common features remain, in several aspects they have developed quite differently and the system in Namibia is faced with a set of distinct challenges.

Some analysis has already been conducted into specific areas of Namibia's system of cash transfers (Schleberger 2002; Devereux 2001; Subbarao 1998; Morgan 1991) and Namibia has featured in a number of multi-country comparisons (Devereux 2007; Standing 2007; Johnson and Williamson 2006; Fultz and Pieris 1999). However, important gaps remain in this literature. Firstly, most of these studies focus almost exclusively on Namibia's state pensions for the elderly while little research has been conducted into other important aspects of the social protection system, notably the country's child grants and the grants for veterans of the liberation struggle, both of which are of growing importance. Secondly, a comprehensive analysis of the impact of cash transfers, including the pensions, on household welfare has so far been lacking due to a lack of nationally representative primary data. Thirdly, and also as a result of data limitations, little analysis has been done to assess the effectiveness of existing mechanisms for targeting social cash transfers towards the poorest. By drawing on newly available household survey data, albeit still with some limitations, this study begins to fill these gaps and presents an empirical analysis of one of the oldest and most comprehensive cash transfer systems in sub-Saharan Africa. This analysis should provide useful guidance for policy makers in Namibia as they explore the options for scaling-up access to transfers and for reforming the current system.

It should also be of interest beyond Namibia's borders as the continent moves towards an expanded social policy agenda.

The paper is organised in seven sections. Section 2 next provides a brief overview of the socioeconomic context within which the social protection system should be assessed. Section 3 presents the social protection system in Namibia, its history and the evolution of the cash transfer programmes and current coverage. Section 4 introduces the data and methodology of the empirical analysis on the impact on poverty and inequality of the cash transfer and Section 5 presents the results from the empirical analysis on the distributive impact of the grants. In Section 6 a range of policy options and reform issues is discussed before Section 7 concludes.

2. Background

Namibia is classified by the World Bank as a 'lower middle income country' with a per capita GDP of US\$ 2,100, which is almost four times the average for sub-Saharan Africa. However, because of extreme levels of inequality, large pockets of poverty and one of the most severe HIV/AIDS epidemics in the world, average income is a particularly deceptive measure of the welfare in Namibia. Today's development challenges reflect a combination of factors including the enduring legacy of the country's recent colonial and apartheid past, unique geo-physical features, demographic changes and public policy choices.

Formerly South West Africa, Namibia was colonised by Germany in 1884 and after World War I it came under South African administration first on a League of Nation's mandate and hence illegitimately annexed into South Africa until Independence in 1990. As in the apartheid-state of South Africa, the policies of separate development meant that the small white settler population of European descent (backed by Pretoria) controlled the economy as well as the political order, while the majority of the population lived in abject poverty (Tapscott 1993). In 1989 the settler community and the small black elite that had emerged under the interim governments after 1978 comprised just 5 percent of the population but were estimated to account for 71 percent of the

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⁴ World Development Indicators (accessed January 2009).

GDP. In contrast, the bottom 55 percent of the population accounted for just 3 percent of the GDP (United Nations 1989, reported in UNICEF 1991). As will be explored further below, these extreme levels of inequality persist to the present day.

The population of around 2 million inhabit a country of 824,269 sq km, which gives Namibia one of the lowest population densities in the world (United Nations 2004). This is mainly due to the fact that a large part of the country is too dry for human settlement, because of low and highly variable rainfall. Two thirds of the population live in rural areas and predominantly in the northern regions (Central Bureau of Statistics 2003). These regions are characterised by communal land ownership, high levels of poverty and food insecurity, and poor coverage of economic and social infrastructure.

What Namibia's population may lack in size it makes up for in diversity with 11 ethnic groups officially recognized and about 30 different Bantu, Khoisan and Indo-European languages spoken (Maho 1998). The policies of apartheid served to reify racial and ethnic divisions throughout the society, to the extent that different communities were segregated geographically, economically and socially (Tapscott 1993). After Independence, Article 10 of the new constitution entrenched equality and freedom from discrimination as basic rights of citizenship. Since then, principles of affirmative action towards "historically disadvantaged groups" have guided government policies in areas such as employment and land redistribution, although a comprehensive policy is still to be prepared.

Growth in GDP averaged 4.3 percent in the decade 1997-2006 and 1.8 percent in per capita terms (Central Bureau of Statistics 2007), which is higher than for most other countries in sub-Saharan Africa. It is also a reversal compared to years of contraction and instability prior to 1990 (see Figure 1). At Independence Namibia inherited a labour market that was segmented according to ethnicity in access to employment opportunities and wages. Oscillating internal labour migration, mainly of males from the northern regions based on a system of contracts and the notorious pass-laws was entrenched to ensure that the white-dominated industries, notably mining and commercial farms, had the needed number of labourers, that surplus labour was kept out of the areas designated for whites while wages were kept low. After Independence patterns of

migration have persisted driven largely by employment opportunities in the commercial centre of Windhoek, the mining areas and the coastal fisheries industry. However, overall job creation has been slow.

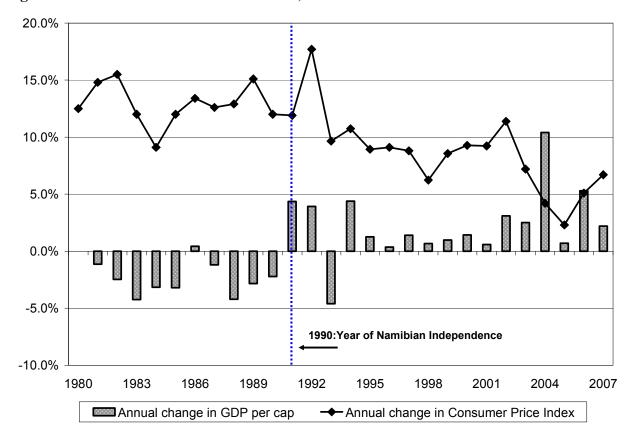


Figure 1: Growth and inflation in Namibia, 1980-2007

Source: Data provided by Central Bureau of Statistics

The broad rate of unemployment, which includes discouraged job-seekers, reached 37 percent in 2004 but unemployment rates are even higher among women and the growing number of youth (Ministry of Labour and Social Welfare 2006). With limited prospects for employment it is no surprise that the labour force participation rate fell over the period, especially among those 60-64 years and 65+ years, where the rates fell from 43 to 23 percent and from 33 to 7 percent, respectively (Ministry of Labour and Social Welfare 2006, 2004).⁵

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⁵ It is not clear whether the increase in the value of the old-age pension and the lowering of the pension age for men from 65 years to 60 years to bring it into line with that of women (discussed more later) may have played a role in reducing post-pension age labour force participation.

Namibia is among the countries in the world that spend the highest share of GDP on education and health (United Nations 2004). Nevertheless, it has proven difficult for the Government to reverse the effects of severe under-investments in social services for the majority of the population during the years of colonial rule. Moreover, health and other human development outcomes are severely affected by the HIV/AIDS epidemic. Among pregnant women tested at ante-natal clinics around 20 percent are infected with HIV, and AIDS-related illness has been the leading cause of death for more than a decade (United Nations 2004). Health indicators such as life expectancy, under-five mortality and maternal mortality have deteriorated over the past decades although in recent years a relatively successful anti-retroviral treatment programme has been rolled out (Ministry of Health and Social Services 2008). The cumulative impact of the AIDS epidemic has been a surge in the number of orphans and the total number of children under 15 who have lost one or both parents is projected to reach 180,000 by 2010 (United Nations 2004).

3. Social cash transfers in Namibia

There exists a range of social protection mechanisms in Namibia ranging from informal arrangements based on sharing within and between families and communities to a variety of formal and publicly funded programmes.⁶ Contributory pensions schemes linked to formal employment include those of the Government Institutions Pension Fund (GIPF) for civil servants and the Social Security Commission (SCC) for those employed in the private sector. Benefits under SCC include maternity and sick leave, death benefits, pension and medical aid funds, and special funds for development of training and employment schemes, and compensation for injuries and accidents. Examples of informal arrangement for social protection include family extensions, gifts and sharing of food and other necessities, and interest free loans from relatives and neighbours. These arrangements are particularly important, but also ultimately deemed insufficient given high levels of income poverty especially in rural areas, increased mortality and morbidity as a result of the HIV/AIDS epidemic, high levels of migration from rural to urban

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⁶ Following United Nations (2000: 3) social protection is "broadly understood as a set of public and private policies and programmes undertaken by societies in response to various contingencies in order to offset the absence or substantial reduction of income from work; provide assistance to families with children; and provide people with health care and housing."

areas in pursuit of formal sector jobs, and food insecurity (Subbarao 1998; Devereux and Naeraa 1996).

Like many other developing countries Namibia also has in place labour-based work programmes, food distribution in times of humanitarian crises such as the frequent droughts or floods, and an expanding school-feeding programme. However, Namibia stands out among countries in sub-Saharan Africa for its long tradition in making available a universal and non-contributory state pension as well as (quasi-)conditional and means-tested child grants. The system of cash transfers in the form of social pensions and grants was inherited from South Africa, where it was initially set up to protect the "white" population but gradually expanded to cover the whole population making it probably the most comprehensive in the developing world (Lund 1993). The fact that the seeds for these trappings of a welfare state were planted under a system otherwise known for its racial inequalities and discriminatory social polices is not without irony (Van der Berg 1997). The main features of the different types of social cash transfers in Namibia are summarised in Table 1. The remainder of this section provides further details of the social pensions and child grants, which are the main focus of this paper.

3.1 Social pensions

There are three types of non-contributory social pensions in Namibia. First, the Old Age Pension (OAP), which is paid to everyone who reaches 60 years of age, irrespective of past and current employment status and income, as long as the person is a Namibian citizen or permanent resident and is residing in Namibia. The universality of the pension sets it apart from most other countries, including South Africa where the state pension is means tested (as discussed further below). In the budget for 2008/2009 the monthly value of the pension was raised from N\$380 to N\$450.8 The second social pension is the Disability Pension (DP), which has the same value as the OAP and is paid to those 16 years and above who have been diagnosed by a State doctor as being temporarily or permanently disabled. Blind people and people who are medically diagnosed with AIDS are also included. Upon registering to receive the OAP or DP, all

⁷ Other countries in sub-Saharan Africa that provide state pensions to the elderly include Botswana, Lesotho, Mauritius and South Africa. Only Namibia and South Africa also have comprehensive national systems for cash transfers to households of vulnerable children.

⁸ In early 2009 the 1 USD = 10 N\$. The N\$ is pegged at par value to the South African Rand.

pensioners also take out a mandatory life insurance, whereby funeral costs to the amount of N\$2,200 are covered when the pensioner dies. Since the OAP is non-contributory and since a change in employment status is not a precondition, Devereux (2001) suggests that it is not a pension at all but instead is a social assistance programme targeted at the elderly as a designated vulnerable group. Accordingly, since 1998 the OAP and DP have been referred to as the Basic State Grant. The third type of social pension is a War Veterans Subvention (WVS), designated for those who participated in the struggle for Independence.

Table 1: Main features of social cash transfers in Namibia

	Amount (N\$/month)	Eligibility	Means test	Recipients (as of Dec08)	Legislation
Old Age Pension 1/	450	60+ yrs; Citizen/PR, resident	No	130,455	Old Age Pensions Act 1928; National Pension Act
Disability Pension ^{1/}	450	16+ yrs; disabled, blind or AIDS; Citizen/PR, resident	No	20,438	1992
War Veterans Subvention	2,000	Independence struggle; Citizen/PR, resident	Applicant income less N\$36,000/yr	1,767	War Veterans Subvention Act 1999; Veterans Act 2008
Child Maintenance Grant	200 + 100 per additional child (max 6)	<18 yrs(<21); single parent or spouse pensioner or in prison; school attendance; Citizen/PR, resident	Applicant income less N\$1000/m	86,086	Children's Act 1960
Special Maintenance Grant	200	<16yrs; disabled, blind or AIDS; Citizen/PR, resident	No		
Foster Care Grant	200 + 100 per additional child	<18 yrs(<21); in custody; school attendance; Citizen/PR, resident	No	13,404	
Place of safety allowance	10/day per child	<21 yrs; in place of safety			

Sources: Ministry of Gender Equality and Child Welfare, Ministry of Labour and Social Services, Ministry of Veterans Affairs.

Note: 1/ Includes funeral insurance up to the amount of N\$2,200.

⁹ The funeral scheme and the provision of decent burials were introduced on grounds of human dignity, but there is also an administrative benefit in that the application for the burial funds enables the authorities to cancel the pension card, thus limiting opportunities for fraudulent claims.

Table 2: Values of social cash transfers before and after equalisation $^{\prime\prime}$

Old Age	and Disability	Pensions, N	\$/month						
	Equalised rate	Owambo, Kavango, Caprivi	"Coloured"	Rehoboth "Baster!"	Herero, Nama	Tswana	Damara	"White"	Ratio of highest to lowest
1989		55	192	150	65	100	75	382	7:1
1990		92	192	150	92	100	92	382	4:1
1991		92	192	150	92	100	92	382	4:1
1992		120	192	150	120	120	120	382	3:1
1993		120	192	150	120	120	120	382	3:1
1994	135								1:1
Latest: 2008	450								1:1
Child Ma	intenance Gr	ant (3 childre	n), N\$/month						
	Equalised rate	Other "blacks"	"Coloured"	"Basters"	Namas	Hereros	"White"		
1995		58.91	288	182.5	58.2	63.41	582		10:1
1996	340								1:1
Latest: 2008	400								1:1
Foster C	are Grant (3	children), N\$/	month						
	Equalised rate	"Coloured	"Basters"	Namas	"Blacks"	"White"			
1995		330	225	93.6	72	891			12:1
1996	340								1:1
Latest: 2008	400								1:1
Place of	Safety Grant,	, N\$/child/day	,						
	Equalised rate	"Coloured	"Basters"	Namas	"Blacks"	"White"			
1995		1.54	0.95	1.02	0.8	9.76			12:1
1996	10								1:1
Latest: 2008	10								1:1

Sources: Ministry of Health and Social Service (1996) and UNICEF (1991) and authors' calculations.

Note: 1/ The racial categories are not applied consistently in the administrative and historical records and this ambiguity is reflected in this and subsequent graphics.

The social pensions can be traced back to South Africa's Old Age Pensions Act of 1928 and the extension of eligibility to "white" residents of colonial South West Africa in 1949. In 1973

eligibility was extended to all residents albeit at highly differentiated rates. According to UNICEF (1991) the highest pensions were paid to "whites" at a monthly rate of N\$382 and the lowest pensions were paid to people in Owambo, Kavango or Caprivi at a monthly rate of N\$55: in other words, a ratio of 7:1 (Table 2).

After independence in 1990 the new constitution entrenched equality and freedom from discrimination, and enhanced the standing of the country's pension system. Under the National Pensions Act of 1992 the age for eligibility was standardised at 60 for both men and women (previously it had been 65 for men) and, after a couple of increments in the lowest pension rates, the pensions were finally equalised at N\$135 in May 1994. Equalisation meant a lowering of the value of the pension especially for "whites" (Figure 2).

500
400
200
100
1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008

Equalised rate

Rehoboth "Baster"

Herero, Nama

Damara

White"

1998 rate for Owambo, Kavango, Caprivi, inflation adjusted

Figure 2: Value of Old Age and Disability Pension before and after equalisation, N\$

Sources: Information on value of pensions from Ministry of Finance budget documents www.mof.gov.na (accessed January 2009) and UNICEF (2001). CPI data used in the inflation adjustments were provided by Central Bureau of Statistics.

Since then the value of the pension has been raised several times based on assessments during the government's annual budget planning process of the availability of fiscal resources. In recent years the value of the pension has increased in real terms, outpacing inflation and the 2008 real value of the pension was 35 percent higher than at the time of equalisation, and 51 percent higher than in 1999. The value of the WVS has increased even more rapidly from N\$500 in 1999 to N\$2,000 in 2007. This represents a real increase of 115 percent. Moreover, the age criterion of 55 years or more has been removed and an annual income threshold of N\$36,000 has been set as another criterion. Anyone earning less than this amount and who the authorities are satisfied took part in the liberation struggle (more on this below) are eligible irrespective of age, wealth or employment status. In 2004 the responsibility for the OAP and DP was shifted from the Ministry of Health and Social Welfare to the Ministry of Labour and Social Services, whereas the responsibility for the WVS since 2006 has rested with a newly established Ministry of Veterans' Affairs

3.2 Child grants

There are four main types of child grants. The first is the Child Maintenance Grant (CMG), which is paid to a biological parent with a child under 18 years, and whose spouse: (i) is receiving an old age or disability grant; (ii) has passed away; or (iii) is serving a prison sentence of 3 months or longer. Unlike the state pensions and other child grants the CMG is means tested and restricted to applicants with monthly incomes of less than N\$1,000. The applicant must also provide each child's birth certificate (or confirmation of birth or baptism card) and school attendance records if the child is older than 7 years. The main part of the grant is not designed as a conditional cash transfer; school attendance records are required simply as documentation that the child is alive, but it may have similar behavioural effects as a conditional grant. Moreover, the grant may be extended until the child turns 21 years of age as long as the child was registered before turning 18 and with the condition that the child continues secondary schooling. Since 2000 the value of the grant has been N\$200 for the first child and N\$100 for each additional child (max 6 children).

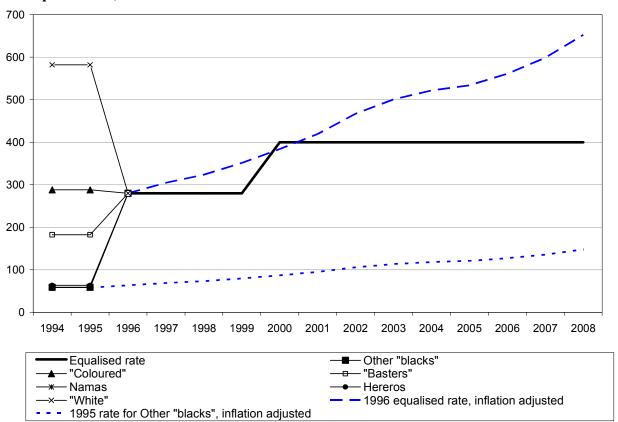


Figure 3: Value of Maintenance Grant for single parent with three children before and after equalisation, N\$

Sources: Information on value of grant from Ministry of Health and Social Service (1996) and Ministry of Finance (2008). Inflation adjustment based on CPI data from Central Bureau of Statistics.

The second grant targeted towards children is the Foster Care Grant (FCG), which is paid to any person who, whether for reward or otherwise, undertakes the temporary care of any child who has been placed in his/her custody. The value of the FCG is the same as the CMG although there is no ceiling set for the number of qualifying children. The third type of child grant is the Special Maintenance Grant (SMG) of N\$200 per month, which is paid to all caregivers of children below 16 years of age who have been diagnosed by a State doctor as being temporarily or permanently disabled, including blind children and those with AIDS. Finally, a Place of Safety Allowance of N\$10 per child per day is paid to a person or institution who is taking care of a child who: (i) is under 21 years of age, and (ii) is placed in a place of safety by a Commissioner of Child Welfare.

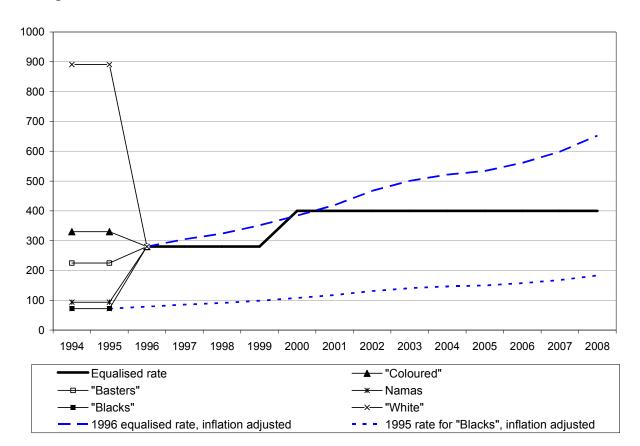


Figure 4: Value of Foster Care Grant for single caregiver with three children before and after equalisation, N\$

Sources: Information on value of grant from Ministry of Health and Social Service (1996) and Ministry of Finance (2008). Inflation adjustment based on CPI data from Central Bureau of Statistics.

Like the social pensions, the child grants are rooted in the pre-Independence legislation adopted from South Africa, notably the Children's Act 33 of 1960, which was made applicable in Namibia with effect from 1 January 1977 by Act 74 of 1973. The rates paid to different ethnic groups were even more discriminatory than the social pensions discussed above. Before the grants were equalized a "white" caregiver with three children would receive N\$582 compared to N\$58.20 to a Nama caregiver with three children, a ratio of 10:1 (also Table 2). In 1997 rates were equalized at a level higher for most ethnic groups. The rate of equalization was set at

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¹⁰ The information presented here on the value of child grants is from a Ministry of Health and Social Services memo dated 19 July 1996, which serves as the background document for the 3 February 1997 authorisation from Ministry of Finance to equalise the rates for the child grants. That document also alludes to some of the difficulties law makers were facing when reviewing the grant system: "At Independence, Namibia inherited a discriminatory and confusing system in which written documentation for current practice cannot be traced." The document also notes that from 1978 no amendments to any of the regulations issued under the Children's Act were gazetted.

N\$160 for the first child and N\$60 for each additional child (maximum three). For a "white" caregiver of three the change meant a decrease in the grant by 40 percent, whereas for a Nama caregiver of three there was an increase of almost 500 percent (Table 2 and Figure 3). Before equalization the FCG was paid at rates that ranged from N\$297 per child per month for "white" families to N\$24 per child per month for "blacks", a ratio of 12:1. Equalization implied a reduction in the "white" rate of almost 40 percent and an increase in the rate for "blacks" of almost 400 percent (Table 2 and Figure 4).

25 20 15 10 5 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 Equalised rate "Coloured" "Basters' Namas "Blacks" "White' 1996 equalised rate, inflation adjusted 1995 rate for "Blacks", inflation adjusted

Figure 5: Value of Place of Safety Grant per child per month before and after equalisation, N\$

Sources: Information on value of grant from Ministry of Health and Social Service (1996) and Ministry of Finance (2008). Inflation adjustment based on CPI data from Central Bureau of Statistics.

Initially the value of the child grants was linked to the value of the pension, and when the pensions were raised in 2000 so were the CMG and PFG. However, since then the value of the child grants has remained unchanged despite several increases in the pension. As a result the value of the grant has not kept pace with inflation and the real value of a CMG or a FCG

received by a caregiver of three has eroded 39 percent since equalisation in 1996 and by 23 percent since 1999. The place of safety grant was also equalized in 1997 at N\$10 per child per day, which was slightly above the rate paid to "whites" who received N\$9.76 compared to N\$0.80 for other "blacks" (Table 2 and Figure 5). However, since then there has been no adjustment in the value of this grant, with its real value lower by 56 percent since 1996 and 46 since 1999.

Table 3 summarises the changes in the different grant values adjusted for inflation. It is clear that the value of the social pensions has increased in real terms, while the child grants have not only fallen behind the pensions but have had their real value significantly eroded in the post-Independence era.

Table 3: Real change in values of social cash transfers

	Old Age/ Disability Pension		Maintenar	Child Maintenance/Foster Care Grant (3 pax)		Safety ance	War Veterans subvention	
Real change since:	1994	1999	1996	1999	1996	1999	1999	
	35%	51%	-39%	-23%	-57%	-46%	115%	

Sources: Authors' computations based on administrative records of the grant values and Consumer Price Index data from the Central Bureau of Statistics.

3.3 Coverage, targeting and administration

The combined number of recipients of the various social grants using the most recent figures comes to around 250,000 people or about 12 percent of the estimated total population in 2008. No consistent time series of recipients of the social transfers is available although since 2003 recording has improved and monthly data are now provided disaggregated by grant type and region. Figure 6 uses various sources to piece together a picture of the evolution of recipients of the social transfers since 1990. Despite gaps for certain earlier years, historical data all rely on the administrative records of the Department of Social Welfare as the source and therefore

should be broadly comparable. Devereux (2001) thus reports 53,129 recipients of the OAP and DP in 1990.

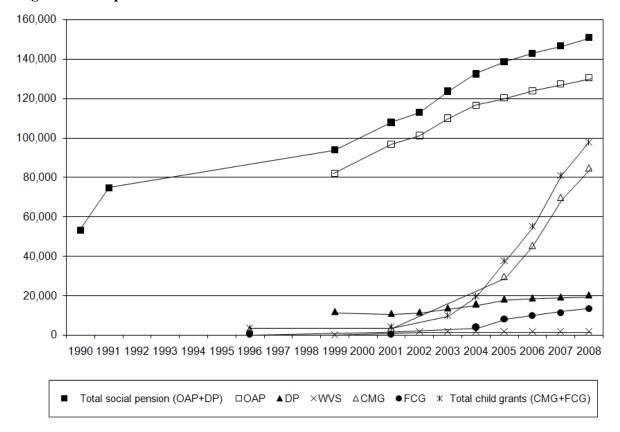


Figure 6: Recipients of social cash transfers¹¹ in Namibia since 1990²¹

Sources: After 2002: administrative records from Ministry of Gender Equality and Child Welfare, Ministry of Labour and Social Services and Ministry of Veterans Affairs. Before 2002: Schleberger (2002), Devereux (2001), Fultz and Pieris (1999) and Subbarao (1998).

Notes: 1/ CMG = Child Maintenance Grant; FCG = Foster Care Grant; AOP = Old Age Pension; DP = Disability pension; WVS = War Veterans Subvention. 2/ Where monthly data was given the annual figure reported on the graph is for the latest month available.

According to the latest administrative records that figure has increased to 150,893 in December 2008, an increase of 184 percent. Most of the increase appears to be as a result of an increase in the recipients of the OAP, whereas the increase in recipients of the DP has been lower. The number of recipients of the WVS has increased from just over 100 at the time the pension was introduced in 1999 to 1767 in 2007. Figure 6 also illustrates how for several years after 1990 the number of recipients of the child grants was low and much lower than for the pensions. There are several reasons for this. Notably, prior to Independence the CMG was not made available at all

in the northern regions of Ovambo, Kaoko, Kavango and Caprivi and so the gap in these populous areas was particularly large (UNICEF 1991). Moreover, since then the main bottlenecks to expanding coverage has been the lack of necessary documentation required to register a child, notably a birth certificate, and more generally lack of awareness of the grants (Ashby et al 2006). However, under new initiatives from the authorities coverage of the child grants has increased markedly in recent years, especially in the previously under-served regions.

This change has coincided with the transfer of responsibility for paying the child grants from the Ministry of Health and Social Services to the Ministry of Gender Equality and Social Welfare. According to administrative data, in January 2003 a total of 9,676 children were registered for a CMG or a FCG. In December 2008 that number had increased ten-fold to 99,490, with CMG recipients numbering 86,086 and FCG recipients numbering 13,404. Access to grants has been expanded, particularly after a campaign by the Ministry and the UN's World Food Programme to register vulnerable children in six northern regions for food aid and hence to transfer these to the child grants. In just two years from April 2006 coverage in these regions increased by 16,000 over and above what would have been expected from past expansion rates (Ministry of Gender Equality and Social Welfare and World Food Programme 2008). Particularly noteworthy is the region of Caprivi where just 20 children received grants in January 2003, corresponding to 0.1 percent of all children under 18. By December 2008 the number of child grant recipients in Caprivi had increased to 5015 or 13 percent of all children under 18 (Table 4). Other regions where child grants are paid to more than 10 percent of all children are Ohangwena, Omusati, Ohsana, and Oshikoto. In all these regions fewer than 1 percent of children received the grants in 2003. Nationally, just over 11 percent of children under 18 receive a grant.

There are also large regional variations in the recipients of the OAP. Given its universality, these regional variations point to some impediments to access whereby some of those being entitled to the grant do not receive it. For instance, in Erongo and Omaheke, 29 and 27 percent, respectively of those aged 60 and over appear not to receive the pension (Table 5). However, in some cases the number of recipients exceed those of the eligible age, which could be a sign of errors whereby some not eligible are receiving the pension, but more likely it is due to inaccuracies in

the population projections used as the basis for determining the number of people 60 years and older. The latter would also explain some of the under-coverage in the data.

While all the social cash transfers have as eligibility criteria that the applicant must be either a citizen or permanent resident, and reside in the country, a number of additional criteria apply to the various grant types. Notably, a key feature of the OAP has been its universality, in contrast to the CMG and more recently the war veterans' pension, where means tests are applied to ensure that these transfer are targeted to lower income applicants. Before Independence the means test for the CMG was applied to target disadvantaged "white" mothers earning less than N\$300 per month (UNICEF 1991). Since the equalisation of the grants, the income threshold has been raised to N\$500 and again to N\$1,000. This threshold pertains to income only and only that of the applicant, thus the assets of the household and the income of other household members are not considered unlike in South Africa, for instance. Usually eligibility under the means test is determined by a salary slip or a note from the employer to certify the income level. In the case of the veterans pension there is a comprehensive vetting process to ensure that the applicant did in fact participate in the Independence struggle, and eligibility under the means test is also determined through documentation of salary levels.

Recipients of pensions and child grants receive payments through a bank transfer, collection at a post office or institution (e.g. old age home) or a mobile unit (Figure 7). According to administrative records about two thirds of recipients of social transfer receive their cash grant through a mobile ATM where cash is dispersed upon the match of the name and ID number and the recipient's fingerprint, with a database carried by the mobile unit.

Table 4: Recipients of child grants by region^{1/}

		January 20	03	April/May 2004			December 2008						
		7	ΓG in % of				-	TG in % of					TG in % of
	TG	Pop<18	Pop<18	CMG	FCG	TG	Pop<18	Pop<18	CMG	FCG	TG	Pop<18	Pop<18
Caprivi	20	37353	0.1	1016	0	1016	37388	2.7	4716	299	5015	38958	12.9
Erongo	610	43698	1.4	674	299	973	47883	2.0	2230	799	3029	66974	4.5
Hardap	1643	31131	5.3	1513	593	2106	32288	6.5	2358	1050	3408	37050	9.2
Karas	962	28543	3.4	815	246	1061	30686	3.5	1787	676	2463	39978	6.2
Kavango	414	108082	0.4	514	442	956	108577	0.9	6301	1356	7657	111240	6.9
Khomas	1999	102388	2.0	2380	568	2948	112149	2.6	5917	1348	7265	156819	4.6
Kunene	341	36053	0.9	479	174	653	37406	1.7	3672	465	4137	42864	9.7
Ohangwena	334	131951	0.3	1262	364	1626	132643	1.2	14865	1641	16506	135948	12.
Omaheke	755	36508	2.1	869	138	1007	38365	2.6	2429	592	3021	46637	6.5
Omusati	363	119640	0.3	1993	365	2358	118374	2.0	14291	1301	15592	113430	13.8
Oshana	837	79774	1.0	1930	345	2275	81194	2.8	12643	1599	14242	87099	16.4
Oshikoto	355	89656	0.4	995	81	1076	92855	1.2	10922	1247	12169	106813	11.4
Otjozondjupa	1043	69150	1.5	1185	471	1656	78775	2.1	3955	1031	4986	94559	5.3
Namibia	9676	869115	1.1	15625	4086	19711	948583	2.1	86086	13404	99490	898651	11.1

Sources: Data on grant recipients provided by Ministry of Gender Equality and Child Welfare; population data from population projections by the Central Bureau of Statistics.

Notes: 1/ CMG = recipients of Child Maintenance Grant; FCG = Foster Care Grant; TG = total grant recipients (CMG+FCG); Pop<18 = Central Bureau of Statistics population estimate of population under 18 for the year. No separate data for CMG and FCG is available before 2004.

Table 5: Recipients of social pension by region $^{1/}$

	No	ovember 200	3	A	August 2004			December 2008		
	OAP	Pop>59	Coverage	OAP	Pop>59	Coverage	OAP	Pop>59	Coverage	
Caprivi	4239	4561	92.9	4339	4476	96.9	5060	4508	112.2	
Erongo	4612	7090	65.0	5004	7455	67.1	6525	9198	70.9	
Hardap	5230	5510	94.9	5632	5673	99.3	6063	6522	93.0	
Karas	3717	4123	90.2	3913	4194	93.3	4396	4623	95.1	
Kavango	8405	11606	72.4	8835	11288	78.3	10777	10926	98.6	
Khomas	6684	9714	68.8	7250	10112	71.7	9722	12287	79.1	
Kunene	4686	5335	87.8	4933	5397	91.4	5725	5917	96.8	
Ohangwena	17758	17758	100.0	18141	18306	100.0	18950	21763	87.1	
Omaheke	3903	4816	81.0	4075	5073	80.3	4573	6254	73.1	
Omusati	21448	20763	103.3	22122	20474	108.0	23791	20311	117.1	
Oshana	11220	10920	102.7	11742	10946	107.3	13943	11464	121.6	
Oshikoto	12038	12872	93.5	12497	13170	94.9	13712	14694	93.3	
Otjozondjupa	5954	5954	100.0	6119	6171	100.0	7218	9750	74.0	
Namibia	109894	119665	91.8	114819	117624	97.6	130455	114568	113.9	

Sources: Data on pension recipients provided by Ministry of Labour and Social Welfare; Central Bureau of Statistics population estimate of population under 18 for the year.

Notes: 1/ OAP = Old Age Pension; Pop>59=Estimate of population over 59 for the year.

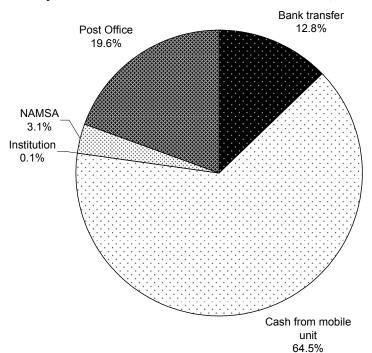


Figure 7: Payment modalities for social cash transfers, 2008

Source: Data provided by the Office of the Prime Minister.

Table 6 shows that the total costs of the social transfer system are approaching 2 percent of GDP and 6 percent of the total budget. This represents almost a doubling in real expenditure since the beginning of the decade. Two thirds of the resources are taken up by the AOP and DP. It is projected that for the fiscal year 2009/2010 the share of the budget devoted to the WVS will match that of the CMG/FCG. Data on administrative costs of the social transfer programmes are not readily available and it is not a straightforward matter to isolate those costs that are directly related to the cash transfer programmes and those that are related to other programmes of the departments and the general functioning of the ministries. This has led earlier studies to some very different conclusions about the costs of the social pension system. For instance, Clausen (2005: 37) suggests that: "The administrative costs constitute only around 4 percent of total costs for the pension scheme and are relatively small compared to the costs of other countries' welfare programs." However, this appears to be exclusively based on costs of delivering cash disbursements from the mobile units (N\$9.75 to deliver a N\$300 pension) and does not seem to include the costs of other disbursement modalities nor the wider costs to the (former) Department

of Social Services in administering the programme. In an earlier study, Subbarao (1998) suggested that the *real* administrative costs of the social transfers was more like 36 percent of the value of the transfer and that the costs were growing at the time. The reason for the escalation in the costs appears to be that even after privatisation of the cash distribution function in the mid 1990's there was no contraction of the staff of the department.

As the system of social grants is being scaled-up in terms of coverage it becomes pertinent to assess the impacts the system is having on promoting national social development objectives notably in terms of reducing poverty and inequality. The next section seeks to provide such and assessment.

Table 6: Government expenditure on social cash transfers¹¹

	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10	
	In million N\$									
Maintenance grants, Foster parent										
allowances	57	57	57	49	90	100	130	193	202	
Social Pensions	252	332	381	443	455	590	660	851	880	
Veterans Subvention Total grants and	14	12	13	12	14	17	21	120	197	
pensions	322	401	450	504	559	707	811	1,165	1,279	
Total expenditure	10,302	11,399	12,245	12,771	13,193	15,279	17,827	22,465	21,749	
GDP	28,992	33,142	34,506	37,300	41,526	48,228	53,564	59,516	64,590	
				In perce	nt of total	expenditure	Э			
Maintenance grants, Foster parent				•		·				
allowances	0.55	0.50	0.47	0.39	0.68	0.65	0.73	0.86	0.93	
Social Pensions	2.45	2.91	3.11	3.47	3.45	3.86	3.70	3.79	4.05	
Veterans Subvention Total grants and	0.13	0.11	0.10	0.09	0.11	0.11	0.12	0.53	0.90	
pensions	3.13	3.52	3.68	3.95	4.24	4.63	4.55	5.18	5.88	
				In	percent of	GDP				
Maintenance grants, Foster parent										
allowances	0.20	0.17	0.17	0.13	0.22	0.21	0.24	0.32	0.31	
Social Pensions	0.87	1.00	1.10	1.19	1.10	1.22	1.23	1.43	1.36	
Veterans Subvention Total grants and	0.05	0.04	0.04	0.03	0.03	0.04	0.04	0.20	0.30	
pensions	1.11	1.21	1.30	1.35	1.35	1.47	1.51	1.96	1.98	

Source: Compiled from budget documents available on www.mof.gov.na (accessed January 2009).

Note: 1/ Figures from 2007/2008 onwards are estimates and projections. Figures do not reflect administrative costs.

4. Empirical analysis: Data and methodology

The empirical analysis to assess the impact of the social cash transfers on poverty and inequality relies on the Namibia Household Income and Expenditure Survey (NHIES) that was carried out from September 2003 to August 2004. The NHIES was based on a national two-stage probability sample of 9801 respondent households. Two forms or questionnaires were administered in the field. Form 1 was used to collect basic information about the household and the people living in it as well as information on household incomes and infrequent expenditure. On this basis it is possible, with some adjustments, to decompose total household incomes into those received from remuneration such as salaries and wages, social transfers from state grants and pensions, and residual income such as profits. Form 2 was a Daily Record Book where households had to record over a four week period all expenditures and receipts, item by item and including incomes and gifts (received and given out), made every day. In preparing the impact analysis of the social transfers using the NHIES two key methodological issues arose. The first related to the appropriate measure of household welfare given the income and expenditure data, and the second issue related to the definition of recipients of social transfer given some ambiguity in the survey instrument. These two issues are discussed in turn below.

In the international literature, it is often suggested that, for pragmatic rather than theoretical reasons, the expenditure concept is the better measure of welfare to use in developing countries (e.g. Deaton 1997). This is because it is well established that poor people have a better conception of their expenditures, and thus poor respondents more accurately give their expenditures in surveys than is the case with incomes. Some reasons why incomes are often under-captured amongst the poor is that poor wage earners do not always know what their wages are before deductions, or that poor subsistence farmers under-report the value of the crops they consume from their own production. On the other hand, it is held that income is better measured in developed countries. In highly unequal societies like Namibia, differences between these two concepts may also have other dimensions, since saving rates and access to credit can be very different between rich and poor.

¹¹ There were 13 of such four week cycles each with a new set of households. While adding to the cost and complexity of the survey operation, the main advantage of carrying out the survey over a full 12 month cycle was that effects attributable to monthly seasonality were evened out.

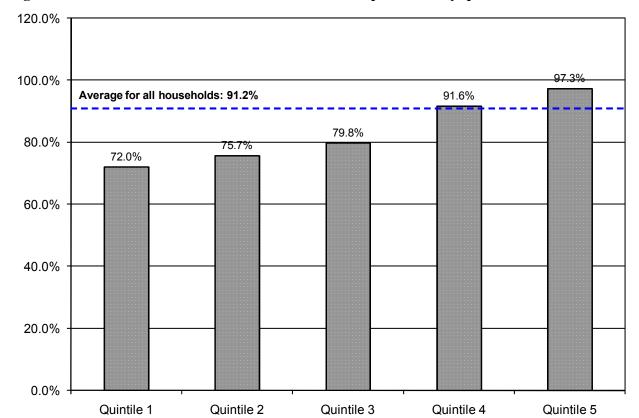


Figure 8: Household income as share of household expenditure by quintile^{1/}

Source: Authors' computations based on 2003/2004 NHIES.

Note: 1/ Quintiles computed using annual expenditure in N\$ per adult equivalent.

In Namibia, with both rich and poor in one country, where the former constitute a large proportion of incomes and expenditures, and the latter a large proportion of the population, under-reporting of both income and expenditure is likely. Exhaustive questioning of all sources of income, as in the NHIES, is one way of trying to limit the problem of under-reporting of income. To deal with under-reporting of expenditure, the expenditure diary method for capturing expenditures has been used in the NHIES 2003/2004, so that poor recall of expenditures does not lead to too great under-estimation of expenditure amongst the rich. Yet problems of correctly capturing both income and expenditure will not have been eliminated. Comparing the incomes available for expenditure i.e. regular household income net of savings, other household income (notably from own production net of inputs) and of deductions by employer with what is actual expenditure illustrates the challenge (Annex A contains details of the components of the expenditure and income variables). Figure 8, shows reported incomes as a proportion of reported

expenditures and reveals that incomes are particularly under-reported in the poorest deciles, particularly Deciles 1 and 2, where less than three-quarters of expenditure is captured on the income side. One important implication of this is that estimates of poverty which use only income as data source will tend to over-state poverty in Namibia. Overall, the correlation between these two concepts (which in principle should be the same) is only 0.70, which implies that variations in income only explain about half of variations in expenditure. One important reason that incomes may be underreported for the poorest households could have to do with the way that remittances and inter-household transfers are recorded. It is well-known that these types of transfers are an important source of livelihoods in Namibia (Subbarao 1998; Devereux and Naeraa 1996) but there was no clear way of capturing these in the NHIES.

It is also apparent from Figure 8 that income is not greatly under-reported amongst the rich in Namibia; in fact, income and expenditure are for the top quintile on average very close. However, both these measures may in fact be under-reported. It is for instance well known from the most recent Income and Expenditure Survey in South Africa (conducted in 2005/2006) that the diary method lead to considerable under-reporting of expenditure amongst the more affluent in that country, probably because of respondent fatigue (Van der Berg and Yu 2007). If this was also the case in Namibia, it is likely that actual expenditure would in fact exceed recorded income, indicating that income may also be under-estimated amongst the more affluent. This is quite likely to be true for income from profits, interest and dividends which is likely to be underestimated in a survey such as the NHIES.

One possible way of dealing with the inaccuracies resulting from under-recording of both income (especially amongst the poor) and expenditure (amongst the rich) is to assume that for any individual household, the higher of these two measures is the accurate one. This makes the assumption that there is no over-reporting of either concept, which would mean that taking the higher of the two would be closer to the true measure, although there may still be some undercapturing. Such a 'hybrid' measure should be a little more accurate than either of its alternatives.

Based on this discussion the subsequent analysis relies on three measures of welfare. The first is *household income* (excluding savings and deductions by employers but including the value of

own production net of inputs), a definition that has been determined to make it consistent with with the second welfare measure, *household expenditure*. The third measure is the *income/expenditure 'hybrid'*, which takes the value of the higher of the two. Figure 9 presents the three measures using kernel density functions, which are essentially smoothed versions of their histograms. The more leftward orientation of the income density function reflects the generally lower levels of reported incomes and its flatter base the greater dispersion of incomes. When income is combined with the expenditure measure, the resulting 'hybrid' has the familiar log normal shape, but with slightly lower levels of poverty and, given the broader base, slightly higher inequality than the measure based purely on expenditure.

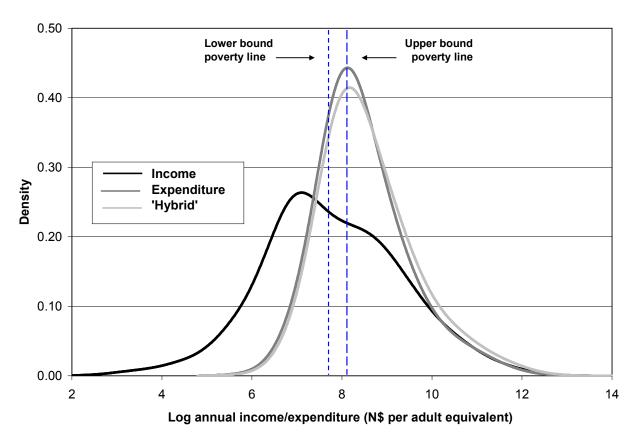


Figure 9: Kernel density functions for measures of household welfare

Source: Authors' computations based on 2003/2004 NHIES.

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¹² This paper follows the practice at the Central Bureau of Statistics by adjusting the welfare measures for household composition using the following weighting scheme to determine an adult equivalent: 0.5 for children up to 5 years, 0.75 for children 6 to 15 years, and 1 for persons older than 15.

The second methodological issue to be addressed relates to the definition of the social grants recipients in the NHIES. With regards to the DP and WVS the survey instrument was quite explicit in the way this information was captured. However, it is clear from inspection of the data that the category of "Old age pension" includes recipients of other types of pensions than just the state grant. In these cases it is natural to assume that the pensioner would have mixed public and private sources of pensions and erroneously reported one total amount to the field worker from the Central Bureau of Statistics. For purposes of the analysis in this paper an adjustment is thus made to include as AOP recipients of households that have one or more members 60 years or older and the pension income is capped at an annual maximum of N\$3,000 per age-eligible household member (reflecting 12 months of a N\$250 pension). Any reported pension income above this amount is regarded as emanating from a private source of pensions. Given the small number of recipients of the DP and WVS, the subsequent analysis is less focused on these grant types.

When it comes to the child grants, the survey instrument captured these under a heading of "Family and other allowances (including state maintenance and child grants)" which is open for interpretation of the respondents and enumerators and again is likely to capture other elements of transfer income than merely the social grants. In this case the data was adjusted to define as a child grant recipient households with an age-eligible child who had lost one or both biological parents, and who reported an income under the category. Although the criteria for eligibility also makes it possible that children of whom one parent is in jail, or who is an OAP recipient, can qualify, these numbers are small and the criteria cannot be determined from the NHIES, thus the possibility that some children were in these categories was ignored for these purposes. Since the number of recipients of FCG in 2003/2004 was relative small (fewer than 4000 nationwide) the results are reported for the two grant types together, but would mainly capture recipients of the CMG. Based on discussions emanating from this study, the Central Bureau of Statistics has redesigned the survey instrument of the next round of the NHIES (covering 2009/2010) in order to better capture the incomes from the various social cash transfers. Nevertheless, even if less than ideal, the adjustments made to the 2003/2004 NHIES appear to bring survey results broadly in line with data from administrative sources. Figure 10 shows a tendency for the adjusted survey data to slightly underestimate the total amounts received by households and the number of recipients when it comes to AOP, while slightly over-estimating when it comes to the child grants. Moreover, results from the two methodologies are closer when it comes to the number of recipients than when it comes to the aggregate amounts, which could have something to do with the difficulties in distinguishing annual from monthly amounts when reporting and capturing the data. Nevertheless, while some degree of divergence is expected simply due to the statistical sampling errors associated with the survey and challenges in recording on the administrative side, the two sets of estimates appear sufficiently close for the analysis to proceed.

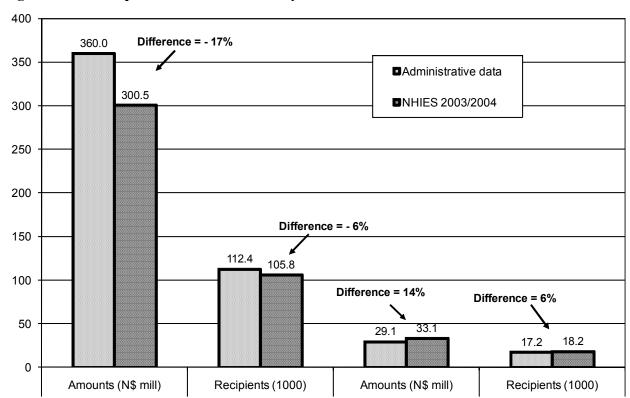


Figure 10: Correspondence between survey and administrative data on cash transfers¹¹

Source: Authors' computations based on 2003/2004 NHIES and data from Ministry of Gender Equality and Social Welfare and Ministry of Labour and Social Services.

Note: 1/ The figures on NHIES 2003/2004 are computed as the amounts reported by households in the survey whereas the amounts for Administrative data are computed by multiplying the number of recipients in each month of the survey as reported by administrative records with the prevailing rate of the appropriate grant at the time.

5. Poverty and inequality in Namibia and the impact of cash transfers

For purposes of assessing the poverty impact of the social transfers the study uses the welfare measures defined above (income, expenditure and 'hybrid' adjusted expressed in per adult equivalents) and the official poverty thresholds. For purposes of reporting poverty the study follows convention by using the decomposable class of poverty measures proposed by Forster et al (1984). Three special cases of this set of measures are of particular interest: the poverty headcount (P0), the poverty gap (P1) and the severity of poverty or squared poverty gap (P2), the two latter of which are more sensitive towards changes in welfare below the poverty line. Following the cost of basic needs poverty line set out in Central Bureau of Statistics (2008), the analysis of poverty uses annual expenditure of N\$2,217.72 per adult equivalent as the severe poverty line (or the lower-bound poverty line), and N\$3,149.4 as the total poverty line (or the upper-bound poverty line).

5.1 Impact on poverty

The analysis of the impact on poverty of the cash transfers is descriptive and static and assumes that no behavioural changes occur due to the transfers nor do the transfers generate any externality or general equilibrium effects. The first set of results are presented under 'With transfers' in the Table 7, which shows that when using household expenditure as the welfare measure severe poverty affects about 20.2 percent of the population, whereas poverty (including severe poverty) affects 37.8 percent of the population. These are the baseline results for welfare variables that include the cash transfer incomes. Thus, using the expenditure figures, roughly the bottom quintile of the population are severely poor, and the second quintile poor but not severely poor. When using household income as the welfare measure however, severe poverty rises to 51.3 percent and all poverty to 59.1 percent. In other words the resultant poverty level is highly sensitive to the choice of welfare measure. The difference in results can be ascribed to the underreporting of income by the poor as discussed earlier, and the income measure of poverty is thus less suitable for this type of analysis. Perhaps the closest figure to the correct value would be the poverty levels computed using the 'hybrid' measure, i.e. assuming that the highest of income or

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¹³ Note that this refers to the share of the *population* in poverty and not to the share of *households* as is the case in the most recent official poverty estimates (Central Bureau of Statistics 2008). The weight applied to the data is thus the household weight multiplied by household size following Deaton (1997). Using household weights only, a smaller proportion would have been regarded as poor, due to the larger household size amongst the poor.

expenditure is the correct welfare measure, as explained above. According to this measure, severe poverty is 17.8 percent and overall poverty 34.0 percent.

Table 7: Effect of social cash transfers on levels of poverty

	Lo	Lower bound poverty line			Upper bound poverty line			
	With transfers	Without transfers	Effect of transfers on poverty measure	With transfers	Without transfers	Effect of transfers on poverty measure		
			Revised per adult	equivalent inco	ome			
Incidence (P0) Gap (P1) Severity (P2)	0.513 0.305 0.216	0.536 0.374 0.298	-4.3% -18.4%*** -27.5%***	0.591 0.379 0.282	0.602 0.433 0.353	-1.8% -12.5%*** -20.1%***		
			Per adult equiva	alent expenditu	re			
Incidence (P0) Gap (P1) Severity (P2)	0.202 0.059 0.026	0.259 0.091 0.047	-22.0%*** -35.2%*** -44.7%***	0.378 0.129 0.061	0.420 0.168 0.091	-10.0%* -23.2%*** -33.0%***		
			"Ну	brid"				
Incidence (P0) Gap (P1) Severity (P2)	0.178 0.050 0.021	0.234 0.080 0.040	-23.9%*** -37.5%*** -47.5%***	0.340 0.113 0.052	0.382 0.150 0.080	-11.0%* -24.7%*** -35.0%***		

Source: Authors' computations based on 2003/2004 NHIES.

The poverty reducing impact of the social transfers can be discerned by comparing these results with the results obtained by subtracting transfers from the welfare variable, which is done for the results under the heading 'Without transfers' also in the Table 7. It is clear that poverty levels without the social transfers are higher. Using household expenditure, the incidence of poverty (P0) without the transfers is 25.9 and 41.8 percent at the lower and upper bound poverty lines respectively. The direct effect of the transfers is thus to lower poverty incidence by 22 and 10 percent, respectively. This effect is statistically significant especially at the lower bound poverty line. The greater positive impact of the social transfers on the poorest of poor is also reflected in the significantly lower levels of the poverty gap (P1) and the severity of poverty (P2), when comparing household expenditure with and without social cash transfers, again especially at the lower bound poverty line. These findings are robust to the alternative specification of the welfare variable using the 'hybrid' measure, but clearly not when it comes to the pure measure of household income, where there is no significant difference in the incidence of poverty

^{*} Significant at 10% ** Significant at 5% *** Significant at 1%.

irrespective of whether transfers are included or not (although the changes to P1 and P2 are significant).

Another way of illustrating the impact of the social transfers is by using the poverty incidence curves in Figure 11. The figure shows that at any given level of household welfare the curve for 'without social transfers' lies above the curve for with social transfers, and thus poverty levels will be higher in the former case irrespective of where the poverty line is set. The indication of the two poverty lines on Figure 11 serves to show how the shift in poverty levels resulting from the social transfers is higher at the lower bound poverty line than at the upper bound poverty line. This confirms the earlier finding that the social transfers seem to have the greatest impact on the poorest of the poor.

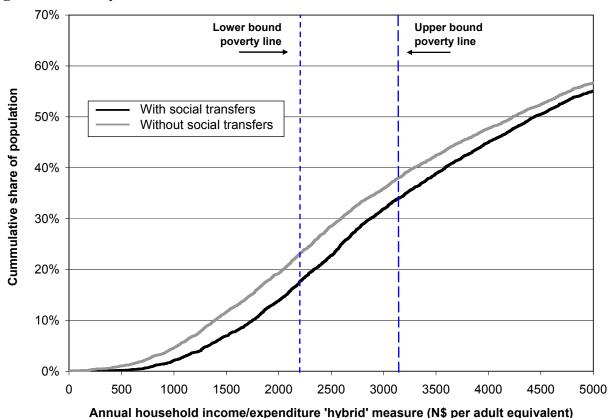


Figure 11: Poverty incidence curves with and without social cash transfers

Source: Authors' computations based on 2003/2004 NHIES.

In order to assess the impact of the social cash transfers on household welfare, given differences in income levels that result from demographic and other characteristics, a multivariate probit regression was run to determine which factors contributed to households being in poverty. The results are summarised in Table 8. By controlling for the impact of other factors such as region, marital status, gender, education, age, employment status of household head, household size, the number of employed in the household, the number of children and the number of elderly, the impact of grant receipt on the probability of being in poverty can be considered. This was done both for the lower and upper poverty line and was also carried out for both the income measure of poverty and the expenditure measure (Table 8 shows the results for household expenditure). It is apparent that the OAP had a clear and significant negative association with poverty incidence (i.e. the pension lowers the probability that the recipient lives in a poor household), both at the lower and upper bound poverty lines. On the other hand the CMG/FCG and the DP had a significant negative association with poverty incidence only at the upper bound. In contrast, the WVS in the more limited form this pension took at the time of the survey, seem to have had only a marginal (and insignificant) effect on lowering the probability of household poverty at the time.

Table 8: Probit regressions: Estimates of grant receipt on incidence of household poverty (P0) at two poverty lines (using adult equivalent household expenditure) 1/

	Lower bound poverty line	Upper bound poverty line
Old Age Pension	-0.2169**	-0.2087**
War Veteran Subvention	-0.010	-0.0028
Disability Pension	0.1208	-0.1841*
Child Maintenance Grant and Foster Care Grant	-0.2042	-0.1886*

Source: Authors' computations based on 2003/2004 NHIES.

Notes: 1/Other factors controlled for: Region, area type, Marital status of household head, Gender of household head, Education of household head, Age of household head, Employment Status of household head, Household size and its square, Number of Employed in household, Number of Children 0-17, Number of elderly 60+. * Significant at 10% ** Significant at 5%.

Table 9 deepens the analysis by focusing on the effect of grants on the poverty measures that are more sensitive to the depth and severity of poverty. It contains the summarised results of Tobit regressions, which censors the value of the dependent variable, with the dependent variable being either the poverty gap ratio (P1) or the severity of poverty (P2). The table shows the coefficients for the impact of social grants on reducing the poverty measures under consideration

(P1 and P2). It is noteworthy that the effect of the old age pension is quite strong for both poverty measures and at both poverty lines. All four coefficients for receipt of the child maintenance grant are also significant, indicating that this grant does have an impact on reducing both the poverty gap ratio and the squared poverty gap ratio. Thus it appears that the effect of these grants is quite strong in reducing the more severe forms of poverty. Disability grants also play a significant role in reducing such poverty, but only at the upper-bound poverty line.

Table 9: Tobit regressions: Effect of grant receipt on household poverty gap ratio (P1) and squared poverty gap ratio (P2) at two poverty lines (using expenditure measure of welfare)^{1/2}

	Lower bound	poverty line	Upper bou	ind poverty line
-	P1	P2	P1	P2
Old Age Pension	-0.1016***	-0.0575***	-0.0633***	-0.0435***
War Veterans Subvention	0.0178	-0.0238	0.0075	-0.0142
Disability Pension	-0.0459	-0.0545*	-0.0273	-0.0325*
Child Maintenance Grant and Foster Care Grant	-0.0728*	-0.0583**	-0.0368*	-0.0350**

Source: Authors' computations based on 2003/2004 NHIES.

Notes: 1/Other factors controlled for: Region, area type, Marital status of household head, Gender of household head, Education of household head, Age of household head, Employment Status of household head, Household size and its square, Number of Employed in household, Number of Children 0-17, Number of elderly 60+. * Significant at 10% ** Significant at 5% *** Significant at 1%.

5.2 Inequality and targeting

While the positive impact of social transfers on poverty reduction is quite clear, the transfers appear to have less of an effect when it comes to reducing inequality. Table 10 shows the Ginicoefficients, using the three welfare measures and computed with and without the various grants. The level of inequality is highest for the income based measure, again due to the underestimation of the income of the poor. The Gini-coefficients for expenditure and for the hybrid measure are more realistic even if they are still extremely high compared to other countries.¹⁴ Given the overlapping confidence intervals, it can be concluded that the grants make no

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¹⁴ Central Bureau of Statistics (2008) provides further comparison between inequality in Namibia's and other developing countries.

statistically significant difference, at conventional levels of confidence, in the standard measure of inequality irrespective of whether household expenditure or the 'hybrid' measure of welfare is used. Nor is this conclusion affected by whether all grants are excluded or either of the two main categories of grants, social pensions and child grant. Only when using household income as the welfare measure is there a (barely) statistically significant difference in the Gini-coefficient computed with and without social transfers.

Table 10: Gini-coefficients with and without social cash transfers

	Household income	Household expenditure	'Hybrid'
With all social transfers	0.739	0.600	0.633
	(0.725-0.752)	(0.577-0.623)	(0.614-0.653)
Without child grants	0.740	0.601	0.634
	(0.730-0.751)	(0.589-0.614)	(0.622-0.646)
Without Old Age Pensions	0.760	0.618	0.648
	(0.750-0.770)	(0.605-0.630)	(0.636-0.660)
Without any social transfers	0.763	0.620	0.650
	(0.753-0.773)	(0.608-0.632)	(0.638-0.662)

Source: Authors' computations based on 2003/2004 NHIES.

Note: Brackets show 95% confidence range.

While the initial assessment is that the impact of the social grants on overall inequality measured by the Gini-coefficient may be small, it is useful to look more closely at the welfare distribution to further explore the effects of social transfers on poverty and inequality. Figure 12 displays the Lorenz curve for total household welfare using the income/expenditure hybrid and concentration curves for various income sources, notably social grants and wages/salaries. The line furthest below the 45 degree line of perfect equality is wages/salaries, which suggests that the overall effect of this type of income is inequality increasing for more than 80 percent of the population up to where the curve cuts through the Lorenz curve. The concentration curve for social pensions lies above the 45 degree line, which suggests that this type of income tends to fall disproportionately to the poorer individuals and thus decrease inequality. On the graph it can also be discerned for example how the 40 percent poorest individuals command almost 70 percent of the total pension income, making this a highly pro-poor intervention. The 40 percent poorest individuals command 50 percent of the total child grant income. The shape of the concentration

curve for child grants however, is such that these grants appear targeted towards the poorest up until around the 25 percentile, but then the curve starts bending inwards towards the 45 degree line. The result is less effective targeting of the child grants.

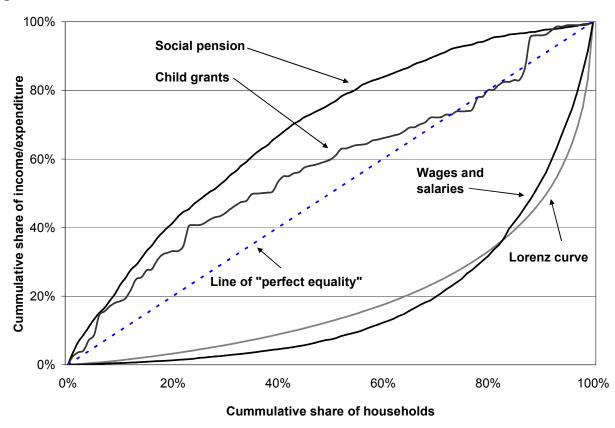


Figure 12: Lorenz and concentration curves for household income sources^{1/}

Source: Authors' computations based on 2003/2004 NHIES.

Note: 1/ Ranking of households using income/expenditure 'hybrid' net of grants.

In interpreting the targeting of the child grant, two different aspects need to be distinguished. On one hand, the main eligibility criteria (access is largely limited to children who are single or double orphans) ensure that there is good targeting of poor households, as children and particularly orphans are more commonly found in poor households. Thus 53 percent of the population in the poorest two quintiles are children, against only 32 percent in the richest quintile, and in the poorest two quintiles almost 18 percent of children are single or double orphans, as against only 9 percent in the richest quintile. Consequently the bottom two quintiles

contain more than 60 percent of all orphans. On the other hand, targeting *within* the group of eligible may nevertheless be less accurate, as will be shown below.

Table 11: Share of eligible households receiving child grant by means test threshold (in % of eligible households)

	Below \$1000/month	\$1000/month or more	Below \$2000/month	\$2000/month or more	All eligible households
Household income before child grant	12.94	13.63	13.28	12.88	13.18
	(11.07-14.80)	(11.30-15.97)	(11.56-15.01)	(10.15-15.61)	(11.73-14.64)
Household expenditure before child grant	14.55	12.77	12.95	13.56	13.18
	(11.43-17.66)	(11.12-14.41)	(11.08-14.82)	(11.23-15.88)	(11.73-14.64)
'Hybrid' before child grant	13.86	12.99	13.00	13.44	13.18
	(10.63-17.09)	(11.36-14.63)	(11.06-14.94)	(11.23-15.65)	(11.73-14.64)

Source: Authors' computations based on 2003/2004 NHIES.

Note: Brackets show 95% confidence range.

The finding that the social pensions are better targeted towards the poor than the child grants is somewhat surprising given the universality of the pensions and the means test of the child grants, which are intended to make only low income applicants eligible for support. One explanation for this could be that at the time of the survey in 2003/2004, and thus before the Government began a concerted effort to roll out the child grants especially among the poorest and most vulnerable households, the means test was not applied rigorously. Another important explanation relates to the way that the means test is designed. By linking the means test threshold to the individual caregiver and not the household opens for the possibility that better-off households receive the grants. There is corroboration for this in the data. Table 11 shows that the share of eligible households that receive child grants is not significantly different whether the household income is above or below the N\$1,000 per month threshold, a finding that is robust to different specifications of the household welfare variable. While the NHIES contains no information on individual incomes it may be argued with good reason that the welfare of the child and the family should not only be determined by the income of the applicant, but more broadly by the household which they share. Indeed the share of recipient households does not change even when doubling the means test threshold (also Table 11). These results can be taken as further

proof of the lack of effectiveness of the targeting mechanism for the child grants, at least at the time of the survey.

5.3 Comparison with South Africa

A comparison with South Africa is instructive, especially given the origins of the Namibian system of social cash transfers. Moreover, as policy makers in Namibia are contemplating introducing a means test to the OAP, the South African experience is particularly relevant. The old-age pension in South Africa is means tested, and applies only to males aged 65 and above and women aged 60 and above (as used to be the case in Namibia). As has already occurred in Namibia, this gender distinction is now being eliminated in South Africa. The means test is set relatively high for the old age pension so that about 80 percent of old people do in fact receive the pension. The child support grants in South Africa are no longer linked to criteria other than age and the means test. This means test is stricter (though it was recently relaxed somewhat), with the consequence that fewer than half of the age-eligible children benefit from this grant. Criteria formerly applying to the South African child maintenance grants relating to household structure and the position of the caregiver (who usually had to be a single parent) have now been abolished. At the end of 2008, South African grant values were N\$940 per month for both the Old Age Pension and the Disability Grant, N\$210 for the Child Support Grant, and N\$650 for the Foster Care Grant.

According to recent survey data, which is broadly comparable to the NHIES, 87 percent of South Africa's age-eligible receive the pension compared to 82 percent of Namibia's. But South Africa has a means test for social pensions despite its almost universal nature, and there is some evidence that it has an effect though not as much as would be expected. In the top quintile in South Africa 70 percent access the pension (Figure 13). In Namibia 74 percent of age-eligible persons in the top quintile get the grant. At the other end of the distribution 94 percent of the age-eligible amongst the poorest 20 percent of the population receive the social pension in South Africa, compared to 87 percent in Namibia. Generally speaking the difference between the universal model pursued by Namibia and the means tested model pursued by South Africa does generate different outcomes, though these differences do not appear overwhelming. What is particularly striking is the ineffectiveness of the means test in South Africa, mainly because the

threshold is set fairly high as noted earlier. Any further assessment of the two systems would thus need to carefully balance the costs of administering the means test, including the associated effects on incentives from the much higher level of the pension in South Africa with the slightly less efficient targeting in the Namibian case.

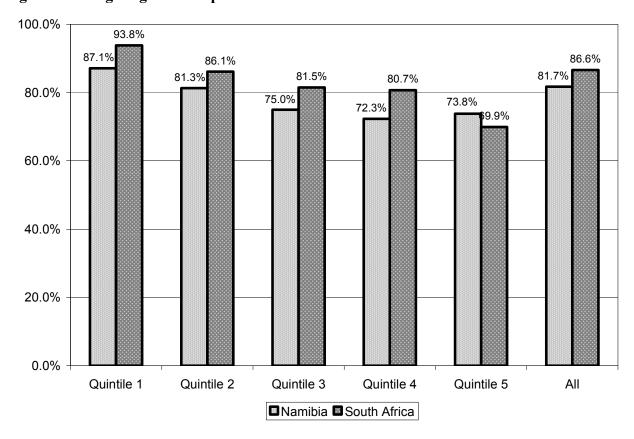


Figure 13: Targeting of social pensions in Namibia and South Africa¹¹

Source: Authors' computations based on 2003/2004 NHIES and on the South African 2005/2006 IES.

Note: 1/ Household quintiles are derived using per adult equivalent expenditure before grants (i.e., all grant income = 0) for both Namibia and South Africa. Percentages refer to age-eligible households.

For child grants, the picture is quite different. Firstly, in South Africa 57 percent of age-eligible children get the grant, versus only 13 percent in Namibia, according to the survey data for 2003/2004 (although as already noted this picture is likely to have markedly changed in recent years as the programme has expanded in particularly poor regions). This difference is primarily accounted for by the fact that eligibility of child grants in Namibia is confined to those meeting specific criteria unrelated to the means test (largely caregivers of children who are single or

double orphans), whereas in South Africa the means test and age criteria are the only ones that apply. Despite the official means test, there is no evidence of targeting of the grants to poorer households within the group eligible by other criteria in Namibia. In all quintiles, access to the grant is low but it seems to peak as proportion of the age-eligible in the middle quintile at 15 percent, and be lowest in the top quintile at 7 percent. Much of this targeting occurs through the eligibility criteria rather than the means test as more children and orphans are live in poor households. In South Africa the evidence of targeting is much stronger, with 85 percent and 69 percent of households with age-eligible children receiving the grants in the bottom two quintiles, compared to a still high 27 percent in the fourth quintile, and only 7 percent in the top quintile.

100.0% 85.0% 80.0% 69.4% 60.0% 57.0% 50.0% 40.0% 27.3% 20.0% 13.9% 14.7% 13.2% 12.0% 11.9% 12.1% 0.0% Quintile 1 Quintile 2 Quintile 3 Quintile 4 Quintile 5 ΑII ■ Namibia ■ South Africa

Figure 14: Targeting of child grants in Namibia and South Africa 11

Source: Authors' computations based on 2003/2004 NHIES and on the South African 2005/2006 IES.

Note: 1/ Household quintiles are derived using per adult equivalent expenditure before grants (i.e., all grant income = 0) for both Namibia and South Africa. Percentages refer to age-eligible households and in Namibia the single-parent criteria is also applied.

6. Simulations and policy discussion

The above analysis raises interesting and important questions regarding the further evolution of the Namibian social grant system. Firstly, it is quite clear that social grants play an important role in the reduction of poverty, especially amongst the very poor. Thus there are strong grounds for believing that, within realistic fiscal constraints, a further expansion of grants would further reduce poverty particularly extreme poverty. This section discusses a range of issues faced by planners and policy makers in expanding access to the social grants and making their impact more pro-poor. The section begins by presenting a series of scenarios for the costs of the social transfer system and then discusses issues related to targeting and means testing.

A simple set of simulations are illustrative of the likely fiscal pressures emanating from the social transfer system. The simulations are based on a set of different assumptions regarding population dynamics and economic growth. The population dynamics are reflected in the projections from three sources: the Central Bureau of Statistics in Namibia, the US Census Bureau and the UN Population Division. These projections differ notably in the way they have accounted for the impact of HIV/AIDS on the population. The projections by the Central Bureau of Statistics are clearly the most optimistic when it comes to population growth and by using lower levels of expected mortality in its medium variant scenario the total population of Namibia is projected to reach nearly 3 million by 2030. The projections from the UN Population Division and especially the US Census Bureau, which consider both the impact of the epidemic and the expansion in recent years of access to anti-retroviral treatment, are less optimistic. However, even if the levels differ between the different population projections they all point in the same direction when it comes to the falling dependency ratios, especially the child dependency ratio. A key effect here is the spike in fertility with the baby boom around the time of Independence and the ageing of these cohorts. Using the data from the Central Bureau of Statistics Figure 15 illustrates the population dynamics notably the falling total and child dependency ratio and the low and rather stable aged-dependency ratio.

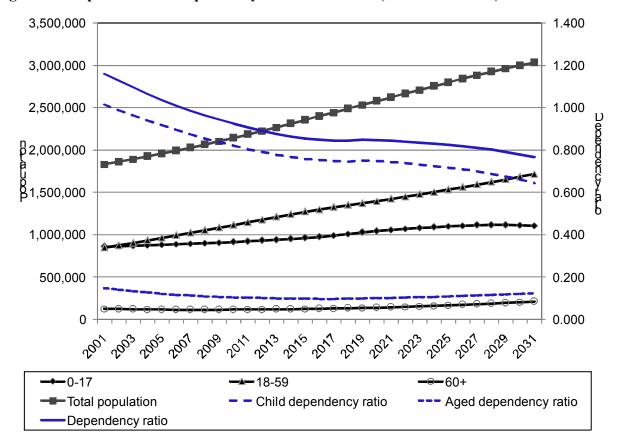


Figure 15: Population and dependency ratios 2001-2031 (medium variant)

Source: Central Bureau of Statistics.

The simulations combine the data on children and the elderly to estimate the demand for social transfers in 2010, 2020 and 2030. The simulations rest on the following simplifying assumptions: coverage of the OAP is expected to stay at 90 percent, for CMG/FCG coverage will increase to 20 percent of all children under 18 years, and for WVS the number of recipients will increase to 10,000 in 2010 and to 20,000 thereafter. A once-off doubling of the rates payable to recipients of CMG/FCG is included to allow for these grants to recover recent years' lost real value, but thereafter all grants are expected to follow the rate of inflation which is set at 5 percent annually. The final assumption relates to administration costs, which in the absence of detailed cost data have somewhat simplistically been set at 15 percent across all grant values. Once more detailed costs estimates have been established it would be easy to rerun the simulations. The population projections are combined with two scenarios for real GDP growth, which reflect Namibia's recent historical growth rate of 4 percent annually and one that reflects more subdued growth prospects of 2 percent annually. In combination the population projections and the growth

assumptions generate six different outcomes for fiscal costs of the social cash transfer programmes for each year as presented in Table 12.

The results show that under the broad assumption of continued growth in GDP at current levels the total costs of the social cash transfers are expected to fall from 2.6-2.7 percent to 1.6-2.0 percent between 2010 and 2030, with the range representing the differences in the three sets of population projections. The falling shares of cost to GDP arise as a result of GDP growth rates outpacing the combined effects of inflation, growth in the number of recipients, and one-off adjustments to the grants. Under all three population scenarios the OAP/DP will command the largest share, followed by the adjusted CMG/FCG and the WVS. The costs shares of all these programmes are falling over time and thus as a whole the programmes of social transfers appear sustainable from a fiscal point of view. This picture changes, but only slightly, if the GDP growth assumption is relaxed and real growth is assumed to slow to 2 percent annually. Under the two latter and more realistic population projections the share of costs of the social transfers to GDP will be either flat or falling from a peak of just under 3 percent. Three percent is also the ceiling on the budget deficit, which implies that the total costs of the social transfer programmes, even under a longer period of slower economic growth, would be manageable within an otherwise balanced budget.

Nevertheless, issues related to efficiency and cost-savings will remain of interest to policy makers. In particular, there is a long and ongoing debate about means testing of the OAP. The 1992 National Pension Act, the 1998 draft amendment to the Act, and the 1997 Poverty Reduction Strategy all make provisions for means testing to be introduced for the OAP. While there thus appears to be political commitment to the principle of means testing there is less agreement on the modality of the test. Interestingly the National Development Plan 3 does not mention means testing at all in its sections on programmes for social welfare. To the contrary, the plan actually proposes increases in "the amounts of welfare grants in response to inflation" and keeps the target from the previous plan to increase coverage of the old age and disability grants to 95 percent of *all* elderly and disabled (National Planning Commission 2008: 209).

¹⁵ For instance, Section 16 (Regulations) of the National Pensions Act of 1992 states: "The income and assets of any applicant (are) to be taken into account in determining any national pension including the value of any assets alienated in any manner within a stated period immediately before application for such a pension."

There are at least two issues to consider when it comes to means testing. The first is what the best way would be to improve the targeting of the OAP, and whether a means test is necessarily the only way of doing so. The second issue to consider is the actual cost of administering means testing. A strong case can be made that in a situation such as the Namibian one, where the old age pension is already universal, the introduction of a means test may only lead to behavioural changes that would not be desired from a policy perspective. Thus, it may create disincentives for individuals to make their own provisions for retirement, if such provision disqualifies people from receiving the social old age grant. An alternative way of dealing with this would be to use the tax system to recover at least part of the costs of old age pensions to more affluent old people through imposing taxes on this income, i.e. an ex-post approach that claws back the pension through revenue collection. On the other hand, if the costs of delivering pensions to recipients are high (and more detailed information is needed on the administrative costs of the pension and other cash transfer programmes) it may even be more worthwhile to try and reduce the number of pensions going to the non-poor in order to reduce fruitless expenditure. In such a case the tax system could potentially be used to impose a severe penalty for those who do take up such social pensions if they are also in the taxable income bracket. This can be done relatively easily and would not impose great costs in terms of changes in behaviour (although there may be some difficulty in treating spouses with varying incomes).

On the other side of the spectrum, the child grants are presently in principle means tested though indications are that at least at the time of the NHIES, these means tests really were either not applied rigorously in practice or that their reference to the income level of the applicant allowed for large errors of inclusion when measured by household income. This may not be a great problem in most cases since many orphans and vulnerable children are in households that are so obviously poor that the means test may just add an unnecessary bureaucratic inconvenience. Yet amongst the much smaller number of non-poor orphans and vulnerable children, there is a considerable proportion (as large a proportion as for the poorer orphans and vulnerable children, as has been indicated above) that does receive these grants without qualifying by the means test criterion. As the grant roll-out improves, such errors of inclusion would become increasingly

costly in budgetary terms. Moreover, if the grant value is increased, it will from a fiscal perspective become even more necessary to keep numbers in check.

Also, at the time of the survey the grants were reaching only a small proportion of orphans and vulnerable children. This proportion would now have risen considerably. However, an issue that has not yet been addressed is whether some other poor children may have even greater needs than many orphans and vulnerable children, but presently do not qualify for these because the eligibility criteria are so strongly focused on the orphan (single or double) status of the recipients. This is an issue that the Namibian social grant system will have to deal with as it matures: Who are the really needy, and what are the appropriate eligibility criteria to target them? Given the large unmet need amongst children, it would therefore appear that some further thinking is still necessary around the means test and also on eligibility criteria so as to cover all of the vulnerable. Means testing appears appropriate in a case such as this where there is such a large need that is not satisfied in order to contain budgetary costs including costs of delivering the grants, which are proportionately higher for children because of the smaller value of the grants they receive.

Table 12: Costs of social cash transfers programmes under different scenarios¹¹

	Scenarios for population projections										
	Central Bureau of Statistics			US Census Bureau			UN Population Division				
	2010	2020	2030	2010	2020	2030	2010	2020	2030		
Total population	2,143,410	2,577,082	2,998,383	2,128,471	2,262,573	2,280,688	2,157,021	2,427,639	2,677,545		
Population 0-17	913,088	1,042,379	1,111,525	901,466	773,749	681,705	926,982	934,042	974,345		
Population 18-59	1,114,277	1,395,516	1,684,470	1,097,367	1,323,353	1,408,459	1,109,738	1,337,081	1,504,826		
Population 60+	116,045	139,187	202,388	129,638	165,471	190,524	120,301	156,516	198,374		
Child Dependency Ratio	0.82	0.75	0.66	0.82	0.58	0.48	0.84	0.70	0.65		
Aged Dependency Ratio	0.10	0.10	0.12	0.12	0.13	0.14	0.11	0.12	0.13		
Total Dependency Ratio	0.92	0.85	0.78	0.94	0.71	0.62	0.94	0.82	0.78		
		Simulations of costs, % of GDP									
Growth scenario 1 (real GDP gro	owth=4%pa)										
CMG/FCG	1.20	0.92	0.81	1.18	0.68	0.50	1.21	0.83	0.71		
OAP/DP	1.03	0.83	0.82	1.15	0.99	0.77	1.06	0.94	0.80		
WVS	0.38	0.51	0.35	0.38	0.51	0.35	0.38	0.51	0.35		
All social cash transfers	2.60	2.27	1.97	2.71	2.19	1.61	2.66	2.28	1.86		
Growth scenario 2 (real GDP gro	owth=2%pa)										
CMG/FCG	1.29	1.21	1.29	1.28	0.90	0.79	1.31	1.09	1.13		
OAP/DP	1.11	1.09	1.30	1.24	1.30	1.23	1.15	1.23	1.28		
WVS	0.41	0.67	0.55	0.41	0.67	0.55	0.41	0.67	0.55		
All social cash transfers	2.81	2.98	3.14	2.93	2.87	2.57	2.87	2.99	2.96		

Sources: Population projections are the 'medium variants' from US Census Bureau, Central Bureau of Statistics and UN Population Division.

Notes: 1/Common assumptions include: Inflation of 5% pa; coverage of OAP/DP of 90% of 60+ population; coverage of 20% of 0-17 population; coverage of WVS of 10,000 in 2010 and 20,000 thereafter; one-off adjustment to child grants of 100% then real value fixed; real value of pensions constant at 2008 level; Administration costs=15% of grant values. CMG=Child Maintenance Grant; FCG=Foster Care Grant; OAP=Old Age Pension; DP=Disability Pension; WVS=War Veterans Subvention.

The next set of simulations contrast the effects of improved targeting through means testing of the child grants against increased coverage through expansion of these grants, based on the 2003/2004 survey. A simulation of the effect of targeting the grants better (shifting all grants presently received by persons not in the bottom two quintiles to recipients in these two quintiles) shows that the population in poverty would have been about 2.9 percent smaller at the lower bound poverty line, and 1.2 percent at the upper bound poverty line at the time of the survey, and assuming no behavioural changes in response to the grants (see Simulation 1 in Table 13). This simulation was based on a probit model containing demographic and other information on households to reallocate grants to the lower two quintiles. Eligible households were thus allocated grants in accordance with their likelihood of receiving such grants in the survey. The percentage reduction in poverty would have been slightly greater for the poverty measures that are more sensitive to more severe poverty. Thus improving targeting could have brought a fair amount of impact on poverty, even though it is unlikely that this full impact is achievable in practice.

Table 13: Simulations of poverty effects of better targeting versus expansion of child grants (using household expenditure per adult equivalent as welfare measure)

	Lower	bound pove	rty line	Upper bound poverty line						
	P0	P1	P2	P0	P1	P2				
Poverty level before simulation	0.202	0.059	0.026	0.378	0.129	0.061				
Simulation 1: Re-targeting all child grants to the lowest two quintiles										
Change in poverty level	-2.9%	-3.4%	-3.8%	-1.2%	-2.2%	-2.9%				
Simulation 2: Doubling grants spending without improving targeting										
Change in poverty level	-3.1%	-3.8%	-4.4%	-1.2%	-2.4%	-3.3%				

Note: A probit model containing demographic and other information on households was used to reallocate grants to the lower two quintiles in simulation 1, and to all quintiles in simulation 2. Eligible households were thus allocated grants in accordance with their likelihood of receiving such grants in the survey.

It is instructive to contrast these effects with those of doubling total spending on child grants through expanding the number of grants, but without improving targeting. The impact on poverty of such a scenario in 2003/2004 would have been almost exactly the same: a reduction of 3.1 percent in the numbers in severe poverty and 1.2 percent in poverty, though the impact on the poverty severity measures is slightly larger (see Simulation 2 in Table 13). Again, a probit model containing demographic and other information on households was used to reallocate grants, but

this time to all quintiles, and again, eligible households were thus allocated grants in accordance with their likelihood of receiving such grants. Yet this second simulation would have required spending *twice* as much money on child grants as was the case at the time of the survey. A very similar effect on poverty could thus have been attained much more cheaply simply by ensuring that child grants were better targeted rather than through the more expensive option of expanding child grant coverage. In practice, the best of both worlds can be attained through *both* expanding coverage of social grants to those eligible, *and* improving the targeting through proper application of the means test.

Table 14: Selected policy implications of the study

- Develop an overarching policy for social protection, which should also define more clearly the
 objectives of the cash transfer system, establish its development planning priority and set consistent
 targets.
- Strengthen coordination and capacity among implementers to avoid double payment of social pensions, subventions and grants, to improve means testing and strengthen uptake and delivery in hard to reach areas and to excluded social groups.
- Determine the appropriate level and regular adjustment (through indexation) of the grants, which is likely to include a one-time upward adjustment to the level of the child grants to align these with other grant types. Medium term budgetary safeguards could be introduced to ensure stability in the availability of fiscal resources for financing the cash transfer programme.
- Reassess suitability of the means test for the maintenance grant specifically with its reference to the
 applicants' income rather than the socio-economic status of the household.
- Reassess eligibility criteria for the maintenance grant notably the exclusion of poor and vulnerable children whose both parents are alive but who may be as needy as children who are currently eligible.
- Explore alternatives to ex-ante means testing of old age pension e.g. using the tax system to claw back pension or penalize high-income recipients.
- Investigate the true administrative costs of the cash transfer system to further assess fiscal sustainability and cost-effectiveness of the system as a whole and in the options for means-testing.
- Strengthen M&E and invest in research for instance on the impact of the secondary school
 conditionality, the large exclusion errors of the old age pension in certain regions (e.g. Erongo and
 Omaheke), the effects of social pensions and grants on labour force participation and other specific
 and general issues related to the cash transfer system.
- Explore alternative social protection programmes specifically directed towards the youth and the unemployed such as public works programmes, incentives for labour hire and employment guarantees.
- Redesign the household income and expenditure survey to better capture the incomes from social and
 private transfers, including cash grants and remittances. Also, involve stakeholders in social protection
 system in the design, execution and analysis of the survey.

On the basis of the discussion in this section a list of selected policy issues is compiled in Table 14. The list is by no means exhaustive but covers a series of key issues that are particularly pertinent for consideration by the Namibian authorities as the system for social protection is reviewed within the context of the new National Development Plan and the cash transfer system expanded. Some of these issues are discussed further next in the conclusion of the study.

7. Conclusions

The Namibian system of social cash transfers has its roots in South Africa, but has evolved quite differently given the different economic and social circumstances in these two countries resulting in a mix of eligibility criteria being applied. So for instance, the old-age pension in Namibia is not means tested (unlike in South Africa), but in principle the child grants are. Also, the Namibian child grant system has elements of conditionality by requiring school attendance records as documentation that the child is alive which some caregivers may regard as a signal that they are required to keep children at school. It may also lead to those not attending school to perceive that they would be excluded from such grants and thus keep them from applying. Certainly the provision of extending the grant beyond the 18th to the 21st year if the child attends secondary school serves as a more conventional conditionality. This is important and further evidence needs to be collected as to the uptake and effects of this feature of the grant. Raising secondary levels of education is of critical importance to Namibia: in 2001 only 46 percent of the candidates for the junior secondary school examination (grade 10), attained the minimum level required into grade 11 (World Bank 2005).

Since 2003/2004 (the years of the NHIES), the number of grant recipients has increased rapidly. This is particularly true for the Foster Care Grant and Child Maintenance Grants which have seen a ten-fold increase between 2003 and 2008. Consequently, at present more than 12 percent of all Namibians are estimated to receive some type of social transfer. But while the number of grant recipients has unquestionably increased, the value of grants has not shown as clear a trend. The value of some grants (Old Age and Disability Pension and War Veterans Subvention) has increased in real terms since equalisation in the post-Independence period in the 1990s, but in

contrast the value of child grants and place of safety grants has declined. The nominal values of these grants have remained largely constant while inflation has eroded their real value.

The NHIES 2003/2004 data has turned out to be a useful tool for studying the impact of grants on household welfare, which is not possible from official administrative data only and which has not been possible before in Namibia due to lack of data. There is broad consistency between the NHIES and administrative sources in terms of both the aggregate value and especially the number of grant recipients, once one adjusts for cases where respondents clearly misunderstood the question on grants (e.g. the confusion between pensions from employment, and social old age pensions, or between maintenance payments or remittances and child grants for which generally only single orphans in the case of maintenance grants or double orphans in the case of foster grants are eligible).

In the static framework used in the analysis social grants are found to lower the number of "poor" individuals (below the upper bound poverty line) by 10 percent. For "very poor" individuals the impact is larger, namely a 22 percent reduction. Moreover, use of the FGT poverty measures shows that the grants matter more among the poorest of the poor. An analysis of the grants demonstrates that not only do they reduce poverty, but that there is a significant negative correlation between severe poverty status and social cash transfers even after controlling for other factors that may play a role such as region, household structure, and the education level of the head of the household. In contrast to their substantial effect on poverty, social grants do not reduce overall levels of inequality much as inequality is affected more by the top incomes. This is important to bear in mind when reviewing the objectives and targets of the cash transfer system. These results are robust to specifications of household welfare that draws information from both the expenditure and income data of the household, although the analysis has shown that income data underestimates the welfare levels of the poorest, and are thus not particularly useful in the developing country context of Namibia.

Despite the fact that the old age pension is universal, it is effectively targeted more at lower income households. Two factors play a role. Firstly, people of pension age are more often found in poorer households. Secondly, of those who are age-eligible for old age pensions, those among

the richer parts of the population are less likely to receive the pension, even though they qualify to get it as it is not means tested. This may be due to stigma and inconvenience: Higher income households may simply be less likely to apply for pensions than their poorer counterparts. It is important to note, though, that when this survey was undertaken there was still a substantial proportion of age-eligible persons at the lower end of the economic scale who did not receive the pensions, even though they qualified for it. It is not clear whether they did not claim it, or whether administrative or other factors prevented them from obtaining it. There are some region-specific issues related to these errors of exclusion that are particularly worth investigating further.

Regarding the child grant, the survey shows that there are large errors of inclusion (non-poor households receiving such grants) and errors of exclusion (poor households with eligible children not receiving the grant). Though the grant was generally targeted at the poor, as the concentration curve shows, this largely happened because children generally, and single and double orphans in particular, were more likely to find themselves in poor households. There is however little evidence that the poorer amongst them are more likely to receive grants than the less poor, i.e. it appears as if the means test in its current form is not effective as a mechanism for targeting.

A debate about the system of social cash transfers in Namibia seems warranted especially if it conducted within the context of reforming social protection more broadly. Such a debate will invariably also touch on the prospects of expanding the social grants system to cover all citizens in the form of a Basic Income Grant, as proposed by a coalition of churches and civil society organisations. Moreover, clearly other options exists for extending social protection mechanisms to those currently uncovered, most notably the unemployed youth, e.g. through public works programmes, labour-hire incentives, and employment guarantees. However, the main focus of this paper has been to highlight the important role of the *current* system of social cash transfers, which is making a substantial and growing contribution to poverty reduction in the country, and to provide some specific suggestions on how to make that system work better.

References

- African Union "Intergovernmental Regional Conference. A Transformative Agenda for the 21st Century: Examining the case for Basic Social Protection in Africa," March 23, 2006 (Livingstone: African Union).
- Ashby, A., Yates, D., Hubbard, D., and Mkusa, E. (2006) "A Review and Plan to Ensure the Systematic Transition of OVC from Food Assistance to Government Grant" (Windhoek: MGECW/WFP OVC Food Support Programme).
- Central Bureau of Statistics (2008) "A Review of Poverty and Inequality in Namibia" (Windhoek, National Planning Commission).
- Central Bureau of Statistics (2007) "National Accounts 1996-2006" (Windhoek, National Planning Commission).
- Central Bureau of Statistics (2006) "2003/2004 Namibia Household Income and Expenditure Survey: Main Report" (Windhoek, National Planning Commission).
- Central Bureau of Statistics (1996) "Living Conditions in Namibia: The 1993/1994 Namibia Household Income and Expenditure Survey" (Windhoek, National Planning Commission).
- Clausen, J.R. (2006) "The Sustainability of Namibia's Universal Pension Grant in Light of Changing Demographics" in "Namibia: Selected Issues and Statistical Appendix," IMF Country Report No. 06/153 (Washington DC, International Monetary Fund).
- Deaton, A. 1997. "The Analysis of Household Surveys: A Microeconometric Approach to Development Policy." (Washington D.C. and Baltimore: The World Bank and Johns Hopkins University Press).
- Devereux, S. (2007) "Social Pensions in Southern Africa in the Twentieth Century," *Journal of Southern African Studies*, 33(3):539-560.
- Devereux, S. (2001) "Social Pensions in Namibia and South Africa," IDS Discussion Paper 379 (Sussex, Institute for Development Studies).
- Devereux, S. and Naeraa, T. (1996) "Drought and Survival in Rural Namibia," *Journal of Southern African Studies*, 22(3):421-440.
- Foster, J.E., Greer, J. and Thorbecke, E. (1984) "A Class of Decomposable Poverty Measures," *Econometrica* 52(3):761-766.

- Fultz, E. and Pieris, B. (1999) "Social Security Schemes in Southern Africa: An Overview and Proposals for Future Development," ILO/SAMAT Discussion Paper No. 11 (Geneva, International Labour Organisation).
- Johnson, J.K.M. and Williamson, J.B. (2006) "Do Universal Non-contributory Old-age Pensions Make Sense for Rural Areas in Low-income Countries?" *International Social Security Review*, 59(4):47-65.
- Lund, F.J. (1994) "State Social Benefits in South Africa," *International Social Security Review*, 46(1):5-25.
- Maho, J.F. (1998) "Few People, Many Tongues. The Languages of Namibia," (Windhoek, Gamsberg Macmillan).
- Morgan, R. "State Pensions as Income Safety Net in Namibia," *Food Policy* (October 1991):352-359.
- Ministry of Finance (2008) "Statement for the 2008/09 Budget," 5 March 2008, (Windhoek, Ministry of Finance).
- Ministry of Gender Equality and Social Welfare and World Food Programme (2008) "Food Support Programme for Orphans and Vulnerable Children, Phase II (April 2006-April 2008), (Windhoek, Ministry of Gender Equality and Social Welfare).
- Ministry of Health and Social Services (2008) "Demographic Health Survey for Namibia 2006" (Windhoek, Ministry of Health and Social Services).
- Ministry of Labour and Social Welfare (2006) "Labour Force Survey 2004" (Windhoek, Ministry of Labour and Social Welfare).
- Ministry of Labour and Social Welfare (2002) "Labour Force Survey 2000" (Windhoek, Ministry of Labour and Social Welfare).
- Republic of Namibia (2008) "Third National Development Plan (NDP3) 2007/2008-2011/2012: Volume I" (Windhoek, Republic of Namibia).
- Schleberger, E. (2002) "Namibia's Universal Pension Scheme: Trends and Challenges," Extension of Social Security Paper, 6 (Geneva, International Labour Office).
- Standing, G. (2007) "How Cast Transfers Boost Work and Economic Security," UN-DESA Working Paper No. 58 (New York, United Nations Department for Economic and Social Affairs).

- Subbarao, K. (1998) "Namibia's Social Safety Net: Issues and Options for Reform", Policy Research Working Paper 1996 (Washington DC, World Bank).
- Tapscott, C. (1993) "National Reconciliation, Social Equity and Class Formation in Independent Namibia," *Journal of Southern African Studies*, 19(1):29-39.
- UNICEF (1991) "A Situation Analysis of Children and Women in Namibia" (Windhoek: UNICEF and Namibian Institute for Social and Economic Research).
- United Nations (2004) "Common Country Assessment for Namibia," (Windhoek, United Nations Country Team).
- United Nations (2000) "Enhancing Social Protection and Reducing Vulnerability in a Globalizing World," Report to the Secretary General to the Thirty-ninth Session E/CN.5/2001/2, (New York, United Nations Economic and Social Council).
- United Nations (1989) "Provisional Estimates of Basic Data for Namibia," mimeo (New York: UN Statistical Office and Population Division).
- Van der Berg, S. (1997) "South African Social Security under Apartheid and beyond," *Development Southern Africa*, 14(4):481-503.
- Van der Berg, S. and Yu, D. (2007) "A Pre-Release analysis of the Income and Expenditure Survey of 2005 A Report to Statistics South Africa" (Stellenbosch: Dept of Economics, University of Stellenbosch)..
- World Bank (2005) "Namibia Human Capital and Knowledge Development for Economic Growth with Equity," Africa Region Human Development Working Paper Series No 84, (Washington DC, World Bank).
- World Bank (1992) "Namibia Poverty Alleviation with Sustainable Growth" (Washington DC, World Bank).

Annex A: Definitions of income and expenditure

1. Adult equivalence scale (adeq)

Age: 0-5 years Weight = 0.5
Age: 6-15 years Weight = 0.75
Age: 16+ years Weight = 1

2. Household income

Regular income (Excluding deductions by employer)

- Other household income
- Household income
 - * Per capita income = household income / hhsize
 - * Per adult equivalent income = household income / adeq

3. Revised household income

Regular income (Excluding deductions by employer)

- + Other household income
- + Produce
- Livestock
- Input cost
- Net withdrawals from savings
- Deductions by employer
- = Revised household income
 - * Revised per capita income = revised household income / hhsize
 - * Revised per adult equivalent income = revised household income / adeq

4. Household expenditure

Consumption: Food/Beverages/Tobacco/Narcotics

- + Consumption: Clothing/Footwear
- + Consumption: Housing/Water/Electricity/Gas and other fuels
- + Consumption: Furnishings/Household equipment/Household maintenance
- + Consumption: Health
- + Consumption: Transport
- + Consumption: Communication
- + Consumption: Recreation/Culture
- + Consumption: Education
- + Consumption: Restaurants/Hotels
- + Consumption: Micellaneous goods and services
- = Household expenditure
 - * Per capita expenditure = household expenditure / hhsize
 - * Per adult equivalent expenditure = household expenditure / adeq

5. Hybrid of expenditure/income

- = Highest value of either expenditure or income
 - * Per capita hybrid = hybrid of expenditure and income / hhsize
 - * Per adult equivalent hybrid = hybrid of expenditure and income / adeq