

Health and Medicines Sector Market Assessment

in Botswana, Lesotho, Namibia and South Africa













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Cadiz ASSIST is a joint venture between Cadiz Asset Management and the African Management Services Company targeting capacity-building among small businesses across sub-Saharan Africa that receive loan funding from AMIIF. AMIIF works with non-banking financial institutions (NBFIs) in helping small and medium enterprises (SMEs) grow with resulting job creation, improved livelihoods, overall SME sector growth across sub-Saharan Africa, and increased access to quality, affordable health care and medicines.

Cadiz Asset Management (CAM)

is a wholly owned subsidiary of Cadiz Holdings Limited; a Johannesburg Stock Exchange listed company. Established in 1996, Cadiz Asset Management has almost ZAR 30 billion in assets under management for individuals and institutions. CAM has built its success by delivering investment performance, patiently cultivating meaningful relationships, and providing clients with exceptional client service. CAM has been active in the socially responsible and impact investing market within southern Africa for over six years, and has played a significant role in developing the environment to cater for social investing.

The African Management Services Company's (AMSCO) primary objective is to assist African companies in becoming globally competitive, profitable, and sustainable. AMSCO seeks to achieve this mandate by providing qualified, experienced, hands-on, professional management and related services to selected private companies and commercially operated public enterprises, with the aim of strengthening management teams while developing local management capacity. AMSCO is a joint initiative of the United Nations Development Programme, the International Finance Corporation (IFC) and the African Development Bank Group (AfDB), and is managed under the auspices of the World Bank. Its shareholders include l'Agence Française de Développement, AfDB, FMO, Finnfund, IFC, Norfund, and Swedfund.

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Endeva's mission is to inspire and support enterprise solutions to the world's most pressing problems: making poverty a thing of the past and preserving ecosystems for the future. As an independent institute, Endeva works closely with partners from the private, public and nonprofit sectors. In their projects, they build, share, and apply knowledge to develop, implement, and grow inclusive business models. Their projects in the health-care sector aim to increase access to health in low-income markets. For example, Endeva wrote the study "Bringing Medicines to Low-income Markets", commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). Endeva has also conducted several trainings that support pharmaceutical companies in the development of sustainable business models that address lowincome patients' needs.

Reciprocity is a Cape Town-based consultancy. Its core activity involves unlocking the potential of enterprise as an agent of economic transformation while maximising the socio-economic footprint of business in lowincome communities. Its focus ranges from financial services to health-care, housing and energy, as well as the food and beverage sector. Reciprocity also facilitates the creation and testing of inclusive business models, that is, business models with a direct impact on people living at the base of the economic pyramid (BoP). This approach involves a large spectrum of services around corporate strategy, project management, and research.

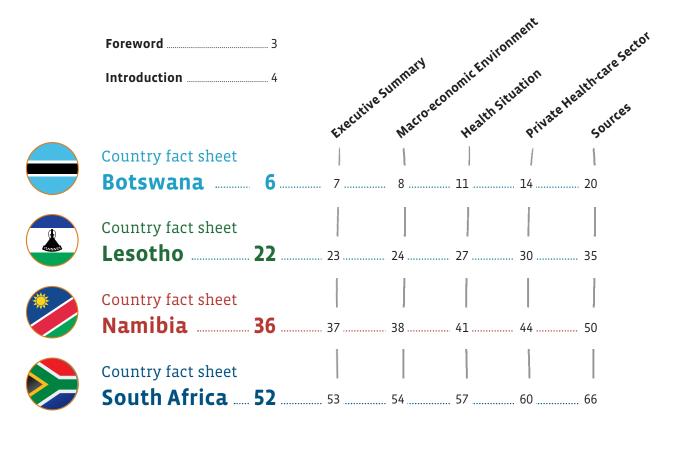
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Foreword

Dear Reader,

Southern Africa has a high burden of disease, worsening with the increase of non-communicable lifestyle diseases. Access to good quality, appropriate and affordable health care and medicines to treat these diseases is one of the building blocks of an effective health system and is embodied in the right to health, yet weak health systems and limited public resources result in this entitlement being denied.

The African Medicines Impact Investment Fund, together with the Cadiz ASSIST Fund, aims not only to support innovative solutions from private sector enterprises that can operate at critical points in the health and medicines value chain, but also to harness private sector investment.

It is clear that governments and donor organisations cannot tackle the challenges of improving health and medicines access alone. For a sustainable and continued improvement in the economic wellbeing and health of the poor, the private sector provides a crucial role in profitable investment in low-income countries, in developing new markets and servicing the needs of poor women and men through commercial and sustainable market solutions, and in providing vital segments in the chain of healthcare delivery. By making the right investment choices,

taking risks, innovating and transforming markets, the private sector can, and is having, a tremendous impact. The private sector delivers a large share of health services across the developing world, sits on the governing boards of international health funds, makes the drugs and treatments that the world needs, and works on ways to encourage greater business involvement. And, importantly, private sector companies have increasingly become important donors themselves.

It is difficult to deliver health care in remote areas without using private-sector supply chains. The technical skill and human capital of multinational firms is needed to develop new vaccines and treatments. Additionally, the private sector has investment capital that can fund these initiatives via innovative financing alternatives. Crucially, governments and donor organisations are increasingly aware of the need to involve the private sector within a new funding paradigm which works for all. In partnership with government and donor organisations, the private sector has a remarkable opportunity to make a real, tangible difference to the health of the poorest worldwide.

We are very excited about these opportunities, and we hope that you join us in making them a reality.

Celestine Kumire

Programme Director SARPAM

Evan Jones
Deputy CEO

Cadiz Asset Management

Introduction

Investments in the health-care sector are not only good for development, they are good for the economy. Healthier people are more productive, and they consume and invest more. In fact, one extra year of life raises GDP by 4%.1 Sub-Saharan Africa offers an extremely good environment for high-impact investments. Reductions in the cost of medicines and health services have a significant impact on government and household expenditures alike. The scale of market opportunities to achieve these gains is enormous. Pharmaceutical spending in Africa is expected to grow at a compound annual growth rate (CAGR) of 10.6% and reach US\$30 billion by 2016. By 2020, this market could represent a US\$45 billion opportunity.2 Similarly, health care spending has grown across 49 African countries at a CAGR of 9.6% since 2000.3 Yet these opportunities have not been fully seized.

burden The disease associated with many communicable diseases has decreased in sub-Saharan Africa. While global figures for pre-term birth complications and maternal disorders have been on the decline, they have increased since 1990 by 19% and 32% respectively in sub-Saharan Africa.4 Tackling noncommunicable diseases represents the next frontier for many health systems in sub-Saharan Africa. In the last 20 years, diabetes, low back pain, and depression have increased by 88%, 65%, and 61% respectively. This challenge is especially pronounced in those countries of the Southern African Development Community (SADC) region that have moved to the upper-middleincome bracket in the past ten years. Namibia, for example, has experienced a 123% increase in the prevalence of diabetes over the last two decades.5

If these diseases are to be properly diagnosed and treated, the population of sub-Saharan Africa, which to date accounts for 12% of the global population, needs access to quality health care services and medicines. However, public health decision-makers are faced with limited public resources. On average, public health expenditure in sub-Saharan Africa accounts for only 44.9% of total health expenditure in the region. Public health systems are thus overburdened and often struggle to provide a satisfactory level of care.

At the same time, the private sector already plays a crucial role in reducing the disease burden throughout the region: Nearly 50% of total health expenditure in the region goes to private providers.8 The urban rich (who are insured) as well as low-income populations (who pay out-of-pocket) often rely on the private sector for treatment or medicines. This is true in particular in low-income countries with fragile public health systems. Leveraging the potential of the private sector can thus significantly improve access to medicines and health care in Africa, especially among middle and low-income populations. Doing so can also further reduce the pressures bearing on public systems.

However, the perceived high risks associated with the health and pharmaceutical sectors mean that many private-sector enterprises struggle to access local debt financing. Loans are often either denied or offered with unfeasible interest rates. The lack of financing is considered a key constraint to economic development in the region, as without it, businesses are unable to scale up or expand business models with a social impact.

The Africa Medicines Impact Investment Fund (AMIIF) was established with the aim of closing this finance gap while seizing the economic and social opportunities associated with investing in the medicines and health sector to increase access to quality-assured, affordable, essential medicines. AMIIF is a debt-financing instrument that provides capital loans at marketrelated interest rates to qualifying enterprises that have an established track record of operating at critical points along the health-care and pharmaceutical value chain.9 The fund was established with a seed investment through the British Government (UKAid) Southern African Regional Programme on Access to Medicines (SARPAM). Its investments are appraised as having strategic potential to improve the marketplace and deliver medicines to meet the health needs of people in the region. Its ultimate objective is to improve access to health and medicines for the tens of millions of people at the Base of the Pyramid (BoP) in the region. The objective of this market assessment is to support the investment hypothesis of the Africa Medicines Impact Investment Fund. The country fact sheets presented here have been designed to provide potential AMIIF investors an overview of the investment environment and opportunities in the private health sectors of four SADC countries: Botswana, Lesotho, Namibia and South Africa. These initial countries were selected because they each face a high burden of disease, but are also relatively investment friendly. Indeed, within sub-Saharan Africa overall and the SADC in particular, these four countries feature the highest credit ratings. Ultimately, the analyses provided here aim to reinforce the important role played by the private sector in increasing access to health care and medicines throughout the region. Highlighting various investment opportunities, this market assessment hopes to attract further foreign and domestic investment into the sector.

Sources

- Harmonization for Health in Africa (2011). Investing in Health for Africa: The Case for Strengthening Systems for Better Health Outcomes.
- 2 IMS Health (2012). Africa: A Ripe Opportunity.
- 3 ihid
- 4 Institute for Health Metrics and Evaluation (2013). The Global Burden of Disease: Generating Evidence, Guiding Policy.
- 5 ibid.
- 6 The Economist (2013). www.economist.com/blogs/baobab/2013/05/sub-saharan-africa

- 7 The World Bank (2012). http://data.worldbank. org/indicator/SH.XPD.PUBL/countries/ZW-ZF?display=graph
- 8 IFC (2007). The Business of Health in Africa: Partnering with the Private Sector to Improve People's Lives.
- 9 A "Qualifying Enterprise" has the capacity and business model to increase access to health care or essential medicines to an extent that is practical, offers acceptable risk-adjusted returns, and is compatible with appropriate standards of prudence in the areas of credit risk, issuer risk, and liquidity risk.

Country Fact Sheet Botswana

Executive Summary

Strong macro-economic fundamentals

Botswana is a landlocked country in southern Africa with a small population of 2.13 million. One of the poorest countries in the world as recently as 40 years ago, Botswana has today attained upper-middle-income status, with high economic growth rates by worldwide comparison, reaching 3.7% in 2012. This growth has primarily been driven by the diamondmining sector, which accounts for more than a third of GDP, combined with sound policies, good governance and political stability.

High double burden of disease

While HIV/AIDS still represents Botswana's highest disease burden, with an adult prevalence rate (ages 15–49) of 23.0% in 2012, new infection rates have gone down by almost 78% in less than two decades. Thanks to freely available HIV testing and treatment, the disease is being shifted from an acute public health emergency to a manageable chronic disease. As a result, the Millennium Development Goal (MDG) on HIV/AIDS, malaria and tuberculosis is likely to be met by 2015. However, the MDGs on reduced child mortality and improved maternal health will not be achieved by 2015.

Non-communicable diseases such as cardiovascular diseases, cancer and diabetes are on the rise. This has led to Botswana grappling with both communicable and non-communicable diseases – a "double burden of disease".

Solid public health-care sector with constraints

Botswana has a strong public-sector health care system that provides specialist and hospital care in return for minimal user fees. The public sector is supplemented by donor aid that focuses strongly on HIV/AIDS issues. Health-care funding totalled US\$780 million in 2011.

Private health-care sector presents opportunities for social and financial returns

The private health-care sector accounts for 39% of the country's total health expenditure, with only 13% of health expenses paid out-of-pocket. Private health-care delivery is currently concentrated in urban areas and in higher income segments.

The private health-care market holds considerable potential for growth. Most notably, opportunities lie in the provision of low-cost primary care in non-urban areas, disease-management products targeting non-communicable diseases, supply-chain management solutions, training of health-care professionals, insurance products for lower-middle-income groups, and information and communication technology (ICT) solutions. All these opportunities should ultimately improve the access to medicines and health-care services for lower- and middle-income groups.

Macro-economic Environment

Small, young population with a human development index ranked 3rd within SADC

Botswana has a population of only 2.13 million, with a moderate growth rate of 1.35%. It has a rather young population, with a median age of 22.7 years, a phenomenon typical within SADC countries. The HIV/AIDS pandemic of the past decade had a dramatic impact on life expectancy; however, this figure is again on the rise, and currently stands at 55 years. The majority of the population lives in urban areas – the capital of Gaborone alone is home to 232,000 residents – with only 38% dwelling in rural areas.¹ Within the Southern African Development Community (SADC),² the country has the third-highest Human Development Index score, a measure of well-being that extends beyond simple income levels and growth rates.³ Botswana has a literacy rate of 85% (see Table 1 below).4

Stable economy with solid growth and favourable investment climate

Botswana's GDP reached US\$14 billion (see Table 2 on page 9) in 2012, or US\$7,190 per capita. The country's economic growth rate the same year was 3.7%.⁵ Over the last decades, it has been one of the world's fastest-growing economies – moving within 40 years from one of the poorest countries in the world to an upper-middle-income status. This shift was primarily driven by the diamond sector and good economic leadership. The diamond sector contributes over a third of the country's GDP,⁶ other important economic sectors include tourism, financial services and cattle breeding.

Although the economy was adversely affected by the global financial crisis, Botswana's economic growth rates are expected to remain robust. The most significant threat to the economy is a slowdown

Table 1: Demographic overview

Indicator		Botswana	Ø SADC	Rank among the SADC member countries*
*	Size	581,730 km²	657,500 km²	9th
†††	Population	2.13 million	19 million	11th
	Population growth rate	1.35%	3.3%	9th
† † †	Urban population	62%	39 %	2nd
	Median age	22.7 years	22.0 years	5th
Ø	Life expectancy	55 years	57 years	7th
\$	Literacy rate	85%	78%	7th
	Human Development Index	0.634	0.518	3rd

*1=highest Source: CIA World Factbook (2013), Human Development Index from UNDP (2012) in global demand for diamonds.⁷ Although the proportion of people living on less than US\$2 per day (PPP) is around 50%, one of the lowest such ratios in the SADC region,⁸ Botswana's overall poverty levels are high for an upper-middle-income country. This will be a critical element of focus for policymakers in coming years.

Botswana is among the most investor-friendly countries in Africa, as evidenced by its credit-risk rating of A-, the continent's best. As can be seen from the Corruption Perceptions Index, Botswana is also perceived as the least-corrupt country among the SADC member states. From 2013 to 2014, the country rose by nine places in the World Bank's Doing Business rankings. This is mainly attributed to a simplification of the process for obtaining a construction permit for a new plant or office building.

Along with South Africa, Namibia, Lesotho and Swaziland, Botswana is a member of the Southern African Customs Union (SACU). Its ties with South Africa are further deepened through its currency, the

pula, which is one of the strongest and most stable currencies in Africa. The pula's value is determined on the basis of a crawling-band exchange rate relative to major trading partners' currencies including the U.S. dollar, the euro, the South African rand and the British pound. This means the currency exchange rate is allowed to fluctuate within bounds around a periodically adjusted central value. The crawling band helps avoid sudden major changes in currency exchange rates, thus avoiding high levels of volatility.

Botswana is quite open to foreign direct investment (FDI). Net FDI inflow was US\$293 million in 2012, around two-thirds of which was concentrated in the mining sector, and another 20% in the financial-services sector. To date, there has been no appreciable FDI in the health-care sector. According to the Botswana Export Development and Investment Authority (BEDIA), Botswana has one of the simplest tax regimes in the world. Corporate tax rates are among the lowest in the SADC region, at 15% for all manufacturing companies and 25% for non-manufacturing companies. 4

Table 2: Economic and financial overview

Indicator		Botswana	Ø SADC	Rank*
\$/#	GDP (current USS) ^A	US\$ 14 billion	USS 43 billion	7th
\$/*	GDP per capita (current Uss) ^A	uss 7,191	uss 3,635	4th
\$/+	GDP real growth rate [*]	3.7%	4.36%	9th
<u> </u> / <u> /</u>	Unemployment rate ⁸	17.8%		
† < ②	Population living under US\$ 2 (PPP) per day A	50%		
	Corruption Perceptions Index ^c	64/100	39/100	1st
41	Doing Business rank (out of 189 economies) ^D	56		3rd
	Long term credit rating foreign currency ^E	A-		
 / \$	Account at a formal financial institution (%age15+) ^F	30%	30%	6th
\$→	Foreign direct investment inflows (current Uss)	US\$ 293 million	US\$ 786 million	10th
¶\$ ∏→	Commercial bank prime lending rate ⁸	11%		
® ₩ → S	BWP/US\$ exchange rate "	8.61 BWP/US\$		
† / =	Cell phone penetration ^J	>100%	50 %	-

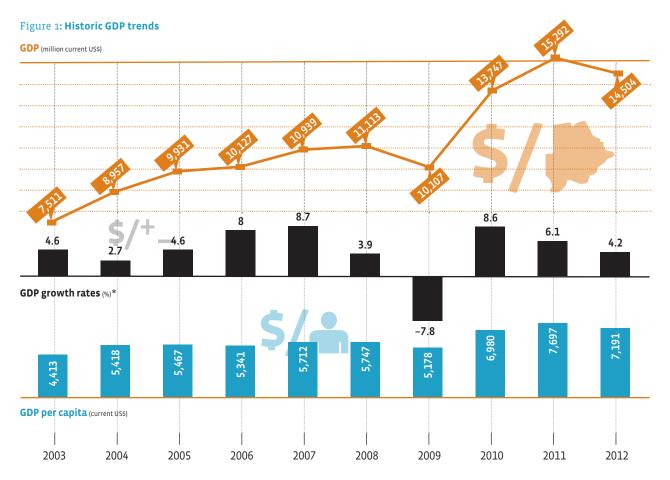
*Rank among the SADC member countries 1-highest
Sources: A) World Bank Indicators (2012) B) CIA World Factbook (2012) C) Transparency International (2013) D) The World Bank (2013) E) Standard & Poor's (2012) F) The World Bank (2014) G) UNCTAD (2013) Hh) oanda (2013/12 J) Deloitte & GSMA (2012)
Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment which is a very strict definition.

An established financial sector, yet little lending within the health-care sector

Botswana has a developed financial sector, with 13 commercial banks at which 30% of the adult population had an account in 2012.15 The prime-lending rate for commercial banks is 11%.16 A minimum risk premium of 2% to 3% is typically added, calculated on the combined basis of the specific venture's risk level and that of the venture's overall sector. The interest rate has decreased by about seven percentage points over the last seven years.17

The Citizen Entrepreneurial Development Agency (CEDA) is tasked with providing access to finance for small and medium-sized enterprises (SMEs). However, it currently has no health-care enterprises in its portfolio, a consequence of two primary factors: First, SMEs in the health-care sector often require technical assistance in order to reach the point of loan eligibility. Second, the agency often lacks a deep understanding of health-care sector dynamics and requires technical expertise before approving a loan.

Cell phone penetration rates lie above 100% of the population.18 However, the raw figures do not indicate how these cell phones are distributed among the population; that is, there may be people who have more than one mobile phone, while others lack phone access altogether. Nevertheless, it can be assumed that the majority of the population has access to mobile phones and thus to mobile-banking solutions.



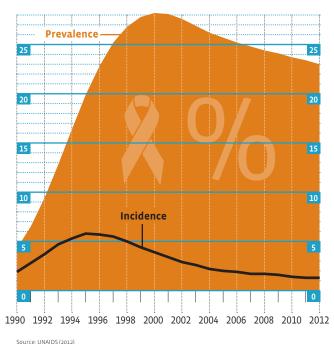
with rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars

Health in Botswana

HIV/AIDS still a heavy burden, but NCD levels rising

HIV/AIDS still represents Botswana's most significant disease burden, with an adult prevalence rate (15 to 49 years) of 23.0% in 2012 (see Figure 2 below).19 Thanks to strong efforts by the government, donors and the private sector, the prevalence rate has stabilised, and the new-infection rate has declined steeply, by around 78% over the last 18 years to 1.3% in 2012.20 Freely available HIV testing and treatment led to a resurgence in life expectancy from 49 years in 2002 to 55 years in 2013, shifting HIV/AIDS from an acute public health emergency to a manageable chronic disease. This concerted effort has made it likely that Millennium Development Goal 6, related to HIV/AIDS, malaria and tuberculosis, will be met by 2015. Though the pandemic remains the top cause of death, accounting for 35% of all reported deaths per year, non-communicable diseases

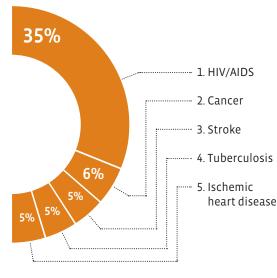
Figure 2: HIV adult prevalence and incidence rates (15-49 years)



(NCD) such as cancer, strokes and cardiovascular diseases have risen into the top five causes of death.²¹ This so-called double burden of disease is a challenge for a health-care system that aims to address patients' acute and chronic needs.

Improving maternal and child-related health care remains a significant challenge. The Millennium Development Goal related to maternal health, which targets a reduction of deaths per 1,000 births to 150, will not be met. As of 2011, there were 189 deaths per 1,000 births. The same holds for the child-mortality rate, which currently stands at 57 deaths per 1,000 live births, far short of the 16 deaths per 1,000 live births target. Similarly, the target of 27 deaths per 1,000 children under the age of five years has not been met, with 76 deaths per 1,000 registered in 2007.²² Universal access to reproductive care is the only related indicator that has shown solid progress.

Figure 3: Five top causes of death



Source: Centers for Disease Control and Prevention (2013)

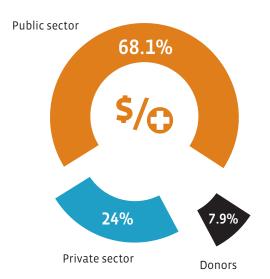
Large public health-care system serves most of the population

Health funding and expenditure

According to the World Bank, Botswana allocated 5.1% of its GDP to health care in 2011, accounting for a total of US\$780 million or US\$432 per capita.23 The Botswana National Health Accounts (2012) breaks down the sources of health-care financing for 2010²⁴ as follows: Providing 68.1% of funding (see Figure 4), the public sector accounts for the biggest share; another 24% originated with the private sector, and 7.9% with donors. The public sector's share is supported primarily by revenues derived from the diamond industry. Donor funding totalled approximately US\$73 million in 2011, nearly 95% of which originated from the PEPFAR programme.25 However, PEPFAR has announced that it will gradually reduce this funding in the coming years, levelling off at an expected US\$35 million in 2016, a decline of 50%.26

In terms of total health expenditure, the public sector also accounted for the largest share with 60.8% in 2011. Here, too, the private sector comes in second, having spent the remaining 39.2%. Public-sector health-care expenditure amounted to 3.1% (see Figure 5) of Botswana's GDP in 2011, reaching an absolute level of around US\$500 million.²⁷ This was enough to rank the country in the SADC's midrange. However, the country's per capita public-sector expenditure was ranked 3rd within the SADC region. The average per capita health

Figure 4: Health financing sources



Source: Botswana National Health Accounts (2012)

expenditure in both the public and private sectors has increased over the last decade, even as public-sector expenditure as a percentage of GDP (see Figure 7 on page 13) has decreased. This implies that public expenditure has not kept up with GDP growth rates.

Usage of private-sector services is confined to individuals who are either covered by medical-aid schemes or who pay out-of-pocket. Per capita private-sector spending is almost twice as high as its SADC average, and is among the highest such levels within the SADC region.

User fees

Botswana's public health-care system charges a flat user fee of US\$0.80²⁸ for all health-care services from the primary to the hospital level. It even includes treatments in South African hospitals if local care is not available. HIV/AIDS testing, diagnoses and treatment are free of charge. Fees in the private sector depend on the type of service delivered. As a reference, a minimum of about US\$40 is currently charged for a visit to a general practitioner.²⁹

Public health-care services delivery

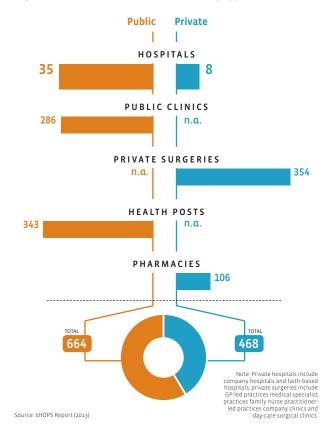
According to the African Health Observatory, Botswana's public health-care facilities are distributed throughout the country, with 84% of the population having access to primary health-care facilities within a distance of five kilometres.³⁰ Private health-care facilities are highly concentrated in urban areas, with 40% located

Figure 5: Overall health expenditure

Health expenditure 2013	Botswana	Ø SADC	Rank*
health expenditure as % of GDF		3.9%	7th
Per capita tota l health expenditure _{(current USS}		US\$ 227	7 3rd
Per capita public health expenditure (current Uss)		US\$ 135	5 3rd
Per capita private health expenditure (current USS		US\$ 92	3rd

*among the SADC member countries, 1=highest Source: The World Bank Indicators (2012) Note: SADC awarges were calculated as the sum of the data of the member states divided by the number of member states. No health data was available for Zimbabwe.

Figure 6: Distribution of health facilities by type



in Gaborone.³¹ Facilities provided by the government range from health-care stations and mobile clinics in rural areas to clinics and hospitals located in more urban areas, for a total of 664 health-care facilities.

Despite the good coverage in terms of facilities, the number of health-care providers actually serving patients is in fact too low: There are only 0.34 doctors and 2.73 nurses per 1,000 patients.³² As comparison, the World Health Organisation (WHO) recommends 1.67 doctors per 1,000 inhabitants, and Europe as a whole has 10 nurses per 1,000 people. The shortage of staff is predominantly an issue in the public sector.

Public health-care system constraints

Compared to other SADC countries, the public healthcare system in Botswana is well established, and consistent investments in health infrastructure have resulted in progress. Nonetheless, a variety of constraints are evident along the whole health-care value chain:

The shortage of doctors and nurses leads to long waiting times, especially in urban areas with heavy patient flows. This shortage is mainly due to a lack of professional-education programmes for health-care practitioners. Until recently, all doctors were trained abroad, and many failed to return. The first and only medical school in Botswana was established in 2009. The first wave of graduates is scheduled to enter the field in 2014.

Supply-chain problems, in particular stock-outs of particular medicines, have recently become an issue. The Central Medical Store is the sole buyer for all medicines prescribed in the public system, and is thus responsible for all pharmaceutical supply-chain management in this large, sparsely populated country.

The reduction in PEPFAR funding through 2016, which involves a decrease in funds provided by the country's most significant HIV/AIDS-programme donor, will jeopardise the free supply of antiretroviral medicines (ARV) and HIV/AIDS services. This will have particular impact on NGOs addressing the issue of HIV/AIDS.

The rise in the incidence of non-communicable diseases

NCDs will put an additional strain on the public health-care system. The need for integrated disease-management programmes and preventive-care measures for chronic diseases increasingly competes with HIV/AIDS on the health agenda.

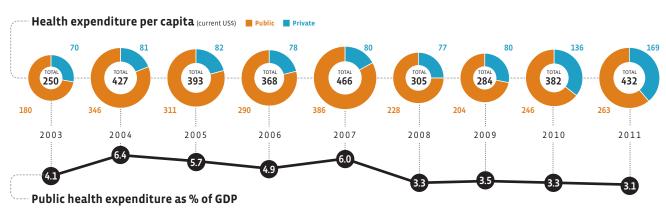


Figure 7: Historic health spending trends

Source: The World Bank (2012)

Private Health-care Sector

The current private health-care market is average in size

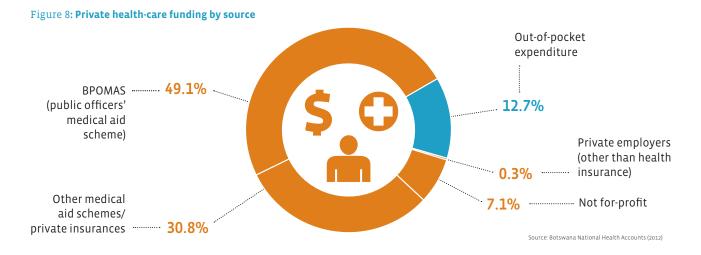
The value of the private health-care market was approximately US\$280 million in 2011 (in current U.S. dollars).33 Today, the sector serves mainly highincome individuals who are covered by private health insurance and who live in urban areas. Indeed, 80% of total private spending (see Figure 8) can be attributed to private-insurance schemes. The Botswana Public Officers' Medical Aid Scheme (BPOMAS) accounts for almost 50% of this expenditure, and other privateinsurance plans make up an additional 30% (see Figure 7).34 Nonetheless, only 17% of the population is covered by insurance schemes, a share corresponding to fewer than 400,000 people. Given the relatively large number of private health-care facilities, this small percentage of the population is in general well served, especially in the urban primary-care segment.

The 83% of the population that is not covered by insurance relies on the public health-care system. Only 12.7%³⁵ of health-care spending (see Figure 8) comes in the form of out-of-pocket payments, a relatively low share compared with the SADC average of over 50%.³⁶ These payments consist of user fees within the public sector, co-payments for individuals with health-insurance coverage, and service fees for uninsured individuals using private-sector facilities.

Fairly established throughout the value chain

The private sector already plays a fairly strong role along the whole health value chain, from a condom manufacturing and a planned medicine repackaging plant to wholesalers, laboratories and pharmacies. On the demand side, there are 10 private insurance companies called medical-aid schemes in Botswana, only one of which serves middle- to lower-income populations (see case study on page 15). Private companies supply the government as well as the private health-care sector. Indeed, some wholesalers have the government as their main customer.

There are also a few examples of public-private partnerships (PPPs). One such example is the African Comprehensive HIV/AIDS Partnership (ACHAP), a partnership between the government of Botswana, the Merck/MSD Foundation, and the Bill and Melinda Gates Foundation that seeks to enhance Botswana's response to the HIV/AIDS crisis.³⁷ Another example is the recently launched agreement between the Central Medical Store, the public procurement entity for medicines, and the Botswana Couriers service, which aims to improve delivery times and accuracy for antiretroviral medicines (ARV).



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Challenges to private-sector growth

The private health-care sector in Botswana is expected to grow considerably over time. However, the following challenges stand in the way:

The large, affordable public health-care system offers all services including hospital care for a low flat fee of US\$0.80. While this is quite inexpensive, patients often have to deal with long waiting times. Comparably priced private solutions do not exist.

A small national market, with a population of only 2.13 million, makes it difficult to benefit from economies of scale within sectors such as manufacturing.

Limited institutional capacity and human capital, mainly due to a lack of vocational training and academic programmes, hamper innovation. There is also limited experience with planning and managing public-private partnerships in the health sector, especially in the case of those providing services instead of creating infrastructure.

Limited access to competitive debt-financing tools and to technical assistance within the health-care sector is a core constraint on the private sector's ability to offer health solutions to a broader share of Botswana's population.

CASE STUDY

Offering affordable health schemes to the middle- to low-income classes



The identified company offers an insurance package for individuals who cannot currently afford existing

medical-aid schemes. It targets mostly self-employed or micro businesses with a maximum monthly income of BWP 4,000 (US\$460). In return for a monthly premium between BWP 130 (US\$15) for an individual and BWP 430 (US\$49) for up to three dependents, the insurance plan allows access to private primary health care and public secondary and tertiary care in hospitals. The scheme includes coverage for all diseases. It currently covers 35,000 people, and has a network of participating service providers including GPs, specialists, dentists and optometrists across the whole country. As such, it relieves a portion of the public health-system burden, especially in primary care facilities where bottlenecks produce long wait times. These health schemes ultimately ensure that more people with lower incomes gain improved access to health care and medicines.

Source: Interview with CEO (Oct. 2013)

But the sector offers considerable **opportunities**

Despite these constraints, a range of opportunities for private-sector solutions exist. Tackling these opportunities can have positive social, economic and health impacts in Botswana.

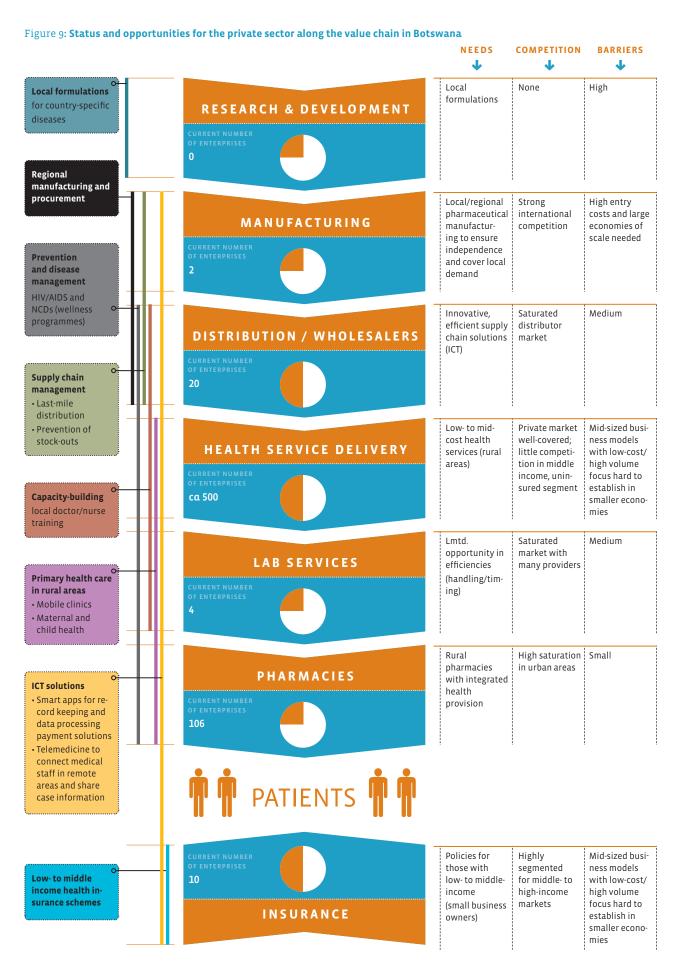
Supply-chain management

Business models that can ensure medicines and medical supplies reach a pharmacy or health centre in a timely manner, in the right quantity and in the right condition are needed. Better planning mechanisms that allow for up-to-date stock information and the flexible and fast filling of orders would help to reduce stock-outs in public-sector pharmacies. Another opportunity lies in last-mile distribution models that ensure the safe and reliable delivery of products to any dispensing outlet, especially in remote rural areas. Supply-chain management could be further improved by setting up a regional procurement company that would purchase medicines and medical supplies on a regional basis in the southern SADC. This would allow the national health-care system to procure larger orders at more competitive prices, ensuring a more reliable supply of medicines. Supply-chain management solutions are particularly suitable for public-private partnerships, as the logistical expertise of the private sector can be employed to serve publicsector needs.

Health-care delivery

An effective primary health-care system can improve health outcomes considerably. However, there are currently few private primary health-care solutions able to serve Botswana's non-urban population. Mobile clinics delivering services to remote areas or health-services delivery outlets in semi-urban areas could address this gap. In particular, they could provide maternal and child-focused healthcare services, contributing to the attainment of the associated Millennium Development Goals. To be sustainable, these business models would need to focus on serving a relatively high volume of patients receiving basic-quality health-care services at an attractive price point. Franchise models have shown promising results in other countries such as Kenya and India. This would reduce the demand for services in public-sector facilities, therefore reducing waiting times or making services available to portions of the population that are currently underserved.

With the rise of non-communicable diseases that are often a consequence of higher incomes and a change in lifestyle, integrated disease-management solutions are needed, and represent another opportunity in the health-care delivery space. Patients that suffer from cancer or diabetes require care tailored to their needs, which in turn requires a concerted effort by primary-care doctors, specialists, nurses, and allied health professionals with specialised diagnostic and treatment plans over a long period of time. Business models specialising in specific disease-management programmes for patients represent a promising but complex opportunity. Such solutions could relieve pressure within the public health-care system, which is currently stressed by the need to address the competing priorities of fighting HIV/AIDS and other communicable diseases and the advent of long-term care for non-communicable diseases. If the private sector shoulders some of the burden in this area, the Ministry of Health could direct more of its resources to public-health campaigns focusing on prevention.



Health insurance

Affordable health-insurance products for a wider portion of the population are needed to secure and expand the private health-care sector. As noted above, only 17% of Botswana's population is covered by health insurance, a fact that limits the size of the private health-services market. Public health-care services can be accessed by every citizen for a small user fee. However, the public system is becoming overburdened. The growing middle class is thus showing increasing interest in using private healthcare facilities for certain services. Affordable privateinsurance schemes could help these individuals balance risks and minimise expensive out-of-pocket payments. Insurance products or medical-aid schemes that offered the right balance of premiums and services would thus fill a gap in the current market. Facilitating access to private facilities would also take the burden off the public system, allowing a broader share of the population such as the growing middle class to receive better-quality health-care services.

Capacity building

Educational institutions and programmes for individuals desiring training or currently working in the health sector are needed. An increase in the number of training and education facilities for nurses and doctors could address the shortage of trained health-care professionals and reduce the brain drain among doctors who have gone abroad for their training. Government subsidies or student loans would increase incentives for the private sector to invest in this area. In addition, vocational and specialist training is needed in other areas, as employees such as lab technicians and health-claim processors are also in short supply. High-quality education and training programmes targeted at the health sector will ultimately improve the country's health-care services and products.

Information and Communication Technology

Tailored ICT solutions can address many of challenges prevalent in the current health-care system. For example, smartphone applications can provide upto-date inventory information, process medicine orders, provide delivery status or price information, or allow better management of supply chains so as to prevent stock-outs. Telemedicine technology can help compensate for a shortage of trained professionals, particularly in rural areas. Electronic patient records allow for greater efficiency and synchronisation of treatments. For example, they can reduce the risk of misdiagnosis, repetition of tests and incorrect prescriptions. Ultimately, this leads to savings in the health system and better outcomes for the patient.

R&D and manufacturing

R&D and the manufacture of pharmaceutical products require a high degree of technical and scientific expertise, as well as high-risk investments, resulting in high market-entry costs. On the one hand, local manufacturing would allow for more independence from international suppliers. On the other hand, competitive prices for generic medicines can only be reached through large production volumes. Thus, it is difficult to achieve internationally competitive price levels through local production in a country with a population as small as Botswana's. Pharmaceutical manufacturing plants that collaborated to supply the region as a whole could have a greater chance of becoming competitive and sustainable.

Nevertheless, the essential and most difficult-to-produce part of each medicine, the active pharmaceutical ingredient (API), will still need to be imported. With only one exception, there is currently no capability for API production in sub-Saharan Africa.³⁸ High tariffs may then be applied to API imports, challenging local manufacturing even further. Consequently, local manufacturing becomes more of a strategic political decision than a business decision, as from a pure business perspective, it may not be a sustainable opportunity.

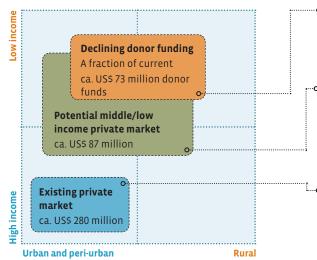
Seizing these opportunities will drive private-sector growth

The high-income population in Botswana is already well served by the private sector. The biggest growth potential thus lies in the middle-income segment. The low-income population has to date relied mostly on services receiving financial support by donors and NGOs. This support is now on the decline. However, new forms of partnerships between the public and private sector can fill this gap. In addition, new actors such as impact investors can catalyse the development of business models that address the needs of this income group through market-based solutions.

Rising middle class

The middle class in Botswana is on the rise: It is today sub-Saharan Africa's second-largest, trailing only that of Gabon.³⁹ Comprised of those living on an income between US\$2 and US\$20 per day, the middle class constituted almost 50%⁴⁰ of Botswana's total population in 2013, and is expected to grow significantly in future years. This population segment can afford to pay for health care, and is ultimately projected to spend on average US\$87 million per year on health-related services over the next ten years. Due to changing diets and a reduction in physical work, as well as increasing life spans, this population is also increasingly likely to be affected by NCDs, which may increase health-related spending even further.⁴¹

Figure 10: Existing and potential private-sector market



Shrinking donor funding will leave gaps to be filled

Donor funding within Botswana's health-care sector, which currently amounts to US\$73 million, is expected to decline in the years to come. This widening gap leaves room for the private sector to step in. Funding for market-based health solutions can come from impact investors, for example. Like donors, these investors aim to address social challenges, but do so by unlocking private investment capital. Often, impact investors are relatively accepting of risk, and are willing to provide patient capital. Their investments are thus particularly well suited to catalysing business models addressing the low-income segment, which often take time to become profitable. Impact investments can thus complement public resources and philanthropic activities.⁴²

The public and private sectors can also team up in public-private partnerships (PPPs) to address current health needs. In fact, the government of Botswana recently introduced a PPP coordinator in the Ministry of Health, showing its openness to the concept. With the ongoing reduction in donor funding, some of the NGOs active in the health sector are starting to transform their donation-based models into revenue-generating businesses. However, this is a long-term trend, since it will require a total shift in their operating models and organisational cultures.

The market potential outlined here is a top-line, macro-economic view of the private health-care market, and will depend on the realisation of many factors throughout the whole health-care ecosystem. However, a positive upward trend within the country's private health-care sector can be projected with a very high level of confidence.

Assumptions

Reduced donor funding: The government could leverage private funds to close the gap left by the decline in donor funding. This includes, for example, engaging in PPPs. Donors currently provide about US\$73 million.

O Additional medium-orlow-cost services: Total population of 2.13 million minus 17% covered by insurance (362,000) minus 49% below poverty line (1,043,700) =0.725 million "middle" income. 3 visits per year at US\$40 each = US\$87 million

Existing private market: The private health market is assumed to be equivalent to private health expenditure as percentage of GDP, or 2.0% of US\$14 billion, for a total of US\$280 million.

Source: created by authors

Sources

- 1 CIA World Factbook (2013). https://www.cia.gov/ library/publications/the-world-factbook/geos/ bc.html
- 2 Human Development Report (2013). http:// hdrstats.undp.org/en/countries/profiles/BWA.html
- 3 HDI scores are a composite measure of life expectancy, education and income indices, and are used to rank countries according to their human development. 0= very low development; 1= very high development. Source: UNDP (2013).
- 4 CIA World Factbook (2012). https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html
- 5 The World Bank (2012). http://data.worldbank.org/indicator/NY.GDP.MKTP.CD
- 6 Botswana Export Development and Investment Authority (2010). www.bedia.co.bw/uploads/ media/BOTSWANA%20STATISTICS%20WEB.pdf
- 7 African Economic Outlook (2013). www. africaneconomicoutlook.org/en/countries/ southern-africa/botswana/
- 8 The World Bank (1994). http://data.worldbank. org/indicator/SI.POV.2DAY?page=3. No recent data available.
- 9 Standard & Poors (2012). www.bankofbotswana. bw/index.php/content/2009110615053-creditrating-reports
- **10** Transparency International (2012). www. transparency.org/country#BWA
- 11 World Bank Group (2013). Doing Business Report 2014, www.doingbusiness.org/data/ exploreeconomies/botswana/
- 12 Botswana Export Development and Investment Authority (2010). www.bedia.co.bw/uploads/ media/BOTSWANA%20STATISTICS%20WEB.pdf
- 13 UNCTAD (2013). http://unctadstat.unctad. org/ReportFolders/reportFolders.aspx?sRF_ ActivePath=P,5,27&sRF_Expanded=,P,5,27
- 14 Botswana Export Development and Investment Authority (2010). www.bedia.co.bw/uploads/ media/BOTSWANA%20STATISTICS%20WEB.pdf

- 15 The World Bank (2013). 2014 Global Financial Development Report: Financial Inclusion. http:// econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/ EXTGLOBALFINREPORT/o,,contentMDK:23489 619~pagePK:64168182~piPK:64168060~theSite PK:8816097,00.html
- 16 CIA World Factbook (2012). https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html
- **17** ibid.
- 18 GSMA and Deloitte (2012). Sub-Sahara Africa Mobile Observatory 2012. www.gsma.com/ publicpolicy/wp-content/uploads/2013/01/gsma_ ssamo full web 11 12-1.pdf
- **19** UNAIDS (2012). http://www.unaids.org/en/regionscountries/countries/botswana/
- **20** UNAIDS (2012). http://www.unaids.org/en/dataanalysis/datatools/aidsinfo/
- 21 Centers for Disease Control and Prevention (2013). http://www.cdc.gov/globalhealth/countries/ botswana/pdf/botswana.pdf
- 22 UNDP (2010). Botswana MDG Status Report (2010). www.undp.org/content/undp/en/home/librarypage/mdg/mdg-reports/africa-collection. html
- 23 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS
- 24 More recent data on breakdown of all financing sources was not available.
- 25 USAID (2013). Strengthening Health Outcomes through the Private Sector (SHOPS). Botswana Private Health Sector Assessment.

 www.shopsproject.org/resource-center/botswana-private-health-sector-assessment
- 26 National AIDS Coordinating Agency (2013). https://www.mmegi.bw/index. php?sid=1&aid=3706&dir=2010/July/Friday23
- 27 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS?page=1
- 28 US\$1 = BWP 8.61 (2013/12).
- 29 Information obtained from AMIIF Consultation Workshop, November 15th (2013).

- **30** African Health Observatory (2010). www.aho. afro.who.int/profiles_information/index.php/ File:Table_3_Proportion_of_population_with_ access_to_primary_care_se.
- 31 USAID (2013). Strengthening Health Outcomes through the Private Sector (SHOPS). Botswana Private Health Sector Assessment.

 www.shopsproject.org/resource-center/botswana-private-health-sector-assessment
- **32** ibid.
- 33 See figure 10: Existing and potential private-sector market
- 34 Ministry of Health (2012). Botswana National Health Accounts 2012.
- **35** ibid.
- **36** The World Bank (2011). http://data.worldbank.org/indicator/SH.XPD.OOPC.ZS. Calculated average.
- 37 ACHAP (2013). www.achap.org/
- **38** Aspen Pharma (2013). www.aspenpharma.com/south-africa/manufacturing-expertise.aspx
- 39 Deloitte (2010). The Rise and Rise of the African Middle Class. www.deloitte.com/assets/Dcom-SouthAfrica/Local%20Assets/Documents/rise_and_rise.pdf
- 40 The Economist (2013). The Wealth Beneath. www. economist.com/news/special-report/21572383-commodities-are-potentially-biggest-threat-africas-future-wealth-beneath
- **41** WHO (2013). www.who.int/mediacentre/factsheets/fs355/en/
- **42** Global Impact Investing Network (GIIN) (2013). www.thegiin.org/cgi-bin/iowa/resources/about/index.html







Country Fact Sheet Lesotho

Executive Summary

→ Solid macro-economic fundamentals

Lesotho is a small, landlocked country entirely surrounded by South Africa. While its history and economic, social and political structures are very different from those of its larger neighbours, there is a large degree of symbiosis with South Africa, especially in terms of economic and interpersonal relations. Lesotho's population is currently estimated at almost 2 million people, and is growing at only 0.34% per annum. Lesotho is classified as a lower-middle-income country by the World Bank, with a per capita income estimated at US\$1,193 in 2012. The country's total GDP at market rates is measured at US\$2.45 billion, and is growing at a steady rate of 4% per annum.

→ Increasing double burden of disease

Lesotho has one of world's highest HIV/AIDS prevalence rates, with the disease affecting an estimated 23% of the population aged between 15 and 49. However, as elsewhere in the region, the disease burden is slowly shifting from HIV to higher rates of non-communicable diseases (NCDs) and lifestyle diseases. This is shown by a decrease in new infection rates and a concurrent increase in NCDs such as cancer and heart diseases.

Solid public health-care sector with constraints

The country's health-care system, with a budget of US\$313 million in 2011, is dominated by the public sector, which financed 63.1% of total health spending that same year. Public health care is either directly provided through the public-sector network, or indirectly through faith-based organisations that are heavily subsidised by public funds. These faith-based organisations operate under an umbrella organisation, the Christian Healthcare Association of Lesotho (CHAL), which accounts for an estimated 40% of the country's health-care provision.

Private health-care sector presents opportunities for social and financial returns

Private-sector health-care delivery is limited to a small portion of the population, mainly based in Maseru, and the bulk of the commercial private sector consists of individual medical practitioners and pharmacies. A few medical-aid schemes cover a minimal 0.01% of the population.

Considering the country's limited resources, donors play a significant role in health-care delivery, accounting for an estimated 18% of health-care financing.

Lesotho's health-care market is constrained by the small size of its economy, human-resources shortcomings, physical barriers, and supplychain issues. However, these challenges also present significant opportunities for innovative solutions able to improve the delivery of health care and complement the public sector, for instance in the fields of health education and prevention, training and community health, lowincome insurance schemes, and the distribution and supply of drugs (both in terms of last-mile distribution and prevention of stock-outs). The country's private health-care market has significant scope for growth, albeit from a low base, not only to cater to the growing middle- and higher-income groups, but also to provide for a dormant low-income market. All investment opportunities should ultimately improve the access to medicines and health-care services for lower- and middle-income groups.

Macro-economic Environment

Overwhelmingly rural and young population

Lesotho remains an overwhelmingly rural country, with almost three out of four people living in rural areas.1 The total population is estimated at 1.9 million (see Table 1), and the median age is 23.4 years.2 The capital, Maseru, is the only sizeable city, with an estimated population of 227,800 people. Population growth figures are among the lowest in the SADC region, at an estimated 0.34% per annum,3 a consequence of increased mortality due to HIV/AIDS. One additional reason for this slow rate of increase may be migration, which has long been an integral part of Lesotho's demographic dynamics: A large share of Lesotho's adult workforce (especially males) works in South Africa, particularly in the mining industry. However, the slowdown in South Africa's mining industry has led to retrenchments over the last decade or so, with a significant impact on Lesotho's migration and income patterns.⁴ As a result, increasing numbers of Basotho work in South Africa's services industries, especially in the neighbouring Free State Province, where people share the Sesotho language.

Lesotho's Human Development Index score is low in both worldwide and cross-SADC comparison.⁵

A small but stable and growing economy

Lesotho is one of Southern Africa's smaller economies, with a total GDP of US\$2.45 billion at market rates (see Table 2) in 2012.⁶ The World Bank classifies Lesotho as a lower-middle-income country, with a per capita GDP of US\$1,193.⁷ The economy has grown annually at a steady average rate of 4% for the last 10 years (see Figure 1 on page 26), outpacing South Africa's economic

Table 1: Demographic overview

Indicator		Lesotho	Ø SADC	Rank among the SADC member countries*
	Size	30,335 km²	657,500 km²	12th
†††	Population	1.9 million	19 million	12th
	Population growth rate	0.34%	3.3%	14th
†††	Urban population	28 %	39 %	12th
	Median age	23.4 years	22.0 years	4th
Ø	Life expectancy	52.3 years	57 years	10th
	Literacy rate	89.6%	78%	3rd
•	Human Development Index	0.461	0.518	10th

*1=highest Source: CIA World Factbook (2013), Human Development Index from UNDP (2012) growth by at least one percentage point per year. Medium-term GDP growth can be expected to remain within the 3% to 4% per annum bracket. The country's main economic sectors are farming, manufacturing, diamond mining and construction. The currency is the loti (plural maloti), which is pegged to the South African rand on a 1:1 basis. The loti thus fluctuates in tandem with the South African rand.

Lesotho's economy is heavily reliant on remittances (equivalent to a full 25.7% of GDP in 2011), mostly coming from South Africa.8 Customs duties from the Southern Africa Customs Union (SACU) and export revenue also account for large portions of the national income, and are key sources of public spending (SACU duties alone account for 47% of the national budget).9 However, in recent years, the government has strengthened its tax collection system, notably through the implementation of value-added and income taxes, helping to reduce its dependency on custom duties and other outside sources.¹⁰

Another important factor in Lesotho's economy is the U.S. African Growth and Opportunity Act (AGOA), which has given Lesotho preferential access to the U.S. market and has enabled the rapid growth of the apparel and garment industry. Today the sector is a significant source of employment (accounting for 80% of the manufacturing industry) and foreign exchange. However, uncertainty as to whether AGOA will be extended beyond 2015 is affecting the prospects of the textile and apparel industry.¹¹

Lesotho's foreign direct investment flows are relatively modest in absolute terms, but high in relation to its GDP. Inflows over the past few years have been fluctuating between US\$112 million and US\$172 million during the 2008–2012 period.¹² These inflows are concentrated in the apparel industry and infrastructure. Infrastructure investment will be a main driver of GDP growth in the next two or three years, with the completion of the Lesotho Highlands Water Project, the Millennium Challenge Compact and the Metolong Dam.¹³

Table 2: Economic and financial overview

Indicator		Lesotho	Ø SADC	Rank*
\$/#	GDP (current USS) ^A	uss 2.45 billion	USS 43 billion	14th
\$/*	GDP per capita (current Uss) ^A	uss 1,193	uss 3,635	9th
\$/+	GDP real growth rate ^A	4.00%	4.36%	8th
<u> </u> / <u> /</u>	Unemployment rate** ^B	25%		
† < ②	Population living under US\$ 2 (PPP) per day ^A	62.25%		
	Corruption Perceptions Index ^c	49/100	39/100	4th
**	Doing Business rank (out of 189 economies) ⁰	136		8th
	Long term credit rating, foreign currency ^E	BB-		
 / s	Account at a formal financial institution (%, age 15+) ^F	19%	30 %	9th
\$→	Foreign direct investment, inflows (current USS)	US\$ 172 million	US\$ 786 million	11th
[s] →	Commercial bank prime lending rate ⁸	10.12%		
(¹) → (5)	LSL/US\$ exchange rate "	10.35 LSL/US\$		
†/=	Cell phone penetration '	46%	50 %	

^{*}Rank among the SADC member countries, 1=highest, **includes large part of underemployment in rural areas
Sources: A) World Bank Indicators (2012), B) CIA World Factbook (2012), C) Transparency International (2013), D) The World Bank (2013), E) Standard & Poor's (2012), F) The World Bank (2014), G) UNCTAD (2013), H) oanda (2013/12, J) Deloitte & GSMA (2012)
Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment, which is a very strict definition.

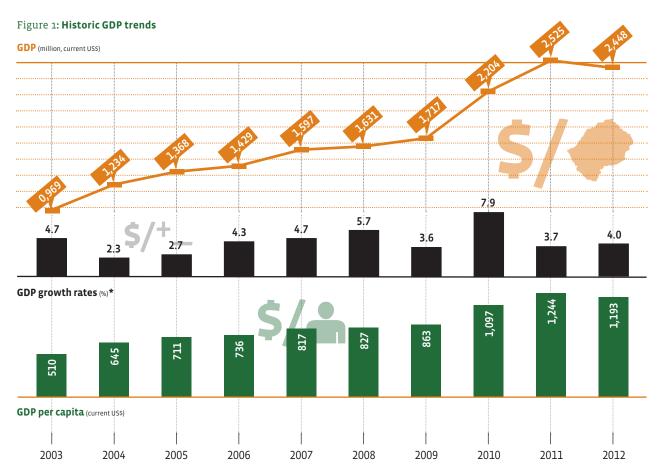
A small financial sector dominated by South African institutions

As a member of the Common Monetary Area (CMA), Lesotho's financial sector is dominated by South African financial institutions and is characterised by limited competition in a small market. The three main commercial banks are Standard Bank, Lesotho Postbank and Nedbank Lesotho; in addition, First National Bank operates a network of three branches. Non-banking financial institutions such as moneylenders, insurance companies and private savings cooperatives also play a significant role in the economy.

Commercial banks cater mainly to the high-end retail market in urban centres, but Standard Bank and Nedbank are now developing products aimed at SMEs. Market interest rates are around 9.92%, a historic low, but an additional risk premium is typically added. 15

The country's fiscal and monetary policies are bound by its membership in the CMA. Under the CMA agreement, Lesotho's currency, the loti, is pegged at par to the South African rand. The central bank's monetary policy is focused on maintaining price stability, ¹⁶ as well as on maintaining the exchangerate peg between the loti and the rand. ¹⁷ As a result of the currency peg and the influence of South Africa's economy in Lesotho, interest-rate trends largely mirror rate movements in South Africa. ¹⁸

SMEs have limited scope for obtaining credit under reasonable conditions, and access to financial services remains fairly rudimentary, including for health-care SMEs. Banks operating in the Lesotho market have in fact been criticised for their limited lending to SMEs and households.19 The public sector remains an important driver of development, notably through the Lesotho National Development Corporation (LNDC). The LNDC is a public institution that seeks to facilitate investment by providing a range of support services including commercial sites and buildings at competitive rental prices, as well as financial assistance on a selective basis.20 One of the LNDC's strategic projects relevant to health care has been the establishment of a pharmaceutical company tasked with serving the local market.21



Health in Lesotho

HIV/AIDS still a heavy burden, but NCD levels rising

HIV/AIDS continues to have a devastating effect on Lesotho's life expectancy and represents the country's most significant disease burden by some distance. The HIV/AIDS prevalence rate is 23.1% (see Figure 2) of the adult population (15-49 years), and HIV/AIDS accounts for 33% of all deaths (see Figure 3) in Lesotho. Nevertheless, new infection rates declined from its peak value of 5.0% in 1997 to 2.3% in 2012, anticipating a slow but steady decline of the overall HIV/AIDS prevalence.²² Life expectancy dropped from 58 years in 1994 to 44 years in 2003, before starting to rise again.23 Recent developments show that the disease burden is shifting towards NCDs.²⁴ As is the case in neighbouring Southern African countries, Lesotho's health system therefore grapples with a "double burden of disease". This refers to the necessity of dealing both with communicable diseases (e.g., HIV/AIDS, infectious diarrhoea) and with NCDs (e.g., heart diseases, cancer). In addition, HIV/ AIDS, respiratory infections and tuberculosis can be linked to the role migratory patterns play in Lesotho's social and economic structures. It is an illustration of the strong epidemiological ties between Lesotho and South Africa,²⁵ and suggests that improvements in health-care outcomes in South Africa, especially in the mining industry, can have a significant effect on health outcomes and disease patterns in Lesotho.

While slow progress is being made in combating HIV/ AIDS and reducing the prevalence of tuberculosis, the country is not on track to reach the Millennium Development Goals (MDG) concerning child and maternal health by 2015. Infant mortality, at 84 deaths per 1,000 births, was more than three times higher in 2008 than the 2015 MDG target. Maternal mortality is more than seven times higher than the target, at 530 deaths per 100,000 compared to a target of 70 in 2015. Access to reproductive care has increased considerably, but the issue still needs attention in rural areas. The proportion of infant deliveries conducted with the assistance of skilled health professionals has decreased in recent years.

Figure 2: HIV adult prevalence and incidence rates (15-49 years)

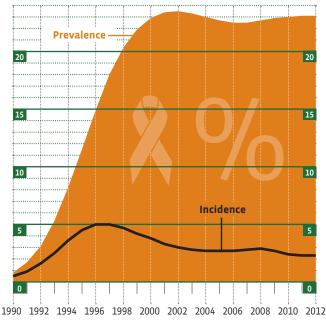
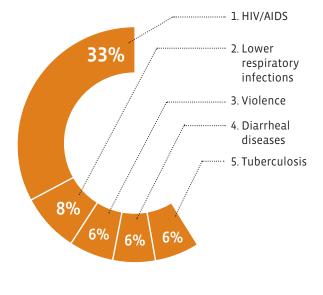


Figure 3: Five top causes of death



Source: The Centers for Disease Control and Prevention (2013)

Source: UNAIDS (2012)

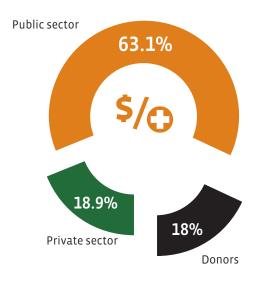
Large public health-care system serves most of the population

Health funding and expenditure

According to the World Bank, Lesotho's total health budget amounted to around US\$313 million in 2011.²⁸ The most recent breakdown of health-financing sources is from Ministry of Health figures dating from 2009; however, the situation is unlikely to have changed considerably. The biggest share originates from the public sector, which accounts for 63.1% (see Figure 4). The financing shares coming from donors and the private sector are almost identical at 18.0% and 18.9% respectively,²⁹ showing the importance of donor funding today. Private financing comes largely in the form of out-of-pocket (OOP) payments, which account for almost 70% of all private spending (see Figure 8 on page 30).

With regard to total health expenditure in 2011, 74.1% was spent within the public sector, and 25.9% in the private sector. Public spending in Lesotho's health-care sector has increased sharply since 2005 as a proportion of GDP, rising from 3.3% to 9.5% in 2011 (see Figure 7 on page 29), the highest levels in relation to GDP in the SADC region.³⁰ This underlines the fact that health care is a major strategic priority for the government of Lesotho. The country's National Health Strategic Plan (2012 – 2017) aims to address declines in health and social-welfare indicators, the declining investment in the health sector, and the impact of HIV/AIDS. This strategy

Figure 4: Health financing sources



is an offshoot of the National HIV/AIDS Strategic Plan (2006–2011), which aimed to strengthen multisectoral coordination, improve preventative measures, and enhance participation and the meaningful societal involvement of people living with HIV/AIDS. The strategy also derives from work done in the context of the Health and Social Welfare Policy (2004) and the sector plan within the country's Poverty Reduction Strategy.³¹ Total per capita health-sector expenditure has tripled in recent years; although both public- and private-sector health expenditure has risen, public spending has accounted for the more substantial share of this increase. Private health care is limited to a small and relatively wealthy part of the population, mainly based in the capital city Maseru.

Public health-care services delivery

The public health sector consists of the government itself and the Christian Health Association of Lesotho (CHAL), the latter of which administers about 40% of the country's health-care services. About 80% of CHAL's funding comes from the government, with the remaining 20% coming from its six member churches.³² The formal health system is divided along national, district and community lines. Health-services delivery takes place largely on the basis of a funnel model; community-care points generally constitute the first point of access to health care, referring cases they are unable to treat to the district level, which in turn refers difficult cases to the national level.³³ A typical consultation fee is around US\$1.5 (LSL 15).

Figure 5: Overall health expenditure

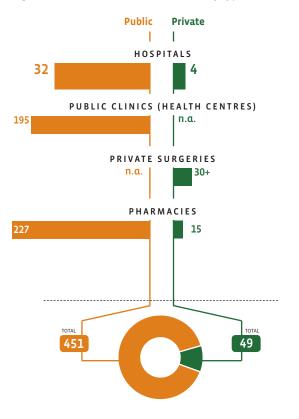
Health expenditure 2011	Lesotho	Ø SADC	Rank*
Public health expenditure as % of GDP	9.5%	3.9%	8th
Per capita total health expenditure (current USS)	US\$ 141	US\$ 227	5th
Per capita public health expenditure (current USS)	US\$ 104	US\$ 135	6th
Per capita private health expenditure (current USS)	US\$ 37	US\$ 92	4th

Source: Ministry of Health (2009)

Public health-care system constraints

While Lesotho's public-sector administrators have made significant efforts to improve health outcomes over the past few years, a number of challenges remain.³⁴

Figure 6: Distribution of health facilities by type



Sources: SADC (2009), USAID (2010), Interviews (2013)

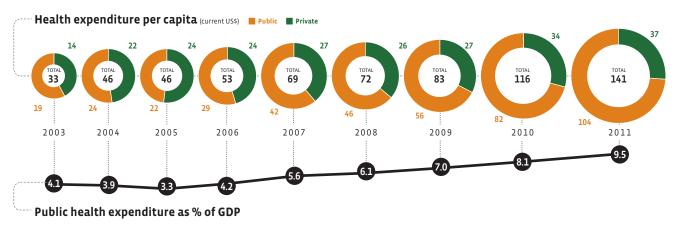
A shortage of human resources makes it difficult to deliver high-quality health care. There is only one doctor for every 10,000 people and six nurses per 10,000 people. A shortage of support staff and skilled health-facility managers also undermines the provision of service. Understaffed health facilities frequently struggle to cope with the high demand, and patients often have to wait for long hours before being attended to by medical personnel.

Physical barriers add to constraints in delivering health-care services, especially in the remote rural areas. Visiting a health-care facility can involve travelling long distances on poor or badly maintained roads, adding to the cost of receiving and delivering health care. Geographical isolation is also a factor in reducing the pool of available medical personnel, as qualified medical practitioners may be reluctant to accept postings in isolated rural areas.

Supply-chain management issues lead to stockouts, with clinics and hospitals often running out of medicines. The lack of effective supply chains also leads to difficulties in getting medicines to distribution points. The cost of delivering medicines is high relative to the size of the market, compounded by the physical barriers mentioned above. More efficient stock and data management would help to alleviate such issues, as would cost-effective delivery systems and innovative logistical solutions.

A reduction in the donor funding that today supports a large share of Lesotho's health-care expenses is underway, and is expected to accelerate over the next few years. This reduction will produce a gap in service-provision funding that the public sector will struggle to fill on its own.

Figure 7: Historic health spending trends



Source: The World Bank (2012)

Private Health-care Sector

Private health care mostly funded by NGOs and out-of-pocket payments

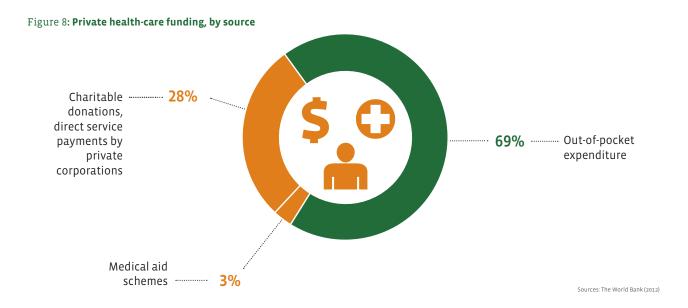
The size of Lesotho's private health-care sector is estimated at around US\$83 million.³⁵ Out-of-pocket payments account for almost seven out of every 10 dollars in the private sector, with most of the remainder contributed by donations and private corporations.³⁶ This is a reflection of the very low rates of insurance coverage; only 0.01% of the population, or about 15,000 individuals, has private medical insurance.³⁷

The private sector is limited to certain parts of the value chain

Lesotho's private health-care sector is currently limited to specific parts of the value chain (see Figure 9 on page 33). There are no locally registered R&D companies or manufacturing plants. An estimated six independent distributors and wholesalers operate in the market,

mostly in Maseru. Fewer than 100 GPs or specialists are listed as private practitioners, and anecdotal evidence suggests that an unknown number of nurses active in the public sector or the CHAL network supplement their income by providing private medical care on an occasional basis.³⁸ Finally, a small number of around 20 laboratories and independent pharmacies supply the market mainly around Maseru.

On the demand side, four companies provide medical insurance coverage for individuals or employees in the formal sector. Only an estimated 15,000 individuals are covered by such schemes. One reason the private-sector offering is limited in this regard is because a significant share of private-sector needs are met by suppliers and service providers based across the border in South Africa. Individuals who can afford private health care tend to go to South Africa to access specialist care. This portion of Lesotho's private health-care market is thus aggregated into South Africa's health statistics, and is therefore hard to quantify.



Challenges to private-sector growth

Lesotho's private health-care sector faces a number of challenges that may explain its relative lack of development:

The national market is small, with only 1.9 million people and a GDP of US\$2.44 billion. Thus, the country's potential is often overlooked by many investors, with larger neighbours enjoying a higher profile and offering greater obvious opportunities.

Health-care delivery is dominated by the public sector and faith-based associations. These latter groups play a unique role in the country's health-care landscape, and can arguably be seen as a substitute for the private sector.

The proximity and availability of private health care in South Africa prompts Basotho who can afford private medical care to seek high-quality care across the border. This reduces the perceived need for a local equivalent, except in the case of emergencies.

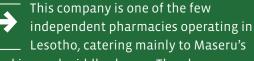
Infrastructural constraints, including the remote location of large parts of the country, push up the cost of delivering products and services, while adding to the difficulty of attracting and retaining qualified and talented personnel.

Limited purchasing power limits private-sector profit potential. This is evident in the fact that 62% of the population lives under the poverty threshold of US\$2 per day.

Limited access to funding makes financing innovative health-care solutions in health, such as ICT programmes, mobile clinics or domestic manufacturing difficult. Most of the country's financial institutions are focused on mortgage lending.

CASE STUDY

Independent pharmacy network



working and middle classes. The pharmacy sells OTC drugs, as well as prescription drugs, medical supplies and orthopaedic devices. It also offers additional detection and prevention services such as bloodpressure tests. The pharmacy currently has two locations, but is planning to expand its network, first to other urban centres and then possibly to rural areas. It provides drugs at affordable prices, but is dependent on imports primarily of generics from South Africa and India. This SME contributes to an improved access to medicines for a wider range of the population.

Source: Interview with CEO (Oct. 2013)

But significant **opportunities** exist in a severely underserved market

The country's private health-care market has significant scope for growth, if from a low base. The growing middle- and higher-income groups offer increasing opportunity, but so too does the currently dormant low-income market. The private sector could also help respond to the aforementioned rise of non-communicable diseases (NCDs) as a share of Lesotho's disease burden, a trend echoed in neighbouring South Africa, Botswana and Namibia.

Manufacturing, distribution and supply of drugs

Given the remoteness of parts of the country, and the challenges in distributing and supplying drugs, this is a key area of opportunity. The existing network of independent pharmacies in the country is small, offering clear untapped opportunities in this area, notably for over-the-counter (OTC) drugs and orthopaedic and other medical devices, which are not readily available outside Maseru. Franchise or micro-franchise models could be the key to making such approaches commercially viable. The public sector, through the Lesotho National Development Corporation, has indicated that establishing a local pharmaceuticals manufacturing facility is a strategic priority, and is also seeking to promote the local production of disposable health-and-safety supplies such as syringes, condoms and surgical gloves.39

Information and communications technology (ICT)

Record-keeping and data processing are additional areas in need of further development, most particularly in rural areas, but indeed across the country's health-care system. The wider use and development of specific applications, particularly mobile-phone-based applications, may be of particular interest, as could be the migration from manual to computerised data processing.

In addition, Lesotho's geography and the rural nature of its population provide ideal opportunities for telemedicine practices, which can eliminate distance barriers and enable medical staff to share information and data. This has the potential to help improve health outcomes while overcoming some of the structural barriers to the delivery of good-quality health care in Lesotho.

Low- and middle-income insurance products

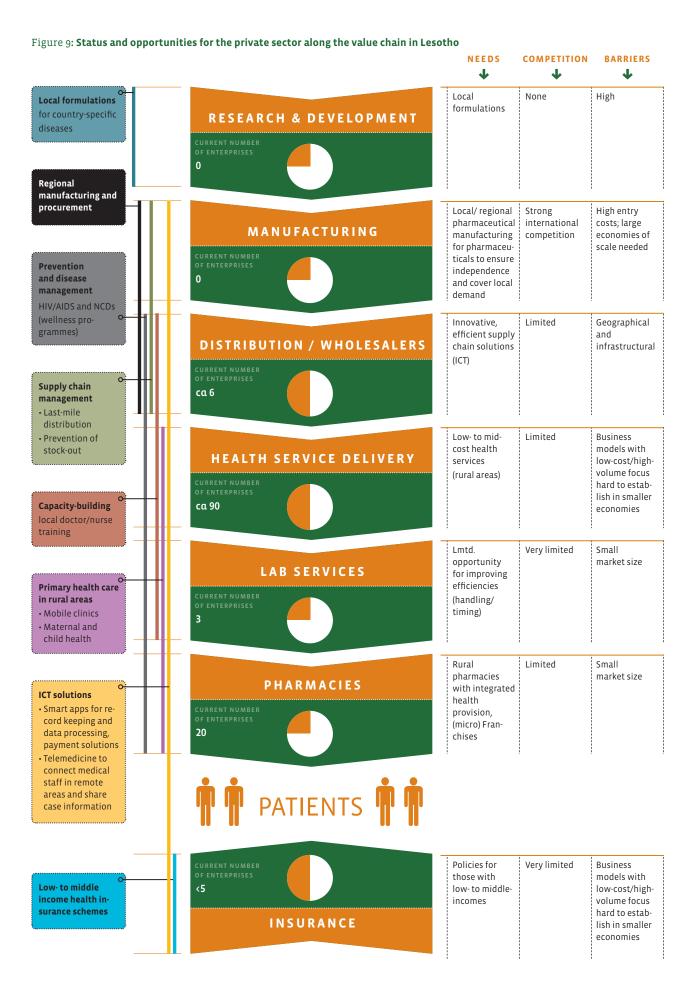
Considering the extremely low penetration rate of medical-aid schemes, especially compared to neighbouring countries in which 15% to 17% of the population is typically covered by private medical insurance, there is considerable scope for expanding health-insurance coverage. This is especially but not exclusively true with regard to medical schemes aimed at low-income households. Lesotho's low-income market and even its growing middle class remain largely untapped in this respect.

Health-services delivery

By building on existing public-private partnerships (PPPs) such as the state-of-the-art Queen Mamohato Hospital in Maseru, private-sector players can help to deliver affordable health care in Lesotho. Areas in which such PPPs may be most successful include immunisation and the provision of primary health care in rural areas, for example through mobile health clinics and nurse-headed community-care centres

Health education and prevention, training and community health

As Lesotho already spends a large proportion of its GDP on health care, more focus on prevention might help it to reduce the cost of coping with its disease burden. The private sector could help to develop and deliver training programmes in the area of health education and prevention, working on behalf of the public sector or the para-public sector (i.e., faith-based organisations that are essentially funded through public funds), as well as through PPP approaches.



Seizing these opportunities will drive private-sector growth

Lesotho's current private-sector market is limited to the high- and middle-income demographics, largely within urban areas. However, as noted earlier, a large portion of private expenditure today consists of out-of-pocket payments, which are made on a regular basis within the broader population as well. This demonstrates the potential for expanding the private market.

Emerging middle-class underserved

The middle class in Lesotho is growing and will increasingly require private health-care services, notably to cope with the rise of lifestyle and other non-communicable diseases.

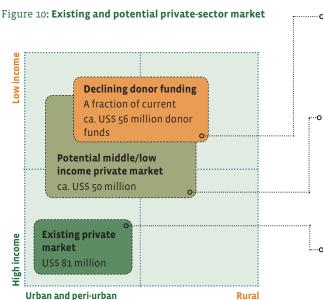
On the basis of current assumptions, the size of Lesotho's existing private health-care market (i.e., the share of private spending in Lesotho's total health-care expenditure) is estimated at around US\$81 million.

This market is heavily underserved and can potentially expand by another US\$50 million, based on the assumption that the middle-income market consists of around 684,000 people that have no insurance coverage, who are in turn responsible for average individual expenditures of about US\$25 for each of three visits to a health-care facility, nurse or doctor per year.

Shrinking donor funding will leave gaps to be filled

The expected reduction in donor funding will affect Lesotho's health-care system over the next few years, but will also provide opportunities for the private sector to fill some of the resulting gaps.

Investors, and specifically impact investors that seek to combine financial return with social impact, can tap into such opportunities and significantly strengthen Lesotho's current health-care system, helping to relieve some of the burden currently carried by NGOs and the public health sector.



Assumptions

Reduced donor funding:

The government could leverage private funds to close the gap left by the decline in donor funding. This includes, for example, engaging in PPPs. Donors provided US\$56 million in 2011.

· Value of additional low-cost services:

Total population of 1.9 million

- -0.01% covered by insurance (15,000)
- -62% below US\$2.00 per day (PPP) (1,201,000)
- = 684,000 "middle" income
- ×3 visits per year US\$25 each
- =US\$50 million

Existing private market:

The private health market is assumed to be equivalent to private health expenditure as a percentage of GDP, or 3.3% of US\$2.45 billion, for a total of US\$81 million.

Source: created by authors.

Sources

- 1 CIA World Factbook (2013). https://www.cia.gov/ library/publications/the-world-factbook/geos/ lt.html
- 2 ibid.
- 3 ibid.
- 4 Interviews with stakeholders in Lesotho. For further reference, see www.migration.org.za/news/2013/sa-lesotho-ease-border-control and Eddy Tshidiso Maloka (2004). Basotho and the Mines: A Social History of Labour Migrancy in Lesotho and South Africa, c.1890-1940. Dakar: Council for the Development of Social Science Research in Africa.
- 5 HDI is a measure of well being beyond income level and GDP growth. It is a composite statistic of life expectancy, education and income indices used to rank countries according to their human development. 0= very low development; 1= very high development. Source: UNDP (2013).
- 6 The World Bank (2012). http://data.worldbank.org/indicator/NY.GDP.MKTP.CD
- 7 The World Bank (2012). http://data.worldbank.org/ indicator/NY.GDP.PCAP.CD
- 8 The World Bank (2012). http://data.worldbank.org/indicator/BX.TRF.PWKR.DT.GD.ZS
- 9 African Development Bank (2013). African Economic Outlook Lesotho. www. africaneconomicoutlook.org/en/countries/ southern-africa/lesotho/
- **10** ibid.
- **11** ibid.
- 12 UNCTAD (2013). http://unctadstat.unctad. org/ReportFolders/reportFolders.aspx?sRF_ ActivePath=P,5,27&sRF_Expanded=,P,5,27t
- 13 African Development Bank (2013). African Economic Outlook Lesotho. www. africaneconomicoutlook.org/en/countries/southern-africa/lesotho/
- 14 Centre for affordable Housing Finance in Africa, a division of Finmark Trust. www. housingfinanceafrica.org/country/lesotho/
- 15 Central Bank of Lesotho (2013). www.centralbank. org.ls/media_centre/MPC%20Statement%2002%20 April%202013.pdf
- **16** ibid.
- **17** ibid.
- **18** Business Day live (2013). www.bdlive.co.za/africa/africanbusiness/2013/06/27/lesotho-central-bank-urges-sa-to-hold-interest-rates-to-help-neighbours

- 19 Coppock Michael et al., Wharton Financial Institutions Centre (2010). Lesotho's financial sector.
- 20 Lesotho National Development Cooperation (2013). www.lndc.org.ls/home/about_us.php
- 21 Lesotho National Development Cooperation (2013). www.lndc.org.ls/opportunities/health.php
- 22 Centers for Disease Control and Prevention (2010). www.cdc.gov/globalhealth/countries/lesotho/and UNAIDS (2012). http://www.unaids.org/en/dataanalysis/datatools/aidsinfo/
- 23 CIA World Factbook (2012). https://www.cia.gov/library/publications/the-world-factbook/geos/lt.html
- 24 Interviews with NGOs and health-care stakeholders in Lesotho, October 2013.
- **25** USAID (2010). Lesotho Health Systems Assessment 2010.
- 26 UNDP (2011). MDG Report 2011. www.undp.org.ls/millennium/
- **27** ibid.
- 28 The World Bank (2012). http://data.worldbank.org/ indicator/SH.XPD.TOTL.ZS. Total health budget was calculated as total health expenditure as a percentage of GDP multiplied by the GDP of 2011.
- 29 USAID (2010). Lesotho Health Systems Assessment 2010. www.healthsystems2020.org/files/2833_file_Lesotho_HSA_2010.pdf
- **30** The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS?page=1
- **31** USAID (2013). www.aidstar-one.com/sites/ default/files/prevention/resources/national_ strategic_plans/Lesotho_06-11.pdfwww.who.int/ countryfocus/cooperation_strategy/ccs_lso_en.pdf
- **32** The Guardian (2011). www.theguardian.com/global-development/2011/oct/07/lesotho-ailing-public-health-system
- **33** USAID (2010). Lesotho Health Systems Assessment 2010.
- 34 Interviews with stakeholders in Lesotho, October 2013.
- 35 The World Bank (2012). http://data.worldbank. org/indicator/SH.XPD.PRIV.ZS. The private market was calculated as private health expenditure as a percentage of GDP, which in 2011 was 3.3% of US\$2.52 billion, thus totalling US\$83 million.
- **36** The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.OOPC.ZS
- 37 Interviews with stakeholders in Lesotho, October 2013.
- **38** ibid.
- **39** Lesotho National Development Cooperation (2013). www.lndc.org.ls/opportunities/health.php



Country Fact Sheet Namibia

Executive Summary

→ Strong macro-economic fundamentals

Namibia is among the least-populated countries in the SADC region. Benefitting from rich natural resources, good economic management and a solid market economy, Namibia quickly attained upper-middle-income status after its independence from South Africa in 1990. Yet despite steady economic growth rates and sound public policies, Namibia is one of the most unequal countries in the world.

High double burden of disease

HIV/AIDS still represents Namibia's highest disease burden, with adult prevalence rates (15–49 years) at 13.3% in 2012, and is the country's top contributor to mortality, accounting for 23% of all deaths. Thanks to freely available HIV testing and treatment, the disease is being shifted from an acute public health emergency to a manageable chronic disease. While the Millennium Development Goal related to HIV/AIDS, malaria and tuberculosis is likely to be met by 2015, the maternal- and child-health goals will not be reached by 2015. In addition, non-communicable diseases (NCDs) are on the rise, a phenomenon typical within countries with a rising income.

Public health sector with constraints

The country's health-care spending totalled US\$690 million in 2011, more than half of which was financed by the public sector. The private sector funded about a fifth of this total, in the form of insurance coverage paid by companies and out-of-pocket payments. In response to the HIV/AIDS pandemic of the preceding decade, donor funding also accounted for one-fifth of the country's total health budget in 2011. A gradual reduction in donor funding has pressed the government to embark on

significant reforms directed at managing, coordinating and financing health services. Namibia's population displays some of the highest inequality levels in the world.

Private health-care sector presents opportunities for social and financial returns

Inequality is also a factor within the health-care system. While the public health-care sector covers 85% of the population, private health-care services are restricted to people with relatively higher incomes and access to a broader array of medical services. Only 15% of the population is able to access this sector.

The private health-care sector currently plays a role along the entire health-care value chain, from manufacturing to wholesalers, health-services delivery and health insurance. However, middleto low-income households represent considerable untapped market potential, especially in non-urban areas. Promising opportunities exist in primary care, NCD prevention, lowincome insurance schemes, information and communications technology (ICT), chain management and capacity-building. The ongoing reduction in donor funding has created an opportunity for the private sector to fill emerging gaps in the delivery of health services. To tap into this potential, market innovations led by the private sector are necessary. All these opportunities should ultimately improve the access to medicines and health-care services for lower- and middle-income groups.

Macro-economic Environment

Young and increasingly urban population

Namibia's population of 2.18 million is among the smallest in the SADC region, and shows a moderate population growth rate of 0.75%.¹ The share of people living in urban areas has steadily increased in recent decades, reaching 38% in 2012.² Namibia's rank in the Human Development Index (HDI), a composite statistic reflecting life expectancy, education and income indices, has declined through the 1990s until 2005, even though its ranking within the SADC region itself climbed.³ This was largely a consequence of the HIV/AIDS pandemic. Considering that Namibia's per capita income is more than twice as high as the SADC average, Namibia's comparably low HDI rank of 128 out of 187 countries (2013) is in part a consequence of widespread social exclusion.⁴

Upper-middle-income economy with solid growth

Namibia is classified as an upper-middle-income country, with a gross domestic product (GDP) per capita of US\$5,768 in 2012 showing a positive development over the last decade.⁵ However, it has one of the highest income-inequality levels in the world: In spite of steady economic growth rates and sound economic management, more than half the population still lives on less than US\$2 (PPP) per day (see Table 2 on page 39 and Figure 1 on page 40).⁶

Namibia has a modern market economy, with most of the country's wealth earned in the mining sector. Approximately 70% of the population still relies on subsistence agriculture. The country's economy is closely linked to that of South Africa, which accounts for 75% of Namibia's imports and 30% of

Table 1: Demographic overview

Indicator		Namibia	Ø SADC	Rank among the SADC member countries*
T	Size	824,000 km²	657,500 km²	5th
†††	Population	2.18 million	19 million	10th
	Population growth rate	0.75%	3.3%	12th
n n n	Urban population	38%	39 %	8th
	Median age	22.4 years	22.0 years	6th
Ø	Life expectancy	52 years	57 years	12th
	Literacy rate	89%	78%	5th
	Human Development Index	0.608	0.518	5th

*1=highest Source: CIA World Factbook (2013), Human Development Index from UNDP (2012) exports.⁸ According to Transparency International, Namibia ranks among the least corrupt countries in Africa. Medium-term prospects for the country are favourable, but risks stemming from global demand uncertainties, particularly with respect to South Africa, exist.⁹

Along with South Africa, Lesotho and Swaziland, Namibia is a member of the Common Monetary Area. The three smaller-country currencies are pegged to the South African rand at a one-to-one level of parity. South Africa sets monetary and exchange-rate policies; by pegging the currency to the rand, the objective of monetary stability is achieved.

Stable financial sector and investment climate, yet little lending within the health sector

Namibia's membership in the Common Monetary Area allows for free capital flows to and from South Africa, the country's financially strongest neighbour. However, Namibia itself has a diverse and highly developed financial infrastructure. Since the country's independence in 1990, the government has actively promoted foreign direct investment (FDI). The Ministry of Trade and Industry has underlined its commitment to promoting FDI, noting that it is necessary to improve the efficiency and competitiveness of domestic production, through the introduction of new know-how and technical assistance. Net FDI inflows in 2012 totalled US\$358 million, having multiplied in the last 10 years due to a booming extractive industry and construction sector.

Table 2: Economic and financial overview

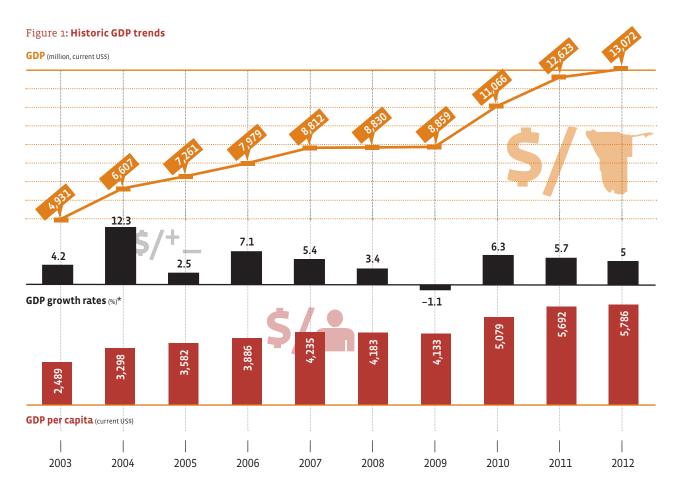
Indicator		Namibia	Ø SADC	Rank*
\$/	GDP (current USS) ^A	US\$ 13 billion	US\$ 43 billion	8th
\$/	GDP per capita (current USS) ^A	uss 5,786	uss 3,635	5th
\$/+	GDP real growth rate ^A	5%	4.36%	6th
† / % _	Unemployment rate** ^B	51%		
† <®	Population living under US\$ 2 (PPP) per day ^A	51%		
	Corruption Perceptions Index ^c	48/100	39/100	5th
41	Doing Business rank (out of 189 economies) D	98		6th
	Long term credit rating, foreign currency ^E	BBB-		
	Account at a formal financial institution (%, age 15+) ^F	62%	30 %	
\$→	Foreign direct investment, inflows (current USS)	US\$ 358 million	US\$ 786 million	9th
	Commercial bank prime lending rate ⁸	8.7%		
NS → S	N\$/US\$ exchange rate ^H	10.35 NS/USS		
† / 	Cell phone penetration ¹	97%	50 %	

^{*}Rank among the SADC member countries, 1-highest, **includes large part of underemployment in rural areas Sources: A) World Bank Indicators (2012), B) CIA World Factbook (2012), C) Transparency International (2013), D) The World Bank (2013), E) Standard & Poor's (2012), F) The World Bank (2014), G) UNCTAD (2013), Hh) oanda (2013/12, J) Deloitte & GSMA (2012)

Namibia's financial sector includes seven commercial banks. The prime-lending rate for commercial banks is 8.7%, 12 plus a sector-specific risk premium of a minimum of 2% to 3%. The Development Bank of Namibia (DBN), which supports the development of small and medium-sized enterprises (SMEs), indicates that only 0.6% of its portfolio is allocated to the health sector. 13 Interest rates have decreased by approximately six percentage points over the last six years. The country's credit rating was affirmed at BBB- in 2013, and shows a stable outlook.

According to the Bank of Namibia (2011), 62% of the Namibian population uses formal financial services to save or borrow money. In 2011, approximately 56% of Namibians owned a mobile phone. Of those without a mobile phone, 41% had used one within the three preceding months. The high mobile-phone penetration rate suggests that access to mobile banking and mobile health solutions is generally good overall.

(See Table 2 on page 39.)



^{*}Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars. Source: The World Bank (2012)

Health in Namibia

HIV/AIDS still a heavy burden, but NCD levels rising

HIV prevalence rates have stabilised at around 13.3% among adults (15-49 years), but HIV/AIDS still accounts for 23% of all deaths in Namibia As a consequence of the HIV/AIDS pandemic, life expectancy dropped in the early 2000s to 39 years, but has since increased to 52 years in 2013.16 New infections are on the decline, with rates having fallen from a peak of 2.7% in 1998 to 0.8% in 2012.17 This can mainly be attributed to education, testing, and treatment efforts made by the government and donors. Private-sector corporations such as mining companies are also supporting the fight against HIV/AIDS by providing testing and antiretroviral therapy (ART) treatment free of charge at many sites across the country. These concerted efforts have meant that Namibia will achieve by 2015 the Millennium Development Goal (MDG) related to HIV/ AIDS, malaria, and tuberculosis (Goal 6), anticipating a continued steady decline of HIV/AIDS prevalence. At the same time, the incidence of non-communicable disease (NCDs) is rising. Cancer, diabetes, cardiovascular and chronic respiratory diseases all show an upward trend, which is mostly attributable to longer life spans and unhealthy lifestyles. Addressing NCDs is high on the agenda of the Ministry of Health and Social Services (MoHSS), which is taking proactive steps to tackle this "double burden of disease". This expression refers to the challenge of facing communicable diseases (e.g., HIV/AIDS, infectious diarrhoea) and non-communicable diseases (e.g., heart diseases, cancer). The rise in NCDs is partially being addressed through school-based initiatives, controls on tobacco products and national health-promotion policies, among other means.¹⁸

While immunisation levels among children have increased, both infant and under-five mortality rates remain comparatively high. While the MDGs aim to lower infant deaths to 38 per 1,000 live births, 46 infants per 1000 live births died in 2008. The statistic for mortality under 5 years is similar – aiming for 45 deaths per 1,000 live births while 69 deaths were reported among under 5 year old per 1,000 live births. Consequently, the MDG number 4 is unlikely to be met. Similarly, in spite of outstanding antenatal care coverage, Namibia has made no progress in reducing maternal mortality rates since 1990. There were still 450 maternal deaths per 1,000 live births, while the MDG goal is to reach less than 337 by 2015. Description of the still and the s

Figure 2: HIV adult prevalence and incidence rates (15-49 years)

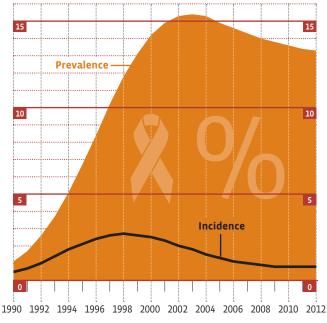
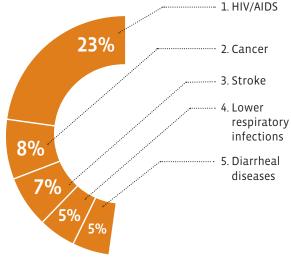


Figure 3: Five top causes of death



Source: The Centers for Disease Control and Prevention (2013)

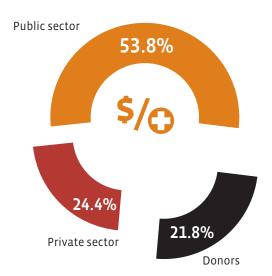
Health care remains a top government priority

Health funding and expenditure

According to the World Bank, Namibia's health-care sector accounted for 5.3% of GDP in 2011. This was approximately equal to US\$690 million, or US\$283 per capita.21 The most recent breakdown of healthfinancing sources comes from Namibia's 2010 national health accounts, although individual indicators suggest that these statistics have not changed considerably since.22 Public funds accounted for the largest share (53.8%) of total health expenditure (THE), followed by the private sector (24.4%) and donors (21.8%) (see Figure 4). Both PEPFAR and the Global Fund, the largest donors in Namibia, have announced plans to reduce funding to the sector considerably in the next few years. For PEPFAR, this will include a complete phase-out of funding for antiretroviral medicines, after providing about US\$25 million for this purpose in 2010,23 as well as a reduction of US\$8.7 million in health-care-worker salary support.24

In terms of total health-care expenditure, the public sector accounted for 57.1% in 2011, while the private sector accounted for the remaining 42.9%. The public sector's health expenditures totalled 3.0% of GDP, ranking Namibia in the midrange among SADC countries (see Figure 5). The same is true of per capita public health spending. However, while public expenditure as a percentage of GDP has been decreasing, average

Figure 4: Health financing sources



Source: Botswana National Health Accounts (2012)

per capita public spending on health has increased (see Figure 7 on page 43) over the last 10 years.²⁵ This is not the case for private health spending per capita.

The government has expressed a desire to provide universal health-care coverage (UHC), to be financed mainly by general taxation. A government task force on the issue has been set up, but no timeline for a possible launch of UHC has been disclosed. Out-of-pocket (OOP) payments account for 18% of private health-care spending, which is low compared to the SADC average of over 50%.

User Fees

Patients consulting a doctor in the public system pay a user fee between N\$4 and N\$20 (US\$0.37 and US\$1.88), depending on the size of the health-care facility. All HIV/ AIDS-related treatment is free of charge. People lacking insurance who nevertheless consult a doctor in the private sector pay a minimum sum of between US\$15 and US\$20 per consultation. Patients enrolled in the Public Service Employee Medical Aid Scheme (PSEMAS) pay an out-of-pocket contribution of 5% to visit a private doctor, while the remaining 95% is paid by PSEMAS.²⁸

Public health-care services delivery

Private health-care facilities overall significantly outnumber their public counterparts, with 728 private and 333 public health-care facilities in the country. This can mostly be attributed to the existence of private-provider consulting rooms and pharmacies.

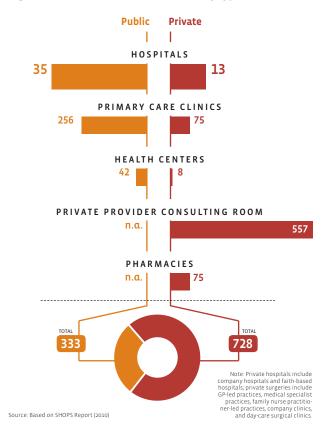
Public health-care facilities are dispersed around the country. Private health-care facilities are concentrated

Figure 5: Overall health expenditure

Health exp	enditure 2011	Namibia	Ø SADC	Rank*
health e	Public xpenditure as % of GDP	3.0%	3.9%	8th
e	Per capita total health xpenditure (current USS)	US\$ 283	US\$ 227	5th
e	Per capita public health xpenditure (current USS)	US\$ 162	US\$ 135	6th
\$/ m	Per capita private health xpenditure (current USS)	US\$ 121	US\$ 92	4th

*among the SADC member countries, 1=highest Source: The World Bank Indicators (2012) Note: SADC averages were calculated as the sum of the data of the member states divided by the number of member states. No health data was available for Zimbabwe.

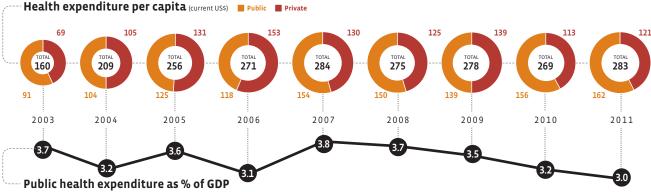
Figure 6: Distribution of health facilities by type



in urban areas, mostly in Windhoek and Walvis Bay, with an additional few close to mining sites.

Compared to the WHO recommendation of 1.67 doctors per 1,000 people, Namibia's ratio of 0.37 doctors per 1,000 people is very low. The public health-care sector has a particular undersupply of specialists, which is partially compensated for by doctors from Zimbabwe and Zambia. There are 3.1 nurses per 1,000 people, which is higher than the SADC average of 2.44, but still far below the European average of 10.29

Figure 7: Historic health spending trends



Source: The World Bank (2012)

Public health-care system constraints

While Namibia's public health-care system is fairly well established, it faces challenges similar to those seen in its SADC neighbours.

Medical personnel shortages and infrastructural shortcomings limit access to services. Primary health-care services are particularly limited in rural areas, where the average distance to the nearest clinic is 60 kilometres, or 100 kilometres to the nearest doctor.³⁰ Even in urban areas, the undersupply of doctors leads to long waiting times even to see general practitioners. Furthermore, Namibia's public hospital infrastructure is insufficient and outdated. Those with comparatively high incomes thus often seek care within the private sector in Namibia or travel to South Africa.

The double burden of disease strains the public system and challenges policymakers to prioritise treatment of either communicable or non-communicable diseases, each of which create a high disease burden but often require different approaches. Especially non-communicable diseases require long-term integrated disease management programmes, which are challenging to implement.

Supply-chain management difficulties often have a negative impact on the provision of health services. The Central Medical Store (the public-sector warehouse for medicines) located in Windhoek regularly experiences stock-outs. This is partly due to the country's dependence on South Africa as a supplier, but suboptimal supply-chain management is also a serious issue. As of 1 January 2014, all imported medicines have to comply with the Namibian Medicines and Related Supply Control Act. No imports of medicines that are not registered in Namibia will be permitted. This threatens to exacerbate stock-management difficulties further. The decline in donor funding, which mainly affects HIV/AIDS services, is presenting new challenges for the public system.

Private Health-care Sector

The current private health-care market is average in size

Total private health-care spending amounted to approximately US\$300 million in 2011.32 This market mainly serves high-income urban individuals who can afford private health insurance, as well as public servants with insurance coverage. Middle- and lowincome people also utilise private health-care services, typically paying out-of-pocket. The Public Service Employee Medical Aid Scheme (PSEMAS) and other private-insurance plans account for 61% of the total private-sector health-care market.33 It is striking to note that these 61% of total private funding covers just 15% of the total population - 327,000 people - leaving about 85% of the population dependent on the public sector or on out-of-pocket payments (see Figure 8).34 Given the relatively large number of private healthcare facilities, this small percentage of the population with private-sector insurance coverage is well served, especially in urban areas.

Out-of-pocket payments represent 18% of expenditure in the private health-care market. These consist of user fees within the public sector and co-payments for individuals with health insurance coverage, as well as service fees for individuals using private-sector services without insurance coverage.³⁵ However, this share is low compared with the SADC average of over 50%.³⁶ Furthermore, it should be noted that the number

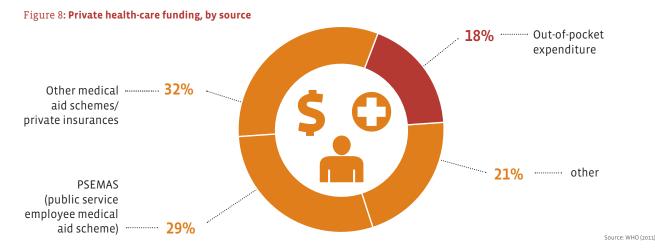
of medical tourists from Angola using private facilities has increased significantly, and these individuals pay out-of-pocket.³⁷ The share classified as "other" includes charitable donations and private corporations' direct payments for services.

Established throughout the value chain

Distributors, wholesalers, health-services providers, pharmacies and insurance companies are well represented along the entire health-care value chain in Namibia, with several players in each category. Furthermore, there is a single pharmaceutical manufacturing plant that produces a portfolio of 20 basic medicines, whose products are used solely within the public sector.

There are 10 medical-aid schemes targeting people with a middle income; almost everyone with medical-aid coverage is formally employed. However, over 50% of formally employed people in Namibia do not have health insurance.³⁸

A number of public-private partnerships in the health sector exist in Namibia, including public access to mine-operated private health-care facilities, disease screenings by mobile testing vans, and the provision of free voluntary counselling, AIDS/HIV tests and ARV treatment.



Challenges to private-sector growth

Investment in Namibia's private health-care sector faces a number of challenges:

A small economy and scattered population reduces incentives for private-sector investment. Namibia's population is just 2.18 million; this means that economies of scale are likely to be achieved only on a regional level, especially in terms of manufacturing. Moreover, the rural population is scattered, hindering private-sector providers from offering their products profitably in these areas.

Limited capacity development results from the country's comparatively small number of medical schools and apprenticeship training positions. More doctors and nurses, as well as other health-care workers, are needed. More human capacity is also needed to register new medicines. The already long registration times are expected to further exacerbate with a new law that will be effective as of January 1, 2014. It will require all medicines that are imported to comply with Namibia's Medicines and Related Supply Control Act that will raise the amount of new applications.

Limited access to funding continues to hamper SMEs in the health-care sector. Although it is in theory possible to obtain financing from a local bank, SMEs often lack sufficient collateral. Moreover, traditional financing institutions often charge substantial risk-related premiums on top of the baseline credit rate. There is considerable market potential, but this will only be realised if there is sufficient investment and technical support within the health sector.

CASE STUDY

Mobile health clinics as public-private partnerships



People living and working in rural areas have only limited access to health-care services, particularly in

the area of primary care. A business that runs mobile clinics set out to fill this gap. Research done in preparation for the project showed that an overwhelming majority of rural employers are willing to subsidise their employees' primary health care as long as services were provided close to the working site. The demand for such services in rural areas is high: The pilot project screened over 6,000 patients in rural areas in one year.

The mobile health clinics offer preventative and curative health services, and make referrals to public and private health-care facilities as needed. Services include screenings for blood pressure, sugar levels, cholesterol, hepatitis B, body mass index, syphilis and HIV. Each mobile clinic consists of two nurses and a driver.

Operating costs are covered by a combination of user fees, donor funding, monthly capitation payments made by rural employers, local corporate donations and the MoHSS, which provides free vaccines and medicines. Progress is being made in rendering this business model self-sustaining even without donor funding. This PPP improves both access to health-care services as well as medicines in rural areas.

Source: Interview with CEO (Oct. 2013)

Nonetheless, considerable **opportunities** exist

A range of opportunities for private-sector solutions exists along the whole value chain. Taking advantage of these will have a positive impact on the health situation in Namibia.

Supply-chain management

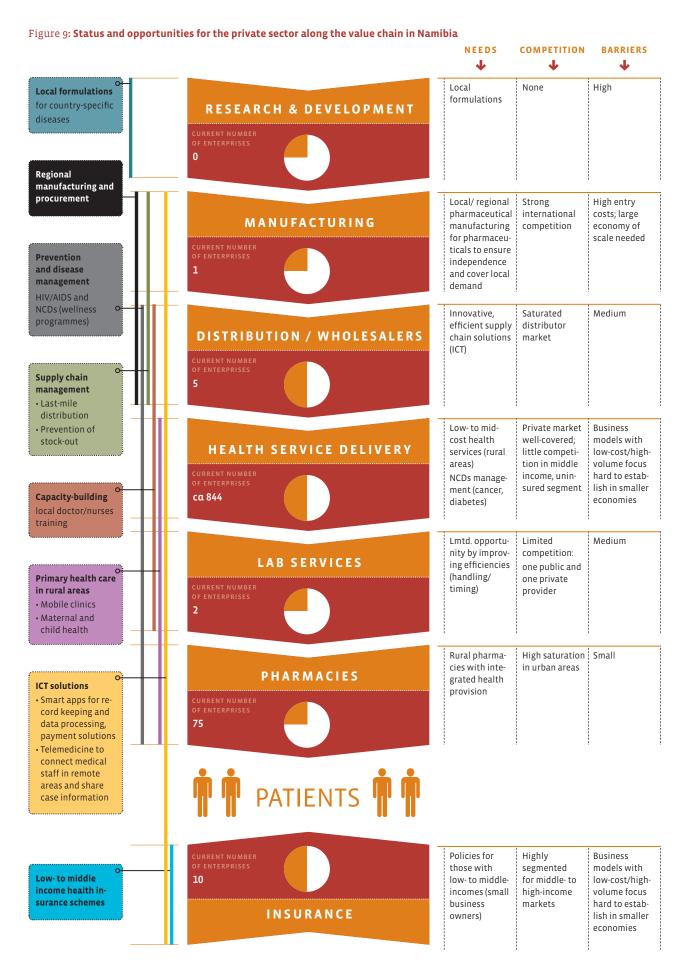
New legislation ensures that government procurement gives preference to Namibian companies, thus creating opportunities for local wholesalers and distributors.39 However, new business models are needed to ensure that medicines and medical supplies reach pharmacies or health centres in a timely fashion. Furthermore, better planning mechanisms that allow for up-to-date stock information, as well as flexible and fast order-filling, would help to reduce stock-outs in public-sector pharmacies. Another opportunity lies in enhancing last-mile distribution models, especially within remote rural areas. Supply-chain management could further be improved by setting up a regional procurement company that would purchase medicines and medical supplies on a regional basis in the southern SADC. This would allow the national health system to procure larger orders at more competitive prices, thus ensuring a more reliable supply of needed medicines. Supply-chain management solutions are particularly suitable for public-private partnerships, as the logistical expertise of the private sector can be used to serve public-sector needs.

Health-care delivery

An effective primary health-care system can improve health outcomes considerably. However, there are currently only a few private primary healthcare solutions able to reach Namibia's non-urban population. More mobile clinics delivering services to remote areas or health-care delivery outlets in semi-urban areas could address this gap. This strategy has shown itself to be effective on a small scale. In particular, these facilities could provide maternal and child-focused health-care services, contributing to the achievement of the health-related Millennium Development Goals. To be sustainable, these business models would need to focus on high volumes of patients receiving basic-quality health-care services at an attractive price point. Franchise models have shown promising results in other countries, including Kenya and India. These could help reduce patient demand for public facilities, therefore reducing waiting times or making services available to currently underserved portions of the population.

With the increase in incidence of non-communicable diseases, which are often a consequence of higher incomes and a change in lifestyle, integrated diseasemanagement solutions are needed. These represent another opportunity in the health-care delivery sector. Patients that suffer from cancer or diabetes need highly individualised care, which requires the concerted effort of primary-care doctors, specialists, nurses, and allied health professionals, along with specialised diagnostic and treatment plans, over a long period of time. Business models specialising in specific diseasemanagement programmes for patients represent a promising but complex opportunity. Moreover, such solutions could take a major burden off a public healthcare system that needs to balance the fight against HIV/ AIDS and other communicable diseases with the advent of long-term care for non-communicable diseases. With the private sector stepping in, the Ministry of Health could direct more of its resources toward public-health campaigns focusing on prevention.

The public-sector physical hospital infrastructure is in need of improvement in various parts of Namibia. Upgrading existing hospitals or constructing new ones represent opportunities for public-private partnership. The model has been proven to be effective in other countries including Lesotho and South Africa.



Health insurance

Affordable health-insurance products for a broader portion of the population are needed. Currently only 15% of Namibia's population has insurance coverage, a share that represents just 50% of the country's formally employed population.⁴⁰ This limits the size of the private health-services market. Broader insurance coverage would also reduce the burden on the overtaxed public health sector, allowing a larger share of the population to receive better-quality health-care services. In particular, the growing middle class is becoming more interested in using private health-care facilities.

Capacity building

Educational institutions and programmes for individuals interested in or already working in the health-care sector are needed. An increase in the number of training and education facilities for nurses and doctors could address the short supply of qualified health-care professionals, supplementing public education facilities. Government subsidies or the provision of student loans would increase incentives for the private sector to invest in this area. In addition, vocational and specialist training programmes in other areas are needed, as skilled employees such as lab technicians and health-claim processors are also in short supply. Training of this kind would also benefit from government subsidy, though private companies would in this case be likely to pay for their employees to attend such programmes. High-quality education and training programmes targeting the health-care sector will ultimately improve the country's health services and products.

Information and Communication Technology

Tailored ICT solutions can address many of challenges within the current health-care system: For instance, smartphone applications can provide up-to-date inventory information, process medicine orders, provide delivery status or price information, or allow better management of supply chains so as to prevent stock-outs. Telemedicine technology can help compensate for the shortage of trained professionals, particularly in rural areas. Electronic patient records allow for greater efficiency and better treatment synchronisation. For example, they can reduce the risk of misdiagnosis, unnecessary test repetition and incorrect prescriptions. Ultimately, this leads to savings in the health system overall, as well as better patient outcomes.

R&D and manufacturing

The government actively supports domestic pharmaceutical manufacturing, through means such as procurement practices that favour the Namibian pharmaceutical company. The Ministry of Health argues that Namibia's small market makes it difficult to obtain competitive prices, while resulting in long lead times for the delivery of supplies, which in turn reduces the availability of medicines for patients. However, the R&D and manufacturing sectors have high barriers to entry. Moreover, economies of scale enabling competitive prices cannot be satisfied by concentrating solely on the domestic market, but rather have to be attained on a regional level.

The essential and most difficult-to-produce medicinal components, the active pharmaceutical ingredients (APIs), will still need to be imported. Currently there is no capability for API production in sub-Saharan Africa, with the exception of one company that manufactures post-patent APIs in South Africa.⁴¹ High import tariffs for API may be charged, increasing the challenge of local manufacturing even further. Consequently, local manufacturing, which from a pure business perspective may not be a sustainable opportunity, comes to reflect more of a strategic political decision.

Seizing these opportunities will drive private-sector growth

High-income individuals in Namibia are already well served by the current private health-care market. By addressing the opportunities outlined above, the private sector can expand to other market segments. In particular, the growing middle class may demand better health products and services. In addition, new business models and players in the health sector may bring about growth in the low-income segment.

Expanding middle class

According to the World Bank, almost half of Namibia's population lives on more than US\$2 per day (PPP).42 Trends follow a pattern similar to that of the whole region: The middle- and lower-middle-income classes are expanding and are often underserved, thus offering considerable growth potential. Over time, this segment is projected to spend an estimated US\$34 million per year on health-care services in Namibia. Due to changing diets, a reduction in physical work, and longer life spans, these growing populations are increasingly likely to be affected by NCDs, a fact that may increase health spending even further.43

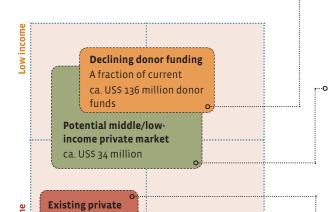
Businesses models that address these new segments can be supported by impact investors. These can provide competitive funding and technical assistance, aiming to generate both social impact and a return for investors.

Figure 10: Existing and potential private-sector market

Shrinking donor funding will leave gaps to be filled

The poor population and those suffering from HIV/ AIDS in Namibia have to date relied primarily on services supported by donors, which contributed an estimated US\$136 million to the country's health-care sector in 2011 alone. This funding was largely channelled through the public sector, with a smaller fraction going directly to NGOs. However, donor funding will decline considerably over the next few years. Consequently, the public sector may turn to the private sector to fill funding gaps, in particularly seeking more public-private partnerships. Additionally, some NGOs may shift from donation-based to profit-generating operating models. However, given the significant change required, this will take place over the long term.

Funding for market-based health solutions can also come from impact investors, who are often more accepting of risk and and are willing to provide patient capital.⁴⁵ Their investments are thus particularly well suited to catalysing business models addressing the low-income segment, which often take time to become profitable. Impact investments can thus complement public resources and philanthropic activities.



Assumptions

Reduced donor funding:

The government could leverage private funds to close the gap left by the decline in donor funding. This includes, for example, engaging in PPPs. Donors provided US\$136 million in 2011.

• Additional medium- or low-cost services:

Total population of 2.18 million

- -15% covered by insurance (327,000)
- -51% below US\$2.00 per day (PPP) (1,111,800)
- = 748,200 "middle" income individuals.
- ×3 visits per year at US\$15 each
- = US\$34 million

Existing private market:

The private health market is assumed to be equivalent to private health expenditure as percentage of GDP, or 2.3% of US\$13 billion, for a total of US\$300 million.

Source: created by authors.

market

US\$ 300 million

Urban and peri-urban

Sources

- 1 CIA World Factbook (2013). https://www.cia.gov/ library/publications/the-world-factbook/geos/ wa.html
- 2 ibid.
- 3 UNDP (2013). http://hdrstats.undp.org/en/ countries/profiles/NAM.html
- 4 HDI is a measure of well being beyond income level and GDP growth. It is a composite statistic of life expectancy, education and income indices used to rank countries according to their human development. 0= very low development; 1= very high development. Source: UNDP (2013).
- 5 The World Bank (2012). http://data.worldbank.org/ indicator/NY.GDP.PCAP.CD
- 6 The World Bank (2004). http://data.worldbank.org/ indicator/SI.POV.2DAY?page=1
- 7 FAO (2005). www.fao.org/nr/water/aquastat/ countries_regions/namibia/index.stm
- 8 South African High Commission Windhoek (2013). www.dirco.gov.za/windhoek/bilateral.html
- 9 African Economic Outlook (2013). www. africaneconomicoutlook.org/en/countries/ southern-africa/namibia/
- 10 Namibian Ministry for Trade and Industry (2013). www.globalpost.com/dispatch/news/ asianet/130406/schlettwein-calls-foreign-directinvestment
- 11 UNCTAD (2013). http://unctadstat.unctad. org/
 ReportFolders/reportFolders.aspx?sRF_
 ActivePath=P,5,27&sRF_Expanded=,P,5,27
- 12 CIA World Factbook (2012). https://www.cia. gov/library/publications/the-world-factbook/ fields/2208.html
- 13 Development Bank Namibia (2012). http://sun.com. na/content/business/dbn-encourages-domestic-production
- 14 Oxford Policy Management (2012). www.opml. co.uk/news/namibia's-path-mobile-money
- **15** Research ICT Africa (2011). www.researchictafrica. net/countries.php?cid=15
- 16 CIA World Factbook (2013). https://www.cia.gov/ library/publications/the-world-factbook/geos/ wa.html

- 17 UNAIDS (2012). http://www.unaids.org/en/dataanalysis/datatools/aidsinfo/
- **18** WHO (2012). www.afro.who.int/en/namibia/press-materials/item/4367-namibia-takes-action-against-ncds-on-the-commemoration-of-healthy-lifestyles-day.html
- **19** WHO (2013). www.afro.who.int/en/namibia/press-materials/item/5342-accelerating-achievement-of-mdgs-4-and-5-parmacm-launched-in-namibia.html
- 20 UNDP (2008). Namibia MDG Status Report 2008. www.undp.org/content/undp/en/home/ librarypage/mdg/mdg-reports/africa-collection. html
- 21 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS
- 22 According to the World Bank (2012), donor resources amounted to 19.7% of total health expenditure in 2011. http://data.worldbank.org/ indicator/SH.XPD.EXTR.ZS
- 23 PEPFAR (2011). Operational Plans, 2005-2010. http://healthaffairs.org/blog/2011/11/29/pepfars-declining-investment-in-hivaids-treatment/
- 24 PEPFAR (2012). Namibia Operational Plan Report Financial Year 2012.
- 25 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS?page=1
- **26** PEPFAR (2012). www.pepfar.gov/documents/organization/212152.pdf
- **27** The World Bank (2011). http://data.worldbank.org/indicator/SH.XPD.OOPC.ZS. Calculated average.
- 28 Interview with stakeholders (Oct. 2013)
- 29 CIA World Factbook (2007). https://www.cia.gov/ library/publications/the-world-factbook/geos/ wa.html
- 30 PharmAccess Foundation (2012).
 www.agrinamibia.com.na/index.
 php?module=Downloads&func=prep_hand_
 out&lid=156
- 31 Interview with stakeholders (Oct. 2013)

- 32 The World Bank (2012). http://data.worldbank. org/indicator/SH.XPD.PRIV.ZS. The private market was calculated as private health expenditure as a percentage of GDP, which is 2.3% of US\$13.07 billion equaling US\$300 million.
- 33 WHO (2011). Global Health Observatory Data Repository. http://apps.who.int/gho/data/node. country.country-NAM?lang=en
- 34 USAID (2010). Strengthening Health Outcomes through the Private Sector (SHOPS). Namibia Private Sector Assessment. www.shopsproject. org/resource-center/namibia-private-health-sector-assessment
- **35** ibid.
- **36** The World Bank (2011). http://data.worldbank.org/indicator/SH.XPD.OOPC.ZS. Calculated average.
- 37 Interview with Ingrid de Beer, PharmAccess Foundation (Oct. 2013)
- 38 USAID (2010). Strengthening Health Outcomes through the Private Sector (SHOPS). Namibia Private Sector Assessment. www.shopsproject. org/resource-center/namibia-private-health-sector-assessment
- 39 Namibian Sun National Newspaper (2013). http://sun.com.na/content/national-news/local-companies-get-lion's-share-government-tenders
- 40 USAID (2010). Strengthening Health Outcomes through the Private Sector (SHOPS). Namibia Private Sector Assessment. www.shopsproject. org/resource-center/namibia-private-healthsector-assessment
- **41** Aspen Pharma (2013). www.aspenpharma.com/south-africa/manufacturing-expertise.aspx
- **42** The World Bank (2004). http://data.worldbank.org/indicator/SI.POV.2DAY?page=1
- **43** WHO (2013). www.who.int/mediacentre/factsheets/fs355/en/
- 44 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.EXTR.ZS. Total donor resources are equal to the percentage of donor resources (19.7%) multiplied by THE (US\$690 million), equaling US\$136 million.
- 45 Global Impact Investing Network (GIIN) (2013). www.thegiin.org/cgi-bin/iowa/resources/about/ index.html

Country Fact Sheet South Africa

Executive Summary

Strong macro-economic fundamentals in Africa's largest economy

South Africa remains by far the largest and most advanced economy in Africa, accounting for an estimated 20% of the entire African continent's gross domestic product (GDP). As a middle-income country, South Africa offers a large domestic market of 49 million people, while continuing to be viewed by investors as a strategic base from which to build and expand their African operations. While South Africa's economy is hampered by structural factors such as high unemployment and a shortage of skills, its GDP has in recent years shown an average of 2.5% to 3% per annual growth. South Africa's political and economic stability is underpinned by strong institutions and a robust constitution.

→ High double burden of disease

The country's disease burden is today dominated by communicable diseases including tuberculosis and HIV/AIDS. The latter showed a stabilised adult prevalence rate (15–49 years) of 18% and a decreasing rate of new infections of 1.4% in 2012. This demonstrates a promising shift from an acute public health crisis to a manageable chronic disease. At the same time, there are rapidly increasing rates of noncommunicable diseases such as diabetes, high blood pressure, alcohol-related diseases, and obesity, as well as external factors such as motor vehicle accidents and interpersonal violence.

→ Public health sector with constraints

The existing health-care system is characterised by a significant imbalance of resources and burden-sharing between the public and private sectors. The private sector funds 50% of total health-care, but serves only 16.5% of the population with private insurance. The public sector spends significant financial resources and provides mostly free health-care services, but often struggles, especially in rural and poor areas, to cope with demand and the disease burden. The public sector displays managerial and skills shortcomings, as well as financial and technical constraints.

Private health-care sector presents opportunities for social and financial returns

The private sector plays a significant role in filling these gaps and in relieving pressure on the public sector. The government has made improved access to health care a strategic priority and has plans to roll out a National Health Insurance (NHI) system, aimed at providing universal coverage, over the next 14 years. The NHI will introduce significant changes within South Africa's health-care landscape, while providing new opportunities for the private sector. Given South Africa's position as a strategic hub for investment in Africa, opportunities exist along the entire health-care value chain, in particular within the fields of low-income medical-insurance schemes, health-care services and mobile healthcare delivery. All these opportunities should ultimately improve the access to medicines and health-care services for lower- and middleincome groups.

Macro-economic Environment

A rapidly urbanising young population and decreasing levels of poverty

With around 50 million people (see Table 1), South Africa has the second-biggest population within the SADC region. Its 2012 population growth rate of -0.45%¹ places it among the lowest of the SADC member states. The population's median age is 25 years. Life expectancy fell dramatically between 1994 and 2005, dropping by around 10 years mainly as a result of HIV.² However, this downward trend has stabilised as a result of the near-universal introduction of antiretroviral (ARV) treatment for HIV-positive patients, and life expectancy has risen again, reaching 50 years in 2011.³

Rapid urbanisation and significant internal migration are transforming the demographic landscape, with an estimated 1.3 million people having moved from poorer rural provinces to the country's main economic

centres between 2006 and 2011. The majority of South Africa's population (more than six out of 10 people) now lives in cities.⁴

South Africa is ranked 121st out of 187 countries in the Human Development Index, lower than neighbouring Botswana, but higher than most other countries on the continent.⁵ The decrease in life expectancy described above played a major role in lowering the country's HDI ranking at the beginning of the new millennium.⁶

Africa's most advanced emerging market and a key strategic-investment hub

South Africa is an upper-middle-income country according to World Bank rankings, with a per capita income of US\$7,508 in current U.S. dollars.⁷ Its overall GDP, estimated at US\$384 billion (see Table 2

Table 1: Demographic overview

Indicator		South Africa	Ø SADC	Rank among the SADC member countries*
	Size	1,219,090 km²	657,500 km²	3rd
†††	Population	49 million	19 million	1st
	Population growth rate	-0.45%	3.3%	5th
†††	Urban population	62%	39 %	1st
	Median age	25.5 years	22.0 years	3rd
0	Life expectancy	50 years	57 years	15th
	Literacy rate	93%	78%	1st
	Human Development Index	0.629	0.518	4th

*1=highest Source: CIA World Factbook (2013), Human Development Index from UNDP (2012) on page 55), accounts for around 20% of the African continent's entire economic output at market exchange rates. With a highly developed and complex industrialised economy, which grew by around 2.5% in 2011 (see Table 2 below and Figure 1 on page 56), the country remains Africa's economic powerhouse and a gateway to the African continent. This position is underlined by an investment-grade BBB credit rating, and a ranking of 41 out of 185 in the World Bank's Ease of Doing Business index in 2013.

Nevertheless, South Africa's economy faces significant challenges, including a 25.1% unemployment rate,12 one of the highest inequality levels in the world, high levels of crime, and poor health and education outcomes despite comparatively high spending levels. Yet South Africa has made huge advances over the past two decades, as outlined in a recent report by investment bank Goldman Sachs. Its economy is today 2.5 times bigger than in 1994. Macro-economic indicators such as inflation, fiscal stability and public finances have improved quite dramatically in comparison with the pre-1994 era. This has led to significant improvement in socio-economic indicators such as access to housing and services (sanitation, electricity, piped water), social security, and infrastructure.13 A large black middle class has emerged and disposable income levels have risen. This steady progress continues to represent significant opportunities for investors, including in the fast-growing health sector.

According to the African Development Bank, economic growth is expected to recover to above 3% in 2014 and 2015. His Premains lower than other emerging African countries such as Kenya, Nigeria, Ghana or Angola, which typically grow at rates of 4% to 6% per annum, it is a reflection of South Africa's status as a medium-sized and mature industrial economy.

Poverty levels remain high, with an estimated 31% of the population living on less than US\$2 (PPP) a day. ¹⁵ However, social grants (direct cash transfers) have played a significant role in reducing levels of absolute poverty over the past decade. In addition, targeted policies that seek to reduce the legacy of inequalities between black and white include the Broad-Based Black Economic Empowerment programme, a series of incentives prompting businesses to increase the participation of formerly disadvantaged groups with respect to ownership, management and employment, and to increase procurement from black-owned businesses. ¹⁶

The country is generally open to foreign direct investment (FDI), and provides a sophisticated legal

Table 2: Economic and financial overview

Indicator		South Africa	Ø SADC	Rank*
\$/#	GDP (current USS) ^A	US\$ 384 billion	US\$ 43 billion	1st
\$/*	GDP per capita (current Uss) ^A	uss 7,508	uss 3,635	3rd
\$/+	GDP real growth rate [^]	2.5%	4.36%	13th
<u> </u> / <u> /</u>	Unemployment rate** ⁸	25.1%		
† < ②	Population living under US\$ 2 (PPP) per day ^A	31%		
	Corruption Perceptions Index ^c	42/100	39/100	6th
44	Doing Business rank (out of 189 economies) ⁰	41		2nd
	Long term credit rating, foreign currency ^E	BBB		
	Account at a formal financial institution (%, age 15+) F	54 %	30 %	2nd
\$→	Foreign direct investment, inflows (current USS)	uss 4573 million	US\$ 786 million	2nd
s →	Commercial bank prime lending rate ⁸	8.5%		
(A) → (S)	ZAR/US\$ exchange rate "	10.35 zar/uss		
†/=	Cell phone penetration	>100%	50 %	

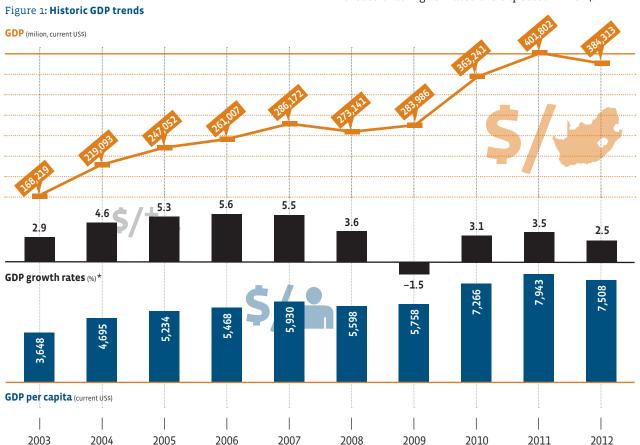
^{*}Rank among the SADC member countries, 1=highest, **includes large part of underemployment in rural areas
Sources: A) World Bank Indicators (2012), B) CIA World Factbook (2012), C) Transparency International (2013), D) The World Bank (2013), E) Standard & Poor's (2012), F) The World Bank (2014), G) UNCTAD (2013), H) oanda (2013/12, J) Deloitte & GSMA (2012)
Note: Unemployment refers to the share of the labour force that is without work but available for and seeking employment, which is a very strict definition.

and regulatory environment that protects foreign investors. FDI flows were recorded at US\$4.6 billion in 2012, down from US\$6 billion in 2011. According to UNCTAD figures, the trend seems to have recovered again in 2013, with flows of US\$3.3 billion for the first six months of 201317 spread across sectors, from retail to financial services, infrastructure and health care. The rand is fully convertible and was recently ranked as the 18th most heavily traded currency on global markets.18 Its value against the U.S. dollar has fluctuated between 15 and nine U.S. cents per rand over the last five years.19 South Africa forms a Common Monetary Area with its three neighbours Namibia, Lesotho and Swaziland. Their currencies are pegged to the rand at a rate of 1:1. Corporate income tax is capped at 28%,20 and South Africa's tax collection system is widely recognised as one of the world's most efficient and least burdensome.21

A highly developed financial sector, with gaps in SME finance

South Africa has a sophisticated and very well-regulated financial sector, one of its key strengths as an emerging market. A total of 17 commercial banks, excluding branches of foreign banks, offer financial services in the country serving according to the World Bank, about 54% of the adult population in 2013.²² With innovation and competition accelerating, major banks pursue market share in the lower-end retail market.

Loan finance in South Africa is easier to obtain than in many other countries in the region. However, the availability of more sophisticated sources of financing such as venture capital and private equity is more limited. Nominal prime commercial interest rates are currently at a historically low level of 8.5%,²³ but the additional premium makes it more difficult for SMEs and businesses to gain access to debt finance. Over the past 18 months, the Reserve Bank has kept its repo rate at a 40-year low of 5%, mainly in order to provide stimulus to the economy during a period of relatively slow growth. These low rates are unlikely to be sustained, however, and recent market signals indicate that higher rates are expected in 2014.²⁴



*Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2005 U.S. dollars

Health in South Africa

HIV/AIDS still dominates disease burden, but NCD levels rising

Communicable diseases - in particular HIV/AIDS and tuberculosis (TB) - remain at the core of South Africa's disease burden. The country accounts for 17% of the global HIV burden and 5% of the global TB burden (respectively 23 times and seven times the world average).25 The combination of a high HIV/AIDS and TB prevalence has dramatically impacted life expectancy since 1990.26 Half of all deaths (see Figure 3) in South Africa today are still attributed to HIV/AIDS. Although still high at an estimated 18%, adult HIV prevalence rates (15-49 years) (see Figure 2) have stabilised and new infection rates among adults (15-49 years) have declined steadily from a peak of 2.9% in 1998 to 1.4% in 2012.27 This is in part a result of the fact that the percentage of the population with advanced HIV infection that had access to antiretroviral medicines (ARVs) jumped from 13.9% in 2005 to 75.2% in 2011.28 With HIV/AIDS prevalence today levelling off, NCDs such as diabetes, high blood pressure and cancer are taking on a larger share of the disease burden.29

The government's latest Millennium Development Goals (MDG) report indicates that significant progress

has been made. However, goal number 6 associated with HIV/AIDS and tuberculosis will still not be met, although the malaria prevalence rate has stopped rising. Progress has been also made in terms of the maternal mortality rate, which dropped from 625 deaths per 100,000 live births in 2007 to 269 deaths per 100,000 live births in 2010.³⁰ However, this figure was still many orders of magnitude higher than the target of 38 deaths per 100,000 live births by 2015. The same holds true for child health indicators; infant mortality rates in particular have shown improvement largely thanks to higher immunisation rates, but the associated MDG will not be met by 2015.³¹

A large public health-care system covers most of the population

Health funding and expenditure

According to the World Bank, the total size of the health-care market in South Africa in 2011 was estimated at about US\$34 billion,³² corresponding to US\$689 per capita³³ (see Figure 5 on page 58) or 8.5% of GDP.³⁴

Figure 2: HIV adult prevalence and incidence rates (15-49 years)

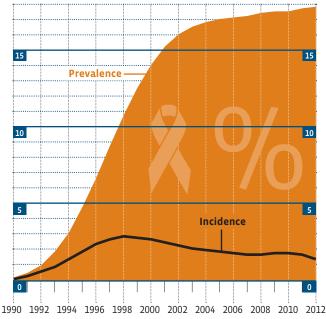
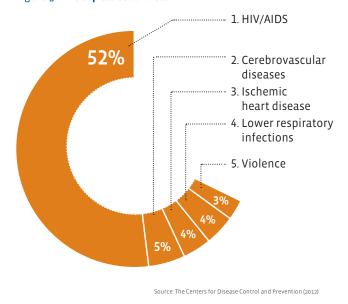


Figure 3: Five top causes of death



iource: UNAIDS (2012

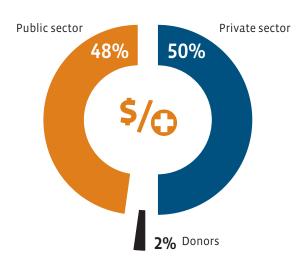
South Africa's public health-care system serves a disproportionately large part of the population relative to the total health sector: Public-sector funding accounts for around 48% of the health-care market's total (see Figure 4). However, because most South Africans cannot afford private health care, this amount must provide for the 84% of the population that lacks private medical-insurance coverage.³⁵ The private sector accounts for 50% of total health-care funding. Donor funding is high in terms of absolute value, at around US\$714 million,³⁶ but accounts for just 2% of total spending in the sector. Moreover, this amount is widely expected to decrease over the next few years.³⁷

In 2011, the South African per capita health expenditure was the highest among the SADC (see Figure 5) countries. South Africa's public-sector health expenditure as a percentage of GDP has been steadily increasing in recent years, reaching 4.1% (see Figure 7 on page 59) in 2011, for a total of US\$16 billion. The same steady increase can be observed for public and private per capita health spending.

User fees

South Africa's public-sector health facilities charge a basic user fee of ZAR 35 (US\$3.40). However, fees in the country's public health-care system have been abolished for patients with incomes lower than ZAR 1,000 (US\$97) per month, as well as for pregnant mothers and children under the age of six. The majority of the users of public health-care facilities fall into this category.

Figure 4: Health financing sources



Source: The World Bank (2012)

A progressive user-fee scale exists for patients in higher income brackets (between ZAR 1,000 [US\$97] and ZAR 5,000 [US\$483], and above ZAR 5,000). This is calculated as a percentage of the corresponding private-sector rates, depending on the procedure involved.³⁹

Rollout of National Health Insurance system

South Africa's health-care landscape will undergo a profound transformation over the next two decades through the planned implementation of the National Health Insurance system (NHI). Driven by the public sector, the primary objective of the NHI will be to provide universal access to essential health care for South Africa's entire population, regardless of recipients' ability to make a direct monetary contribution to the NHI fund.⁴⁰ The NHI rollout is planned to take place over the next 14 years, with pilot projects currently ongoing in selected districts across all of South Africa's nine provinces.

Health-care services delivery

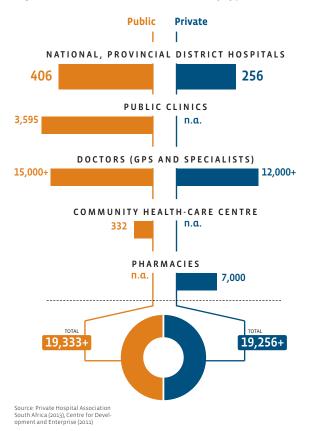
South Africa has an extensive network of private and public health-care facilities and providers providing primary, secondary and tertiary health-care services. The private sector is more heavily concentrated in large and medium-sized urban and peri-urban centres, as it tends to cater to middle- and high-income groups. The public sector provides care that is largely free at the point of service; consequently, the vast majority of South Africans in lower-income categories rely on the public sector for their health-care services.

Figure 5: Overall health expenditure

Health expenditure 2011	South Africa	Ø SADC	Rank*
Public health expenditure as % of GDP	4.1%	3.9%	4th
Per capita total health expenditure (current USS)	US\$ 689	US\$ 227	1st
Per capita public health expenditure (current USS)	US\$ 329	US\$ 135	2nd
Per capita private health expenditure (current USS)	US\$ 360	US\$ 92	1st

*among the SADC member countries, 1=highest Source: The World Bank Indicators (2012) Note: SADC awarges were calculated as the sum of the data of the member states divided by the number of member states. No health data was available for Zimbabwe.

Figure 6: Distribution of health facilities by type



Overall, South Africa has more doctors than the SADC average, with an estimated 0.55 doctors per 1,000 people, but less than the World Health Organisation (WHO) recommendation of 1.67 doctors per 1,000 people. The ratio of 2.8 nurses per 1,000 people is also significantly lower than the European average of 10.41

Public health-care system constraints

South Africa's public health-care system faces structural challenges that contribute to persistently poor health outcomes despite high health expenditure and many supportive policies.⁴² These challenges include:

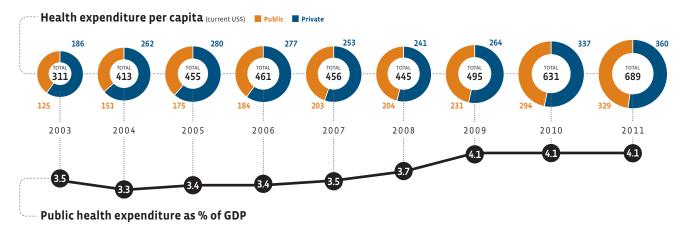
A shortage of qualified managerial staff within hospitals, clinics and other health-care facilities is a serious constraint in the public sector, according to the National Department of Health. This is especially true in rural areas, where it is more difficult to attract and retain personnel.⁴³

Financial management, reporting and accountability⁴⁴ within the public health-care system all suffer from serious shortcomings.

Stock-outs are relatively frequent in South Africa's public health-care system, with supply-chain failures often serving as the root cause.⁴⁵ The issue of stock-outs was recently highlighted by a coalition of NGOs including Doctors Without Borders and Treatment Action Campaign, which expressed concern that interruptions in the supply of ARV medicines could negatively impact the treatment of HIV-positive patients.⁴⁶

A shortage of qualified medical staff leads to long waiting times. Across South Africa's entire public-sector health-care system, 35% of doctor and nurse staff positions were vacant as of 2009. This figure reached 50% in largely rural areas such as the Eastern Cape and the Free State.⁴⁷ There is also an external brain drain, with some studies suggesting that as many as one-fifth of South-Africa-born physicians live and work overseas.⁴⁸

Figure 7: Historic health spending trends



Source: The World Bank (2012)
Note: Private health expenditure has been calculated as total health expenditure minus public health expenditure minus external (donor) health expenditure.

Private Health-care Sector

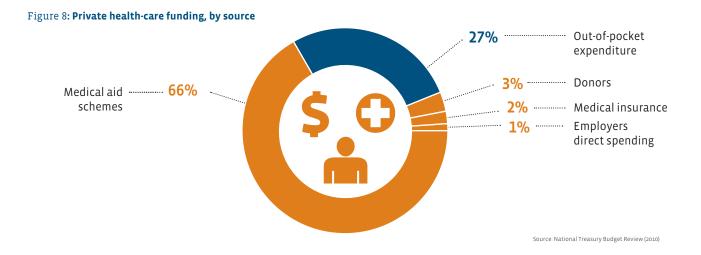
A large sector dominated by medical aid schemes

South Africa's private-sector health-care market is valued at about US\$17 billion.49 A significant share of this market is accounted for by medical-aid schemes (see Figure 8), which provide medical insurance to about 8.7 million people, or about 16.7% of the population.50 Considering that the average premium is around US\$113 per month,51 membership is out of reach for the vast majority of South Africans. However, an estimated 4 million additional people in the formal employment sector have access to some private health care as part of collective employment-based schemes, through which the employer covers the cost of medical insurance for specific ailments.52 An estimated 20.9% of the uninsured population also uses private-sector primary care on an out-of-pocket (OOP) basis.53 Thus, it is arguably more accurate to say that the private sector serves between 35% and 40% of the population, considering that a significant percentage of the population makes use both of private- and public-sector facilities.54

The sector is key to the health-care value chain

The private sector in South Africa is represented along the entire health-care value chain (see Figure 9 on page 63) from research and development to wholesalers, laboratories, and pharmacies. On the demand side, a total of 92 medical-aid schemes offered insurance plans as of 2012.55 Most of these schemes have a closed-membership structure, limited to certain sectors or employers. A total of 14 large openmembership schemes dominate the market.56 There are few medical-aid schemes targeted at low-income households, possibly as a result of a prescribed minimum benefits regulation that compels medical-insurance schemes to guarantee certain minimum benefits to all their members.57

On the supply side, South Africa's health-care sector is relatively sophisticated. A large number of international pharmaceutical companies are present in the country as well as a home-grown pharmaceutical industry, in particular in the field of generics. This includes the only manufacturer of active pharmaceutical ingredients (API) for post-patent compounds in SSA. The distribution of



medicine is increasingly concentrated in the hands of a few large retailers. There is also a strong pool of medical-equipment manufacturers.

Companies along the value chain do supply the private health-care sector but often additionally count the public sector as a primary customer, as in the case of vaccinations.

South Africa is expanding public-private partnerships (PPP) at both the national and provincial levels. Examples include The Biovac Institute (which develops affordable vaccines for the African continent) and the Clicks Helping Hand Trust between the Western Cape provincial government and Clicks, a leading retail pharmacy, which aims to boost child immunisation rates.⁵⁸

Challenges to private-sector growth

Like the public sector, the private health-care sector faces a number of challenges. These include:

A lack of competition, along with high market-entry costs. Private medical schemes, pharmacies and individual health care providers compete for a relatively small share of the population. The high entry-level costs have left several segments of the value chain, including pharmacies and medical-aid schemes, dominated by three to four very large actors.

The implementation of the NHI will pose a number of challenges to South Africa's private health-care sector. One of these is the fact that the NHI as currently planned will make the public sector the sole or at least dominant purchaser of health care for the population at large (under the "single buyer" or "single purchaser" model). This could have significant consequences for the long-term profitability of some private players in the health-care value chain. With a decade and a half to prepare, companies within the private health-care sector should have time to integrate these changes into their business and revenue models.

CASE STUDY

Affordable good-quality primary health care in peri-urban poor communities



This company operates a small network of community clinics that provide primary health-care services

in poor peri-urban areas. For a consulting fee typically between ZAR 100 (US\$9.7) and ZAR 150 (US\$14.5), patients can consult a qualified nurse and receive medicines with which to treat a range of common primary health-care conditions. The clinics also play an important role in preventive care by providing HIV testing, immunisation, family planning and antenatal care, and help address South Africa's increasing NCD burden by offering blood-pressure, blood-glucose, cholesterol, and vision tests. The clinic can also treat chronic illnesses such as diabetes.

From a patient perspective, the clinic's main advantage is that waiting times are considerably shorter than are average waits at public facilities. This saves time and prevents a loss of income as a result of missed work.

Further benefits include career and income opportunities for independent nurses who run their clinics on commercial terms, as well as a reduction of burdens on local public health-care facilities.

The success of the community clinics shows that poor communities represent an underserved market in which people are in fact able and willing to pay for good-quality health care and better access to medicines.

Source: Interview with CEO (Oct. 2013)

Legislative and regulatory policies create reverse incentives in the private sector. These include a rule banning private hospitals from employing doctors, as well as the prescribed minimum benefits policy that limits the opportunity for low-cost medical-insurance schemes.

Further **opportunities** exist along the value chain

Given the constraints and gaps that exist throughout South Africa's health-care system, opportunities exist across the health-care value chain

Expanding private-sector primary health-care services

Securing better access to primary health care (PHC) holds the potential to reduce South Africa's disease burden significantly. Improved access can also have a positive effect on public health generally by increasing early-detection rates and reducing the subsequent cost of treatment. Cost-effective PHC solutions, especially in rural areas, may include mobile clinics and networks of PHC access points headed by nurses. A small network of PHC solutions that charge low user fees and help relieve pressure on the public-sector network could be expanded to serve the growing market in poor communities for affordable primary health care that does not require a visit to the doctor.

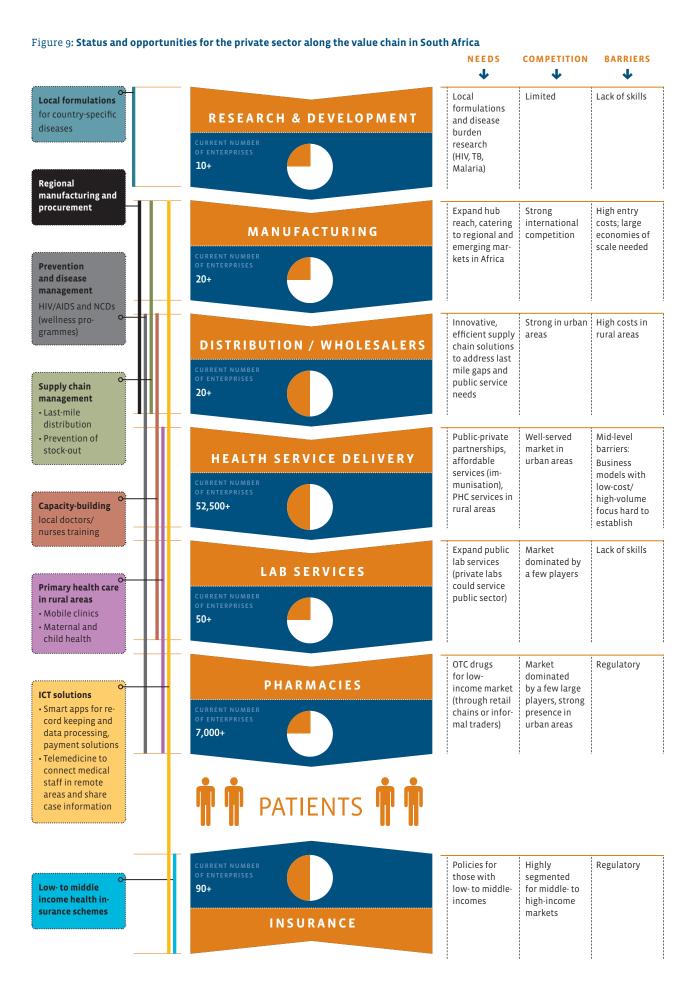
There are also opportunities for public-private partnerships to provide affordable health-services delivery, including immunisations and preventative measures such as male circumcision or pap smears. 60

National Health Insurance

The implementation of the NHI programme over the next two decades will present the private sector with significant opportunities as the health-care landscape is transformed. The NHI is likely to have a far stronger focus on cost control than is currently the case within South Africa's private health-care landscape. This will also shift the onus to more preventative care, and thus provide significant opportunities for the private sector to provide early-detection and other preventative products and services. The NHI will also increase the scope for public-private partnerships, for instance in the fields of hospital management and financial administration, training, immunisation campaigns, and health-care education.

Insurance schemes for lower-income populations

The comparatively high incidence of out-of-pocket (OOP) payments shows that South Africa's lowermiddle-income population represents a large potential market, as it is both willing and able to devote a proportion of its income to good-quality health care. This market could be referred to as the "missing middle", that is, the large numbers of people in South Africa's expanding lower-middle-income classes who desire basic and affordable medicalinsurance plans able to cover some of their healthcare needs. Depending on how regulatory conditions evolve, opportunities to expand this market for basic medical-aid schemes will emerge. There might also be opportunities for financial-services providers to offer medical-savings mechanisms that enable people to manage their medical expenses more effectively.



Supply-chain management

South Africa's stock-out crisis demonstrates the need to improve supply-chain management practices, thus ensuring that a quantity of medicines sufficient to patient needs is available at all times. Particularly in rural areas, this presents opportunities for private-sector companies to create innovative supply-chain solutions, leveraging their logistics and distribution expertise.

Efficient stock management is also a crucial component of health-care delivery. Here too, there are opportunities for private-sector companies to provide integrated and streamlined stock-management solutions that can help reduce inefficiencies and control costs.

ICT solutions

Information and communications technology is playing an increasingly important role in improving both access to health care and the efficiency of health-care delivery. Opportunities for ICT solutions in South Africa include, for instance, the use of new software applications to support record-keeping and data processing, notably in rural areas. Such solutions can be directly applied to improving stock and data management, but also have the potential to improve health outcomes by enabling the public sector to detect infectious-disease outbreaks more quickly, for example. Separately, telemedicine applications can play a role in alleviating the shortage of doctors and trained medical staff, particularly in rural areas. While South Africa is highly urbanised, the significant pockets of the population that do live in rural areas often have poor access to medical personnel or health facilities. Moreover, doctors and other medical personnel may be reluctant to practice in such areas and hard to retain. Telemedicine applications can help eliminate these distance barriers, and enable medical facilities to share information and data.

Preventative care and early detection in response to rising NCD incidences

The private sector can also play a larger and complementary role in the area of preventative health care, specifically in the context of South Africa's rising non-communicable disease burden. Such a focus could help relieve pressure on the public sector, as well as have a positive impact on the cost inflation that is today particularly acute in the areas of hospitalisation and treatment. For instance, the private sector could provide circumcisions (which help reduce HIV infection rates) and pap smears (helping to identify and prevent cervical cancer), 61 and could produce HIV detection kits, which are increasingly affordable and efficient today. Additional significant opportunities will stem from the treatment of NCDs such as diabetes, obesity, low and high blood pressure, and heart disease.

R&D and manufacturing

South Africa's government holds local procurement to be a strategic priority. There are thus further opportunities for expanding local research and development as well as local drug manufacturing. South Africa's relatively well-developed infrastructure and financial markets, along with its accumulated know-how, make it a potential R&D and manufacturing hub for emerging markets in general, and particularly for the fast-growing African continent. The significant role already played by the local pharmaceuticals manufacturing industry today hints at the broader potential for this sector in the future.

Significant room for private-sector growth

The market value of South Africa's private health-care sector is today estimated at around US\$17 billion. However, this market has significant potential for further growth, especially considering the country's position as a regional economic base able to serve the entire subcontinent. Moreover, the country's own fast-growing internal market, with a rising middle class increasingly able to afford private health care, points to significant future opportunities. Along the health-care value chain there is considerable scope for investors – particularly impact investors – to combine financial return with social impact.

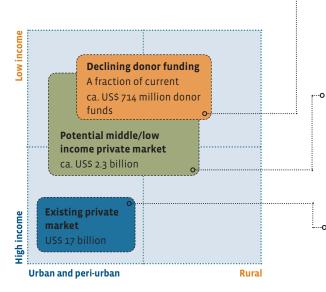
Expanding middle class

The biggest demand for expanded health-care products and services is today in the middle-to-lower-income segment, which consists of the population that is currently not insured but lives above the poverty line. These individuals are urbanising fast and have rising incomes. The potential size of this market is estimated to be as high as US\$4.5 billion, assuming people in this segment visit the doctor an average of three times a year, each time spending about US\$30 (ZAR 300).

Shrinking donor funding will leave gaps to be filled

People living below the poverty line are likely to be served primarily through existing public funding for the foreseeable future. However, the increasing number of PPPs engaging in specific services such as immunisation has expanded the scope for private-sector involvement in this market. Moreover, by serving the middle-income population's medical needs, these partnerships can reduce the burden on an overtaxed public system.⁶²





Source: created by authors.

Assumptions

Reduced donor funding:

The government could leverage private funds to close the gap left by the decline in donor funding. This includes, for example, engaging in PPPs. Donors provided US\$714 million in 2011.

Value of additional low-cost services:

Total population of 49 million

- -16.7% covered by insurance (8.7 million)
- -31% below US\$2.00 per day (PPP) (15 million)
- = 25.3 million "middle" income
- ×3 visits per year at US\$30 each
- =US\$2.3 billion

Existing private market:

The private health-care market is assumed to be equivalent to private health expenditure as a percentage of GDP, or 4.5% of US\$384 billion, for a total of US\$17 billion.

Sources

- 1 CIA World Factbook (2013). https://www.cia.gov/ library/publications/the-world-factbook/geos/ sf.html
- 2 ibid.
- 3 ibid.
- 4 ibid.
- 5 UNDP (2013). http://hdrstats.undp.org/en/countries/profiles/ZAF.html
- 6 HDI is a measure of well being beyond income level and GDP growth. It is a composite statistic of life expectancy, education and income indices used to rank countries according to their human development. 0 = very low development; 1 = very high development. Source: UNDP (2013).
- 7 The World Bank (2012). http://data.worldbank.org/ indicator/NY.GDP.PCAP.CD
- 8 The World Bank (2012). http://data.worldbank.org/indicator/NY.GDP.MKTP.CD
- 9 The World Bank (2012). http://data.worldbank.org/ indicator/NY.GDP.MKTP.KD.ZG
- 10 Standard and Poor's (2013). http://www.stanlib. com/EconomicFocus/Pages/SPaffirmedSouthAfric a'screditratingMar2013.aspx
- 11 The World Bank (2013). www.doingbusiness.org/data/exploreeconomies/south-africa/
- 12 CIA World Factbook (2012). https://www.cia.gov/library/publications/the-world-factbook/geos/sf.html
- 13 Goldman Sachs (2013). Two Decades of Freedom, What South Africa is Doing With it, and What Now Needs to Be Done.
- 14 African Development Bank (2013). www.afdb.org/ en/countries/southern-africa/south-africa/southafrica-economic-outlook/
- 15 The World Bank (2009). http://data.worldbank.org/indicator/SI.POV.2DAY
- 16 Department of Trade and Industry (2013). Broad-Based Black Economic Empowerment Act 53 of 2003. www.thedti.gov.za
- 17 UNCTAD (2013). http://unctadstat.unctad.
 org/ReportFolders/reportFolders.aspx?sRF_
 ActivePath=P,5,27&sRF_Expanded=,P,5,27
- **18** BusinessTech (2013). http://businesstech.co.za/ news/international/45653/the-most-tradedcurrencies-in-the-world/

- 19 xe.com (2013). www.xe.com/de/currency/zarsouth-african-rand
- 20 South African Revenue Service (2012). www.sars. gov.za/AllDocs/OpsDocs/Guides/LAPD-Gen-Go1%20 -%20Taxation%20in%20South%20Africa%20-%20 External%20Guide.pdf
- PricewaterhouseCoopers (2013). Paying taxes 2014
 A comparison of tax systems in 189 economies worldwide.
- 22 The World Bank (2013). Global Financial
 Development Report 2014: Financial Inclusion.
 http://www.worldbank.org/en/news/
 feature/2013/11/11/New-World-Bank-GroupReport-Charts-Road-Map-for-Financial-Inclusion
- 23 Reserve Bank of South Africa (2013). www.resbank. co.za/Pages/default.aspx
- 24 Reserve Bank of South Africa (2013).

 www.resbank.co.za/MonetaryPolicy/Pages/
 MonetaryPolicy-Home.aspx and
 African Development Bank (2013). www.afdb.org/
 en/countries/southern-africa/south-africa/south-africa-economic-outlook/
- 25 The Lancet (2011). Health in South Africa, An executive summary for the Lancet Series and Centre for Development and Enterprise (CDE) Research Paper (2011), no.18.

 Reforming Health Care in South Africa What Role for the Private Sector.
- **26** ibid.
- **27** UNAIDS (2012). www.unaids.org/en/regionscountries/countries/southafrica/
- **28** UNDP (2013). South Africa MDG Country Report 2013.
- 29 Interviews with stakeholders, October 2013..
- **30** UNDP (2013). South Africa MDG Country Report 2013.
- **31** ibid.
- **32** The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS.
- 33 The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.PCAP/countries?page=2
- **34** The World Bank (2013). http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS
- 35 National Planning Commission of South Africa (2011). National Development Plan Vision 2030.

- 36 The World Bank (2012). http://data.worldbank. org/indicator/SH.XPD.TOTL.ZS. Donor funding is at 2.1% of total health funding, totalling US\$714 million.
- 37 Interviews with various stakeholders, October 2013.
- **38** The World Bank (2012). http://data.worldbank.org/indicator/SH.XPD.PUBL.ZS?page=1
- **39** Interviews with various stakeholders, October 2013.
- 40 Department of Health of South Africa (2013). www.doh.gov.za/list.php?type=National%20 Health%20 Insurance and National Health Insurance (2013). www.nhisa.co.za/
- 41 Centre for Development and Enterprise (CDE) (2011). Research Paper no.18.

 Reforming Health Care in South Africa What Role for the Private Sector.

 Nurses: 40,000 in private, 104,000 in public sector.

 Doctors: GPs ca. 10,700–11,300 in public, 6,500 to 7500 in private sector. Specialists: ca 4000–4400 in public and 5000–5500 in private sector.
- 42 The Lancet (2009). The Health system of South Africa historical roots and current challenges and Centre for Development and Enterprise (CDE, 2011). Research Paper no.18. Reforming Health Care in South Africa What Role for the Private Sector.
- 43 Centre for Development and Enterprise (CDE) (2011). Research Paper no.18. Reforming Health Care in South Africa – What Role for the Private Sector
- **44** ibid.
- 45 Interviews with stakeholders, October 2013.
- 46 Reliefweb (2013). Stock outs in South Africa: A National Crisis (November 2013). http://reliefweb.int/report/south-africa/ stock-outs-rock-worlds-biggest-hiv-treatmentprogramme
- 47 Centre for Development and Enterprise (CDE) (2011). Research Paper no.18. Reforming Health Care in South Africa – What Role for the Private Sector.
- **48** ibid. and Department of Health (2013). Annual Report 2013.

- 49 The World Bank (2012). http://data.worldbank. org/indicator/SH.XPD.PRIV.ZS. The private market was calculated as private health expenditure as a percentage of GDP, which in 2011 was 4.5% of US\$384 billion equaling US\$17 billion.
- 50 Council of Medical Schemes (2012). Annual Report 2012.
- **51** ibid.
- **52** Interviews with various stakeholders, October 2013.
- 53 Centre for Development and Enterprise (CDE)
 (2011). Research Paper no.18. Research Paper no.18.
 Reforming Health Care in South Africa What Role for the Private Sector.
- **54** ibid.
- 55 Council of Medical Schemes (2012). Annual Report 2012.
- **56** ibid.
- 57 Centre for Development and Enterprise (CDE) (2011). Research Paper no.18. Reforming Health Care in South Africa – What Role for the Private Sector.
- 58 The Biovac Institute (2013). www.biovac.co.za/ and Clicks Pharmacies (2013). www.clicks.co.za/ Campaigns/HelpingHand/
- 59 Centre for Development and Enterprise (CDE) (2011). Research Paper no.18. Reforming Health Care in South Africa – What Role for the Private Sector.
- **60** Interviews with various stakeholders, October 2013.
- **61** ibid.
- 62 SARPAM / AMIIF Workshop, 14 November 2013.

Methodology

Objective

The objective of this market assessment is to support the investment hypothesis of the Africa Medicines Impact Investment Fund (AMIIF) and identify key private-sector investment themes and opportunities. The expected outcome is to attract foreign and private investment into the sector while reinforcing the important role played by the private sector in increasing access to health care and medicines throughout the region.

The country fact sheets were designed to provide an overview of the investment environment and the private health-care sector in a selected number of SADC countries for potential investors in the Africa Medicines Impact Investment Fund (AMIIF).

Research questions

The following key research questions were developed to guide the research:

Macro-economic environment:

What is the market context?

Health status and system:

What is the health situation?

Private health-care sector mapping

What role does the private sector play in health care? What are the potential business opportunities in the private health-care sector?

Methodology

The report has been developed in two stages: In a first step, the results from desk and field research were summarised in a first draft of the market assessment. This first draft was subject to discussion and review during a one-day multi-stakeholder workshop addressing the role and potential of the private health-care sector in increasing access to health care and medicines. In a second step, a full draft was developed that incorporated feedback gathered during the workshop.

The country fact sheets are based on the input from different sources:

Literature: Literature research was conducted to collect macro-economic and health indicators in international and national databases and to obtain information on companies active in the health-care sector.

Field research and interviews: A number of semistructured interviews were conducted with stakeholders from the pharmaceutical industry, associations, NGOs, and the public sector during field visits in each of the four selected countries. The authors would like to express their gratitude to the following people for giving so generously of their time and insight:

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Communications

Consultation workshop: A one-day consultation workshop was held on November 14, 2013 in Johannesburg with 57 attendees from the private health-care sector, government, academia, and intermediaries to discuss and review the initial findings. Feedback from the workshop was incorporated in the final country fact sheets.

Management consultation

The design, development and execution of the market assessment and the publishing of the final market assessment report have been done in consultation with the management team of:

Oliver Withers, SARPAM

Terry Wyer, Cadiz Asset Management

Scope of data and analysis

The statistics cited in the macro-economic, health status and private health-care sector chapter are drawn from secondary sources. It should be noted that the available data is not complete for each country and that some data sources contradict each other. For socio-economic health indicators that were used for ranking across SADC countries, the same data source was used across profiles. Where no ranking was needed, the most recently available and reliable international or national data was used.

The mapping of private-sector players along the value chain is based on desk research as well as interviews. These data were reviewed and confirmed by local experts during the consultation workshop. The overview, however, cannot guarantee complete data.

The market potential for the private health-care sector has been calculated by drawing on specific assumptions provided in summary at the end of each country profile. These assumptions can be subject to debate, and ultimate results will vary. The authors cannot accept responsibility for the information provided being error-free, comprehensive, or complete.

Acronyms

ACHAP	African Comprehensive HIV/AIDS
	Partnership
AfDB	African Development Bank
AGOA	African Growth and Opportunity Act
AIDS	Acquired Immune Deficiency Syndrome
AMIIF	Africa Medicines Impact Investment Fund
AMSCO	African Management Services Company
API	Active pharmaceutical ingredients
ART	Antiretroviral Therapy
ARV	Antiretroviral Medicine
BEDIA	Botswana Export Development and
	Investment Authority
BMZ	German Federal Ministry for Economic
	Cooperation and Development
BoP	Base of the pyramid
BPOMAS	Botswana Public Officers' Medical Aid
	Scheme
CAGR	Compound annual growth rate
CAM	Cadiz Asset Management
CDE	Centre for Development and Enterprise
CEDA	Citizen Entrepreneurial Development
	Agency
CHAL	Christian Healthcare Association of
C14.4	Lesotho
CMA	Common Monetary Area
DBN	Development Bank of Namibia
DFID	Department for International
FDI	Development
GDP	Foreign Direct Investment Gross Domestic Product
GDP	Deutsche Gesellschaft fuer Internationale
GIZ	Zusammenarbeit
HIV	Human Immunodeficiency Virus
HDI	Human Development Index
ICT	Information and Communication
101	Technology
IFC	International Finance Corporation
LNDC	Lesotho National Development
	Corporation
LSL	Lesotho Loti
MDG	Millennium Development Goals
МоН	Ministry of Health
MoHSS	Ministry of Health and Social Services
NBFI	Non-banking financial institutions
N\$	Namibian Dollar
NCD	Non-communicable diseases
NGO	Non-governmental Organisation
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NHI	National Health Insurance
00P	Out-of-pocket
ОТС	Over-the-counter
PEPFAR	The United States President's Emergency
	Plan for Aids Relief
PHC	Primary health care
PMB	Prescribed minimum benefits
PPP	Public-private partnership
PPP	Purchasing Power Parity
PSEMAS	Public Service Employee Medical Aid
	Scheme
SACU	Southern African Customs Union
SADC	Southern African Development
	Community
SARPAM	Southern African Regional Programme on
	Access to Medicines
SHOPS	Strengthening Health Outcomes through
	the Private Sector project
SME	Small and Medium Enterprises
TB	Tuberculosis
THE	Total Health Expenditure
UHC	Universal Health Coverage
UNCTAD	United Nations Conference on Trade and
	Development
UNDP	United Nations Development Programme

World Health Organization

WHO

About the Authors

Aline Krämer directed and co-authored this study. She is a founder and managing director of Endeva. Over the past seven years, Aline has led and implemented a variety of research and consulting projects for a broad range of organisations, including companies, international organisations, and foundations. Aline led the project on "Bringing Medicines to Low-income markets" for the BMZ, GIZ, and Sanofi, and served as coauthor of the resulting report targeting pharmaceutical companies. She has also developed and facilitated workshops and training sessions on this issue for pharmaceutical companies, NGOs, and development organisations. More recently, Aline served on the team that developed the "Realizing Africa's Wealth" report for the UNDP's Africa Facility for Inclusive Markets. Over the years, Aline has gathered extensive experience on low-income markets conducting field research in Brazilian favelas, for which she gained the Emerald/ CAPES Management Research Fund Award. Aline holds a Masters in International Business and Cultural Studies. She is completing her PhD on "Identifying Lowincome Consumers as a Source of Innovation" at the TUM School of Management in Munich, Germany.

Solveig Haupt is the project lead and lead author of this study. As an associated expert with Endeva, she brings more than 16 years of experience in the pharmaceutical and global health fields. She coauthored "Bringing Medicines to Low-income Markets" for the BMZ, GIZ, and Sanofi. Solveig has worked on this issue with numerous pharmaceutical companies and served as a consultant of the Clinton Health Access Initiative. Prior to becoming an independent consultant, Solveig led as Director Global Access for Pfizer Inc. a pilot in maternal health in partnership with Professor Yunus' Grameen's Kalyan organisation in Bangladesh. As a Global Brand Team Leader and Director World Wide Commercial Development, she introduced three innovative medicines for Pfizer Inc. worldwide. Solveig served as a Pfizer Global Health Fellow in India and gained further experience in global health by conducting research on bed-net replacement strategies in Uganda in collaboration with the Global Alliance Against HIV/AIDS, Malaria, and Tuberculosis. Solveig earned her MBA as a Fulbright scholar at Ball State University in Indiana and has a Masters in Global Public Health (MPH) from New York University.

Pierre Coetzer is a founding associate at Reciprocity and co-author of this study. With an MA in Political Science and a BA in Business Management, Pierre Coetzer started his career in investment banking before joining Nicolas Pascarel in founding Reciprocity. Pierre combines desk research with field work in South African townships on topics such as access to financial services, access to health-care, and support to small entrepreneurs. He has written more than 30 fact sheets, case studies, and international reports researching, analysing, and documenting innovative business approaches in low-income communities. Most recently, he co-authored the UNDP report "Realizing Africa's Wealth" on Inclusive Businesses in Africa (published in May 2013).

Isabel von Blomberg is a co-author of this study. She is a junior consultant at Endeva with a focus on economic research and analysis. She has worked as a consultant for GIZ on private-sector development and for the BMZ. Isabel holds a MSc in Economics from the University of Edinburgh with a focus on Development Economics. Her Master's thesis included an extensive quantitative analysis of informal insurance markets in rural Tanzania that cover compensation for diseases. Isabel has been working for several years for the NGO Solidarity with Orphans, an organisation supporting AIDS orphans in rural Tanzania. Their work includes targeting the ongoing improvement of health-care provision and children's access to medicines.

Nina Cejnar is a senior advisor to this report who brings her expertise as an impact investing specialist. Nina is currently engaged in various consulting projects for social businesses and impact investors with her combined knowledge of both sectors. Previously, she worked with Kois Invest, an impact investor in Belgium, where she helped determine investment strategies and investment management. She was also a principal actor in developing the business plan of a social business targeting the reduction of homelessness in Belgium. Before that, Nina worked as a consultant in Tanzania where she led initial implementation steps of Village Power, a social business in the solar energy sector. As a former business manager with the Alphamundi Group, Nina supported the establishment of two impact investment funds. Other experiences include the support of an MFI and self-sustaining orphanages in Nepal. She holds a Masters of Economics and has achieved CAIA Level I. Nina is on the advisory board of Beyond Capital Fund, and a founding member of the German association Hands with Hands.



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