



USAID
FROM THE AMERICAN PEOPLE



PEPFAR
U.S. President's Emergency Plan for AIDS Relief

SHOPS
Strengthening Health Outcomes
through the Private Sector

Financing Medical Education through the Private Sector



November 2014

This publication was produced for review by the United States Agency for International Development. It was prepared by Nhu-An Tran, Marc Luoma, Piotr Korynski, and Ilana Ron Levey for the SHOPS project.

REPORT

Abstract: From 2010 through 2013, the Strengthening Health Outcomes through the Private Sector (SHOPS) project implemented a series of pilot activities to explore the feasibility of introducing private sector health education financing mechanisms. SHOPS explored private sector solutions to help meet ambitious targets from the U.S. President’s Emergency Plan for AIDS Relief for training new health care workers. This report shares the project’s work with private pre-service education financing in Malawi, Rwanda, Tanzania, and Zambia. The authors capture major lessons from these pilot efforts and provide an evidence-based framework that policymakers and donors can use to improve health education financing.

Keywords: Human resources for health, medical education, private sector financing, pre-service education

Recommended Citation: Tran, Nhu-An, Marc Luoma, Piotr Korynski, and Ilana Ron Levey. 2014. *Financing Medical Education through the Private Sector*. Report. Bethesda, MD: Strengthening Health Outcomes through the Private Sector Project, Abt Associates.

Cover photo: Jessica Scranton

Project Description: The Strengthening Health Outcomes through the Private Sector (SHOPS) project is USAID’s flagship initiative in private sector health. SHOPS focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV and AIDS, and other health areas through the private sector. Abt Associates leads the SHOPS team, which includes five partners: Banyan Global, Jhpiego, Marie Stopes International, Monitor Group, and O’Hanlon Health Consulting.

Download: To download a copy of this publication, go to the resource center at www.shopsproject.org.

Financing Medical Education through the Private Sector

CONTENTS

- Acknowledgments** iii
- Terminology** iv
- 1. Introduction** 1
 - The Human Resources for Health Crisis 1
 - Private Sector Possibilities for Financing Medical Education 2
- 2. The SHOPS Experience** 4
 - Learning Objectives 4
 - SHOPS Activities 5
- 3. Emerging Insights** 16
 - Demand 16
 - Supply 18
 - Policy 20
- 4. Other Initiatives That Expand Education Financing** 22
 - IFC Private Financing Facility for Student Loans 22
 - Crowdfunding Higher Education 22
 - Higher Education Finance Fund 23
 - USAID Development Credit Authority 24
 - Relevance to PSE Financing 24
- 5. Recommendations** 25
 - Recommendations for Governments 26
 - Recommendations for Donors 27
 - Recommendations for Implementing Partners 27
- 6. Conclusion and Next Steps** 29
- References** 31

ACKNOWLEDGMENTS

The authors thank Meaghan Smith of Banyan Global, Caroline Quijada of the SHOPS project led by Abt Associates, and Nida Parks and Ramona Godbole of USAID for their useful and insightful reviews and comments. They thank Estelle Quain of USAID for her support and leadership of this activity, as well as her interest in strengthening pre-service education through the private sector. The authors relied on a team of consultants in Malawi, Rwanda, Tanzania, and Zambia to help implement this body of work. They specifically thank John Mthetwa of Zambia, Tobias Swai of Tanzania, and Ernest Mlenga of Malawi. The authors are grateful for the many students in Malawi and Zambia who candidly discussed their experiences and perceptions about financing pre-service health education. Their perspectives greatly enhanced the authors' understanding of private financing for pre-service education.

TERMINOLOGY

Affordability: The rule that loan repayment should not exceed 20 percent of a borrower's annual income, with a repayment period not exceeding 10 years.

Bonding/conditional student loan: A type of loan in which repayment comes in the form of socially valuable labor. In the health sector, for example, a student's debt would be forgiven if he or she agrees to work in a rural or underserved area for a specific period of time. If the student breaks the agreement, he or she would be required to pay back the loan.

Cost sharing: A process in which parents and students bear the greater share of tuition costs and living expenses.

Credit or loan guarantee: A risk-sharing tool that encourages private financial institutions to lend to higher-risk individuals. In case of a loan default, the guarantor compensates the lender for uncollected loan payments. The level of compensation (loan loss coverage) is determined by an agreement between the guarantor and the lender.

Factoring: A financial transaction in which a business sells its future receivables (income) to a third party (a factor) at a discount. In most factoring transactions, the business owner sells receivables in the form of an invoice; the factor then makes an advance of 70 to 85 percent of the purchase price of the receivable amount. The factor collects the full amount from the customer in due course and pays the balance due to the business owner after deducting a commission and other charges.

Guarantor: An individual, usually a parent or other close relative, who agrees to be legally responsible for repaying a loan in the event of a default on loan payments.

Income-contingent loans: A periodic loan payment obligation fixed as a percentage of the borrower's earnings each year. The repayment may be constant for all income levels or progressively increase for higher income levels. Payments either continue until the loan is repaid or a repayment period is stipulated.

Means-tested financing: A loan program in which borrowers are selected on the basis of the applicant's means (income or economic resources) or the means of his or her family.

Mortgage-type student loans: A loan with payment made over a specified period, usually with equal monthly payments. Less often, payments are graduated so that initial payments do not impose an excessive burden on borrowers. The vast majority of loan programs are of this type.

Real interest rate: An interest rate that removes the effects of inflation to show the borrower the true cost of funds and to show the lender the true yield.

Payment deferral: A loan feature, allowing a borrower to postpone required payments to a later period, usually because the borrower experiences temporary low income.

Secured lending: The borrower pledges some asset, such as a car or property, as collateral for the loan. In the event of default, the creditor takes possession of the collateral and may sell it to regain some or the entire amount originally loaned to the borrower.

Subsidized student loan: A third party—a government institution, private foundation, or some other entity—pays for part or all of the costs associated with the loan. Subsidies may take the form of lower interest rates, a tuition discount, or deferred payment.

Unsecured lending: Any debt or obligation not backed by collateral or a lien on a borrower's assets. Given their higher risk, unsecured loans tend to carry higher interest rates.

Financing Medical Education through the Private Sector

1. INTRODUCTION

The Human Resources for Health Crisis

The World Health Organization estimates that there is a shortage of more than 1 million health care workers in sub-Saharan Africa (SSA) (World Health Organization, 2006). In many countries in this region, health care worker vacancy rates hover near 50 percent. In Malawi, the vacancy rate for nurses is 65 percent (World Health Organization, 2008a). In addition to these high vacancy rates, Africa continues to carry a disproportionate amount of the global disease burden, especially in communicable diseases such as HIV (World Health Organization, 2008b). Despite small gains in helping health care providers enhance their productivity, there simply are not enough health care workers to meet the basic health needs of countries in SSA.

To increase the stock of human resources for health (HRH), or the number of health care workers in a country, a country faces a choice: either increase the inputs into the system or decrease turnover. In recent years, some countries have achieved moderate success in reducing the turnover of health care workers. However, it is clear that to fill vacant posts, countries must increase inputs. Several countries in SSA are seeking to reintroduce diaspora health care providers into their home country health care systems, with South Sudan perhaps best known among them (International Organization for Migration). However, the number of returnees accounts for a small percentage of the number of providers needed. In other countries such as Kenya, emergency hiring plans have successfully re-employed health care providers no longer working in the health care system. While providing hope for future projects, the number of providers deployed in Kenya has been relatively small (830), and the costs have been relatively high (Adano, 2008).



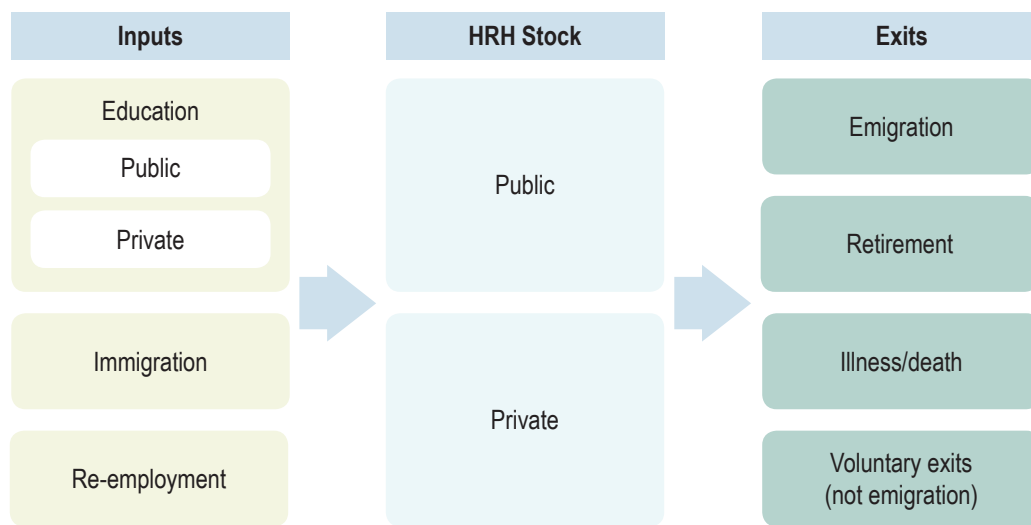
Jessica Scranton

Figure 1 presents a simplified model of the flow of health care workers into and out of the health care system and includes both public and private inputs.

Producing more health care workers through public and private pre-service education (PSE) remains one of the more feasible methods for rapidly increasing the number of workers. In Ethiopia in 2003, the government committed to more than doubling the health care sector's proportion of higher education seats (to 20 percent), resulting in a 106 percent increase in the number of health care workers in the system in only five years (World Health Organization, 2011).

However, increasing enrollment in PSE is a challenging endeavor. In most SSA countries, the public sector's health education system is overburdened and faces a shortage of equipment, facilities, and instructors. With national education budgets constrained, many governments and donors are increasingly looking to the private sector (both for-profit and nonprofit) to help train more health care workers (Patrinos, 2007).

Figure 1. Health workers flow in and out of the health care system



Private Sector Possibilities for Financing Medical Education

Even though the private sector produces only a fraction of the health care workers, its portion is increasing, and sometimes rapidly so. The increase parallels a general trend regarding the private sector’s participation in higher education in SSA (Patrinos et al., 2009). Legislation passed in several African countries in the 1990s led to a rapid increase in the number of medical professionals educated at private institutions. More than 75 percent of the medical schools established in the last three decades are private for-profit institutions. In Angola, Burundi, Côte d’Ivoire, Kenya, and Rwanda, private sector enrollment accounts for more than 25 percent of total enrollment in institutions delivering medical education. In Botswana and Cape Verde, the portion is over one half (World Bank/IFC, 2010).

Private sector educational institutions need reliable funding to attract and retain instructors as well as maintain facilities and buy equipment and supplies, perhaps even more acutely than public sector institutions, which receive large amounts of government funding. In addition, private sector educational institutions face challenges in attracting private financing, even through loans. Banks in developing countries see private institutions and their students as risky lending prospects for loans.

While multilateral institutions such as the World Bank and International Finance Corporation have pioneered some nascent financing strategies (including targeted philanthropy and investment funds), real-world testing and feasibility analyses of these strategies in SSA countries are needed.

Traditionally, government has been the sole funder of PSE in SSA. PSE was typically free or extremely low-cost for those who gained admission, usually through a rigorous testing process. Yet, when the government has been the sole provider of PSE, the entire financial burden of creating more health care providers has rested on the public sector. Even when countries had no medical school, such as in Swaziland, the government bore the burden of overseas education, including transportation and housing, even while recognizing that the majority of students educated abroad would not return to practice in their home country.

With public sector PSE institutions overburdened and unable to meet demand, governments are increasingly looking to the private sector to supply school seats and financing solutions (Patrinos et al., 2009). By permitting private PSE, governments seek to remove themselves and the associated financial constraints as the bottleneck to increasing the HRH stock in their countries. Usually, a public-private

partnership involves government provision of free or very low-cost PSE for a few students who qualify through academic testing, with the remainder trained in the private sector. The partnership performs a regulatory function by accrediting schools and testing graduates.

Public-private blending of PSE can be described in terms of which sector provides the education and which sector pays for it. Unlike the case of health care service delivery, the distinctions between the public and private sectors in medical education are often somewhat blurred. For instance, most governments heavily regulate private PSE, and private PSE institutions often rely on public health facilities for practicum opportunities (Chandani et al., forthcoming 2014).

Nonprofit and faith-based mission schools, for-profit institutions, and, in certain countries, other private regulatory entities such as nursing councils, provide PSE. Ministries of health and ministries of education typically license all private training institutions. In SSA, the degree of private sector involvement in PSE varies. According to the CapacityPlus project, in Malawi and Uganda, faith-based schools train up to 70 percent of nurses and midwives. In Tanzania and Zambia, private PSE trains 30 to 55 percent of nurses and laboratory technicians. Although increasing in scale in SSA, for-profit schools are relatively new in the PSE health system. They face an additional burden of answering to proprietors to show a profit on the considerable investment made in equipment, infrastructure, and salaries.

Even in countries where the private sector funds a relatively small portion of education, this sector can play a role in financing PSE. In several countries, including the four discussed in this report, governments are experimenting with private sector funding mechanisms that help students afford school fees, books, lodging, and other education-related

expenses. Unlike developed countries such as the United States, the majority of countries in SSA have not achieved much success with government-backed student loan programs. Governments are exploring ways to use private sector loan mechanisms to fund students who, in turn, will fund schools, allowing schools to engage more instructors, purchase new equipment, and acquire more classrooms.

To help meet ambitious targets by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) to train 140,000 new health care workers by 2014, the United States Agency for International Development (USAID) Office of HIV/AIDS asked the Strengthening Health Outcomes through the Private Sector (SHOPS) project to help explore private sector solutions to train numerous health care workers. SHOPS undertook a series of pilot projects to explore the feasibility of introducing private sector health education financing

**In Malawi and Uganda,
faith-based schools train
up to 70 percent of nurses
and midwives.**

mechanisms in Malawi, Rwanda, Tanzania, and Zambia from 2010 to 2013. This report captures the major lessons from these pilot efforts and provides a framework that policymakers and donors can use in their attempt to improve private sector health education financing.

This report shares the SHOPS project's experience with private PSE financing in Malawi, Rwanda, Tanzania, and Zambia. The emerging insights section discusses the experience and proposes a framework for private PSE finance based on demand, supply, and policy. The next section describes other initiatives to expand education financing and summarizes current models for education finance, including medical education in emerging economies. Finally, the recommendations section offers guidance to country governments, donors, and implementing partners to facilitate private financing initiatives.

2. THE SHOPS EXPERIENCE

Across the globe, several private sector initiatives exist for financing secondary and post-secondary education. However, the long-term impact and sustainability of these initiatives has not been well-studied. Further, current education financing initiatives tend to focus on undergraduate education or vocational technical training rather than on post-secondary medical education. Concurrently, many SSA governments are shifting from a regime of free universal education to a more market-driven policy for allocating financial assistance to students. These converging conditions made a compelling case for SHOPS to contribute to the existing body of knowledge and explore whether and how private sector interventions could help achieve public policy goals.

Learning Objectives

Through several activities funded by the USAID Office of HIV/AIDS in the area of HRH PSE financing from 2010 to 2013, SHOPS sought to answer the following questions:

- Are student loans a feasible method for financing PSE?
- What elements need to be in place for student loans to succeed?
- What should be the features of a viable financial product?
- Where do government subsidies end, and where does private financing begin?

SHOPS developed an analytic framework to explore the issue of financing along three dimensions: demand, supply, and policy. Table 1 presents the key research questions under the PSE financing body of work.



Jessica Scranton

Table 1. Analytic Framework for Student Financing

Demand for Student Loans	Supply of Student Loans	Policy Environment
How are students currently financing their education?	What types of financing programs are available to students, including subsidized and unsubsidized loans, scholarships, or bonded loans?	What is the government's policy on higher education? Has the government instituted a policy of universal access to higher or continuing education?
What is students' (and parents') willingness to borrow for medical education?	Are banks interested in offering student loans? What are the terms of the loans? What are some existing financial products for education (savings and credit)? What are the terms and conditions of these products?	Has government policy caused any distortion in the market in terms of the willingness to pay for education? Are PSE financing decisions made for political reasons that should be considered?
How much, for what purpose, and under what terms would students borrow for their education?	What is the total cost of borrowing for students? Do commercial products meet students' needs?	What is the government's policy for education financing? What types of financial aid programs are in place, including public loans, scholarships, or conditional loans or bonding? What has been the country's experience in running these initiatives?
What is students' capacity to repay loans for PSE?	What is the role of schools? Can they be a source for financing? How are schools currently financing their operations? How widespread is the use of endowments or alumni giving, tuition fees, and external financing (public and private)?	What is the government's attitude toward private medical training institutions and the role of private financial institutions in supporting medical education?

SHOPS Activities

SHOPS conducted PSE financing assessments and studies in four African countries with significant shortages of health care professionals: Malawi, Rwanda, Tanzania, and Zambia (see Table 2). At the time, the countries were in various stages of reforming their respective higher education policies and determining how higher education would be financed nationally. The table summarizes the density of the health workforce in each country.

SHOPS used four criteria to select countries for pilot work:

1. High demand for mid-level professional health care workers (clinical officers, laboratory workers, nurses, and midwives)
2. Existence of private medical training institutions (for-profit and nonprofit) or an opportunity to expand the private sector's role in medical education
3. Availability of financial services, including banking institutions that were receptive to developing or replicating student financing products
4. Potential for policy development work or programmatic linkages with the public sector to ensure sustainability

Table 2. Summary of Health Workforce Density (per 1,000 population)

Country	Physicians	Nurses and Midwives	Pharmacy Personnel	Laboratory Workers	Community and Traditional Health Workers
Malawi (2009)	0.019	0.343	0.016	0.037	0.732*
Rwanda (2010)	0.056	0.689	0.006	0.085	1.48*
Tanzania (2007)	0.088	0.235	0.004	0.013	0.001
Zambia (2010)	0.066	0.784	0.025	0.043	0.732**
OECD Average (2010)	3.1	8.7	n/a	n/a	n/a

Source: WHO Global Health Observatory Data Repository

OECD = Organization for Economic Co-operation and Development

*2008 data

**2004 data



Jessica Scranton

The following is a summary of the HRH situation in each country, SHOPS activities, and major findings.

Malawi

Between 2004 and 2009, the government of Malawi implemented an emergency human resources plan to address the severe shortage of health care workers. As a result, the total health care workforce across 11 high-priority health cadres increased by 53 percent, from 5,453 in 2004 to 8,369 in 2009. During that period, the capacity of training institutions increased, with some colleges doubling their intakes. In addition, health care staff retention improved in response to a 52 percent salary top-up across the 11 high-priority cadres (Malawi Health Workforce Observatory, 2010).

While Malawi's HRH situation has moved past the crisis stage, the country still faces challenges associated with an absence of sustainability plans, a generally weak national health system, rapid population growth, and a continuing high burden of disease—all of which contribute to an ever-increasing need for health care workers (PEPFAR, 2013). The number of established positions across the health sector increased from 9,568 to 27,599 over a single year and created significant vacancies in the system, particularly for physicians, nurses, clinical officers, and laboratory and pharmacy technicians. In addition, new guidelines for antiretroviral treatment and the prevention of mother-to-child transmission of HIV Option B+ treatment have increased the need to train more health care workers to meet a rising demand for treatment, which is expected to double in the next five years.

One of the core challenges in addressing Malawi's human resources shortage is the country's inability to produce and retain an adequate number of health care workers (Malawi Health Workforce Observatory, 2010). The Christian Health Association of Malawi (CHAM) is a nongovernmental umbrella organization of health facilities owned and operated by Christian churches in Malawi. CHAM facilities provide health services and train health care workers to staff public and faith-based facilities throughout the country. The 10 training institutions affiliated with CHAM deliver an estimated 40 percent of overall health care worker PSE. CHAM's nursing and midwifery pre-service training produces 77 percent of all nursing

personnel in Malawi (Pearl, 2009). An estimated 600 health care workers—including laboratory technicians, nurses, midwives, and counselors—enroll annually in CHAM's training institutions. In 2009, over 500 health care professionals graduated from these training institutions (Pearl, 2009). Among scholarship recipients attending CHAM PSE institutions, about 40 percent of graduates work for CHAM and 60 percent for the public sector.

One determinant in the production of new health care workers is the affordability of PSE. Historically, most enrollees have relied on government scholarships or out-of-pocket payments to fund their training. However, a 2011 assessment of Malawi's private health sector conducted by SHOPS revealed a high degree of uncertainty about the government's plans for financing PSE.

According to administrators at CHAM schools, approximately 90 percent of CHAM students receive government scholarships. Since the government funds CHAM training institutions directly for students on scholarship, the suspension of scholarship funding by the government would directly impact CHAM's ability to continue its operations. The average tuition and board is \$1,991 per year. Through the scholarship program, the government pays \$1,783, and the student directly contributes \$208.

Building on findings from the SHOPS private health sector assessment, the project conducted an assessment on financing PSE for medical students in Malawi. The objective was to determine the feasibility of introducing student loans as an alternative source of financing, particularly for the students of nursing colleges in the CHAM network. A market research study accompanied the feasibility assessment, examining the demand for financing among 294 students from nine out of 12 medical colleges offering health-related certificates, diplomas, and degrees.¹

¹ Seven of the nine colleges belong to CHAM; the other two are government health colleges.

Key findings

The market research study concluded there is strong demand for medical training and a need for financing, but it also identified several barriers to launching a student loan program. The barriers include a lack of government loan guarantees, an unclear higher education policy environment, difficult economic conditions in Malawi, and financial institutions' unwillingness to undertake long-term unsecured lending. Moreover, the negligible rate of loan recovery in the student loan program (0.41 percent) suggests the persistence of a culture of nonrepayment and students' sense of entitlement to free education (Korynski and Smith, 2012). In addition, Malawi's politicization of higher education, whereby loan forgiveness is linked with social stability, further reinforces a culture that is less than conducive to launching a student loan program. Nevertheless, the study showed that students are willing to borrow for medical education and have the capacity to pay more than the current cost-sharing amount, equivalent to 10 percent of tuition.

The results of the assessment demonstrate that student loans can be feasible if certain conditions are met, notably the announcement of a clear government policy on student loans and banks' willingness to provide longer-term lending. Currently, the government of Malawi has no laws on student loan policies or the financing of CHAM colleges. The Ministry of Education has submitted draft legislation on student loans, but it is not clear if the proposal applies to both public and private institutions.² Student loan financing may be an option worth exploring if the Ministry of Health, in coordination with other government agencies and stakeholders, drafted a policy that provided the basis for regulations and legislation on student loans. Such an effort would present a good opportunity to clarify the meaning of free education, establish clear cost-sharing principles, and develop incentives for repayment or sanctions for nonpayment.

SHOPS also concluded that CHAM colleges could reexamine their operational models, restructure their non-core functions, and develop new sources of funding to reduce their dependence on government funding. Access to short-term financing for the colleges in the form of overdraft facilities or factoring³ of government receivables could be structured to smooth out cash flow and prevent school closures.



Jessica Scranton

Nearly 80 percent of students expressed a willingness to borrow to complete their education in the prescribed time.

² In 2009, when the emergency HRH plan funded by the U.K. Department for International Development ended, the Ministry of Health cut tuition assistance to CHAM training institutions. As a result, CHAM experienced a 50 percent reduction in the number of enrollees.

³ Factoring allows a business entity or organization to borrow against future receivables (income). In Malawi, the government transfer of funds to schools is often delayed, causing several schools to close due to lack of funds. To avoid this situation, CHAM could "sell" its receivables in the form of an invoice to a bank (the "factor"). The bank would make an advance of 70 to 85 percent of the receivable amount, collect the full amount from the government of Malawi, and pay CHAM the balance amount after deducting a commission and other charges.

Rwanda

The HRH situation in Rwanda is among the most challenging anywhere, given the legacy of the 1994 genocide and the subsequent social and economic chaos (Africa Health Workforce Observatory, 2009). Since 1994, the government has focused on rebuilding a health system that restores the number of health care workers to pre-1994 levels and adopts HRH standards at the level of middle-income countries.

Rwanda has 30 institutions of higher learning, of which 17 are public. Enrolled students, about 63,000 in 2011, are equally distributed between public and private institutions. One medical school operates within the National University of Rwanda, enrolling about 250 to 270 students per year. Rwanda's five nursing schools (one of which is private) account for a total enrollment of 250 students per year (Republic of Rwanda Ministry of Health, 2011). With a current ratio of 0.56 doctors and 6.89 nurses for each 10,000 population, compared to the Ministry of Health's goal of 10 doctors and 20 nurses for every 10,000 population by 2016, the production of physicians would have to increase by 203 percent and the production of nurses by 54 percent to meet the Ministry's goal.

The government has played a major role in funding medical education; in fact, 70 percent of students enrolled in medical school receive tuition assistance. The government also operates a student loan program through the Student Financing Agency for Rwanda, which makes small loans to qualifying students (those receiving government tuition support) for living expenses. While many students have benefited from the loans, the agency lacks the resources to enforce repayment and make collections. Thus, repayment has been below five percent.

Over the course of the SHOPS investigation, HRH growth in Rwanda encountered a major obstacle: a change in government policy that reallocated financial resources toward primary education and vocational training while drastically reducing scholarships and other funding for higher education. Hence, SHOPS had a timely opportunity to explore alternative sources of financing for medical education.

Jessica Daly



The Rwandan government aims to restore the number of health care workers to pre-1994 levels and adopt human resources for health standards at the level of middle-income countries.

Key findings

Initially, SHOPS planned to explore a potential partnership with the Urwego Opportunity Bank and Vittana, which offered a vocational student loan for full-time students in their last year of education in four universities. However, an assessment conducted by SHOPS revealed that the current and planned loan products offered by financial institutions did not meet the full range of student financing needs, particularly long-term loans to be paid back over time from future earnings. Moreover, only 14 percent of the general population has access to formal financial services (FinMark Trust, 2008), so banks would rather focus on short-term, secured market opportunities rather than long-term, unsecured student loans.

Accordingly, the Ministry of Health asked SHOPS to explore the potential of introducing a new type of student loan that would increase cost sharing and decrease the burden on government funding. As a first step, SHOPS examined the affordability of loans for medical students as an indicator for the broader feasibility of a student loan program. The project analyzed three student loan scenarios (see Figure 2).

Based on the assumption that loans must be affordable to students (no more than 20 percent of annual income allocated to loan repayment and a maximum 10-year repayment period), the analysis showed that either a full loan for the last two years (scenario 2) or a partial loan for five years (scenario 3) were the most feasible options. In either case, some government subsidies would be required to keep the size and cost of the loan manageable. Maintaining manageability would require the government to fund the first four years of medical school in scenario 2 and to subsidize interest rates in scenarios 2 and 3. Market rate loans were not affordable under any of the scenarios.

Figure 2. Three scenarios for financing pre-service medical education

Scenario 1	Year	1	2	3	4	5	6	
	Financing	Full tuition loan						
Scenario 2	Year	1	2	3	4	5	6	
	Financing	Self-financing or government scholarship				Full tuition loan		
Scenario 3	Year	1	2	3	4	5	6	
	Financing	Self-financing	Tuition loan (25%)					
			Self-financing (75%)					

Tanzania

Tanzania has one of the lowest health care worker-to-population ratios in SSA. According to the government's HRH strategic plan for 2008 to 2013, the shortage of health care professionals in the public sector ranges from 59 percent at health centers to 66 percent at regional hospitals. Strikingly, medical training institutions experience the highest shortage of staff at 75 percent. Within the private sector, the shortage of medical personnel is even higher, at 86 percent at health centers and 87.5 percent at hospitals (Tanzania Ministry of Health and Social Welfare, 2008).

Of the 27 universities and colleges under the jurisdiction of the Tanzania Commission for Universities, six have medical programs, and three of those are private universities: Hubert Kairuki Memorial University (HKMU), International Medical and Technological University, and the Weill Bugando University College of Health Sciences. Among the 57 medical training schools with at least provisional accreditation by the National Accreditation Council of Technical Education, nine are private medical training schools—four nursing schools, three clinical offices, and two pharmacy schools (White et al., 2013).

The government of Tanzania provides some level of financial assistance to all medical training institutions. Its Higher Education Student Loan Board (HESLB), established in 1994, provides annual government loans of up to \$1,613 to public and private health science students pursuing advanced or higher diplomas and degrees (dentist, medical doctor, nurse, pharmacist, and veterinarian). HESLB makes tuition payments directly to private medical training institutions (PMTIs) and makes quarterly payments to students for expenses such as housing, books, and field costs. The higher the number of enrolled students, the higher the payment made to the school. However, several challenges undermine the capacity of HESLB to support the growth of PMTIs. First, use of the loans is restricted to attendance at private, fully accredited universities, not at mid-level diploma or certificate PMTIs.

Second, HESLB loans do not adequately cover PMTI tuitions. Third, given the low repayment rate for public loans (42 percent), HESLB officials do not expect the loan amount ceiling to be raised in the near future (White et al., 2013).

Student tuition payments comprise the largest share of a PMTI's revenue. As PMTIs increase tuition to pay for instructors and investments such as infrastructure, tuition costs become more burdensome for students. Several PMTIs, even well-established institutions, are experiencing financial difficulties because of affordability issues. For example, HKMU must rely on an overdraft facility⁴ at 21 percent interest to cover monthly expenses, and the Mount Ukombozi PMTI addresses cash-flow constraints by relying on support from its affiliated hospital. As noted, PMTIs receive some government support based on the number of enrolled students. However, the assistance is insufficient to cover costs; in addition, the timing of payments is often unpredictable. If PMTIs are to survive and grow, they must be able to obtain revenue from sources other than student tuition and government support.

⁴ Establishing an overdraft facility with a bank allows a business to use or withdraw more funds than it has in its account, up to a specified maximum negative balance. Such a facility can be useful in covering short-term cash flow constraints.

In June 2012, SHOPS began short-term technical assistance to banks and PMTIs in Tanzania to address policy⁵ and operational issues related to student financing of medical education, along with improvements in PMTI operational performance. The goal of the technical assistance was (1) to initiate steps that would help increase the number of students graduating from PMTIs by reducing the number of students who leave school because of their inability to pay, and (2) to diversify PMTI revenue.

SHOPS found that most financial institutions were not interested in lending to students because of a perceived high risk in the absence of a government guarantee and students' lack of income while enrolled in school. During a preliminary assessment conducted by SHOPS, a few banks expressed interest in developing a parent loan similar to a

consumer loan and based on salary deductions. SHOPS provided technical assistance to Exim Bank and Akiba Bank to pilot a loan product to parents of students at HKMU and the Royal Pharmaceutical Training Institute. With this product, banks would lend to parents, seen as lower-risk borrowers, to finance the education of their children.

⁵ SHOPS initially planned to work with HESLB to reexamine its policies regarding medical training loans, such as a policy that prevents students seeking diploma and certificate programs in health care from receiving HESLB loans. Another consideration was to increase the maximum annual loan amount as well as the number of scholarships and grants for private medical sector students. However, given that any proposed changes to HESLB policies would have required long-term parliamentary approval, SHOPS did not undertake any policy reform activities.

Sonnie Choi



The Tanzanian government provides some level of financial assistance to all medical training institutions.

Key findings

Akiba Bank had initially planned to offer a salary loan product (already in its portfolio) to parents of medical students at HKMU and other PMTIs. The bank indicated to SHOPS that, following the bank board's approval of the loan product at the end of 2012, it would begin actively marketing the loan to parents of students attending the targeted PMTIs. However, upon review of its loan portfolio at the end of 2012, Akiba Bank determined that the salary loan product was not profitable and therefore would not be available in any form. This decision effectively halted the parent loan product being offered to the public.

Exim Bank decided to use an existing savings product, Haba na Haba, which allows individuals to borrow so long as they use their own savings as collateral. (A minimum of six months of savings is required as collateral.) Unlike Akiba, Exim was interested in marketing the product to several medical schools in Tanzania. Despite the country-wide marketing of its product, Exim was slow in marketing it directly to parents and students at targeted PMTIs. However, the bank expressed interest in receiving support from SHOPS to design a marketing campaign. The bank's reluctance may indicate that the institution does not view parents and students as a profitable market segment and thus, not worth targeting without some donor-supported outside assistance.

In addition to assisting with loan products, SHOPS worked with HKMU to identify several revenue-generating and fundraising ideas: forming an alumni association, offering continuing medical education for doctors and nurses, and developing a health research and consulting services bureau at the institution. HKMU included all of these activities in its strategic plan and, with the support of SHOPS, initiated the formation of a fee-bearing alumni association. HKMU has also started to offer some continuing education programming. Tanzania's demand for such programming is limited in that most continuing education programs take the form of short lectures delivered at no charge.

Zambia

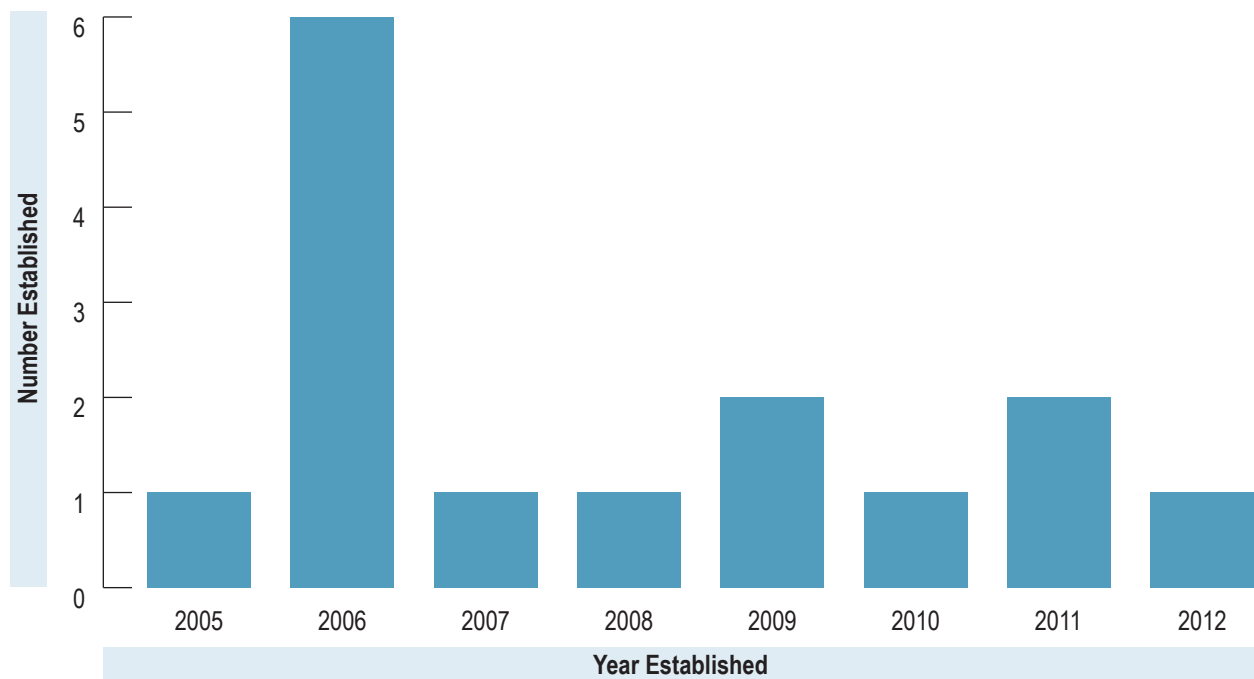
With a population of approximately 13 million people, Zambia has doctor and nurse population ratios of 0.07 doctors and 0.60 nurses per every 1,000 persons (Mwanzaa, 2010). The major cause of Zambia's HRH crisis is the emigration of Zambian medical personnel to developed countries outside Africa and to more developed countries within Africa, in response to Zambia's low salaries, poor working conditions, and ineffective retention policies (Makasa, 2008). Another significant factor in the HRH shortfall is Zambia's inability to increase the production of trained health care workers.

In recent years, Zambia has seen the establishment of several PMTIs, with the largest growth in 2006 (see Figure 3). As of July 2012, 15 PMTIs in Zambia were operating, including 10 that trained nurses and midwives, two that trained medical doctors, two that trained clinical officers, and one that trained pharmacy technologists (Mthetwa and McKeon, 2012). Increasingly, PMTIs are training a significant number of medical personnel in Zambia, particularly nurses, admitting 1,165 students per year out of a total of 2,350 annual entrants. However, a 2012 SHOPS assessment revealed that these PMTIs face significant growth and sustainability challenges.

Zambia provides large subsidies for medical education in public medical training institutions. Students receive 90 percent of tuition fees, a monthly living allowance, and other allowances. However, demand for enrollment in public institutions far outstrips supply. Students who attend PMTIs receive no government assistance and must fund their own education. Even though the General Nursing Council, which regulates nursing schools, has capped the amount of tuition that private nursing schools may charge, many prospective students still cannot afford it. The development of a student loan program could make private medical education more affordable, while allowing schools to generate sufficient revenue to expand and become sustainable.

In November 2012, SHOPS conducted an organizational assessment of 13 of the 15 PMTIs in Zambia, examining the institutions along 11 dimensions that included understanding the external environment, governance, planning, business management capacity, use of external financing, profitability, curriculum development, and staffing. Additionally, SHOPS interviewed representatives of financial institutions to determine the institutions' interest in financing PMTI student tuition and providing loans to PMTIs. To complement the assessment, the project conducted a structured field survey of 323 students attending PMTIs to determine the demand for financing.

Figure 3. About one to two PMTIs were established annually from 2005 to 2012



Key findings

The organizational assessment found that most PMTIs in Zambia exhibited deficiencies with respect to governance, profitability, access to external financing, and infrastructure or training resources. PMTIs receive no support from the government in terms of operational subsidies or scholarships. Consequently, the institutions rely on tuition payments to cover operating expenses, with a margin for profit. The SHOPS project's research found that, for most PMTIs, at least 40 percent of enrolled students experienced difficulty in making tuition payments and approximately 30 to 40 percent of tuition goes uncollected.⁶

The assessment's authors surmised that government support for student loans would help mitigate the difficulty faced by private medical students in paying their tuition. A student loan program for private medical education would not only reduce the number of students who drop out of school because of lack of funding, but would also increase PMTIs' financial viability.

On the demand side, the SHOPS survey results showed that students highly value their education, with 79 percent expressing a willingness to borrow to complete their education in the prescribed time rather than prolonging their education to obtain sufficient financial resources. However, students' lack of borrowing experience coupled with their low level of financial knowledge points to the need for further testing and cross-validation of students' loan preferences against the financial mechanisms currently offered in the public and private sectors (Tran, 2012).

⁶ While policies for dealing with delinquent tuition payments vary, most PMTIs require 50 percent of tuition to be paid before a student may begin training.



Jessica Scranton

3. EMERGING INSIGHTS

As Table 3 shows, most SHOPS activities related to HRH have addressed supply issues,⁷ with some exploration into the demand and policy aspects of education financing. This section discusses the major insights gleaned from these activities along the analytic framework’s three dimensions: demand, supply, and policy.












⁷ Supply in this context comprises potential providers of financing that may include government institutions, financial institutions, and medical training institutions.

Demand

Students have the ability to pay and a positive attitude toward borrowing, yet are risk-averse.

In Malawi, results from a demand survey of 294 medical students showed that students have the ability to pay for education and are able to pay a higher cost-sharing fee than the required 10 percent level (\$113). In fact, students are more likely to pay more for their education when the government offers no subsidy. When the government offers a subsidy, the amount that students claim to be able to pay is *lower* by an average of \$40 to \$55 (Mlenga et al., 2012). In Zambia, 73 percent of surveyed students self-finance their medical education through their own savings (19 percent) or their parents’ resources (54 percent).

Table 3. Summary of SHOPS HRH Interventions

Country	Demand	Supply	Policy
Malawi			
Rwanda			
Tanzania		  	
Zambia		 	



Research/feasibility study



Product design



Training



Technical assistance

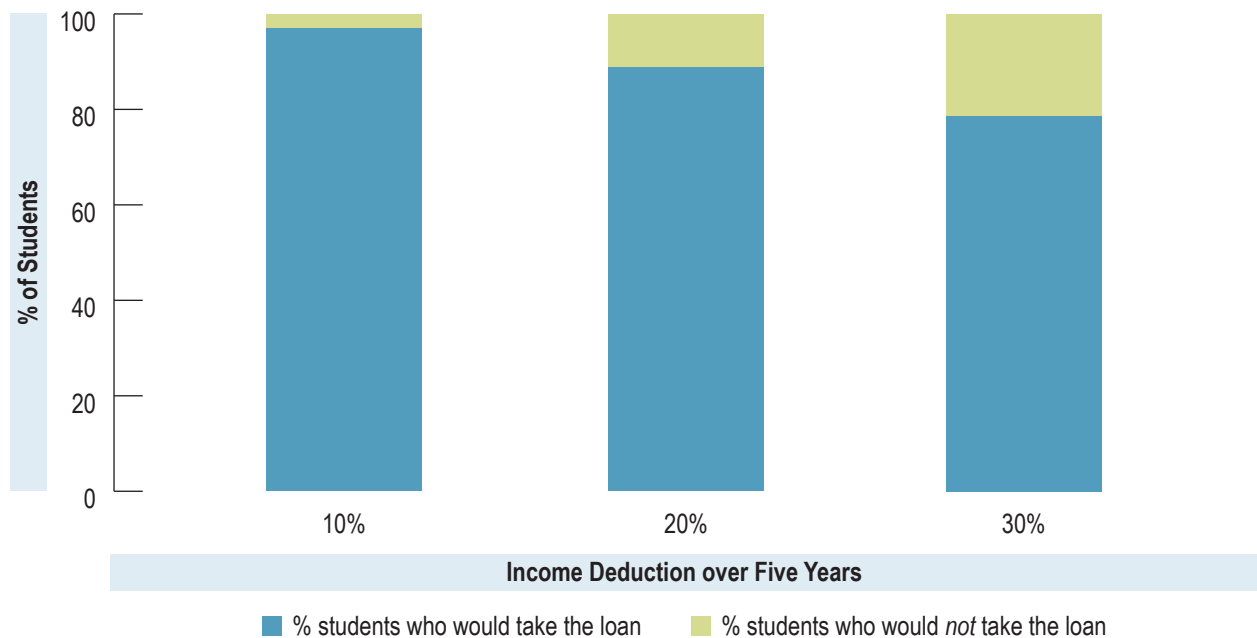
In general, students have a positive attitude toward borrowing for education. In Malawi, 54 percent of surveyed students have a positive to very positive attitude while, in Zambia, 60 percent of 323 surveyed students expressed a positive to very positive opinion about borrowing. Students placed a high value on education, with 65 percent of students in Malawi and 64 percent in Zambia viewing loans as an opportunity to reach their educational goals. They expect higher salaries upon graduation and receipt of professional credentials.

Despite a positive outlook on borrowing and employment prospects, students remain risk-averse and are willing to borrow only modest amounts. In Zambia, students prefer to pay back loans within an average of four years. In Malawi, students are willing to accept a 10 to 20 percent deduction from their monthly income to repay a loan, on average. Figure 4 shows that, under the 10 percent payback option,

97 percent of students expressed a willingness to take a loan for their education. However, the percentage drops to 89 percent under the 20 percent payback option and further decreases to 79 percent under the 30 percent payback option.

In Malawi, willingness to repay appears to be weak. Even though a high proportion of students view a loan as an opportunity (65 percent), many students also believe that they have a right to an education (18 percent) or view education as an entitlement (49 percent). However, nearly 50 percent of students in Zambia view an education loan as a privilege, and only 24 percent consider a loan as an entitlement. The difference in students' perceptions is likely attributable to the government of Malawi's history of promoting free education and conditional scholarships (in the form of loans) as well as to recent donor programs that fund scholarships.

Figure 4. Malawian students were most likely to take loan with 10 percent income deduction repayment option



N = 294

Financial literacy can influence a student's attitude toward borrowing and the willingness to take a loan.

In the Malawi demand study, a regression analysis tested the correlation between students' financial knowledge and their willingness to borrow, as well as the correlation between students' attitude toward borrowing and willingness to borrow. The data show that low financial knowledge can have a negative effect on students' willingness to borrow for their education. In a 10 percent income deduction repayment scenario, the level of financial knowledge does not seem to have any effect on willingness to borrow. However, the 20 and 30 percent income deduction repayment scenarios appear to have an adverse effect on those with low and average financial knowledge regarding their willingness to borrow.⁸ For those with adequate financial knowledge, there is no negative effect among the different repayment scenarios.

Analysis of a student's financing needs should consider the total cost of education, including tuition, fees, and living expenses.

In Malawi, many students (93.8 percent) are aware that the cost of education exceeds the tuition and fees charged by schools. Schools are usually required to provide food and accommodation for students. When asked whether they would prefer to be a residential student (pay full school fees) versus a nonresidential student (pay half the school fees and be responsible for their own food and accommodation), students were divided. Over half (53 percent) of surveyed students indicated that they would pay the residential fees because they believe that the food and accommodation costs would be higher if they paid on their own. The remaining students said that they would prefer to pay their own living expenses. The divergence suggests that the level of existing subsidies could be restructured to better reflect students' needs.

Supply

Private financial institutions are reluctant to provide long-term education loans and prefer to provide short-term loans only if fully secured.

In Tanzania, commercial banks are not willing to invest in developing a loan product for financing education. After several months of technical assistance provided by SHOPS, both Akiba and Exim Bank decided to offer an existing product that was suitable for parents' use to pay fees, though the loan was not specifically tailored to education.

Pre-service education can be financed through public-private partnerships and hybrid models.

Given the unique characteristics of student loans, it is important to consider public-private partnerships and hybrid models for PSE financing. While a government may not be able to rely on the private sector to fully finance education, targeted subsidies could leverage and complement private and self-financing.

Banks appear to prefer lending for the last one or two years of studies, or for part-time studies, rather than covering the full tuition cost of a medical education.

In Rwanda, Urwego Opportunity Bank offers two types of loans at a maximum amount of \$2,500 for up to two years. The career loan, for employed students with two years of studies remaining, offers no grace period for repayment. However, the vocational loan, which is aimed at full-time students in their last year of studies, requires a cosigner with a permanent income and offers a one-year grace period.

In Zambia, the Indo-Zambia Bank and First National Bank offer student loan products. The Indo-Zambia Bank student loan is for individuals working toward a degree or diploma, or enrolled in vocational school. The maximum repayment period is two years without

⁸ A larger sample size would be needed to confirm the statistical significance of these results.

a grace period, and loans bear market interest rates. Given that medical students are not employed during pre-service training, the loan's short repayment period and absence of a grace period make the product unaffordable and insufficient to meet the full needs of medical students. The FNB student loan is for individuals pursuing studies in higher learning and covers tuition fees as well as books. The repayment period is determined by the individual's personal risk profile and the term of the loan. However, to qualify, the student needs to have a parent or sponsor who is employed or self-employed and who can demonstrate a history of on-time repayment.

All the above loans cover tuition expenses rather than both tuition and living expenses. Therefore, full-time medical students must seek other sources of funding to cover the cost of food, accommodation, and books.

The design of a student loan product should take into consideration students' perceptions of affordability.

Given the low level of financial literacy and high level of risk aversion among medical students surveyed in Malawi and Zambia, student loans should be designed to be perceived as affordable for the given country context. The demand survey in Malawi showed that affordability means a monthly loan repayment that does not exceed 20 percent of monthly income, likely reflecting Malawi's overall high levels of poverty.

Important cost factors to consider when examining the acceptability of a student loan include:

- **Grace period for repayment.** Full-time medical students have no sources of income. Therefore, any loan without a grace period must be repaid either by parents or a cosigner with disposable income. Ideally, loan terms should include a grace period for the interest and principal, though commercial banks are likely to require at least a monthly interest payment. Total deferral of loan payments would require some type of government subsidy or guarantee.
- **Market versus subsidized interest rate.** A loan at the market interest rate would be costly, especially if interest charges were to

accumulate over the loan period. For instance, in the SHOPS project's projections prepared for Malawi, if a student borrows \$95 a year for three years at the market rate of 36 percent, and the interest is compounded annually, the amount owed at the end of the student's studies would total \$607. At a subsidized interest rate of 18 percent, the total debt at graduation would be \$414, a significant difference. If loans are administered through a commercial bank, the government would need to subsidize the differential interest rate costs.

- **Mortgage-type versus income-contingent loan.** The results from the Malawi and Zambia surveys suggest that students seem to prefer an income-contingent loan, whereby the monthly repayment is a fixed percentage of income until the loan is paid off rather than a mortgage-type student loan in which the borrower pays a fixed amount over a set period. The first option limits a graduate's debt burden but can mean a longer repayment period and higher interest.
- **Timing of loan.** The Rwanda feasibility analysis revealed that student loans for the last two years of medical school are far more affordable than



Jessica Scranton

loans for the full six years of medical school, since four fewer years of interest accumulate on the loan capital. However, the two-year loan arrangement would require various options: students would have to pay for the first four years of medical school, the government would have to provide some type of subsidy, or the student and the government would have to enter into some type of cost-sharing arrangement.

Private medical training institutions can play an integral role in producing health care workers if the institutions are supported by adequate policy, training, and financing.

In Zambia, where PMTIs do not receive any support from the government, tuition payments must cover operating expenses, with a margin for profit. For most training institutions, at least 40 percent of enrolled students experience difficulty in paying tuition. Most PMTIs now require students to pay 50 percent of their tuition before they begin their training. Such a practice could lead to a reduction in enrollment, worsening the financial viability of PMTIs. Government support for student loans could help ease student difficulty in paying tuition.

In Malawi, the CHAM network of colleges enrolls 60 percent of pre-service medical education students in

the country. However, CHAM faces several capacity and financing issues. Its colleges currently operate as full boarding schools, with at least 40 percent of all operating expenses allocated to the provision of food for students. The CHAM business model has resulted in school closures when the government delays its payments. CHAM's dependence on government funds could be reduced if the network received support to revise its operational model, restructure its non-core functions (such as catering), and develop new sources of funding. In addition, access to short-term financing for the colleges, such as overdraft facilities or factoring of government receivables, could augment cash flow and prevent closures.

Policy

Clear and consistent government rules and policies for student education financing are fundamental to the success of student loans.

In Rwanda, student financing and the financing of higher education was a topic of government debate in 2011. A newly proposed policy seeks to introduce cost sharing by students (through student loans if students lack sufficient resources). The policy reform could lead to decreased enrollment in the short term if (1) students are reluctant to assume debt and (2) schools increase tuition, with the assumption that fewer students will enroll. The complexity and length of the policy debate undermines private commercial banks' interest in the student loan market until new policies are enacted and enforced.

In Malawi, even though policies define the responsibilities of the government and students in relation to financing education, they are not consistently or transparently applied. In addition, the issue of student loans is highly politicized in a country with a history of government interference in determining loan eligibility and granting loan forgiveness. In 2012, the Malawi Savings Bank refused to make loans to several students, sparking student protests and the government's decision to require the bank to grant loans to all applicants. This move by the government further reinforced Malawi's persistent culture of nonrepayment.

In a country with few clear and approved student loan policies and weak enforcement of repayment, it is difficult to implement a student loan program



Jessica Scranton

that meets the long-term needs of medical students. In addition, the uncertain politics behind education finance sends a signal to private commercial banks that student loans are highly risky and thus not a worthwhile line of business.

A student loan system should consider a means-tested financing initiative that uses a combination of grants or scholarships and subsidized loans.

The demand survey in Malawi disclosed differences in the amount of tuition fees charged to households at various socioeconomic levels. The survey also showed that, in the absence of government subsidies, students have the capacity to pay a greater share of their tuition. At the same time, the survey showed ability-to-pay differences between nursing and non-nursing students, with 40 percent of the latter able to pay double the current cost-sharing fee. These findings point to a willingness and ability to pay for education. Subsidies based on means testing would lead to a more equitable and efficient allocation of government funds.

A student loan program should set forth a clear purpose and objectives as well as specific mechanisms for cost recovery.

National student loan programs operate with objectives that can usually be categorized across five themes (Ziderman, 2004):

1. Budgetary objectives (income generation from tuition fees)
2. Facilitating the expansion of higher education
3. Social objectives (improving equity and access for the poor)
4. Meeting specific human resources needs
5. Easing student financial burdens

Any given program may have several objectives as long as they are well defined. In the context of HRH, the last three themes are the most relevant.

In countries with limited government resources such as those in SSA, the loan purpose must be explicit. Government commitments to funding student living expenses have represented a growing share of higher education budgets, often at the expense of

institutional budgets. According to the World Bank, students' living allowances account for 14 percent of total education expenditures in industrial countries compared to 35.2 percent in East Africa and 65.6 percent in West Africa (Albrecht and Ziderman, 1991). Survey results in Malawi showed that students have mixed opinions about government subsidies for living expenses, with half preferring to pay for their own food and housing if their tuition cost sharing can be reduced by half. In addition, recent studies suggest that educating students near their homes can help reduce living expenses while also helping to alleviate the rural and urban imbalance in HRH (CapacityPlus Project). Governments should better rationalize the option for supporting living expenses based on needs and preferences.

Ultimately, governments should aim for financial effectiveness and cost recovery. First, programs should target the most needy and able students. Second, loans should carry positive real interest rates, combined with repayment plans that are based on the fluctuation of a graduate's earnings. Third, loan programs should be managed by banks, private collection agencies, or taxation departments—institutions with the capacity and financial incentives to collect payment. Finally, loan programs should not be used as a political tool to maintain social stability. In some SSA countries, student subsidies are poorly targeted. Responsibility for loan collection switches from one weak institution to another and frequent government interference in the loan disbursement and collection process can create a culture of nonrepayment.

4. OTHER INITIATIVES THAT EXPAND EDUCATION FINANCING

The SHOPS activities described in the previous section have provided valuable lessons on financing pre-service education. Other models, including those outside SSA, offer approaches to financing private education that could be applied in the region. Models from countries where the financial sector is more developed and where a competitive and high-quality private university system is in place are particularly germane as African financial sectors continue to develop. Some of the initiatives below are purely private, while others are public-private partnerships. All aim to support education at private universities.

IFC Private Financing Facility for Student Loans

The International Finance Corporation (IFC) is collaborating with private universities and private foundations in several countries to establish private financing facilities for student loans. In most cases, a foundation or university contributes funds that either cover the initial loss, as in the Kenya program described below, or subsidize the cost of the loan, as in Indonesia. A private bank acts as the underwriter and administrator of funds, and IFC provides a second loss guarantee of 50 percent.

In Kenya, IFC is partnering with the Commercial Bank of Africa and Strathmore University to introduce a new student loan product. The bank will manage the overall program, which will consist of a \$4.5 million portfolio. Strathmore will contribute funds to cover potential initial losses on the loan portfolio, and IFC will provide a structure to reduce the remaining risk. The loans will cover tuition, at an annual interest rate of 12 percent. Students will make payments in equal monthly installments over a 12-month period, enabling them to meet annual tuition costs. The loans will provide the university with a stable flow of funds.

In Indonesia, IFC formed a partnership with the Sampoerna Foundation and PT Bank Internasional Indonesia Tbk. The Sampoerna Foundation, the largest philanthropic organization in Indonesia, provided grant funds of up to \$2.75 million to support the creation of a loan facility, permitting loans to be priced attractively. IFC and PT Bank Internasional

Indonesia Tbk have each accepted up to a \$10 million risk on the loan portfolio, which will grow to a maximum of \$20 million over its lifespan. The facility is expected to offer loans that cover tuition and entrance fees for up to 20,000 students, with the average loan costing \$1,000. The loan facility will extend loans to students and their families through participating institutions. The loans will have terms of one to three years, and the life of the facility will have a maximum term of seven years.

In Chile, IFC is partnering with the Departamento Universitario Obrero Campesino de la Universidad Católica (DuocUC) and Banco de Crédito e Inversiones to provide loans to DuocUC students enrolled in any of its professional or technical programs. The loans cover the full cost of tuition and will be offered at an attractive interest rate, with repayment terms of up to seven years after graduation. DuocUC will assume the initial loss risk of the student loans while IFC and Banco de Crédito e Inversiones will each cover up to \$19.2 million of senior risk.

Crowdfunding Higher Education

Crowdfunding (crowd financing or crowdsourced fundraising) is the collective effort of individuals who network and pool their money, usually via the Internet, to support efforts initiated by other people or organizations (Ordanini et al., 2011). Kiva⁹ and Vittana¹⁰ are two U.S.-based crowdfunding websites that rely on individuals' small giving to mobilize funding for students in need of financial assistance. Funds from individual donors are usually channeled through partner institutions—either microfinance institutions or educational institutions. Donors do not expect a return on top of what they contribute, thereby making the cost of funds for partner institutions essentially free. Kiva expects its donors to be repaid. Vittana offers its donors the option of making either an outright donation or a “loan,” in which they receive their donation back with no interest.

⁹ The information presented in this section reflects the approach taken by Kiva as of 2013. Kiva continues to experiment and test different models for financing education.

¹⁰ Vittana began closing its operations in August 2014. As noted in a GeekWire article on August 29, 2014, Vittana's CEO told supporters that after five years and various approaches, the company had not found a business model to wean it off philanthropic support.

Kiva has partnered with several higher educational institutions to provide low-income students with longer-term tuition loans as well as short-term loans for supplies and living expenses. To be eligible for the Kiva loan program, students must maintain high academic standards and come from a low-income household, among other requirements.

Kiva offers two types of tuition loans:

- **Eleven-year.** These long-term loans include a grace period of up to five years, including the period of enrollment and the first year after graduation. At the end of the grace period, payments are due monthly. The borrower is charged an interest rate of 2 percent during the loan's grace period and 4 percent for the remainder of the loan term.
- **Four-year.** These shorter-term loans are available to enrolled students (second year and above) who face cash-flow constraints. The loans have no grace period. Payment is due monthly, and the borrower is charged 2 percent per year for the first 12 months, 4 percent per year during months 13 through 24, and 6 percent per year for the remainder of the loan term. Full repayment is required before the student is permitted to graduate.

Kiva also offers laptop loans, which have a 24-month loan term at a 5 percent interest rate.

Vittana partners with microfinance organizations around the world to implement student microlending programs. The organization currently works with 22 organizations in Africa, Asia, Latin America, and the Middle East. Unlike Kiva's loans, Vittana's loans typically support students in vocational training or in the last one or two years of university studies. With Vittana loans, parents are cosigners to ensure accountability for repayment. In addition, students enjoy a grace period but are required

to make small interest payments each month during school enrollment. The last requirement ensures that students develop the habit of making regular payments and will continue to repay after graduation. It also provides the lender with a better return on its loan and enables the lender to fund additional loans. Interest rates charged by the microfinance institutions average 10 to 15 percent per year.

Higher Education Finance Fund

The Higher Education Finance Fund (HEFF), established in 2011, is a \$34 million fund that seeks to provide student loans to low-income populations in Latin America. The fund lends to microfinance institutions and other financial intermediaries serving the poor, and provides technical assistance to them. The microfinance institutions, in turn, use HEFF financing to fund their student loan portfolio. Managed from Costa Rica by Omtrix, Inc. HEFF is the first full-fledged microfinance fund offering student loans with a mission to prove that

The Higher Education Finance Fund aims to prove that student loans can be a viable financial product with double-digit bottom-line returns.

these loans can be a viable financial product with double-digit bottom-line returns.

HEFF targets six Latin American countries: Bolivia, Costa Rica, Dominican Republic, Guatemala, Honduras, and Paraguay. As of September 2013, HEFF had partnered with eight financial intermediaries in the targeted countries, with a commitment of \$30 million and the potential capacity to serve 3,500 students. Omtrix is currently introducing its technical assistance package to microfinance institutions and other financial institution partners, advising the partners on lending methodology, loan structure, and cost-benefit analysis. This technical assistance includes market intelligence about the local labor market and the types of skills and educational backgrounds desired by employers.

HEFF will base the price of loans on commercial rates and will calculate payment terms in accordance with the student's future income, with the rule that loan payments may not exceed 35 percent of salary. Even though the loans are unsecured (no collateral is required), parents or some family members will likely serve as guarantors and make monthly interest payments while the student is in school. The financial intermediaries are advised to apply strict criteria for selecting students, supporting only those aiming for high-demand careers.

USAID Development Credit Authority

In Panama, USAID partnered with a local Panamanian bank, Banvivienda, and two universities, Universidad Interamericana de Panama and Universidad Latinoamericana de Ciencia y Tecnologia, to facilitate student loans. The two universities are part of Laureate Education, an international network of more than 70 accredited campus-based and online universities offering undergraduate and graduate degree programs to more than 780,000 students around the world. Under this partnership, the two Panamanian universities provide a 20 percent discount on tuition costs. The loan from Banvivienda covers 100 percent of tuition, with the 20 percent differential put into a reserve trust to cover up to \$1 million in losses of principal on loans made to students. Once the trust is exhausted, the USAID Development Credit Authority covers 50 percent of losses up to \$5 million. The loan to students carries an interest rate of 9.8 percent, with interest-only payments due while the student is in school; the principal and interest payments begin following graduation.

In Kyrgyzstan, USAID signed a loan portfolio guarantee with Microcredit Company Kompanion and Kyrgyz Investment and Credit Bank to offer two loan products: a vocational school loan to youth in rural areas to acquire agriculture-based vocational training and a university student loan to youth in urban and rural areas who attend private universities. The guarantee facility covers up to \$1 million in loans for Kompanion and \$0.5 million in loans for Kyrgyz Investment and Credit Bank.

Relevance to PSE Financing

The previously discussed initiatives are relatively new and require more in-depth research to evaluate their effectiveness in terms of the number of students served (scale), access among low-income students (equity), terms and conditions (affordability), and the repayment rate (commercial viability). However, the initiatives share the following traits:

- **No interest rate deferral.** Banks expect interest payments to be made while the student is enrolled, though the amount varies with the level of subsidy provided by a third party.
- **Short-term loans.** Most models provide loans for short-term vocational training unless a partner subsidizes a portion of the tuition for undergraduate studies.
- **Not sector-specific.** The current initiatives tend to be multisectoral rather than focused on a particular sector. None focuses on medical education or post-graduate education.
- **Limited effects of a guarantor on interest rate.** It cannot be presumed that a credit guarantee will result in a lower interest rate for students. However, it appears that higher risk coverage (at least 70 percent), makes it more likely that banks will provide a favorable rate.

From this analysis, it appears that Kiva and IFC partnership in Indonesia are models potentially applicable to a PSE context. Kiva provides long-term loans that are free to the lender and therefore is able to offer students affordable interest rates. Likewise, the IFC Indonesia program operates with a subsidy from the Sampoerna Foundation, which allows loans to be priced below commercial rates.

Recommendations



5. RECOMMENDATIONS

Drawing on the findings and lessons from the work of SHOPS conducted between 2010 and 2013, and taking into account models undergoing implementation or testing, the concluding section of this report proposes recommendations to spur effective private sector PSE strategies for governments, donors, and implementing partners.

Recommendations for Governments

Advocate for a regulatory framework that provides transparency and fairness in the allocation and financing of student loans.

The framework should consider the following policy options:

- **Type of lending institution.** Determine whether the student loan program should be administered by an autonomous public body, a private commercial bank, or a higher education institution.
- **Repayment mechanism.** Determine whether to implement a mortgage-type loan, an income-contingent loan, or a graduated payment loan. Another option is to implement a bonding agreement or a conditional loan that allows students to repay through national service.
- **Targeting.** Determine whether student selection should be based on means testing, ability or school performance, or priority area (health, engineering, or information technology).
- **Interest rates and subsidies.** Determine whether the interest rate on the loan should be fixed, floating, or differentially set based on income; the length of the repayment period; and whether students would accept an upfront discount on tuition if they forgo the loan.
- **Minimizing default.** Determine whether to grant a grace period for repayment, to require a loan guarantor or cosigner, or to request an upfront credit insurance fee and mechanisms such as a private collection agency to locate students and secure payment.

Explore a public-private partnership model where the government supports long-term loans, complemented by private commercial financing to meet short-term needs such as living expenses.

An ideal public-private partnership would involve several stakeholders, including:

- Banks as the source of funding and loan management.
- Government (Ministry of Health, Ministry of Education, or Ministry of Finance) to provide a continued subsidy for higher education systems and to serve as a partial guarantor of loans.
- USAID (or another donor) to provide a credit guarantee, such as the Development Credit Authority guarantee, and technical assistance to structure the partnership and design the loan product.
- Medical and nursing schools to assist with student monitoring and loan management.
- Employers (typically the public sector) to assist with future loan collection through salary deductions.

A carefully conducted cost-benefit analysis should determine the government's fiscal cost of subsidies and the administrative cost of loan processing and loan collection, relative to the benefits gained. The analysis could help policymakers consider whether to support scholarships rather than loans.

Recommendations for Donors

Explore the effectiveness of existing financing initiatives that involve external guarantees.

SHOPS research reveals that, in the absence of explicit government funding, one viable program might take the form of a model in which an external trust or foundation partners with a bilateral or multilateral donor such as USAID or IFC to share risks with a financial institution. USAID's experiences in Panama and IFC's partnership with the Sampoerna Foundation in Indonesia are worth further investigation to determine the models' long-term impact and sustainability.

Develop a common analytic framework that could be used by USAID, other donors, and governments to assess the feasibility of a student loan program.

This report, which presents a preliminary framework for assessing the feasibility of a student loan program for medical education, is based on the unique country contexts of four countries in SSA. Further work is needed to expand and deepen the framework for future application in other countries where HRH remains a significant challenge. Application of a common analytic framework would enable donors, governments, and other stakeholders to:

- Compare the potential for financing PSE across countries and geographic regions.
- Launch a dialogue about the policy and institutional reforms that need to take place if more private sector PSE financing initiatives are to be implemented.
- Build the evidence base for (or against) developing a student loan program for medical studies.
- Provide important market information that could encourage the entry of private sector stakeholders.

Recommendations for Implementing Partners

Use private medical training institutions as an entry point to engage students and foster a customer relationship with a financial institution.

In certain countries, PMTIs may already enjoy a relationship with a financial institution through which staff salaries are paid, or perhaps through a bank branch or an ATM on the institution's campus. PMTIs could encourage enrolled students to open bank accounts with the partner financial institution. In turn, the financial institution could monitor student savings accounts to determine students' level and use of funds, thereby providing the institution with the market information needed for the cross-selling of other banking products that could potentially finance PSE.

Nurture the demand for student loans through an appropriate mix of financial education, marketing, and product development.

Having a bank account is a starting point for students to take out loans and should be coupled with financial education and awareness-raising of students by the financial institution or an implementing partner. Among students, low levels of financial literacy and limited experience with formal borrowing could lead to confusion about risk and returns. Students are also uninformed about the amount of financing they *need* relative to what they can *afford* and do not understand what they can realistically obtain in the market. Financial education to strengthen students' understanding about financial management, financing methods, access to credit, and the importance of repayment is an important component of any program aimed at developing student loans.

Conclusions and Next Steps



6. CONCLUSION AND NEXT STEPS

Even though countries in SSA have made significant progress in responding to the health sector's human resource constraints, shortages of health care workers persist. Public educational institutions remain the dominant force in producing health care workers, but, in many countries, the private education sector is expanding as it responds to the demand for health care instruction. Governments are increasingly looking to the private sector to share the responsibility for financing PSE.

This report captured the experience of the SHOPS project from its PSE financing work in four countries: Malawi, Rwanda, Tanzania, and Zambia. The discussion and analysis show that private financing of medical education is feasible in certain policy regimes, under certain market conditions,

and through certain institutional channels. It is important to understand the various dimensions of student demand for financing to ensure that loan programs are structured with the appropriate pricing and incentives. Furthermore, the government's recognition and support of the private sector as a partner in addressing the HRH issue is a crucial factor in encouraging financial institutions to engage in the health care education sector.

The SHOPS project's research and efforts have provided valuable lessons that could be useful in future considerations of student loan programs. The emerging insights and recommendations could provide the basis for further discussion among key HRH stakeholders and help create a sustainable and inclusive private sector financing model to produce health care workers in developing economies.



Jessica Scranton

REFERENCES

- Adano, Ummuro. 2008. "The Health Worker Recruitment and Deployment Process in Kenya: An Emergency Hiring Program." *Human Resources for Health* 6: 19.
- Africa Health Workforce Observatory. 2009. *Human Resources for Health Country Profile: Rwanda*.
- Albrecht, D. and A. Ziderman. 1991. "Deferred Cost Recovery for Higher Education: Student Loan Programs in Developing Countries." Washington, DC: World Bank, Discussion paper no. 137.
- CapacityPlus Project, www.capacityplus.org.
- Chandani, T., I. Ron Levey, A. Wakefield. "Public-Private Partnerships in Medical Education." In *Private Sector Role in Scaling Up Education of Health Workers: Gaining the Competitive Edge*. Washington, D.C.: World Bank Group, forthcoming 2014.
- FinMark Trust. 2008. *FinScope Rwanda 2008*.
- International Organization for Migration. "IOM and Partners Meet in South Sudan to Engage Diaspora for Health Sector Development." Accessed November 14, 2014, <http://www.southsudandiasporaforhealth.org/pages/11-iom-and-partners-meet-in-south-sudan-to-engage-diaspora-for-health-sector-development.php>.
- Korynski, P. and M. Smith. 2012. *Feasibility of Introducing Student Loans as an Additional Source of Financing for Medical Education in Malawi: Preliminary Assessment*. Bethesda, MD: SHOPS project, Abt Associates.
- Makasa, E. 2008. "The Human Resource Crisis in the Zambian Health Sector: A Discussion Paper." *Medical Journal of Zambia*. Vol. 35, no. 3.
- Malawi Health Workforce Observatory. 2010. *Human Resources for Health Country Profile: Malawi*.
- Mlenga, E., N. Tran, P. Korynski. 2012. *Financing Medical Education in Malawi: Results from a Demand-Side Survey on Student Loans* (unpublished white paper). Bethesda, MD: SHOPS project, Abt Associates.
- Mthetwa, J. and K. McKeon. 2012. *Assessment of Private Medical Training Institutions in Zambia: Challenges and Opportunities to Enhance Sustainability and Growth*. Bethesda, MD: SHOPS project, Abt Associates.
- Mwanzaa, J. 2010. *Human Resources for Health Country Profile: Zambia* (draft). Africa Health Workforce Observatory.
- Ordanini, A., L. Miceli, M. Pizzetti, A. Parasuraman. 2011. "Crowd-Funding: Transforming Customers into Investors through Innovative Service Platforms." *Journal of Service Management* 22, no. 4: 443.
- Patrinos, H. A. 2007. *International Evidence on Public-Private Partnerships to Improve Access and Quality in Education*. Washington, DC: World Bank.
- Patrinos, H. A., F. Barrera-Osorio, and J. Guaqueta. 2009. *The Role and Impact of Public-Private Partnerships in Education*. Washington, D.C.: World Bank.
- Pearl, E., S. Chand, C. Hafner. 2009. *Training Health Workers in Africa: Documenting Faith-Based Organizations' Contributions*. The Capacity Project, Technical Brief 17.
- PEPFAR. 2013. *Malawi Operational Plan FY2012*. Washington, DC: PEPFAR.
- Republic of Rwanda Ministry of Health. 2011. *Human Resources for Health Strategic Plan: 2011–2016*, Kigali: Republic of Rwanda Ministry of Health, March 2011.
- Tanzania Ministry of Health and Social Welfare. 2008. *Human Resources for Health Strategic Plan 2008–2013*. Dar Es Salaam: Tanzania Ministry of Health and Social Welfare.
- Tran, N. and E. Mlenga. 2012. *Zambia HRH: Demand for Student Loans* (unpublished white paper). Bethesda, MD: SHOPS project, Abt Associates.

White, J., B. O'Hanlon, G. Chee, E. Malangalila, A. Kimambo, J. Coarasa, S. Callahan, I. Ron Levey, and K. McKeon. 2013. *Tanzania Private Sector Assessment*. Bethesda, MD: SHOPS project, Abt Associates.

World Bank/International Finance Corporation. 2010. *The Private Sector and Tertiary Health Education: Market Analysis and Private Sector Models for Sub-Saharan Africa*. Washington, DC: World Bank/International Finance Corporation.

World Health Organization. 2006. *The World Health Report 2006: Working Together for Health*. Geneva: World Health Organization.

—. 2008a. "Country Cooperation Strategy at a Glance: Malawi." Geneva: World Health Organization.

—. 2008b. *The Global Burden of Disease: 2004 Update*. Geneva: World Health Organization.

—. 2011. *Transformative Scale Up of Health Professional Education*. Geneva: Health Systems and Services, World Health Organization.

Ziderman, A. 2004. *Policy Options for Student Loan Schemes*. Bangkok: UNESCO Bangkok/International Institute for Educational Planning.

The Strengthening Health Outcomes through the Private Sector (SHOPS) project is a five-year cooperative agreement (No. GPO-A-00-09-00007-00) funded by the U.S. Agency for International Development (USAID). The project focuses on increasing availability, improving quality, and expanding coverage of essential health products and services in family planning and reproductive health, maternal and child health, HIV and AIDS, and other health areas through the private sector. SHOPS is led by Abt Associates Inc., in collaboration with Banyan Global, Jhpiego, Marie Stopes International, Monitor Group, and O'Hanlon Health Consulting. The views expressed in this material do not necessarily reflect the views of USAID or the United States government.

For more information about the SHOPS project, visit: www.shopsproject.org



Abt Associates Inc.
4550 Montgomery Avenue, Suite 800 North
Bethesda, MD 20814 USA
Telephone: 301.347.5000 • Fax: 301.913.6019
www.abtassociates.com