Governmental student funding systems for higher education: an international perspective

Riaan Dirkse van Schalkwyk⁽¹⁾ and Sumei van Antwerpen⁽²⁾

¹Department of Operations Management, University of South Africa, Pretoria, Republic of South Africa; ²Department of Operations Management, University of South Africa, Pretoria, Republic of South Africa

(2) Corresponding author: Sumei van Antwerpen a,

Tel: +27 429 4988

Email: vanans@unisa.ac.za

Abstract

The worldwide surge in demand for higher education (HE) aligns with an increasing need for effective student funding systems, particularly in countries where poverty poses a significant barrier to accessing HE. An international perspective on governmental student funding systems allows us to examine how other governments have implemented these systems to benefit their citizens. The aim of this article is thus to provide a global view of the functioning and challenges pertaining to student funding systems and to shed light on the policies in place in the international landscape. The realist systematic literature review methodology was deemed the most suitable for this study as various scholars have previously studied different facets of the topic. This study aligns with the interpretive research paradigm and qualitative methods. The desired information therefore already exists within the body of knowledge, although it has not yet been analyzed through this particular method. It is evident that both developing and developed countries experience challenges regarding student funding, both in the purpose thereof as well as in the implementation. This is a universal issue, and an in-depth literature review confirmed this phenomenon.

Keywords: student funding; higher education (HE); developed countries; developing countries

Introduction

Education is one of the most important yet costly activities of countries worldwide. The worldwide surge in demand for higher education (HE) aligns with the increasing need for effective student funding systems, particularly in African nations where poverty poses a significant barrier to accessing HE. A wealth of information exists on the multifaceted aspects of student funding, encompassing public policy, administration, economics, and political science. This information offers valuable insights into the challenges associated with such systems and their broader societal impact.

An international perspective on governmental student funding systems allows us to examine how other governments have implemented these systems to benefit their citizens. This article thus delves into the background of and the imperative need for governmental student funding. Additionally, it draws comparisons between the student funding mechanisms of developed countries such as the United States (US) and the United Kingdom (UK) and those in developing African nations such as Ghana, Kenya, and South Africa. The overarching objective of this

article is to investigate the performance, functionality, and challenges of these governmental funding systems within their respective contexts.

The need for governmental student funding

Literature points out two main approaches pertaining to student funding. The first goal is to promote competition among Higher Education Institutions (HEIs) based on their funding levels. This may entail implementing initiatives like choice of attending a HEI, in order to motivate institutions to enhance their performance to attract more students and financial support (Sohn et al., 2023). Sohn et al. (2023) state that the second goal includes increased funding. Conversely, an alternative approach entails extra funding being provided by governments to HEIs that are struggling academically or serving economically disadvantaged students. This approach acknowledges that certain HEIs face greater challenges and require additional resources to meet educational standards. By allocating more funding to these institutions, policymakers aim to reduce disparities and ensure that all students have access to a quality education.

Many countries see HE as vital for social and job success (Ali & Jalal, 2018), as they share many of the same goals, such as a knowledge economy, access, mobility, and equity (Gayardon & Brajkovic, 2019). HE also addresses socio-economic challenges, especially for low-income families, via governmental funding (Ali & Jalal, 2018).

HE benefits society with human capital and economic growth (Amin & Ntembe, 2020) and HE access has shifted from the elite to the masses, with impoverished areas needing more resources (Musundire & Mumanyi, 2020; Holt & Duffy, 2017). Financial pressures therefore affect institutions globally, particularly in Africa (Acquah, 2021).

Strategic student funding models can tackle societal and economic issues (Naidoo, 2018). Policymakers need insights on schemes, grants, loans and timing (Holt & Duffy, 2017), and existing research has extensively examined effective programs (Baum et al., 2017).

Gayardon and Brajkovic (2019), for example, argue that the most effective approach to shaping policies that help students to afford HE is by establishing a student funding system with a mandate to develop strategies that ensure affordability and access to HEIs while keeping student debt at manageable levels. Gavardaon and Brajkovic (2019) outline several key principles for designing, philosophizing, managing, and developing such a system:

- Priority for low-income students: The primary focus of need-based student funding should be on supporting low-income students, and programs should aim to reduce the levels of debt that students accumulate.
- Access and success: Student funding reforms should prioritize policies that effectively help students access universities and succeed in their academic pursuits.
- Cost-efficiency and simplification: Reforms should aim for simplification and cost-effectiveness without requiring additional public investment.
- Leveraging partnerships: Governmental student funding programs should leverage, rather than replace, active support from non-governmental organizations (NGOs), educational institutions, and the private sector.
- Shared responsibility: Governmental student funding should be seen as a shared responsibility among students, educational institutions, the private sector, and the government.

In many African countries, a cost-sharing strategy has been adopted. Cost-sharing involves sharing the financial burden of HE study costs among governments, educational institutions, and students or their families. The increasing emphasis on cost-sharing at tertiary institutions underscores the need for more effective financial aid policies that can enhance the access of disadvantaged students to HE, as highlighted by Darvas et al. (2017).

Gayardon and Brajkovic (2019) emphasize affordability and enrollment in student funding system design. Principles include targeting low-income students, reforming access policies, and leveraging support (Gayardon & Brajkovic, 2019; Sohn et al., 2023).

Cost-sharing is common, and requires effective financial aid (Holt & Duffy, 2017). Sustainability and adaptability are also crucial (Gayardon & Brajkovic, 2019). Financing's interplay with education and development is significant (Cassano et al., 2017), and therefore understanding program benefits, trade-offs, and challenges is key (Gayardon & Brajkovic, 2019).

Research method

This realist systematic literature review study follows the qualitative research methodology. The systematic literature review methodology, specifically in the realist domain, was deemed the most suitable for this study because various scholars have previously studied different facets of the topic being researched, so the desired information already exists in the body of knowledge, although it has not yet been studied using this particular method. The researchers' aim with this paper is therefore to collate and synthesize that information, and the gaps in the existing literature, into one comprehensive study. This realist systematic literature review study aligns with the interpretive research paradigm and qualitative methods.

Following the realist literature review methodology, a review protocol was created to document the procedure that was followed. According to the purpose of the systematic literature review, which is to present a comprehensive review of the previous research addressing student funding systems for HE, the population to be studied included sources that were:

- empirical papers analyzing one or several entities;
- published in peer-reviewed journals or on reliable sources on the Internet, which guarantees a high level of quality as a consequence of the strict refinement process inherent in publication of empirical findings;
- published between 2015 and 2023;
- concerned with student funding in higher education; and
- written in English, since English is the preferred language for journal articles.

Google Scholar, Web of Science, and Scopus were used as the primary academic databases to locate the relevant publications applicable to this study. Keywords used for the database searches were student funding, student funding and HE, student funding and education, student funding and developed countries, and developing countries and performance funding. Abstracts of articles were reviewed to ensure that they met the criteria of this search by focusing on "student funding in higher education". Due to the fact that only a limited number of articles on student funding in HE had been published, Internet sources in the form of news articles and portal reports were also included in the study.

Discussion

The following section focuses on student funding systems in developed countries.

Student funding systems in developed countries

Developed nations invest heavily in HE, with the expectation that educated populations will bolster future employment, economic growth, and tax revenues (Barshay, 2017). Some developed countries implement governmental student funding systems that ensure quality and equity, and allow borrowing for those in need, with loans normally payable after graduation and after securing employment (Boatman et al., 2019; Sohn et al., 2023). Reduced public funding for HE worldwide, including in developed countries, has led to student borrowing to offset lost revenues (Boatman et al., 2019), and government efforts have expanded borrowing capacity for students.

The US and the UK, leading developed economies, will be examined for their student funding policies and related challenges in the following section.

United States student funding systems

Education represents one of the most crucial and substantial undertakings of the US government. Over an extended period, the US federal government has played a major role in funding education, with a particular focus on student funding. However, in the past two decades, financial constraints arising from various factors, including the economic recession of 2008, have prompted policymakers in the US to re-evaluate their strategies for achieving student access goals, as highlighted by Urahn and Convoy (2020).

Functioning and challenges

Although it is a highly developed country, the US grapples with HE funding, involving government, industry, and families (Tiefenthaler, 2018). The practice of balancing education costs among these entities remains a contentious endeavor (Baum et al., 2017). State governments are responsible for financing the well-established network of state universities across the nation. This system guarantees access to HE for the majority of individuals who are both willing and academically qualified to pursue such educational opportunities. However, policy and funding reviews are essential (Gayardon & Brajkovic, 2019), as decreased state support since 2009 has resulted in blurred boundaries between universities and external sectors, fostering industry partnerships (Tiefenthaler, 2018).

Economic conditions have also led to tuition hikes and alternative funding (Gayardon & Brajkovic, 2019). Geiger (2019) observed student funding expansion in the US due to tuition increases, economic recession, and privatization. Growing enrollment further strains government resources (Swanger, 2017).

Inequalities persist in the US, favoring wealthier students and negatively affecting marginalized groups (Lockhart, 2019). Ethnic disparities also endure (Bitzer & De Jager, 2018). Despite government funding, graduation gaps between income levels have only widened (Loonin & Morgan, 2018).

Federal Student Aid (FSA), overseen by the US Department of Education, supports student attendance (Lockhart, 2019). FSA provides over \$122.4 billion annually for expenses like tuition and room and board (US Department of Education, 2018). Challenges include improper payments, IT security, oversight, and data quality (US Department of Education, 2017). In addition, rising tuition contributes to increased student borrowing. More than a 50% rise in student debt since 1995 is due to increased loans (Friedman, 2019). Over 44 million borrowers owe an average of \$37,172. Student debt is a challenge, with defaults rising (Dalal & Thompson, 2018). Default rates reached in student loans reached a figure of 11.5% in 2018, reflecting \$1.5 trillion in debt (Kopf & Wang, 2018). The system's sustainability has thus been questioned (Goldstein, 2018).

While loans promise students a brighter future, a rising number struggle to repay them: Outdated policies that are not up to date with funding a widely accessible, high-quality system of HE has compromised the ability of hard-working people from all family backgrounds to complete their degrees and left millions in debt, without a degree, and worse off than when they began (Goldrick-Rab, 2016:9).

United Kingdom student funding systems

The UK includes the countries of England, Wales, Northern Ireland, and Scotland. Tuition fees were initially implemented in every UK country, as their introduction preceded the devolution of education policy. However, following devolution, student funding policies have diverged substantially in each of the UK countries (Cullinane & Montacute, 2017).

Functioning and challenges

The UK system of student funding is differentiated by students' nationality, household income, and the location of the HE institution at which they are studying. These differences affect the tuition fees charged to the student, the loans and grants available to them, and the loan repayment terms and conditions that apply to the borrower (Murphy et al., 2018). The various funding mechanisms of each country will be discussed next.

England

In the past two decades, HE in England has experienced continuous reform, notably the 2012 tuition fee increase (Belfield et al., 2017). English government policies shifted financial support, replacing grants with loans so that loans now constitute 96% of government support over the last years since 2012 (Belfield et al., 2017).

The 2004 Higher Education Act, enacted in 2006, introduced variable fees for full-time undergraduates in English HE institutions. Students can access income-contingent tuition fee and maintenance loans, repaid once earnings surpass a certain threshold, with zero real interest (Murphy et al., 2018). Yet, Bolton (2021:5) points out the following regarding repayment of these loans: at present, the UK loans over £17 billion to approximately 1.3 million HE students in England annually, and, as of the end of March 2021, the total value of these outstanding loans had reached £160 billion. According to government projections, the outstanding loan balance is expected to reach approximately £560 billion (2019–20 estimates) by the middle of this century. Among the group of borrowers who completed their courses in 2020, the average debt amounted to £45,000. The government anticipates that only 25% of current full-time undergraduate students who take out loans will manage to fully repay them (Bolton, 2021:5).

Callender and Mason (2017) predict that the prospect of repayment will deter students from participating in HE to further their studies. Moreover, it is very alarming that most of the funds loaned to students will not be repaid, essentially wasting taxpayers' money.

Wales

Like many ongoing reforms in the education sector in Wales, funding for HE and student support underwent a review from 2014 to 2016, as documented by Kilbride (2019). In 2012, Wales followed England's lead by increasing the maximum fee limit for full-time undergraduate study to £9,000 per year. However, in contrast to England, the Welsh government introduced tuition fee grants for all full-time undergraduate and European Union (EU) students in Wales, covering this increase (approximately £5,000). The goal was to ensure that these students would not pay more, in real terms, than they did before the fee increase, as reported by Bolton (2021).

Notably, Welsh students receive partial tuition fee subsidies, regardless of where they choose to study in the UK. However, this "portable" subsidized system has sparked controversy, as highlighted by Callender and Mason (2017). According to Kilbride (2019), this policy effectively means that the Welsh government subsidizes students to study anywhere in the UK, diverting income away from Welsh universities, which lose valuable resources, while simultaneously funding universities in other parts of the UK.

By the end of the 2020–2021 financial year, the loan balance for both Welsh and EU borrowers had reached £6.2 billion, representing a 15.5% (£0.8 billion) increase from the previous financial year's figure of £5.3 billion. This increase aligns with the annual rises observed in the previous two financial years, as reported by the Student Loans Company (SLC, 2021). Changes in the funding of HE in Wales have raised concerns that the annual tuition fee increases may discourage young people from pursuing university education due to the prospect of accumulating substantial debt, as noted by Evans and Donnelly (2018).

Northern Ireland

In Northern Ireland, full-time and part-time studies have varying costs, and there are no set regulations for part-time course fees. The average student fees were £4,530 in 2021 (NIdirect, 2021).

Students can access different funding options, including tuition fee loans, student contribution loans, and maintenance loans. Repayment starts after graduation, once the graduate earns over £21,000 annually. Non-repayable grants consist of maintenance, special support, and childcare grants. However, eligibility for support grants requires residency in the UK for at least three years and a household income below £41,450 per annum (Student Finance Northern Ireland, 2021).

Support for full-time, part-time, and postgraduate HE students in Northern Ireland amounted to £423.9 million in 2020–2021, a 2.3% increase from £414.4 million in 2019–2020. The number of funded students rose to 51,200 in 2020–2021, a 1.9% increase from 50,300 in 2019–2020. This marks the first growth in both student numbers receiving funding and the awarded amount since 2017–2018 (SLC, 2021). Despite having the lowest household income among the UK's devolved nations, graduates from Northern Ireland carry more debt, with an average

debt of £20,990 in 2017, although they owe less compared to their English university peers (Meredith, 2017).

Scotland

Scotland eliminated tuition fees in 2000, yet there has been a recent shift toward increased loan reliance for low-income full-time HE students' living costs (Blackburn, 2017).

Student Awards Agency Scotland (SAAS) offers financial aid to eligible full- and part-time HE students, adhering to fair access policies (SAAS, 2020). SAAS grants non-repayable bursaries, covers tuition fees, and provides fee and living cost loans via the SLC (SLC, 2021). The SLC had 86 product variants, 8.5 million customers, and a £136.7 billion loan book by 2019 (SLC, 2021).

Recent data in Scotland reveal higher bursaries for full-time students, up to £8,100 annually, and increased support for poorest students, from £1,875 to £2,000 per year (Currie, 2021).

Conclusion on student funding systems of developed countries

The information provided underscores the ongoing challenges of student funding in countries such as the US and the UK, despite their developed status, in establishing sensible and easily comprehensible student funding mechanisms that enhance access for students and contribute to national development and economic growth. Although grant programs are available, especially for economically disadvantaged students, many of these programs still place the financial burden of HE on parents and students through income-contingent loan schemes. Loans, with their associated financial burdens, often lead to stress, anxiety, and disadvantages for students, impacting their academic performance (White, 2020).

It is noteworthy that, even though these countries possess some of the largest economies globally, none of them currently offer "free" HE as a national policy, a proposition that is currently being advocated for in South Africa. The state of New York was the first in the US to provide free tuition to low-income residents, as determined by a means test, but this program comes with significant restrictions. It operates as a "last dollar" program, meaning that awards are granted only after accounting for other governmental student aid, such as Federal Pell Grants, as explained by Neutuch (2018).

Until 1998, full-time students in England could attend public universities without paying tuition fees, but concerns about declining quality at public institutions, government-mandated enrollment caps, and increasing inequality in college access led to a series of reforms, as noted by Murphy et al. (2017). Murphy et al. (2017) suggest that the US might benefit from considering key elements of the modern UK system, which includes enrolling graduates with income-contingent loans designed to minimize the risk of loan default and mitigate the impact of rising tuition costs. This approach contrasts with the "free education" model that was prevalent in the UK during the 1990s.

Student funding systems of developing countries in Africa

Most African nations are classified as developing countries. Research indicates that achieving a developed economy requires a strong HE system (Amin & Ntembe, 2020). Student funding in developing countries is a complex issue that requires a multifaceted approach to address

challenges related to access, affordability, and quality in HE. Governments, international organizations, and NGOs play critical roles in shaping the landscape of student funding in these regions. Efforts to expand access to HE and support students from disadvantaged backgrounds are essential for achieving sustainable development goals.

Acknowledging the link between education and socio-economic progress, numerous African countries have raised annual public education funding by over 6% (World Bank Group, 2021). The growth in African education has strained national budgets, affecting sectors such as healthcare, housing, and social welfare (Mngomezulu, Dhunpath & Munro, 2017).

To balance fiscal efficiency and equity, the introduction of tuition fees in Africa is paired with student funding programs, loans, and financial aid policies, vital for cost-sharing (World Bank Group, 2021). Student loans are gaining traction as funding alternatives for HE in Africa (Mngomezulu et al., 2017); currently, over 13 African nations employ student loan systems (World Bank Group, 2021). Nonetheless, many of these countries struggle with low repayment rates for these loan schemes (Mngomezul et al., 2017; Sohn et al., 2023).

It is therefore essential to have sustainable financial resources, particularly in Africa, where a significant portion of the population hails from economically disadvantaged backgrounds, often making HE unattainable for them. In numerous African nations, very few, if any, young individuals from low-income households manage to access HE (Acquah, 2021). Given the uncertainties of the current economic climate, most African governments will need to make strategic decisions regarding how to ensure that growing student populations have access to higher levels of education, as noted by Muller et al. (2017). The availability of student funding plays a crucial role in granting these students and their families the opportunity to pursue HE.

In the following sections, the government funding schemes of Ghana, Kenya, and South Africa will be explored.

Ghanaian student funding system

The Ghanaian government has demonstrated its dedication to education at all levels, including HE, through a series of reforms aimed at nurturing middle- and top-level human resources, as highlighted by Acquah (2021). In earlier years, before the 1990s, HE in Ghana was traditionally offered "free of charge" in universities, with qualified students enjoying free boarding, meals, and accommodation. However, in 1987, Ghana introduced the cost-sharing student funding approach, shifting the financial responsibility for HE to a shared model involving the government, HE institutions, parents and students, donor agencies, and, more recently, private-sector participation in HE.

Functioning and challenges

The following passage details the historical development and challenges of student financing in Ghana's HE system. Between 1987 and 1989, Ghana's government recognized the increasing financial burden associated with higher education. In response, they implemented several measures aimed at reshaping the financial structure of HE in the country. These measures included expanding the role of private HEIs, increasing the number of public universities, and introducing a cost-sharing financing model, as documented by Darvas et al. (2017).

As part of these cost-sharing efforts, the student loan scheme was launched in 1988, providing Ghanaian students pursuing approved courses with loans to assist in financing their education (Darvas et al., 2017). The scheme initially operated under the management of the Ghana Commercial Bank but later shifted to the Social Security and National Insurance Trust (SSNIT). It is currently overseen by the Ghana Education Trust Fund (GETF) (Dhunpath and Munro, 2017).

The GETF, established by the Ghanaian government in 2000, plays a pivotal role in funding the country's educational requirements, spanning from primary to tertiary levels (Acquah, 2021). The SSNIT, which is responsible for managing and sustaining pensions and other benefits through member contributions, operates an investment fund known as the Student Loan Trust Fund (SLTF). This fund intentionally contributes to the student loan scheme by investing some of its assets to generate interest for its members. The interest rates on these loans are subsidized and linked to inflation. Additionally, all student loans require a Ghanaian citizen and pension fund member as a guarantor (SLTF, 2015).

According to the Ministry of Education Report from 2017, the Ghanaian government increased the number of loans granted to students by 50% during the 2017–2019 academic year. The report also revealed significant budgetary increases for the Ministry of Education in subsequent years, reflecting a steady growth trend (Ministry of Education Ghana, 2017). However, the operation of the SLTF loan scheme has faced challenges, including administrative complexities and a poor loan recovery rate (Acquah, 2021). Despite being heavily subsidized by the government, the scheme often leaves students with substantial debts, contributing to a high rate of defaulters since its inception, as reported by Darvas et al. in 2017. The emigration of loan beneficiaries has also posed challenges, as highlighted by Kossey and Ishengoma (2017).

Despite these challenges, the student loan scheme has remained a reliable source of financial support for the majority of HE students in Ghana. Additionally, robust information and education campaigns led by Ghana's SLTF have proven highly effective, resulting in involuntary loan repayments (Acquah, 2021).

Kenyan student funding system

Student finance remains underdeveloped in Kenya, as is the case for the rest of the developing world; Kenyan banks do not provide commercial student loans and reject more than 60% of applicants (Jackson, 2017). Yet, enrollment in Kenyan universities has grown exponentially while many eligible candidates are still denied access (Jackson, 2017).

Functioning and challenges

In 1974, following Kenya's attainment of independence, the government initiated the University Student Loans Scheme (USLS) with the intention of promoting cost-sharing in education (Jackson, 2017). However, the USLS faced difficulties in loan recovery due to the absence of a legal foundation. Consequently, in July 1995, the Kenyan government established the Higher Education Loans Board (HELB) to take charge of the administration of the student loans program (Mngomezulu et al., 2017).

HELB is a state-owned corporation, and, for the past two decades, its primary mandate has been to secure funds for lending, disbursing loans, bursaries, and scholarships. Additionally,

HELB is responsible for recovering mature loans to create a revolving fund from which funds can be made available to assist financially needy students (Moronge, 2017).

All students who benefit from these loans are required to commence repayment one year after completing their studies. Employers are also obligated to facilitate loan repayments through salary deductions, in accordance with HELB Act No. 213A of 1995. Although Kenya's student loan scheme faces challenges related to low recovery rates, HELB predominantly relies on recoveries from graduates, particularly those employed in government and public enterprises, as they are more easily accessible (Dhunpath and Munro, 2017). Historically, several student loan programs in Kenya have encountered difficulties, but recent reforms implemented in various African countries, including Kenya, have contributed to improved management of their loan programs (Jackson, 2017).

South African student funding system

South Africa is no different from the aforementioned countries discussed, as it faces similar challenges in providing HE access to deserving students from low-income family backgrounds. Notably, both developed and developing countries are known to establish independent statutory bodies, reporting to the HE authorities with the exclusive purpose of overseeing the quality of the whole system and students' higher-learning experiences, which include the allocation of student funding.

Functioning and challenges

The post-apartheid era in South Africa has prompted analysis of universities' challenges amid societal shifts. Social, economic, political, and cultural changes impact the HE sector. Funding and student access are key 21st-century concerns (HESA, 2014). In 1999, the South African government established the National Student Financial Aid Scheme (NSFAS) (Act No. 56 of 1999) to provide loans, bursaries, and loan recovery for eligible public HE students

Hence, the government designed the NSFAS to tackle growing student debt in HEIs and fulfill its commitment to rectify past inequalities. The establishment of the NSFAS to fund deserving students is crucial for enhancing participation among disadvantaged students (NSFAS, 2018a). Unfortunately, the demand for financial aid far outstrips the available supply, meaning that not all deserving students receive financial support. One could make a compelling argument that the government's attempts to address the financial challenges faced by HEIs have not achieved complete success, as both universities and students continue to grapple with underfunding (NSFAS, 2018b).

There is a prevailing idea that the NSFAS needs to undergo restructuring to enhance the oversight and efficient allocation of funds to students (NSFAS, 2021). This notion calls attention to the present leadership of the NSFAS, suggesting that inadequate leadership hampers the effective management of the NSFAS, which is a national resource with a pivotal role in South Africa's future.

Currently, there is an ongoing debate regarding whether the NSFAS system is effectively achieving its strategic objectives. The Parliamentary Monitoring Group (PMG) has expressed significant concerns about the state of the NSFAS and its management. They have asserted that it is implausible for the management not to have identified the challenges they are currently

facing, and have emphasized the need for accountability and consequences for any shortcomings (PMG, 2019).

The central issue underlying the challenges faced by the NSFAS is insufficient governance, which fails to inspire public trust and confidence, as noted by PMG (2019). Quality governance encompasses an array of elements, including integrated systems, processes, leadership, and organizational culture. It is a foundational component of ensuring the delivery of safe, effective, interconnected, person-centered services, all of which are supported by a commitment to ongoing improvement (Peake, 2018).

Continued concerns about the NSFAS's effectiveness and poor operations management have sparked public demand for change. Since the 2009 DHET report, its inefficiencies, capacity problems, delays, and outdated technology have been evident (DHET, 2021). Challenges include recovering owed loan funds, with only R4.6 billion retrieved out of R21.3 billion (Bronkhorst & Michael, 2017). These authors mentioned that this is primarily attributed to inadequate system design and prioritization since 2009 and onwards.

Conclusion on student funding systems of developing countries

Extensive evidence supports the assertion that education, HE in particular, plays a significant role in accelerating economic growth, particularly in developing nations. This connection underscores the importance of enhancing a country's human capital as a vital means to reducing poverty. Consequently, developing countries are strongly encouraged to prioritize investments in the skills and knowledge of their human capital by expanding and enhancing the quality of their education systems.

Student funding systems in HEIs in developing countries often face a range of challenges and complexities. These challenges can include limited financial resources, high demand for education, and disparities in access to quality HE.

In summary, the success of economic growth strategies is closely intertwined with HE, which, in turn, relies heavily on sufficient and high-quality student funding support. This is particularly critical in developing countries, where poverty is more widespread compared to developed nations.

Conclusion

Student funding is essential for HEIs to fulfill their educational and societal missions. It ensures that HE is accessible, affordable, and of high quality. Moreover, it has a broader impact on economic development, social mobility, and innovation, making it a critical investment for governments and institutions alike. However, the mere provision of student funding is rendered meaningless if the system itself is inadequate, ultimately failing the students it aims to assist. It is evident that both developing countries and developed countries experience challenges regarding student funding, both in the purpose thereof as well as in its implementation. This is thus a universal issue, confirmed in an in-depth literature review.

REFERENCES

- Acquah, A. (2021). Higher Education Finance Between Ghana and the United States. Current Issues in Comparative Education, 23(1), 90–108. https://doi.org/10.52214/cice.v23i1.8143.
- Ali, M.S. & Jalal, H. (2018). HE as a Predictor of Employment: The World Perspective. Bulletin of Education and Research, 40(2), 79–90.
- Amin, A.A. & Ntembe, A. (2020). Sub-Sahara Africa's HE: Financing, Growth, and Employment. International Journal for HE, 10(1), 14–23.
- Barshay, J. (2017). While the rest of the world invests more in education, the U.S. spends less. The Hechinger Report: Covering Innovation and Equality in Education. https://hechingerreport.org/rest-world-invests-education-u-s-spends-less
- Baum, S., Harris, D.N., Kelly, A. & Mitchell, T. (2017). A Principled Federal Role in HE. Education Policy Program, Urban Institute. Washington. https://www.urban.org/sites/default/files/publication/93291/
- Belfield, C., Britton, J., Dearden, L. & Van der Erve, L. (2017). HE funding in England: past, present and options for the future. Institute for Fiscal Studies, United Kingdom.
- Bitzer, E. & De Jager, E. (2018). The Views of Commerce Students Regarding Free HE in South Africa. South African Journal of Higher Education, 32(4),12–36. https://doi.org/10.20853/32-4-2436.
- Blackburn, L.H. (2017). Using Student Loans for Living Costs: Current issues in Scotland. University of Edinburgh Press, Edinburgh.
- Boatman, A., Evans, A.J. & Soliz, A. (2019). Understanding Loan Aversion in Education: Evidence from High School Seniors, Community College Students, and Adults. AERA Open, 3(1), 1–16. https://doi.org/10.1177/2332858416683649.
- Bolton, P. (2021). Student Loan Statistics. House of Commons, London. https://researchbriefings.files.parliament.uk/documents/SN01079/SN01079.pdf
- Bronkhorst, S. & Michael, M. M. (2017). Student Funding Model used by the National Student Financial Aid Scheme (NSFAS) at Universities. Journal of Internet Banking and Commerce, 22(2), 1–20. https://hdl.handle.net/10210/242073.
- Callender, C. & Mason, G. (2017). Does student loan debt deter HE participation? New evidence from England. Annals of American Political and Social Science, 671(1), 20–48. https://doi.org/10.1177/0002716217696041.
- Cassano, R., Franzoni, S. & Salvioni, D.M. (2017). Sustainability in the HE System: An Opportunity to Improve Quality and Image. Journal from Molecular Diversity Preservation International (MDPI), 9(914), 1–27.
- Cullinane, C. & Montacute, R. (2017). Fairer Fees: Reforming student finance to increase fairness and widen access. The Sutton Trust, London. https://www.suttontrust.com/wp-content/uploads/2019/12/Fairer-Fees-Final.pdf
- Currie, L. (2021). Further and HE in Scotland: Subject Profile. The Information Centre, Scottish Parliament. https://sp-bpr-en-prod-dnep.azureedge.net/published/2021/7/27/748aa666-cc88-4f53-8b0c-36b6dfbc54e0/SB%2021-42.pdf
- Dalal, N. & Thompson, J. (2018). The Self-Defeating Consequences of Student Loan Default. Institute for College Access and Success.
 - https://ticas.org/sites/default/files/pub_files/ticas_default_issue_brief
- Darvas, P., Gao, S., Shen, Y. & Bawany, B. (2017). Sharing HE's Promise beyond the Few in Sub-Saharan Africa. World Bank Publications, Washington, D.C.
- Department of Higher Education and Training (DHET). (2021). Guidelines for the Department of HE and Training Bursary Scheme for Students at Public Universities 2021.

- Pretoria. https://www.dhet.gov.za/SitePages/Institutional-Governance-and-anagement-Support-Documents.aspx.
- Evans, C. & Donnelly, M. (2018). Deterred by debt? Young people, schools and the escalating cost of UK HE. Journal of Youth Studies, Vol. 21, No. 9, pp.1267–1282.
- Friedman, Z. (2019). Student Loan Debt Statistics in 2018: A \$1.5 Trillion Crisis. Forbes Media LLC. https://www.forbes.com/sites/zackfriedman/
- Gayardon, A. & Brajkovic, L. (2019). Student finance policies worldwide: Leveraging funding for attainment and equity in higher education. American Council on Education. World Bank. https://www.acenet.edu/Documents/Student-Finance-Policies-Worldwide.pdf
- Geiger, R.L. (2019). Higher Education and the Public Good. Reviews in American History. Johns Hopkins University Press.
- Goldrick-Rab, S. (2016). Paying the Price: College Cost, Financial Aid, and the Betrayal of the American Dream. University of Chicago Press, Chicago.
- Goldstein, A. (2018). Student debt hurts the whole economy: So why is Trump making the problem worse? NBC. https://www.nbcnews.com/think/opinion/student-debt-hurts-whole-economy-so-why-trump-making-problem-ncna873111.
- Goyayi, M. (2021). Police Brutality and Student Protest in South Africa. Democracy Development Program. https://ddp.org.za/blog/2021/04/15/police-brutality-and-student-protest-in-south-africa/
- Higher Education South Africa (HESA). (2014). South African HE in the 20th Year of Democracy: Context, Achievements and Key Challenges. Cape Town, 5 March 2014.
- Holt, J.K. & Duffy, D.Q. (2017). Cornerstones of student success: Institutions yielding high return on investment for underserved students. Illinois Education Research Council, Edwardsville. https://files.eric.ed.gov/fulltext/ED578864
- Jackson, T. (2017). Exam scores are being used to build student loan credit reports in Kenya. Quartz Africa. https://qz.com/africa/919852.
- Kilbride, K., Phillips, J. & Miller, N. (2019). Peer review of proposals for evaluation of the Diamond Student Support Reforms. Social Research and Information Division, Welsh Government, Cardiff.
- Kopf, D. & Wang, A.X. (2018). America's daunting student debt crisis is about to get even worse. Quartz. https://qz.com/1183280/
- Kossey, M.M. & Ishengoma, J. M. (2017). Issues and Challenges of Student Financing Systems in Africa: The Case of Tanzania. International Journal of African Higher Education, 4(1), 67–90. https://doi.org/10.6017/ijahe.v4i1.10250.
- Lockhart, P.R. (2019). What the college admissions scandal says about racial inequality: America's broken education system fails poor black and Hispanic students well before college application season. Vox. https://www.vox.com/identities/2019/3/20/18271462/
- Loonin, D. & Morgan, J. M. (2018). Federal Student Aid: Can We Solve a Problem We Do Not Understand? Utah Law Review, 4(5), 897–917. https://dc.law.utah.edu/ulr/vol2018/iss4/5
- Meredith, R. (2017). Northern Ireland students owe £3bn to loans company. British Broadcasting Corporation, News NI. https://www.bbc.com/news/uk-northern-ireland-40289095.
- Ministry of Education Ghana. (2017). Medium term expenditure framework (mtef) FOR 2017-2019. https://mofep.gov.gh/sites/default/files/pbb-estimates/2017/2017-PBB-MOE.pdf
- Moronge, M. & Nyasani, A. (2017). Determinants of Financing HE in Kenya: A Case of HE Loans Board. The Strategic Journal of Business and Change Management, 4(4), 1079–1100. https://strategicjournals.com/index.php/journal/article/view/600/0

- Mngomezulu, S., Dhunpath, R. and Munro, N., 2017. Does financial assistance undermine academic success? Experiences of a risk students in a South African university. Journal of Education (University of KwaZulu-Natal), 68, 131-148.
- Muller, J., Cloete, N, & Van Schalkwyk, F. (2017). Castells in Africa: Universities & Development. African Minds, Somerset-West.
- Murphy, R., Scott-Clayto, J. & Wyness, G. (2018). The end of free college in England: Implications for enrolments, equity, and quality. Economics of Education Review, 71, 7–22. DOI 10.3386/w23888.
- Murphy, R., Scott-Clayton, J. & Wyness, G. (2017). Lessons from the end of free college in England. Economic Studies, Brookings. Evidence Speak Reports 2(13), 1–10.
- Musundire, A. & Mumanyi, D. (2020). Exploring challenges, opportunities and prospects associated with higher education student funding in the context of South Africa. Journal of Management and Administration, 1(5), 1728–9157.
- Naidoo, A. (2018). Student funding at a South African institution of HE. Gordon Institute of Business Science, University of Pretoria, Pretoria.
- Neutuch, E. (2018). The Ups and Downs of Excelsior Scholarship's Freshman Year and What Comes Next. Gotham Gazette. http://www.gothamgazette.com/opinion/8025
- NIdirect, 2021. Indicative fees for students starting Higher Education in 2021-2022. NIdirect. https://www.nidirect.gov.uk/articles/tuition-fees
- NSFAS. (2018a). The NSFAS Annual Report, 2017/18. Cape Town.
- NSFAS. (2018b). The NSFAS Strategic Plan 2018-2020. Cape Town.
- NSFAS. (2021). Programme funding status report 2021. Cape Town.
- Panigrahi, J. (2015). Growing Private Providers and Constraints in the Choice of HE Institutions: Impact on Access to Higher Education. Journal of Economics, 60(1), 41–47. DOI:10.5958/0976-4666.2015.00004.2
- Parliamentary Monitoring Group. (2019). TVET colleges governance & management; the NSFAS audit; MTBPS implications. PMG. https://pmg.org.za/committee-meeting/29311/
- Peake, K. (2018). Community services quality governance framework: Safe, effective, connected and person-centred community services for everybody, every time. Victoria Government, Melbourne.
- Siddaway, A.P., Wood, A.M. & Hedges, L.V. (2019). How to do a systematic review: a best practice guide for conducting and reporting narrative reviews, meta-analyses, and meta-syntheses. Annual Review of Psychology, 70, 747–770. DOI: 10.1146/annurev-psych-010418-102803
- Sohn, H., Park, H. & Jung, H. (2023). The effect of extra school funding on students' academic achievements under a centralized school financing system. Education Finance and Policy, 18(1), 1–24. https://doi.org/10.1162/edfp_a_00375
- Student Awards Agency Scotland (SAAS). (2020). Operational Statistics. 2019. Scotland Government. https://www.gov.scot/publications/foi-19-01815/
- Student Finance Northern Ireland. (2021). How you are paid Full Time HE Student Finance A guide to Entitlement to Support and Payment. https://www.studentfinanceni.co.uk/media/1480/sfni_hyap_guide_2122_o.pdf.
- Student Loan Trust Fund (SLTF). (2015). Annual report. Accra. www.sltf.org.gh
- Student Loans Company (SLC). (2021). Student Loans in Wales Financial Year 2020-21: Income Contingent Student Loan Balance Income. Statistical Publication, SLC. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/992350/slcsp022021.pdf
- Swanger, D. (2017). The Future of HE in the U.S.: Issues Facing Colleges and Their Impacts on Campus. SUNY Fulton-Montgomery. https://www.fmcc.edu/about/files/2018/08/The-Future-of-Higher-Education-in-the-US2.pdf

- Tiefenthaler, J. (2018). More than one funder has to step up. The Conversation. http://theconversation.com/making-college-more-affordable-98284
- U.S. Department of Education. (2018). Federal Student Aid (FSA) Annual Report. Washington, D.C.
- Urahn, S. K. & Convoy, T. (2020). Federal and State Funding of Higher Education: A changing landscape. The PEW Charitable Trust.
 - $https://www.pewtrusts.org/{\sim}/media/assets/2015/06/federal_state_funding_higher_education final.pdf$
- White, T. (2020). For many borrowers, student loans are a mental health crisis. Mental health news. https://www.verywellmind.com/student-loans-are-a-mental-health-crisis-5093360.
- World Bank Group. (2021). Global Education Monitoring Report. United Nations Education, Science and Culture Organisation. Washington D.C.