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The State of South African Universities with Regards to Corporate Governance and Entrepreneurship Ecosystem

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Abstract: South African universities are going through a transformation and are responsible for engaging in sustainable projects. One of the transformation reforms involves having entrepreneurial ecosystems that adopt corporate governance. On that note, the paper explores the state of South African universities about available strategies that enable an entrepreneurship ecosystem. Some of the strategies include policies, frameworks and models that contribute to the entrepreneurial ecosystem. The desktop methodology is employed where the content and descriptive analyses are utilized. There is consideration of the following themes: good governance in universities as entrepreneurial firms; policies on the third-stream income; involvement of external stakeholders in entrepreneurial universities, and barriers facing entrepreneurship sustainability. Corporate governance ensures sustainability in that entrepreneurial firms are managed in a manner that does not compromise the funds of the business and investors; produces an impactful and economic output that addresses the needs of the community; and complies with environmental regulations.

Keywords: Corporate governance, Entrepreneurial ecosystem, Transformation, Sustainability

1. Introduction

Transformation taking place in South African universities is necessary to advance historically disadvantaged institutions and subsequently improve the economic contribution of the university to its community. There are several projects underway to improve the universities such as curriculum transformation aimed at updating programs offered, transforming universities to be entrepreneurial with more focus on third-stream income and incorporating Fourth Industrial Revolution (4IR, 2017), (Duval-Couetil, Ladisch & Yi, 2019; Lehmann *et al.*, 2020). One relevant skill is entrepreneurship which sharpens business acumen that enables university stakeholders to commercialize research, which subsequently creates accessible solutions for communities while creating third-stream income for the universities. Unfortunately, entrepreneurship education is overlooked in universities and is normally offered in certain programs (Badri & Hachicha, 2019). This is attributed to a lack of enabling entrepreneurial ecosystem with clear governing policies, roles of stakeholders and benefits for the institution (Hsieh & Kelley, 2020).

Good corporate governance is essential in addressing currently emerging tasks such as entrepreneurial ecosystems in universities to ensure *inter alia* effective implementation, transparency, accountability, and integrity (Ramalho, 2016). Market confidence and business integrity acquired through good corporate governance improve relationships between stakeholders. For instance, accountable businesses stand better chances to access equity capital for long-term investment from financial institutions (Cumming, Werth & Zhang, 2019). Therefore, ethics and corporate governance intertwine and are important for the creation and sustaining of entrepreneurial university ecosystems (Aluchna & Idowu, 2017). Mukhejee and Sen (2019) highlight that entrepreneurship education plays an important role in creating sustainable businesses that contribute to regional and national economic growth.

An entrepreneurial ecosystem requires a commitment from university management to review the roles of all stakeholders involved so that they are afforded time, resources, and incentives. For example, entrepreneurship education taught in a participatory teaching method may require capital funds for students to do practical exercises such as starting businesses (EDHE, 2022). Academics must be part of curriculum redesign and be trained on effective pedagogies necessary to teach entrepreneurship education. Universities can undertake corporate entrepreneurial activities consisting of *inter alia*, new business venturing, commercialisation of research, innovativeness, self-renewal, and proactiveness (Kalantaridis & Küttim, 2021).

Consequently, entrepreneurial universities will assume new missions and relations that contribute to the knowledge-based society. Hence, this study seeks to unveil the status of South African universities in creating entrepreneurial ecosystems and the role of corporate governance. Findings from this paper aim to define roles for the different stakeholders and identify barriers to the entrepreneurship ecosystem.

2. Theoretical Perspective

The paper explores the state of South African universities on available strategies that enable corporate governance in an entrepreneurship ecosystem. To achieve that the paper adopts two theories namely the agency theory (Audretsch & Link, 2019; Colombo, Dagnino, Lehmann & Salmador, 2019; Cunningham, Menter & Wirsching, 2019; Lehmann *et al*., 2020) and theory of change (Matschoss, Repo & Lukkarinen, 2020; Bhagavathy, Cardenes & McCulloch, 2021; Coombs & Meijer, 2021).

The agency theory entails governing relationships between governance structures, research-based ecosystems and agents that coordinate policies of an effective entrepreneurship ecosystem (Colombo *et al.*, 2019; Cunningham *et al.*, 2019). The organisational structure comprising of university governance, leadership and management have an absorptive capacity to create an entrepreneurial ecosystem. The capacity refers to the university ecosystem that forms strong knowledge flows among agents and the university identifies a key person called the principal (Audretsch & Link, 2019). Hence, the theory points to the principal-agent framework.

In the agency theoretical framework that follows corporate governance, there is knowledge capacity that spills over from the university to agents like large firms, multinational enterprises, small businesses, and communities (Lehmann *et al.*, 2020). The knowledge flow to the agents creates entrepreneurial ventures that are innovative and promote sustainable businesses. According to Audretsch and Link (2019), the key to university governance structure is usually the director of an entrepreneurship centre or any delegated leadership in the university. This relates to South African universities as most universities have opened centres or incubators, and directors are leaders with research skills (EDHE, 2022). The agent relationship in a university entrepreneurship ecosystem assists in several things including promoting an efficient ecosystem and mitigating the risk of business ventures, especially of start-ups (Audretsch & Link, 2019; Colombo *et al.*, 2019).

Theory of change refers to how and why an initiative works and, therefore, finds a link between inputs, activities, outcomes and the context of the initiative. It is relevant in South African universities as they are in the transformation phase, especially in the entrepreneurship space. The theory of change can sharpen the planning and implementation of entrepreneurship through initiatives ranging from university start-ups, and university-community-based business ventures to commercialisation of research. The input phase involves the feasibility stage where the prototype or service is tested (Bhagavathy *et al.*, 2021). It should be noted that this stage is necessary though it's time consuming and expensive. However, there is seed funding provided by the universities and other private institutions that researchers can consider for a successful feasibility study. After a successful feasibility study, through the theory of change researchers engage in several activities. These activities entail research and development of the prototype, transfer of knowledge and collection of data for analysis (Bhagavathy *et al.*, 2021). The theory of change links to commercialisation because the initiative can be evaluated in a systematic and cumulative way to put activities and outcomes together (Matschoss *et al.*, 2020).

The theory of change involves that the entrepreneurship process begins with an entrepreneur stating the intended outcomes and putting them into context (Matschoss *et al.*, 2020; Coombs & Meijer, 2021). For instance, in this case, the intended outcome is for universities to produce impactful research for communities that have economic value through corporate governance of structures in the ecosystem. An important economic factor may be the policy environment, where universities provide legislation on funding models of the research project at the stages of an entrepreneurship process. Moreover, another contextual fact may refer to social networks such as how communities can accept the project or how intergroup relations are addressed, linking this theory to agency theory. The theory of change needs to be plausible in that implemented activities should lead to desired outcomes. There should be economic, institutional, and human resources for the change to be successful, hence corporate governance is essential. The

entrepreneurial outcomes in the ecosystem should have measurable records of accomplishment under conditions that enhance continuous improvement (Meoli, Paleari & Vismara, 2019).

3. Good Governance

The success of the university entrepreneurial ecosystem is hugely dependent on the ability of universities to create and sustain good corporate governance practices. This pertains to how entrepreneurship is established and maintained within the said ecosystem. This paper discusses good governance in the context of the idea of corporate university culture and governance. Pomeranz and Stedman (2020) state that good governance is a state of affairs that needs regulated, translucent, proficient, and accountable government. Furthermore, the need for a governance system to undertake its task in a manner that is participatory, consultative, and abides by precepts of formal democracy (Sridhar, Gadgil & Dhingra, 2020). According to Eloff (2021), good governance implies decision-making and public policy formulation processes, to be transparent and accountable. For the World Bank (1994), good governance is evident through predictable, transparent, and the progressive making of developmental policy. Good governance is a bureaucracy imbued with professional ethos. In the same vein, this phenomenon and practice is hinged on answerability for one's decisions or actions, an unwavering civic society that partakes in the interventions promoting public welfare within the ambit of the existing rules and laws (Bevir, 2007). These definitional perspectives show that good governance is hinged on public consensus, unanimity, and participation of the citizens who are the main stakeholders. In this article therefore, good governance speaks to the need for tertiary institutions like universities to ensure that they involve all pertinent stakeholders in the policy design together with the corresponding implementation of such to ensure that there is participatory democracy.

Historically, corporate governance originates from the concept of politics of ownership structure as well as the ideas of shareholder activism which are intimately embedded in institutional and regulatory frameworks (Haan, 2022). For Allen and Berg (2020) is a compound of multifarious components which encompass amongst others, strategies, supervision, auditing, control, and evaluation, which all point to the need to manage organisational affairs to please all its stakeholders. Corporate governance is branded the governing for stakeholders approach. According to Aluchna and Idowu (2017), corporate governance is principally premised on the need to establish ample market confidence as well as business integrity that resultantly makes it a major requirement for entities that need access to equity capital for lasting organisational or market investment. Hence, it is the means to some business end, not an end itself per se. From this argument, corporate governance must promote an entity's investment. When focussing on its character, Aluchna and Idowu (2017) posist that, corporate governance is evidence based and its focal point is to pay attention to synchronising organisational tasks that are linked to the effective implementation of both structures and procedures that are ideal for performance of any corporate or business entity. Furthermore, Aluchna and Idowu (2017) note that the dimensions of these tasks are environmental and social in their nature, thus referring to the business environment and the social ecosystem into which the entity is located.

Released in 2016, the King Report on Corporate Governance IV addressing the context of South Africa emphasised an *ubuntu*-focused approach by placing ethical leadership as the key denominator to an organisation's success (Ramalho, 2016). According to Ramalho (2016), corporate governance shall abide by the golden rule of society that emphasises on reciprocity of human actions and social harmony. For Ferrell and Fraedrich (2020), ethics refers to aspects related to issues of decision-making, conduct, and intimate relationship between the organisation, its stockholders or stakeholders and the broader society. By conceptualisation, ethical leadership is solely exemplified by tenets that encompass *inter alia* integrity, fairness, competence, responsibility, accountability and transparency (Ramalho, 2016). Therefore, ethics and corporate governance go hand-in-hand and thus are important for the creation and sustaining of entrepreneurial university ecosystems.

Mukhejee and Sen (2019) posit that entrepreneurship serves a vital role in the establishment, survival, growth and success of businesses, as well as the socio-economic and sustainable development of society, regions and national economics at large. Entrepreneurial opportunities are, "those situations in which new goods, services, raw materials, and organising methods can be introduced and sold at

greater than their cost of production" (Mukhejee & Sen, 2019). Universities can undertake actions that can be viewed as corporate entrepreneurial, which is reflected in entrepreneurial activities as well as in top management orientations in organisations which consist of *inter alia*, new business venturing, commercialisation, innovativeness, self-renewal, and proactiveness (Kalantaridis & Kuttim, 2021). Furthermore, in the knowledge-based society of the 21st century, tertiary institutions such as universities and colleges have adopted emergent focusses in a bid to play a pivotal role to the socio-economic and community development of their surrounding environments (George, 2006; Flofsten, Fayolle, Guerrero, Mian, Urbano & Wright, 2019). According to Peris-Ortiz and others (2017), universities underwent a cumulative three kinds of academic revolutions. In the first academic revolution, there was the addition of a focus on the added the mission of creating knowledge by way of research and imparting such onto societies, which is arguably the very original or conventional goal of tertiary institutions (Peris-Ortiz *et al.*, 2017). In terms of the second academic revolution, new dimensions in the making of economic as well as social development were brought on board to expand from the research and teaching missions (Etzkowitz, 2013). Impliedly, universities are not static but rather are evolving centres of knowledge generation which are now hubs for social and economic development, a new feature that was not present in the past centuries.

According to Flosten *et al.* (2019), universities in the modern society need to therefore form solid synergies with industry and other stakeholders like government entities to play a part in socio-economic development, through what is known as the triple helix of innovation. Peris-Ortiz *et al*. (2017) construe that, the triple helix of innovation signifies a networked innovation based community development agenda that infuses the major actors such as universities, industrial players and the government itself. In the 21st century, this triple helix phenomenon is more than relevant and worth pursuance, especially in the context of South Africa. Audretsch (2014) argues that tertiary institutions must reform and adopt an entrepreneurial agenda as part of their core business as a way of enabling knowledge spill-overs that also bring in the innovation-based commercialisation of the knowledge that they generate. Such a bold stance is instrumental in the unlocking of socio-economic development of regions, localities and national economics since it enables the creation and utilisation of generated knowledge through entrepreneurial opportunities (Urbano & Guerrero, 2013). Therefore, according to Badri and Hachicha (2019), an entrepreneurial university is a game-changer as far as the character and focus of these tertiary institutions is concerned in a contemporary knowledge-based society.

4. Stakeholders of an Entrepreneurial Ecosystem

This paper argues that in addition to academic knowledge generation, South African universities need to commercialise university products and build synergies with industry to qualify as entrepreneurial (Duval-Couetil *et al.*, 2021). These all depend on the ability of university leaders and management to undertake good corporate governance that ensures that the university becomes an active member of a well-knit ecosystem that is not separated from its society and the economy. There are various stakeholders in the entrepreneurial university concept such as government entities, the business community and university staff.

4.1 Government Entities

The government is a major stakeholder in the creation, sustaining and expansion of the entrepreneurial university concept (Bozhikin *et al.*, 2019). This is because the funding of the various knowledge production and the co-production of other goods and services that are part of the entrepreneurial university is mainly from the government. The various research grants that different government units extended to universities for research, the creation of innovation and incubation hubs, the partnerships between universities and industry role players are hinged on this idea of entrepreneurial universities. Unfortunately, the current government funding initiatives and interventions in the creation and sustaining of entrepreneurial ecosystems in universities are not enough to push the agenda, which includes the 4IR (Hsieh & Kelley, 2020). For instance, developing countries like South Africa get allocated about 1% of the Gross Domestic Production (GDP) for research (World Bank, 2021).

One example is the 4IR thrust at the University of Johannesburg where funding is being directed to innovative and entrepreneurial projects that drive the technology-driven innovation for poverty alleviation, economic development, and sustainable

development. The 4IR promotes digital connectivity which comprises of available technology that allows people who have access to the Internet to connect with organisations in real-time (Jarbandhan, 2017; Moșteanu, 2019). The 4IR is regarded as a wholesome transformation phase of the industry standards and goods production using advanced technological inventions like biotechnology, three-dimensional (3D) printing, artificial intelligence, robotics, nanotechnology, and data mining (Oosthuizen, 2017; Kasza, 2019). This is referred to as the Internet of Things due to its direct link to web-based innovations and technologies that transformed how the world does its business and daily activities. Therefore, the government entities remain a major stakeholder in the creation of entrepreneurial universities by making sure that this agenda is a major cost item even in the drafting of departmental and national budgets (World Bank, 2021).

4.2 Business Community

Businesses are a valuable source of funding for university projects and give input in the drafting of curriculum content (Colombo *et al.*, 2019). This is usually realised through career fairs in which businesses engage students and faculties on expected skills that they can hire graduates on. Furthermore, the synergies that universities form in the research and creation of hubs are usually involving private sector businesses (Peris-Ortiz *et al.*, 2017). In the building of a viable and suitable university ecosystem, businesses are major stockholders especially when they demand corporate governance that is responsible, transparent, and accountable from those tasked with managing the hedge funds that businesses donate to universities (Solomon, 2020). This is one purpose of universities being required to furnish stakeholders such as business (project funders) with period performance reports as a way of apprising them on how their funds are spent.

Solomon (2020) further states that businesses have an influential role to play as far as their businesses-like entrepreneurial university ecosystem is concerned. From another angle, the business community must guide universities to create future entrepreneurs and businesses instead of just employees (Badri & Hachicha, 2019). Involving businesses in curriculum development ensures that graduates acquire relevant skills for the industry, making them employable. This is a sign of a viable economy and such a competitive economy is good for businesses that can enjoy economies of scale and improve on the quality of goods and services because of the stiffness of the competition in the market. Additionally, universities that commercialise their products are sometimes dependent on businesses to create smooth supply chains and retailing chains for university-made products (Ghio *et al*., 2019). The expertise of the business community in penetrating new markets is essential for the sustainability of start-ups (Audretsch & Link, 2019; Colombo *et al.*, 2019). Therefore, there is a need for good rapport between universities and the business community more than ever.

4.3 Research Centres and Think Tanks

The research centres, think tanks and incubations hubs are key role players in the creation of entrepreneurial university ecosystems. The centres have rich repositories of expertise in commercialisation, knowledge production, skills transfers and innovation initiatives. These skills are necessary for designing, implementing and sustaining entrepreneurial ecosystems (Cunningham *et al*., 2019). One such example of a centre is the Human Sciences Research Council (HSRC) which is a bastion of expertise in human sciences research and innovation interventions (Chetty, Siswana & Josie, 2021). Universities in South Africa need to acknowledge this repository of experts to ensure that they always tap into their knowledge and experience. The expertise can be consulted for curriculum reviews or design of new curricula, the establishment of innovation hubs, the commercialisation of university products, and the building of self-sustaining university systems. A complete entrepreneurial agenda includes corporate social responsibility that responds to societal issues such as ending poverty, creating employment, small business ventures and addressing the huge disparities in wealth (Bozhikin *et al*., 2019). Sustainable social development solutions can be formulated in collaboration with the centres by either sharing tried and tested or devising innovative ways (Aminova, Mareef & Machado, 2020).

This paper argues that the use of these units to advise on strategies that universities can adopt towards being a feeder into the social and economic development must not the under-emphasised. This is prudent in the case of South African universities such as Walter Sisulu University, which is domiciled in some of the poorest rural communities.

Partnerships and skills sharing with the centres can aid the fight against poverty and unemployment amidst the limited resources that the world always faces, particularly exacerbated by the geographical disadvantages of rural universities. Therefore, the socio-economic interventions that the government does must be augmented by what entrepreneurial universities offer to their local constituencies (Mshengu, 2019).

4.4 Academics and Students

The creation of self-sufficient entrepreneurial university ecosystems is also dependent on the ability of academics and students to take part in the process (Urban & Chantson, 2019). This is based on the traditional setup of the university that placed lecturers and students as some of the key stakeholders in the knowledge production matrix (Haasan, 2020). Academics and students are both major stakeholders since they collectively build on this entrepreneurial ecosystem agenda (Urbano & Guerrero, 2013). Academics are experts in research, commercialisation and the administration of research of socio-economic development programmes. Further to this, academics have expertise in the market and the dynamics in the job market and hence they can create products and university products that can specifically target just that. However, academics are hesitant due to either lack of entrepreneurship education background or ambiguous understanding of their roles within the ecosystem. Students as the stakeholders that are at the receiving end of unemployment, poverty and underdevelopment, can help with their input on how best this culture can address their plight effectively and in a manner that is sustainable (Badri & Hachicha, 2019).

4.5 International Financial Institutions

International Financial Institutions such as the World Bank and International Monetary as funders in developmental projects have a role to play in the establishment of entrepreneurial university ecosystem. Some of the combined roles of these two lenders include fighting of poverty and ensuring that there is economic development in developing countries (World Bank, 2021). South Africa is a developing country that can get loans and conditional grants for entrepreneurship from local universities. However, banks and financial institutions hold their resources because the universities do not have the capacity to invest (Redda & van Deventer, 2020). In addition, universities need more practical answers than philosophical questions. Therefore, these are key stakeholders in the establishment and sustaining of entrepreneurial universities.

4.6 Curriculum Development Experts

Gamede and Uleanya (2019) posit that entrepreneurial university ecosystems also promote the development of fresh kinds of curricula that create entrepreneurs rather than produce graduates that seek to be employed. Therefore, the experts in the design of time-compliant and relevant curricula are key stakeholders because they use their expertise to diagnose the various challenges and development interventive modules, diplomas, degrees and higher degrees for an effective entrepreneurial ecosystem. For Yamamoto and Shih (2019), the integration of abilities, projects, and problem-based curriculum in a qualification is important. Hence, this is one aspect of skills development that South Africa can utilise to address the skills deficit that is always bemoaned by academics, practitioners and the business community.

5. Policies and Third-Stream Income

Corporate governance and entrepreneurship ecosystems are found to link to the creation of wealth in the form of third-stream income for universities (Colombo *et al.*, 2019; Meoli *et al.*, 2019; Lehmann *et al.*, 2020). This occurs through investor confidence in entrepreneurial ecosystems with effective and corporal governance structures. For instance, South African universities adopt different approaches to the accumulation of third-stream income (EDHE, 2022). Through the corporate agency theory, South African universities collaborate with the government (ministry of small business development) and get sponsors on opening incubators or centers of entrepreneurship. The centers promote good governance with interactions between the university and different stakeholders in the entrepreneurship chain and govern start-ups that emanate from the university. A well-established incubator within the university designs policies that allow economic participation through venture creation and accumulate income for the university (Audretsch & Link, 2019). Therefore, the venture increases the university's third-stream income while empowering its community in job creation. The corporate governance in the centres lies in the capability of

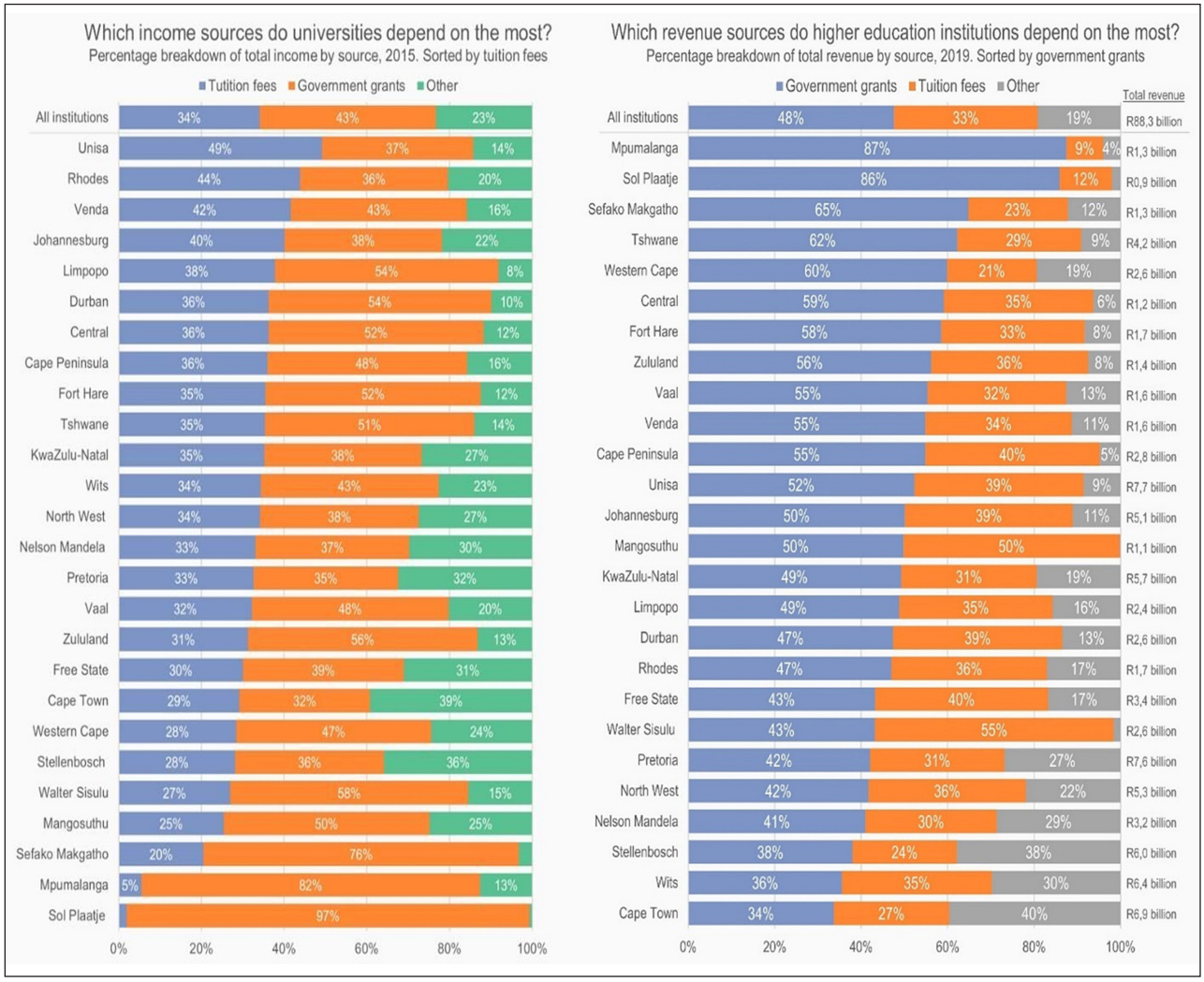
the leadership to attract investors and some form boards for effective governance. Where there is an incubator/center, the directors can formulate boards to facilitate control of the system and design activities that can attract funding (Cunningham *et al.*, 2019). The corporate governance issues determine the size and composition of boards (functioning and membership).

Universities need to have policies on how their ecosystem can interact with agents like financial systems and local businesses to acquire third-stream income (Ghio *et al.*, 2019). Though banks are restricted by their risk aversion policies, they build trust in universities that have a well-governed entrepreneurial ecosystem, because of the strength in university knowledge. Funders use a memorandum of understanding agreements to support business ventures coming from universities based on the trust in the knowledge system in the ecosystem. Cumming *et al.* (2019) suggest that strong policies on the accumulation of third-stream income rest on micro policies in the negotiating skills of the principal investigator in an entrepreneurial ecosystem. This mitigates risk and lowers costs involved in the entrepreneurship journey through the principal-agent relationship, where the principal has the research skills. In addition, venture creation from start-ups to well establish innovations need continuous research and strong collaborations with firms. Good governing institutions like universities are centers of knowledge production and exploration, and therefore strategically form a collaboration that attracts funding and increases their third-stream income. In the future, universities need to come up with strategies for increasing the third-stream income as government funding is decreasing annually (Bruwer, 2021).

South African universities have three main sources of financial resources namely government grants provided as state funding, tuition fees paid by students and third-stream income indicated as "other" in Figure 1 (Stats SA, 2019). These financial resources are strained by the poor economic conditions in South Africa such as weak currency, escalating fuel prices, unemployment and others, the fees must fall student protests and the associated issues, and magnified by the consequences of the COVID-19 pandemic (Bruwer, 2021). The reports from Stats SA (2015; 2019) indicate discrepancies in the funding system of South African universities, especially on the third-stream income (see Figure 1). For instance, most historically disadvantaged universities show a decline in third-stream income from 2015 to 2019, see the Mangosuthu University of Technology dropped from 25% to 0%, Walter Sisulu University 15% to an insignificant number, and the University of Fort Hare from 12% to 8%. On the other side, the University of Cape Town increased from 39% to 40%, and Stellenbosch from 36% to 38% (Stats SA, 2015, 2019). This means even those that are increasing, are slowly increasing third stream income, and this impact of the funding reductions largely affects vulnerable institutions (Bruwer, 2021). The solution is that universities must engage in entrepreneurial ecosystems with a more efficient revenue-cost model that factors in the reduced financial resources available to the university (Moyo & McKenna, 2021). Corporate-governed universities should develop a framework for new partnerships and collaborations that can generate a better reputation and revenues for the institution. There should be projects that seek to investigate new and innovative ways on how universities can leverage technological advancements to better position themselves as well as to generate revenue through third-stream income.

Access to financial resources, particularly third-stream income can be reached by universities through incubators and other funding supporting mechanisms. As alluded by Aminova and others (2020), lessons from the Arabian case that natural resources where universities exist can act as agents in the building of entrepreneurial ecosystems. The emphasis is on policies on building strong entrepreneurship ecosystems that emanate from online business registrations, ease of energy permits, and opportunities to start new business ventures (Aminova *et al*., 2020). To relate this to South African universities, there should be business opportunities relating to solving critical issues like energy on easing regulations. This can contribute to increasing sustainable third-stream income for universities. Meoli *et al.* (2019) confirmed that policies relating to intellectual property and reward systems stimulate new venture creation. This needs buy-in by university management to provide policies and provide entrepreneurship education for venture creation. A well-governed entrepreneurial ecosystem, established collaborations and technology transfer activities provide sustainable relations of universities with stakeholders to assist in guiding them to pursue successful entrepreneurial endeavours that can strengthen third-stream income.

Figure 1: Trends of the Funding System in South African Universities, 2015 & 2019



Source: Statistics South Africa (2019)

6. Conclusion and Recommendations

This paper explored the state of entrepreneurial ecosystems regarding corporate governance in South African Universities by using a desktop methodology that incorporated content and descriptive analyses. The state of entrepreneurial ecosystems in South African Universities differ significantly based on historical background, even after 28 years of democracy. South Africa is a developing country that allocates only 1% of its GDP toward research and innovation. The limited government funding challenged by other economic factors such as rising inflation, high unemployment rate and unstable political climate need to be supplemented for the sustainability of the universities. Therefore, South African universities must adopt a different approach to generate third-stream income. Established universities like the University of Stellenbosch are slowly improving their third-stream income from 36 to 38% between the period of 2015 and 2019. Contrarily, previously disadvantaged institutions reported a decline where for example the Mangosuthu University of Technology dropped from 25 to 0% in the same reporting period. This is one of the challenges that hinder the establishment of entrepreneurial ecosystems, given that access to funding is an enabler of entrepreneurship.

The disparities are evidence of a lack of good corporate governance in the universities and South Africa at large. Corporate governance is defined as an Ubuntu-focused approach that supposedly ensures

mutual benefits for all stakeholders involved. The revenue report of the universities shows a lack of partnerships and skills sharing, which could be facilitated by having frameworks and memoranda of agreement that are mutually beneficial. This paper further revealed that ethics and corporate governance are interlinked, implying that it needs to be rule-based, transparent, efficient, and accountable and implemented in a participatory, consultative, and abides by precepts of formal democracy. This study calls for university management to commit to the creation of an entrepreneurial ecosystem by reviewing policies to enable the incorporation of entrepreneurship education in all programs offered, employment conditions for academics that provide time, resources, and incentives, and involvement of communities and financial institutions.

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