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NAMOD: a Namibian tax-benefit microsimulation model

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Abstract

This paper provides an account of the construction of a tax-benefit microsimulation model for Namibia (NAMOD) which is based on the EUROMOD platform F6.0. Previous research on social security provision in Namibia is reviewed and the current social security, personal income tax and value added tax arrangements are outlined. Various strengths and weaknesses of the Namibian Household Income and Expenditure Survey (NHIES) as an underpinning dataset for NAMOD are highlighted. In particular, the income data in the NHIES is problematic and so analysis of the impact of policies on poverty should be treated with caution. In spite of these challenges, NAMOD provides a starting point from which government can explore issues such as promoting take-up of grants or making changes to the social security system.

JEL Classification: I32, I38, H55
Keywords: tax-benefit policy; microsimulation; developing country; Namibia

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Contents

1. Introduction

NAMOD (a Namibian Microsimulation Model) is a tax and benefit microsimulation model that was developed for the Namibian government by the Centre for the Analysis of South African Social Policy (CASASP) at the Department of Social Policy and Intervention, University of Oxford, with funding from UNICEF Namibia.

Microsimulation is a technique that involves taking household survey data and applying a set of policy rules to the data to calculate individual entitlement to benefits and/or liability for taxation. The resulting output at individual and household level can then be aggregated to provide national data on, for example, expenditure on social grants or revenue from taxation (see for example Mitton *et al.*, 2000; Zaidi *et al.*, 2009).

NAMOD has been developed using the EUROMOD platform (version F6.0), which was built by Professor Sutherland (University of Essex) and colleagues to simulate policies for the European Union countries (Sutherland and Figari, 2013).[2] EUROMOD has been built and developed over a period of almost two decades and now runs simulations for 27 countries. The main features of EUROMOD which make it a particularly suitable basis for the Namibian model are that: all the calculations are transparent and can be easily modified by the user; the model is very flexible and allows policies to be modified and almost any type of new policy to be created; and, it has a simple Excel interface so requires no special software to run[3]. The only requirements are that users should be limited to government, academia and not-for-profit organisations, and should attend an approved course and subscribe to the University of Essex's conditions of use of EUROMOD.

CASASP has also developed a South African tax and benefit microsimulation model (SAMOD) for the South African Government in collaboration with the University of Essex (Wilkinson *et al.*, 2009; Wright et al., 2011). The development of a 'sister' model in Namibia provides an opportunity for users to work together and share skills. For example, it would be possible to analyse the effect of policies on poverty and the income distribution in Namibia and South Africa in a comparable manner and even swap policies, i.e. estimate the effect of adopting a policy existing in one of the countries in the other country.

This report provides information about the social security system in Namibia (Section 3), and the numerous decisions and in some instances compromises that had to be made in relation to NAMOD's underpinning dataset (Section 4). Initial results are presented in Section 5, and Section 6 includes a set of recommendations for how this model can be further developed. A NAMOD user manual has also been produced which explains how to use the model and so this is not repeated here.

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[2] See also https://www.iser.essex.ac.uk/euromod.

[3] The current user interface requires the installation of a 32-bit version of Microsoft office and Windows 8 is not supported. As part of ongoing EUROMOD technical developments a new user interface is being rolled out across the 27 EUROMOD countries which is independent of EXCEL. NAMOD could potentially benefit from this development.

2. Background

2.1 The importance of social security provision

The importance of social security[4] in developing countries for poverty alleviation and investment in human capital is widely acknowledged (e.g. Barrientos, 2010; Barrientos and Hulme, 2008; Barrientos and Niño-Zarazúa, 2011; DFID, 2011; European Commission, 2010; Handa et al., 2010; Hanlon et al., 2010; ILO, 2008; ISSA, 2010; Kabeer, 2009). This is reflected in Article 22 of the Universal Declaration of Human Rights which states that, 'Everyone, as a member of society, has the right to social security'.

Within Africa, the African Union (AU) has emphasised the importance of social protection[5] for poverty alleviation in key social policy documents (for example AU, 2005; AU, 2008a,b,c; see Wright and Noble, 2010 for a summary), declarations (for example AU, 2004; AU, 2006; HelpAge International, 2006) and expert meetings and consultations (for example HelpAge International, 2008). The ILO also promoted the extension of social security at its African Regional Meeting (ILO, 2007). The first Regional Social Security Forum for Africa took place in Kigali in 2008, and 2008 was also the year of the launch of the Africa Civil Society Platform for Social Protection.

A SADC-specific Social Policy Framework has been developed (SADC, 2006), which highlighted *inter alia* the importance of social security for both vulnerable and non-vulnerable groups as it has defensive and enabling dimensions. The 2003 Charter of Fundamental Social Rights in SADC states that both workers and people outside the labour market should have adequate social security benefits or should receive sufficient resources and social assistance (SADC, 2003). The Code on Social Security in the SADC further states that everyone in SADC has the right to social security and that member states should, as far as is realistically possible, increase their social security provision to ensure that everyone is meaningfully covered under the system (SADC, 2007).

In addition to these commitments, Namibia's own constitution makes provision for the promotion and maintenance of the welfare of its people through policies aimed at ensuring that 'senior citizens are entitled to and do receive a regular pension adequate for the maintenance of a decent standard of living and the enjoyment of social and cultural opportunities' and that 'the unemployed, the incapacitated, the indigent and the

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[4] Following the Code on Social Security in the SADC, social security is defined here as 'public and private, or […] mixed public and private measures, designed to protect individuals and families against income insecurity caused by contingencies such as unemployment, employment injury, maternity, sickness, invalidity, old age and death. The main objectives of social security are: (a) to maintain income, (b) to provide health care, and (c) to provide benefits to families. […] social security includes social insurance, social assistance and social allowances.' (SADC, 2007: 2).

[5] In accordance with the Code on Social Security in the SADC (SADC, 2007), social protection is regarded as broader than social security, encompassing all forms of social security, as well as social services and developmental social welfare.

disadvantaged are accorded such social benefits and amenities as are determined by Parliament to be just and affordable with due regard to the resources of the State' (Republic of Namibia, 1990: Article 95).

The reduction of poverty and inequality has been and remains a central focus for the Namibian government. The national development framework, Vision 2030, states that currently 'Inequality and poverty endangers social harmony, peace and democracy', and has as a sub-vision the objective that 'Poverty is reduced to the minimum, the existing pattern of income-distribution is equitable and disparity is at the minimum' (Republic of Namibia, 2004: 104). In addition to the 1998 Poverty Reduction Strategy and subsequent National Poverty Reduction Action Programme (Republic of Namibia, 1998; 2002), in successive National Development Plans the reduction of poverty and inequality has been a key objective (Republic of Namibia, 1995; 2001; 2008; 2012).

Social grants are regarded as an effective way to help combat poverty in Namibia: 'Financial assistance, in the form of grant transfers, is a [sic] important component to a national safety net that prevents the most needy from falling further into poverty and deprivation' (Republic of Namibia, 2002: 57). The most recent National Development Plan (NDP4) highlights a number of issues with the current grants system and makes the following commitments with regard to improving the system: (i) expansion to include more of the households severely affected by poverty; (ii) review and simplification of bureaucratic procedures (e.g. means testing and introduction of a Kinship Grant); (iii) improvement of civil registration to reduce access barriers; and (iv) adequate and regular increases to the grant amounts. It also includes a specific proposal to expand social protection to cover children in all poor households. (Republic of Namibia, 2012: 68).

Social security in Namibia takes the form of non-contributory social grants and contributory schemes. Despite wide coverage, the Namibian social grant system is not yet comprehensive and existing grants do not always reach the target poor populations. The following subsection comprises a review of recent research on poverty, inequality and the social grants system in Namibia.

2.2 Previous research on poverty, inequality and the social grants system in Namibia

Various studies of poverty and inequality in Namibia have been undertaken, often by government agencies using Namibia Household Income and Expenditure Survey (NHIES) data (for example, NPC, 1996; Strauss, 2006; Van Rooy et al., 2006; Levine, 2007; CBS, 2008; Noble et al., 2011; NSA, 2012a,b). Some studies use only money metric approaches to measure poverty, while others use multidimensional measures or a combination of the two. Other studies include multidimensional profiles of the population. With regard to child poverty, a situation analysis for children reports on previous analyses of poverty (NPC, 2010)[6], while a recent report specifically focused on children uses NHIES data and applies money metric and multidimensional approaches (NSA, 2012c).

Over the last 20 years there have been a number of assessments of social security provision and recommendations for improvements (for example, Morgan, 1991; Subbarao, 1998; Devereux, 2001; Schleberger, 2002; Strauss, 2006; Clausen, 2006). These studies mainly focus on the OAG, and most discuss issues with the universal nature of the grant and options for means testing or other approaches to improve the targeting and effectiveness of the grant. In addition, some of these studies briefly examine the economic, social and demographic impacts of the OAG. Haarmann et al. (2009) have assessed the impact of a Basic Income Grant (BIG) pilot project that was carried out from January 2008 until December 2009 in the Otjivero-Omitara area of Namibia. Options for financing a BIG nationally are also examined, showing that the costs of a BIG could be financed through tax revenue.

There have been relatively few detailed studies into the impact on poverty and inequality of Namibia's existing social grants and potential policy options. The first study, by Levine et al. (2009; 2011), examines the impact of cash transfers on household welfare in Namibia using the NHIES 2003/04. They find that cash transfers, particularly the OAG, play an important role in alleviating poverty, especially for the very poor, but that the impact on inequality is limited. They provide evidence that an expanded system of social transfers (growth in the number of beneficiaries and grant amounts increasing in line with inflation) is sustainable. They highlight the ineffectiveness of the CMG means test (errors of inclusion) and show the impact on poverty of better targeting of the grant, and also question whether appropriate eligibility criteria are used to capture the poorest and most vulnerable children (errors of exclusion). They also find that some poorer age-eligible individuals do not receive the OAG (while higher income individuals are less likely to apply).

The recently released report on child poverty in Namibia (NSA, 2012c) includes a section in which the impact of social grants is examined and simulations are carried out to assess the impact of child welfare grant expansion and variation. The NHIES 2009/10 was used for this analysis. The research shows that the grant system as a whole has a notable impact on child poverty (the rate would increase from 34% to 41% without the grants or from 39% to 62%

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[6] There have been two other situation analyses for children since 1991 (UNICEF and NISER, 1991 and UNICEF, 1995). It has not been possible to obtain a copy of the first of these, while the second is a report on children's rights from a broad perspective.

when only households in receipt of the grants are taken into account), and that the OAG has the greatest impact. Various scenarios for expanding child welfare grants are simulated, including all children under 18 in households with consumption below a means test of 40% of equivalent expenditure per year (N$5,673), and universal grants for children under 5 and all children. This exercise reveals that the costs of expanding the child grant system are substantial, but that child poverty could be dramatically reduced with such policy changes (for example, a universal grant for all children under 18 would decrease poverty from 34% to 13%).

This analysis was complemented by a qualitative study on the effectiveness of the social protection system in reducing child poverty in order to understand why high levels of child poverty persist and why the social protection system is not reaching the most vulnerable groups of children (MGECW and NPC, 2012). In addition to findings on poor people's experiences of poverty and informal community support structures and coping strategies, the study examines uptake and impact of grants on vulnerable children and their families, finding that despite the small value of Child Welfare Grants, they play a critical role in reducing the burden of poverty by providing for children's basic needs and by supporting household economic activities and other productive activities (e.g. job-seeking). However, a range of issues are identified and are reflected in the recommendations (selected points only): (i) expand the grants to all poor and vulnerable children; (ii) increase the grant amounts every year in line with inflation; (iii) remove barriers to grant access (e.g. documentation and distance travelled) and raise awareness about grants; and (iv) improve data collection on the number of children who require and receive grants and services, and introduce regular monitoring of the implementation of the grant system and child outcomes.

Finally, in an issues paper produced for the Ministry of Gender Equality and Child Welfare (MGECW), Bradshaw and Huby (2013) analyse the impact of different options for extending the child welfare grants system, again using the NHIES 2009/10. A range of scenarios are simulated, building on the analysis in the NSA (2012) report. These include full take up of the existing child grants without the means test being applied to CMG, replacing the CMG (but not the FCG or SMG) with a new grant paid to all children under certain ages (under 6 and then extending progressively to under 18) and with different amounts (N$200, N$250 and N$400 per month per child), and then repeating the analysis with different means tests. Poverty rates and gaps, inequality and cost are all examined. The different scenarios have varying impacts on poverty and inequality, at best reducing the child poverty rate to under 3% (for a universal grant of N$400 per month paid to all children under 18). However, this has to be balanced against the increased cost of expanding the system.

In the above studies, the impact of the current social grants system is simulated on the basis of reported receipt of grants in the NHIES. Simulations of modifications to the current system are carried out in relation to the specific grant only, rather than by modelling the entire tax and benefit system using the rules contained in policy documents. This however has been undertaken through NAMOD and the impact of existing (or hypothetical) tax and benefit arrangements can be calculated in terms of the extent to which they reduce poverty and inequality, their cost, and their impact on different sub-groups of the population such as children[7]. The following section provides an account of the tax and benefit rules that could - or could not - be incorporated within in NAMOD.

[7] Although an initiative was undertaken to promote microsimulation across Africa, including Namibia (http://african-models.wider.unu.edu/), the models are 'hard-wired' (i.e. the tax and benefit rules are not made explicit and are embedded within the programming syntax of the model) and only amendable by the model creator or through a simplified – and very restricted – user interface. NAMOD is based on the EUROMOD platform, which has a very transparent approach and allows the user to easily amend the tax and benefit rules.

3. Tax and Benefit Policies in Namibia and their inclusion in NAMOD

This section provides details about social security in Namibia which takes the form of non-contributory social grants and contributory schemes, as well as the country's tax arrangements. Section 3.3 summarises which of the policies are simulated in NAMOD, with further details provided in Section 4 which focuses on issues relating to the underpinning dataset.

3.1 Non-contributory social security: the social grants

The main social grants in Namibia are the War Veterans Subvention, the so-called Basic State Grants (for older persons and disabled adults) and Child Welfare Grants (for children who are either disabled, in foster care or poor/vulnerable in specified ways). In addition a Place of Safety Allowance is paid to an institution or person who is taking care of a child who has been located in a place of safety by a Commissioner of Child Welfare. Each of these is described in turn below.

3.1.1 War veterans subvention

The War Veterans Trust Fund was first established by the War Veterans Subvention Act 1999 (Republic of Namibia, 1999) which was then repealed and replaced by the Veterans Act 2008 (Republic of Namibia, 2008). Veterans are defined as people who were either members of the liberation forces, i.e. they 'underwent military training and participated consistently and persistently in the war in order to bring about the independence of Namibia'; or 'consistently and persistently participated or engaged in any political, diplomatic or under-ground activity in furtherance of the liberation struggle'; or 'owing to his or her participation in the liberation struggle was convicted, whether in Namibia or elsewhere, of any offence closely connected to the struggle and sentenced to imprisonment' (Republic of Namibia, 2008: 4-5).

In order to apply for the grant, an application has to made to the Veteran Board for registration as a veteran. It can also be paid to registered dependants (the widow/widower or children under 18) of deceased veterans under certain conditions (section 30 of the Veterans Act 2008). The grant is means tested (the threshold is currently N$50,000 per year) and pegged to the income tax threshold.[8] It is the largest grant (in value) as it is paid at N$2,200 per month.[9]

[8] Website of the Ministry of Veteran Affairs http://209.88.21.36/opencms/opencms/grnnet/MOVA/MinisterialActivities/Registration/index.html

[9] All amounts in this section relate to April 2013.

3.1.2 Old age grant

The Old Age Grant is a universal grant (i.e. there is no means-test) and as such can be classified as a social allowance rather than social assistance. It is payable to men and women aged 60 and over. Applicants must be Namibian citizens or permanent residents if not born in Namibia, and must reside in Namibia. The payment is N$600 per month. The National Pensions Act (Republic of Namibia, 1992) refers to it as a 'basic state pension'. It cannot be claimed concurrently with the Disability Grant.

3.1.3 Disability grant

The Disability Grant (DG) is also a universal grant, and comprises a social allowance for certain people aged 16 or above. The National Pensions Act (Republic of Namibia, 1992) makes a distinction between a 'disability pension' and a 'blind person's pension' (for people who have been registered as blind) but they have been conceptually combined and referred to as the 'Disability Grant' (and in any event they cannot both be paid to one person). A disabled person is defined as: "any person who is, owing to any physical or any mental disability, incapable to obtain from any employment or the practising of any profession or trade, or from the rendering of any service, the means needed to enable him or her to adequately provide for his or her own maintenance, and has attained the age of 16 years." (Republic of South Africa, 1992 p.3). As part of the application process, the applicant has to be examined by a district surgeon who then has to prepare a medical report. Applicants are also eligible if they have been certified by a medical doctor as having AIDS. Applicants must be Namibian citizens or permanent residents if not born in Namibia, and must reside in Namibia. The payment is N$600 per month, and it cannot be claimed concurrently with the Old Age Grant.

3.1.4 Child Maintenance Grant

The Child Maintenance Grant (CMG) has been put into force by the Children's Act (No 33 of 1960) and is administered by the Ministry of Gender Equality and Child Welfare as part of its child welfare programme. It is payable to a biological parent with a child under the age of 18 (may be extended up to age 21 if child remains in education (MGECW)) under certain circumstances. The applicant's income is means tested[10] (< N$1,000 per month) and they must also fulfil one of the following conditions: the applicant is receiving an old age or disability pension or their spouse (the other biological parent of the child): (i) is receiving an old age or disability pension; or (ii) has died; or (iii) is serving a prison sentence of 6 months or longer. For children older than 7 years, he/she is required to attend school (school report

[10] The means test is in fact not applied if the applicant (or the other biological parent of the child, if living with the applicant) is in receipt of OAG or DG (MGECW).

has to be presented every year). Applicants must be Namibian citizens or permanent residents if not born in Namibia, and must reside in Namibia. The payment is N$200 per month.

According to the website of the Ministry of Gender Equality and Child Welfare, the follow items are required as part of the application process (http://www.mgecw.gov.na):

- Certified copies of the applicant's birth certificate and Identity document
- Certified copies of the child or children's full birth certificates/ confirmation of birth or baptism card
- A certified copy of the applicant's marriage certificate where applicable
- The latest school report of each school-going child
- A certified copy of the spouse's death certificate in case of death
- If the spouse is in prison, a letter from the prison and a declaration from him/her confirming this
- Proof of the spouse receiving a disability grant or an old age pension.
- If the applicant is employed, a pay slip with the name, phone number and address of the employer, if not employed a police declaration

3.1.5 Special Maintenance Grant

The Special Maintenance Grant (SMG) has been put into force by the Children's Act (No 33 of 1960), and is administered by the Ministry of Gender Equality and Child Welfare as part of its child welfare programme. It was designed to assist Namibian children under the age of 16 with disabilities. A child can only receive one grant type (CMG, SMG or FCG). Applicants must be Namibian citizens or permanent residents if not born in Namibia, and must reside in Namibia. The payment is N$200 per month. According to the website of the Ministry of Gender Equality and Child Welfare, the follow items are required as part of the application process (http://www.mgecw.gov.na):

- A certified copy of the child's birth certificate
- Certified copies of parent / caregiver's ID and birth certificates
- A medical certificate from a state medical officer or doctor confirming disability
- A social background report from a social worker

3.1.6 Foster Care grant

The Foster Care Grant (FCG) has been put into force by the Children's Act (No 33 of 1960), and is administered by the Ministry of Gender Equality and Child Welfare as part of its child welfare programme. It is payable to someone who undertakes the temporary care of any child, who has been placed in their custody in terms of section 31(1)b or section 50(1) of the Children's Act No 33 of 1960. Applicants must be Namibian citizens or permanent residents if not born in Namibia, and must reside in Namibia. The payment is N$200 per month per foster child. A child can only receive one grant type (CMG, SMG or FCG). According to the website of the Ministry of Gender Equality and Child Welfare, the following items are required as part of the application process (http://www.mgecw.gov.na):

- A certified copy of the Court Order, or if the child was transferred, (i.e from one foster parent to another) a section 50 Transfer Order
- A certified copy of the child's birth certificate
- A certified copy of the foster parent's Identity Document (ID)
- A certified copy of the marriage certificate of the foster parents if applicable
- The latest school report of each school-going child
- A certified copy of the death certificate(s) of the biological parent(s) if applicable

3.1.7 Place of Safety Allowance

The Place of Safety Allowance is payable to a person or institution who is taking care of a child who is under the age of 21 years and has been placed in a place of safety by a Commissioner of Child Welfare in terms of the Children's Act No 33 of 1960 or the Criminal Procedure Act No 51 of 1977. The payment is N$10 per day.

3.2 Contributory schemes

The contributory schemes in Namibia, administered by the Social Security Commission, include the Maternity Leave, Sick Leave and Death Benefit Fund (MSDF), and the Employees' Compensation Fund (ECF). The Social Security Act (Republic of Namibia, 1994) also makes provision for a National Medical Benefit Fund and National Pension Fund, and while such provisions are currently being developed by the Social Security Commission they have not yet been implemented at present. There is also a contributory pension scheme for civil servants: the Government Institutions Pension Fund.

With regard to the MSDF, both the employer and the employee are required to make social security contributions at a rate of 0.9% (1.8% in total) of the employee's basic wage from N$300 per month to a ceiling of N$6,000. The scheme is also open to self-employed workers who have to pay both the employer and employee share, and workers in the informal sector. The minimum monthly contribution by members is N$2.70 and the maximum is N$54.

Employers are also required to register all employees (subject to certain exclusions) and pay annual assessments to the Accident Fund[11]. An employee who is injured as a result of an accident arising out of and in the course of his/her employment is paid compensation from the Accident Fund in respect of temporary disablement, permanent disablement (according to the degree of disablement) and death. Reasonable medical expenses are payable for a period of two years, or longer if further medical or surgical treatment may reduce the extent of the disablement.

Further details on the contributory social security schemes are provided in Appendix 1.

Additionally the Social Security Commission administers the Development Fund (DF). This was set up to assist unemployed Namibians from socio-economically disadvantaged backgrounds through training and employment schemes and by providing bursaries, loans and other financial aid to students enrolled at technical or academic institutions of higher education.

3.3 Personal Income Tax and Value Added Tax in Namibia

Personal income tax is payable by resident and non-resident individuals in Namibia. Individuals may deduct contributions to approved pension, provident and retirement annuity funds, and premiums with respect to educational policies. The income tax threshold is N$50,000 and rates are progressive up to 37%[12]. Further details are provided in Appendix 1 (see also Republic of Namibia, 1981).

VAT is imposed on the supply and import of most goods and the provision of services at a standard rate of 15%. Certain goods and services are exempted whilst others are zero-rated. Further details are provided in Appendix 1 (see also Republic of Namibia, 2000).

3.4 Policies simulated in NAMOD

For the purposes of this project the following policies were simulated.

- Child Maintenance Grant

[11] This terminology is taken from the Social Security Commission website (http://www.ssc.org.na/funds/Employees-Compensation-Fund/24/) and presumably refers to the ECF.

[12] This is the situation in 2012/13.

- Foster Care Grant
- Old Age Grant
- Disability Grant
- Personal income tax
- VAT (only a proportion of VAT will be captured using a household survey)

The two grants that could not be simulated were the Special Maintenance Grant (SMG) for disabled children, and the War Veterans Grant. It was not possible to simulate the SMG because there is not a disability question about children in the NHIES (see next section) and so potentially eligible children could not be identified, except by their receipt of the SMG which fails to capture eligible non-recipients. Similarly, as it is not possible to identify war veterans in the NHIES (except by their receipt of the War Veterans Grant) it was not possible to simulate the War Veterans Grant either. For the purposes of analysis, the NHIES data on reported receipt of SMG and WVS was retained so that it could be added to the simulations for the other grants in order to analyse the impact of grants on poverty and inequality. That is, analysis on the impact of grants takes into account *simulated* CMG, FCG, OAG and DG, and *reported* receipt of SMG and WVS (see section 5). However, in order to facilitate implementation of these policies should appropriate data become available, policies in respect of both SMG and WVS have been prepared but switched off in the model.

There are no variables in the NHIES that enable the Place of Safety Allowance to be modelled. However, this is only a short-term emergency measure and beneficiary numbers are small.

The contributory Employee Compensation Fund and MSD Fund are not simulated. Whilst it would be possible to calculate contributions made (a percentage of salary paid by the employer/employee in both cases), it is not possible to ascertain whether people are eligible to receive the fund as employment history and past contributions are not measured. In any event such schemes would more typically be simulated using a dynamic (rather than static) microsimulation model.

The following section provides an account of the dataset that underpins NAMOD, and the various decisions (and in some instances compromises) that had to be made to enable the policies listed here to be simulated.

4. Underpinning microdata for NAMOD

4.1 Strengths and weaknesses of the NHIES as the source for the microdata

A review was undertaken of the availability of suitable microdata in Namibia, and the Namibia Household Income and Expenditure Survey (NHIES) was identified as the most suitable microdata source as the data was collected quite recently and contains detailed information on household and individual income and expenditure. The 2011 Namibian Population and Housing Census does not include questions about income or expenditure and so could not be used as the underpinning dataset. The 2008 and 2012 Labour Force Surveys could not be used as there is insufficient detail in these surveys about income and expenditure (NSA, 2013).

The NHIES is a survey targeted at private households in Namibia. Surveys have been conducted by the Namibia Statistics Agency (and its predecessors) in 1993/94, 2003/04 and 2009/10. The main objective of the NHIES 2009/10 was to provide information on patterns of consumption and income and other socio-economic characteristics. The final sample size was 10,660 households, which equates to 2.8% of the households in Namibia (NSA, 2012a).

The NHIES income data is usually only released at household level. However, individual level income data was necessary for our purposes for the following reasons:

1. The incomes of individuals within a household will of course vary and in order to undertake microsimulation it is necessary to know to which person the income should be assigned. For example, personal income tax is calculated at individual level.
2. The means tests for social grants currently applied in Namibia (for WVS and CMG) are calculated on the applicant’s income only (the biological parent in the case of the CMG). This calculation can only be carried out accurately where an individual’s own income is known, rather than an income that is some fraction of the household level income.
3. If grant income is only provided at household level it is not possible to determine which individuals within the household are receiving the grants.

It is important to stress that by using the individual level income data we will obtain very different results from other studies which use aggregate household income data. This is because the published household-level income data was inflated prior to its release to equal household expenditure totals. [13] So for example, our approach results in higher levels of poverty than other studies which use the adjusted aggregate household income data.

[13] Correspondence with Mr Quita Sapalov, Namibia Statistics Agency.

As no metadata were supplied we used the NHIES questionnaire and data to scope the breadth of policies that could be simulated with the NHIES, assessing the data against the policy rules and EUROMOD requirements. It should be signalled that the NHIES data does have several challenges which can be grouped into three categories: transparency, survey design and gaps.

Transparency

Multiple extracts of the dataset were supplied to the research team, each time with no metadata, making the assessment of the data more time-consuming and laborious than would usually be the case (nine datasets were supplied successively over an elapsed time of almost a year). This was particularly problematic in relation to the income data. Some datasets could not at first be linked due to missing linkage variables.
Recommendation: Metadata to be released with NHIES datasets.

Survey design

As will become evident in the next section, there are clearly some fundamental challenges associated with capturing income data at an individual level. Easiest to address however, are questions relating to receipt of social grants. Grant receipt is assigned to individuals within a household inconsistently. For example, the SMG is sometimes assigned to a child, sometimes assigned to an adult (presumably the child's caregiver), and in some instances is assigned to the child and an adult (again presumably the child's caregiver). For example, only 35% of the SMG recipients in the NHIES are under 16 and the remainder are adults (some of whom live in households with no children). This could be resolved by designing the survey in such a way that ensures that child grants can only be assigned to the relevant child in the household.
Recommendation (1): Rewording the grant questions in NHIES e.g. specifying that information on child grants should be recorded against the child for whom the grant is paid.
Recommendation (2): Improving the collection of individual level income data, perhaps in collaboration with Statistics South Africa and/or the National Income Dynamics Team at the University of Cape Town in South Africa (though this may already be underway).

Gaps

A number of pieces of information were lacking (either because the questions do not exist as they are not included in the questionnaire, or because they were repeatedly not supplied) which limits the adequacy of the NHIES for use as an underpinning dataset for NAMOD. Some of the gaps have more consequence than others, and recommendations are included below in relation to the most important ones.

1) <u>Information about disability</u>. One of the most important gaps for NAMOD's purposes is information about disability, which is required for simulating the DG (adults) and SMG (children). There is not a question on disability status, however with regard to adults there is a question on reason for not working in the past seven days, for which one of the responses is 'unable to work due to illness, disabled' (D7). This can be used as a proxy for disability for adults in addition to reported receipt. In the absence

of a question on disability for children, and as the data on the reported receipt of grants was problematic (see below) it was not possible to simulate SMG.
Recommendation: NHIES to include a disability question/s for all ages.

2) Identification of spouse. Spouse person number is used in EUROMOD for the determination of assessment units and may be used in the calculations of eligibility for benefits where the income of the applicant and spouse needs to be taken into account, or in determining tax deductions on the basis of payments made by the applicant on behalf of his/her spouse and dependants. In fact, in the EUROMOD set-up a partner variable is required, regardless of whether it is actually used to model any policies. The NHIES does not have a household roster, and only provides information on relationship to head of household (and the person numbers of the case's biological mother and father if present in the same household). There is not any information on a person's spouse/partner or other relationships in the household. It is possible, using the relationship to head of household variable, to determine the spouse for the head of household, but other couples will be more difficult to accurately identify. Although the status quo can mostly be modelled without detailed information on relationships, the scope for modelling different policy options (both taxes and benefits) is constrained by the inability to reliably identify an individual's spouse.
Recommendation: NHIES to include a household roster.

3) Information about premiums paid for education policies. The NHIES does not have a suitable question on premiums paid for education policies (they are included in a single question on premiums paid by the household for life and endowment policies). Therefore it was not possible to deduct these payments from gross income in the calculation of income tax.
Recommendation: NHIES to include a separate question about premiums paid for education policies.

4) Section 2.2 on deductions by the employer was not supplied. These questions relate to car loan, housing loan or mortgage, house rent, income tax, medical aid, insurance, pension, social security, and other deductions.
Recommendation: This information to be made available for future iterations.

5) Information about prisoners. Low income parents are eligible to apply for the CMG if the other biological parent of the child is in prison, but information on prison attendance is not included in the NHIES.
Recommendation: N/A as beyond scope of NHIES.

6) Information about absent biological parents. Eligibility for CMG is determined on the basis of the status of the child's biological parents, including their incomes and whether they are in receipt of OAG or DG. A considerable number of children live in

households with a live biological parent living elsewhere whose status (other than being alive) could not be determined.
Recommendation: N/A as beyond scope of NHIES.

7) Information about war veteran status. War veteran status was not asked about in the NHIES (and is probably of little relevance in terms of the objectives of the survey). Eligibility for the WVS could have only been modelled using the question on actual receipt (though again there are problems with the data which result from ambiguous questions in the questionnaire resulting in inconsistent data – see the paragraph on survey design above).
Recommendation: N/A as beyond scope of NHIES.

8) Individual level expenditure data. Expenditure is only recorded at household level in the survey and was allocated to the head of household for the purposes of simulating the VAT.
Recommendation: N/A as beyond scope of NHIES.

4.2 Data and Policy time points

After collating the necessary NHIES datasets, a rectangular file was constructed in STATA using five of the datasets that had been supplied. These comprised four individual level files and one household level file.

The NHIES fieldwork was carried out between June 2009 and July 2010 and the monetary variables are an average for the whole period[14] so a time point of December 2009 (an approximate midpoint) is assumed. NAMOD Version 1.0 contains tax and benefit policy rules for April 2013 and so the income and expenditure data was inflated within the model to this time point using the CPI (NSA, 2013b).

Furthermore, the weights within the data set supplied necessarily related to the time of data collection (see above). Given that the policy simulations are for 2013, in an ideal situation the supplied weights would be adjusted to reflect the demographic structure in 2013. It is standard practice within microsimulation modelling to re-weight the input dataset to reflect such demographic changes. Unfortunately, midyear estimate population data for 2013 are not available. Consequently, the re-weighting of the data was undertaken to reflect the time point of the decennial census in 2011. The constraining variables used in the re-weighting were region, age band, and gender. When midyear population estimates become available it will be a straightforward exercise to re-weight to a more recent time point.

[14] Correspondence with Quita Sapalov, NSA.

5. Results

Grant Eligibility and Receipt

Using NAMOD it is possible to simulate several of Namibia's grants in order to estimate how many people are eligible for each of them. Table 1 shows the number of eligible people for each grant (column A), as well as reported receipt of the grants in the NHIES (column B) and actual receipt based on administrative data (column C). A take-up rate is presented in the final column, calculated as the number of recipients based on administrative data divided by the number of people identified using NAMOD as eligible for each grant (i.e. C/A). As can be seen and as reported above, it was not possible to simulate the SMG and the WVS using the NHIES, however we do show reported receipt (B) and administrative data on receipt (C) for these two grants.

Table 1 Eligibility, receipt and take-up of grants in 2013

Grant	A Eligible (NAMOD)	B Reported receipt (NHIES using survey weights for 2011)	C Actual receipt (administrative data)	Take-up rate (C/A) %
Child Maintenance Grant	109,021	29,846	122,064**	112.0%
Foster Care Grant	31,498	8,458	19,723**	62.6%
Old Age Grant	149,329	64,363	143,007***	95.8%
Disability Grant	33,683	14,910	27,312***	81.1%
Special Maintenance Grant*	-	5,956	4,079**	-
War Veterans Subvention*	-	3,504	22,589****	-

(*) Could not be simulated in NAMOD due to lack of information in the NHIES.
(**) April 2013 supplied by UNICEF.
(***) March 2013 from Ministry of Labour and Social Welfare (from draft OPML table supplied by UNICEF).
(****) 2012/13 from Ministry of Veteran Affairs (from draft OPML table supplied by UNICEF).

There are very large discrepancies between reported receipt in the NHIES (in Column B) and actual receipt based on administrative data (Column C). The discrepancies are likely to exist for a number of reasons including a probable increase in grant take-up rates between 2009 when the NHIES was in the field and 2013 (the time point of the administrative data); reweighting the NHIES data to a more recent time-point (as done here) would not take a significant increase in take-up into account. A second possible reason is that the NHIES may under-capture receipt of grants: it is common internationally for survey data to under-capture grant receipt. A third possible reason could be errors of inclusion in Column C (i.e. the presence of ineligible recipients within the administrative data system).

Column A shows the number of people that have been identified using NAMOD to be eligible for each of the grants. The Old Age Grant was the most straightforward grant to simulate. Using the simulated figure (column A) for the number of older people who are eligible for OAG, this yields a take-up rate of 95.8%.

For the Disability Grant, NAMOD identifies 33,683 people as eligible, which generates a take-up rate of 81.1%.

We obtained a 62.6% take-up rate for the FCG. Two things should be kept in mind when considering this take-up rate: first it is of course possible for children to be put into the custody of a temporary carer even though their biological parents are alive, whereas in NAMOD potentially eligible children are identified solely on the basis of being double orphans; and second the 2009/10 NHIES identifies more double-orphans than the 2011 Census (the Census has 22,833 double-orphans aged less than 18, and 24,500 double-orphans aged 18-24)[15]. If the higher levels of double-orphanhood amongst the 18-24s than the 0-17s in the Census signify that double-orphanhood amongst children is reducing, then the earlier time point of the NHIES should imply that there would at that point have been more double-orphans aged 0-17 than at the time of the 2011 Census. Again, reweighting the NHIES to a 2011 time-point (as done here) would not take a decrease in double-orphanhood into account.

The Child Maintenance Grant is the most complex to interpret given the nature of the grant's rules. It is also the only grant that was simulated that uses a means-test and so is dependent on the quality of the income data. Using NAMOD 109,021 children were identified as eligible for CMG, which gives a take-up rate of 112%. A further 79,459 single orphans aged 0-17 inclusive were not identified as being eligible for CMG as they were either living in families above the means-test or were not living with either of their biological parents. For more details about the application of the CMG rules to the NHIES data see Annex 2.

If there was a hundred per cent take-up of the simulated grants, their cost (excluding administrative costs of providing the grant) would be N$261.6m for CMG, N$75.6m for FCG, N$1075.2m for OAG, and N$242.5m for DG per year.

[15] Figures supplied by UNICEF Namibia.

Personal income tax and VAT

Personal income tax and VAT were both simulated in NAMOD V1.0. Table 2 below shows the simulated amounts and the reported amounts from administrative data. As can be seen we simulate only 35.1% of reported personal income tax, and only 25.6% of reported VAT.

Table 2 Simulated and reported personal income tax and VAT in Namibia in 2013

Tax	NAMOD N$ A	Administrative data* N$ B	Extent of Capture (A/B) % C
Personal income tax	2,783,736,320	7,929,270,952	35.1
Value added tax	2,038,993,408	7,974,669,778	25.6

(*) Estimate for 2013-14 (Republic of Namibia, 2013: 7).

The simulated personal income tax is very low, and is probably due to under-reportage of income in the NHIES. It may also reflect the fact that high-income people are often less likely to agree to participate in a survey and so they could well be under-represented in the NHIES.

Unlike with personal income tax, a household survey cannot be expected to capture all income streams for VAT as not all expenditure is made by households, and so it should not be expected that NAMOD would simulate VAT amounts similar to the total reported VAT income. In fact, the simulated amount represents a higher percentage (25.6% of the Ministry of Finance's published estimate of VAT income for 2013-14) than has been previously obtained in South Africa. For example, using SAMOD and the 2008 National Income Dynamics Study the research team simulated 19.3% of the VAT take in South Africa (see Wright et al., 2011: 21).

Impact of grants on poverty and inequality

It is possible using the output data from NAMOD to explore the impact of grants on poverty and inequality in Namibia. Table 3 below shows the extent of poverty before-grants and after-grants. For this analysis we used the poverty lines reported in NSA (2012c) which were then reweighted using the CPI to a 2013 time point. The equivalisation scales were used as in NSA (2012c). The poverty head count (P0) refers to the proportion of people that fall below the poverty line. The poverty depth measure (P1) summarises how far people are from the poverty line. The poverty severity measure (P2) places greater emphasis on people that are further away from the poverty line (Foster et al., 1984).

An important distinction must be signalled between the poverty analysis presented here and the poverty analysis presented in NSA (2012c): the analysis presented in this report uses *income* data, whereas NSA (2012c) is based on *consumption* data. As the NHIES data yields consumption data that far exceeds the income data, the poverty figures presented here will inevitably be *higher* than those derived using expenditure data.

The 'before-grants' scenario is based on income having excluded all reported or simulated grants. The 'after-grants' scenario includes within the income data the simulated receipt of CMG, FCG, OAG and DG, and reported receipt (in NHIES) for SMG and WVS.

Table 3 Impact of social security on 'severe poverty' in Namibia in 2013

Poverty	'Before grants'	'After grants'
P0	0.632	0.563
P1	0.481	0.324
P2	0.409	0.231

Note: Poverty line set at N$334.71 per adult equivalent per month.

In Table 3 we see that 63% of the population are in severe poverty 'before grants' i.e. in a situation with no social assistance/social allowances. The 'after grants' scenario in the final column shows that social grants reduce poverty by seven percentage points, to 56%. The 'after grants' figures for the poverty depth (P1) and poverty severity (P2) measures also reveal the poverty alleviating impact of the grants. It must be remembered that the 'after grants' scenario adds in the simulated CMG, FCG, OAG and DG assuming *full take-up*. It should also be noted that the 'after grants' scenario includes *reported* (in the NHIES) receipt of SMG and WVG as these grants could not be simulated in NAMOD. We know from Table 1 that WVG is significantly under-reported in the NHIES (3,504 recipients in NHIES, compared with 22,589 recipients using administrative data) and so the 'after grants' poverty rates would fall further if WVG could either be simulated in NAMOD or was better captured by the NHIES.

Table 4 presents the same analysis but this time uses the higher poverty line of N$455.82 per adult equivalent per month. Using this threshold, the grants have reduce poverty by four percentage points from 68% to 64.5%.

Table 4 Impact of social security on 'poverty' in Namibia in 2013

Poverty	'Before grants'	'After grants'
P0	0.683	0.645
P1	0.528	0.400
P2	0.454	0.293

Note: Poverty line set at N$455.82 per adult equivalent per month.

If we measure the impact of social security on inequality in Namibia, the gini coefficient 'before grants' is 0.79 whereas 'after grants' it falls to 0.73.

Amending an existing policy

In NAMOD it is also possible to amend existing policies and to test their impact on poverty and inequality. As an example, we universalised the CMG. In order to implement this we created a test scenario in which a CMG which was awarded to all children aged 0-17 inclusive regardless of income and family composition. In this test scenario the SMG was abolished because it is paid at the same rate as CMG and so no distinction is necessary between disabled and non-disabled children in this instance (though in practice it would be important to consider the additional costs of disability for disabled children).

The Foster Child Grant is still paid, as a N$250 top-up for foster children (i.e. paid in addition to the CMG). The additional cost of these changes would amount to N$2.1 bn. Table 5 shows the impact of such a policy on severe poverty and on inequality.

Table 5 Impact of social security on severe poverty and inequality in Namibia in 2013 (test scenario 1: universal CMG, FCG paid as a top-up, and abolishment of SMG)

Severe Poverty and Inequality	'Before all grants'	With existing grants	Test Scenario 'After grants'
P0	0.632	0.563	0.436
P1	0.481	0.324	0.151
P2	0.409	0.231	0.075

Note: Poverty line set at N$334.71 per adult equivalent per month.

All the same points need to be kept in mind that were made in the above section in relation to Tables 3 and 4. The analysis is based on income (not consumption) data; 'with existing grants' includes simulated CMG, FCG, OAG and DG assuming *full take-up*, plus *reported* (in NHIES) WVG and SMG. If income was better captured by the NHIES the poverty rates would almost certainly fall; and if WVG was better captured by the NHIES, the 'with existing grants' poverty rates would fall further.

Notwithstanding these very important caveats that must be kept at the forefront of one's mind when interpreting Table 5, a universal CMG would seem to have a large impact on poverty reduction in Namibia. The penultimate column shows (an attempt to capture) the 'status quo' and the final column shows how severe poverty would change with the introduction of a universal CMG. The poverty rate would fall to 43.6%, the poverty depth and poverty severity scores would plummet. Inequality would also fall, from 0.73 (with existing grants) to 0.65.

Table 6 shows the same analysis but this time uses the higher poverty line of N$455.82 per adult equivalent per month.

Table 6 Impact of social security on poverty in Namibia in 2013 (test scenario 1: universal CMG, FCG paid as a top-up, and abolishment of SMG)

Poverty	'Before all grants'	With existing grants	Test Scenario 'After grants'
P0	0.683	0.645	0.581
P1	0.528	0.400	0.248
P2	0.454	0.293	0.134

Note: Poverty line set at N$455.82 per adult equivalent per month.

Adding a new policy

In NAMOD it is also possible to add new policies, and to test their impact on poverty and inequality. As an example, we introduced a youth grant (YG) for adults aged 18-24. There are many ways in which a YG could be designed (for examples of options considered in South Africa see Altman *et al.,* 2014).

For the purposes of this example, we created a test scenario in which the YG was awarded to all young people with personal incomes less than N$1000 per month. Young people in receipt of the DG or WVS were not assigned the YG. On this basis 270,490 young people were identified using NAMOD as being eligible, which if paid at N$250 per month would cost N811m per year. Tables 7 and 8 show the impact of such a policy on poverty.

Table 7 Impact of social security on severe poverty in Namibia in 2013 (test scenario 2: means-tested youth grant)

Severe Poverty Inequality	'Before all grants'	With existing grants	Test Scenario 'After grants'
P0	0.632	0.563	0.528
P1	0.481	0.324	0.264
P2	0.409	0.231	0.170

Note: Poverty line set at N$334.71 per adult equivalent per month.

Again the caveats mentioned above must be kept in mind. But, using the severe poverty line (N$334.71 per adult equivalent per month), and that data currently available, poverty would fall from 56% (with existing grants) to 53%. The impact of the grant is less notable but this is because the amount of the grant would not take zero income young people living on their own above the poverty line. It nevertheless does have a discernible impact on inequality: the gini coefficient would fall from 0.73 (with existing grants) to 0.70.

Table 8 Impact of social security on poverty and inequality in Namibia in 2013 (test scenario 2: means-tested youth grant)

Poverty	'Before all grants'	With existing grants	Test Scenario 'After grants'
P0	0.683	0.645	0.624
P1	0.528	0.400	0.348
P2	0.454	0.293	0.235

Note: Poverty line set at N$455.82 per adult equivalent per month.

Table 8 presents the same analysis but this time uses the slightly higher poverty line of N$455.82 per adult equivalent per month.

These are only examples, included with the aim of demonstrating how microsimulation techniques can be used. In practice, design of a new policy would need to take a host of factors into account, particularly in the context where the underpinning dataset has problematic income data.

6. Conclusion and recommendations

Microsimulation modelling requires access to robust microdata which contains all the necessary variables that are required to simulate a country's tax and benefit policies that relate to individuals. This version of NAMOD has a number of strengths: it uses reasonably up-to-date data that has been collected by government, and is built using the EUROMOD platform which has been developed over many years and used in a large number of countries including most locally South Africa. NAMOD contains the policy rules for each of the grants as well as VAT and personal income tax.

The current version of NAMOD is undermined by the underpinning dataset. The data required to ascertain eligibility for certain policies is not available in the NHIES and so the SMG and WVS could not be simulated. There were also a number of other challenges related to the NHIES data (see Section 4) and it is recommended that these issues are explored further. Any improvements that can be made will enhance future versions of the NHIES which could in turn be used by NAMOD as an improved underpinning microdataset.

In spite of these challenges, NAMOD provides a starting point from which government can explore issues such as promoting take-up of grants or making changes to the social security system. The use of NAMOD will additionally enhance the use and scrutiny of NHIES data within government and academia, encourage debate about the strengths and weaknesses of survey and administrative data, as well as provide a tool for considering ways in which poverty and inequality can be reduced in Namibia.

7. Appendix 1 Namibia’s social security system, personal income tax and VAT

Social grants
Old Age Grant (OAG)
Men and women aged 60 and over. Namibian citizens or permanent residents if not born in Namibia. Must reside in Namibia. Amount = N$600 per month. SOURCES: Levine et al. (2011), Petra Hoelscher
Disability Grant (DG)
People aged 16 or above and medically certified by a State doctor as being temporarily or permanently disabled (blind people included); persons with AIDS as certified by a medical doctor. [Definition from National Pensions Act: "disabled person" means any person who is, owing to any physical or any mental disability, incapable to obtain from any employment or the practising of any profession or trade, or from the rendering of any service, the means needed to enable him or her to adequately provide for his or her own maintenance, and has attained the age of 16 years] Namibian citizens or permanent residents if not born in Namibia. Must reside in Namibia. Amount = N$600 per month.

SOURCES: Levine et al. (2011), National Pensions Act No 10 of 1992, Petra Hoelscher
War Veterans Subvention (WVS)
People who participated in the struggle that led towards independence in 1990 as confirmed by the Ministry of War Veteran Affairs. Means tested (< N$50,000 per year) and pegged to the income tax threshold. Namibian citizens or permanent residents if not born in Namibia. Must reside in Namibia. Payable to registered dependants (widow/widower or children under 18) of deceased veteran. Amount = N$2,200. SOURCES: Levine et al. (2011), Veterans Act No 2 of 2008, Petra Hoelscher
Child Maintenance Grant (CMG)
Biological parent with child under the age of 18 (may be extended to 21 if child continues secondary schooling) who is receiving an old age or disability pension or whose spouse (other biological parent of the child): (i) is receiving an old age or disability pension, or (ii) has passed away, or (iii) is serving a prison sentence of 6 months or longer. Means tested on applicant's income (< N$1,000 per month).

If child is older than 7 years, he/she needs to attend school (supposed to show school report every year). Namibian citizens or permanent residents if not born in Namibia. Must reside in Namibia. Amount = N$200 per month. SOURCES: Levine et al. (2011), http://www.mgecw.gov.na/, NSA (2012), Petra Hoelscher
Foster Care Grant (FCG)
Any person who, whether for reward or otherwise undertakes the temporary care of any child, who has been placed in his/her custody in terms of section 31(1)b or section 50(1) of the Children's Act No 33 of 1960. Namibian citizens or permanent residents if not born in Namibia. Must reside in Namibia. Amount = N$200 per month. SOURCES: Levine et al. (2011), http://www.mgecw.gov.na/, NSA (2012), Petra Hoelscher
Special Maintenance Grant (SMG)
Children below 16 years and medically certified by a State doctor as being temporarily or permanently disabled (blind people included); persons with AIDS as certified by a medical doctor. Namibian citizens or permanent residents if not born in Namibia.

Must reside in Namibia. Amount = N$200 per month. SOURCES: Levine et al. (2011), http://www.mgecw.gov.na/, Petra Hoelscher
Place of Safety Allowance
Person or institution, who is taking care of a child who is under the age of 21 years and who is placed in a place of safety by a Commissioner of Child Welfare in terms of the Children's Act No 33 of 1960 or the Criminal Procedure Act No 51 of 1977. Amount = N$10 per day. SOURCES: Levine et al. (2011), Petra Hoelscher

Notes: Grant amounts and means test thresholds are for 2012/13. An increase to the OAG amount to N$600 per month was announced in the 2013 Budget.

Contributory social security schemes
Maternity leave, Sick leave and Death benefit Fund (MSDF)
Membership: Any person who works and receives a basic wage for his or her services in Namibia, even if it is for only one day per week on a regular and continuous basis. This includes domestic employees, as well as employees of Small and Medium Enterprises such as shebeens, hair salons, panel beaters, construction workers, etc. Self-employed persons may choose to register themselves with the MSDF voluntarily. The employers are liable to register all such employees.

Contributions: The contribution rate for the MSDF is 1.8% of the employee's basic wage shared on a 50/50 basis by the employer (0.9%) and the employee (0.9%) from N$300 per month to the ceiling of N$6,000. The minimum monthly contribution by members is N$2.70 and the maximum is N$54. Employees earning less than N$300 per month are also required to contribute the minimum of N$2.70. A self-employed person's contribution is a combination of both an employer's and an employee's contribution (i.e. 1.8% of his/her basic wage/income).

Benefits: There is a six month waiting period for newly registered members before a benefit can be received. This is not applicable for qualifying members who are merely changing jobs, provided that they are de-registered by the previous employer and registered under the new employer. No fees are payable upon registration for the Fund.

Maternity leave benefit

Maternity leave benefits to female members equal 100% of basic wage up to a ceiling of N$10,500 for a maximum period of 12 weeks (3 months), with a minimum of N$300 per month and maximum of N$10,500 per month.

Sick leave benefit

The sick leave benefit is payable when an employee is booked off by a medical practitioner for 30 or more consecutive days and has exhausted paid sick leave days as provided under the Labour Act or contract of employment. Sick leave benefits are paid at 75% of the maximum basic salary of N$10,500 for the first 12 months (minimum N$225 per month and maximum N$7,875 per month) and 65% for a further 12 months, at N$195 per month (minimum) and N$6,825 per month (maximum).

Death, disability and retirement benefits

A single payment of N$5,515 will be made upon the death of a fully paid up member or upon retirement or permanent disability. This is a once-off benefit for disability, retirement or death.

SOURCE: http://www.ssc.org.na/funds/Maternity-Sick-Death-Benefit-Fund/23/

Employees' Compensation Fund (ECF)

Membership: Under the Employees' Compensation Act No 30 of 1941, every employer who employs one or more employees is required to complete a form of registration and to pay annual assessments to the Accident Fund.

An employer is generally any person engaged in business (including the professions, clubs, associations, companies, etc.) who employs one or more persons in connection with their business activities.

An employee means any person, male or female, with the exception of the classes referred to below, who has entered into works under a contract of service or of apprenticeship with an employer, whether the remuneration is calculated by time or by work done, or is in cash or in kind, and includes (amongst others) working directors earning fixed salaries, members of close corporations, managers, clerks, typists, cleaners of service flats, etc.

An essential feature is that an 'employer-employee' relationship must exist between employer and employee.

The following persons are specifically excluded by the Act from the definition of an 'employee':

a) Persons earning more than N$76,000 per annum;
b) Persons employed casually and not for the purpose of the employer's business;
c) Outworkers performing work on premises not under the control of the employer;
d) Seamen or airmen employed under a contract of service whose remuneration is fixed solely by a share in the takings.
e) Persons employed temporarily outside the Republic of Namibia for a continuous period of more than 12 months, unless their employers have made special arrangements with the Commission.

Benefits: The Act provides for the payment of benefits on a generous scale to an employee injured as a result of an accident arising out of and in the course of his/her employment. Compensation is paid in respect of temporary disablement, permanent disablement (according to the degree of disablement) and death. Reasonable medical expenses are payable for a period of two years, or longer if further medical or surgical treatment may reduce the extent of the disablement.

SOURCE: http://www.ssc.org.na/funds/Employees-Compensation-Fund/24/

Development Fund (DF)

The main objectives of the DF are to:

1. Conduct training schemes and employment schemes approved by the President of the Republic of Namibia for the benefit of socio-economically disadvantaged persons who are unemployed;
2. Grant bursaries, loans and other forms of financial aid to students enrolled at any recognised technical or academic institutions of higher education.

Unemployed Namibians from socio-economically disadvantaged backgrounds can apply to participate in the Bursary Scheme, Study Loan Scheme or Training Scheme. The Employment Scheme supports deserving community-based projects with potential to create employment for the unemployed.

SOURCE: http://www.ssc.org.na/funds/Development-Fund-SSC-DF/25/

Income tax

Resident and non-resident individuals are taxable on all income received or accrued from an actual or deemed Namibian source that is not of a capital nature.

Taxable income is an individual's gross income less exempt income and deductions:

Exempt income

Lump sum payments

- Lump sum payments from a pension fund, where payment is made because of death, superannuation, ill health or any other infirmity proven to the satisfaction of the Minister of Finance, or retirement.
- Any lump sum payment from a retirement annuity fund.
- One third of the payment of any amount from a provident fund, except where the payment is due to resignation, termination, dismissal or dissolution of the fund or a provident preservation fund due to retirement or death of the member of the fund.
- The first N$300,000 of any lump sum payment received as a bonus, gratuity or compensation received upon termination of services due to superannuation, ill health or any other infirmity, or if such person attained the age of 55 years or more, or as a result of redundancy. Any balance of the lump sum above N$300,000 may be spread over a three-year period for tax purposes where the termination is due to superannuation, ill health or any other infirmity, or the Minister of Finance is satisfied that the circumstances of the case warrant this concession.
- Any lump sum benefits derived from a pension, provident or preservation fund transferred to another fund (pension, provident, preservation or retirement annuity) within the year of assessment or a period of three months after the ending of such year of assessment, unless a deduction can be claimed in respect of the amount transferred.

Uniform allowance

The value or allowance given to an employee by the employer, as the Minister of Finance considers reasonable, for a special uniform which the employee is required to wear while on duty as a condition of employment. The uniform must be distinguishable.

Dividends

Any dividends (local or foreign) received by or accrued to a Namibian resident, other than dividends payable by a Namibian tax resident to a non-resident.

Interest received

Interest received by any person, other than a company, from:

- Any savings in a Post Office Savings Bank, or

- Any external company not carrying on business in Namibia, or
- Stock or securities, including Treasury Bills, issued by the Namibian Government, or any regional council or local authority.

Casual and study loans

Casual loan received from the employer not exceeding N$3,000 and any loan granted to an employee for study purposes.

<u>Deductions from income</u>

Fund contributions

- Contributions to any pension fund, provident fund or retirement annuity fund and to any insurance policy for the post-school education of the taxpayer's child are deductible to a maximum of N$40,000 per annum.

Donations

Any donation to a welfare organisation or an educational institution approved by the Minister of Finance may be deducted if:

- No individual is nominated as a beneficiary,
- The deduction does not create or increase a taxable loss,
- A certificate is obtained from the welfare organisation or the educational institution, and
- The payment is not in respect of school fees or a contribution to a school fund which the taxpayer is obligated to make.

No deductions are granted to individuals for medical expenses (employers liable for such expenses may deduct them, subject to certain limits).

Rates are progressive up to 37%.

Taxable income (N$) - tax rate
Up to 40,000 - 0%

40,001 to 80,000 - 27% on amount exceeding 40,000 80,001 to 200,000 - 10,800 plus 32% on amount exceeding 80,000 200,001 to 750,000 - 49,200 plus 34% on amount exceeding 200,000 Over 750,000 - 236,200 plus 37% on amount exceeding 750,000 SOURCES: Deloitte International Tax Namibia Highlights 2013, PWC Creating Opportunities in Tough Times: Namibia Tax Information August 2012, KPMG Tax Card 2011/12, Income Tax Act No 24 of 1981; PKF Namibia Tax Guide 2012, http://www.taxrates.cc/html/namibia-tax-rates.html	

Notes: The tax rates are for 2012/13. A change to the tax rates and tax brackets was announced in the 2013 Budget.

VAT
VAT is imposed on the supply and import of most goods and services. The standard rate is 15%. Certain goods and services are zero-rated: • Export of goods and services and related supplies • International transport • Sale of a going concern • Sale of land and buildings for residential purposes and erection of residential buildings • Municipal services (electricity, water, refuse removal, sewerage) to residential accounts • Telecommunication services to residential accounts • Certain food supplies (mahango and mahango meal, maize meal, fresh and dried beans, sunflower cooking oil, fried out or

processed animal fat used for the preparation of food, bread and cake flour, bread, white and brown sugar, fresh milk)

- Postage stamps
- Supplies by charitable organisation and similar institutions
- Livestock (other than game)
- Goods, and the repair thereof, to be used as aids by physically handicapped persons who are blind, deaf, crippled or a chronic invalid. Services for any adjustment or modification in respect of a vehicle used for these purposes.
- Medical or paramedical services
- Services or rooms in a registered hospital, maternity home, convalescent home, hospice or clinic
- Funeral undertaking services
- Petrol, diesel and paraffin (subject to fuel levy)

SOURCES: Value Added Tax Act No 10 of 2000, Deloitte International Tax Namibia Highlights 2013, Deloitte and FNB Namibia Quick Tax Guide January 2011, PKF Namibia Tax Guide 2012

8. Appendix 2 Classification of NHIES children by biological parent's status and presence in child's household

Group	Bio mother in hh	Bio father in hh	Bio mother alive	Bio father alive	Is their child potentially eligible for CMG?*
1	✓	✓	✓	✓	Yes if one or both of the parents receives OAG or DG. Note: no means-test is applied (MGECW).
2	✓	×	✓	✓	Yes if mother is in receipt of OAG or DG. Note: no means-test is applied ((MGECW).
3	✓	×	✓	×	Child is a single orphan. Yes if mother's income falls below means test.
4	×	✓	✓	✓	Yes if father is in receipt of OAG or DG. Note: no means-test is applied ((MGECW).
5	×	✓	×	✓	Child is a single orphan. Yes if father's income falls below means test.
6	×	×	✓	✓	Child is not an orphan but not living with a biological parent. We cannot consider these children in NAMOD for CMG as the grant is routed through the biological parent and neither of them live in the child's household.
7	×	×	✓	×	Child is a single-orphan but not living with a biological parent. We cannot consider these children in NAMOD for CMG as the grant is routed through the biological parent and neither of them live in the child's household.
8	×	×	×	✓	Child is a single-orphan but not living with a biological parent. We cannot consider these children in NAMOD for CMG as the grant is routed through the biological parent and neither of them live in the child's household.
9	×	×	×	×	These are double-orphans so are eligible for FCG and therefore not considered in NAMOD for CMG

*Other criteria are applied relating to the child's age and education status.

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