THE MEDIATING EFFECT OF RISK FACTOR MANAGEMENT ON THE RELATIONSHIP BETWEEN ECONOMIC LITERACY AND PERFORMANCE OF PUBLIC UNIVERSITIES IN SOUTHWESTERN NIGERIA

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BAMIRO NURUDEEN BABATUNDE

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ABSTRACT

Nigerian universities face economic and funding challenges, resulting in infrastructural deficits, low rankings, and limited human capital development despite administrative autonomy. Studies on economic literacy and organizational behaviour in educational contexts remains underexplored, particularly in developing countries like Nigeria, where studies predominantly focus on non-educational sectors and emphasize financial literacy, a subset of economic literacy. This study investigates the mediating role of risk factor management in the relationship between economic literacy and university performance in Southwestern Nigeria. It measures the levels of economic literacy, risk factor management, and university performance while analyzing the impact of economic literacy on both risk factor management and university performance. Additionally, it assesses the effect of risk factor management on university performance and their mediating role in the relationship between economic literacy and university performance. Grounded in Cobb-Douglas production function, Resource-Based View, and Enterprise Risk Management theory, the study adopts a survey research design. Data were collected from 662 university administrators across fifteen public universities in Southwestern Nigeria using a proportionate sampling approach. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed for data analysis and the data indicate no evidence of common method bias. The findings reveal significant relationships between economic literacy and risk factor management (β=0.489, t-value=16.630, $p<0.01$), risk factor management and university performance (β=0.548, t-value=16.027, $p<0.01$), and the mediating role of risk factor management between economic literacy and university performance (β=0.268, t-value=11.186, $p<0.01$). However, the direct relationship between economic literacy and university performance (β=0.052, t-value=1.33, $p>0.01$) is not significant. The results indicate competitive partial mediation and a suppression effect. The suppression effect indicates that overlooking risk practices and institutional logic contributed to the insignificant relationship. The study underscores the need for Nigerian universities to redesign risk management practices, promote economic literacy, and establish risk management units to enhance sustainability in higher education.

KESAN PENGANTARA PENGURUSAN FAKTOR RISIKO TERHADAP HUBUNGAN ANTARA LITERASI EKONOMI DAN PRESTASI UNIVERSITI AWAM DI WILAYAH BARAT DAYA NIGERIA

ABSTRAK

Universiti di Nigeria berhadapan cabaran ekonomi dan kekangan pembiayaan, mengakibatkan kekurangan infrastruktur, kedudukan yang rendah, dan pembangunan modal insan yang terhad walaupun diberi autonomi pentadbiran. Kajian literasi ekonomi dan tingkah laku organisasi dalam konteks pendidikan terutama di negara membangun seperti Nigeria, masih kurang diterokai. Kajian sedia ada tertumpu kepada sektor bukan pendidikan dan memberi penekanan kepada literasi kewangan, yang merupakan sebahagian daripada literasi ekonomi. Kajian ini menyiasat peranan pengantara pengurusan faktor risiko dalam hubungan antara literasi ekonomi dan prestasi universiti di Barat Daya Nigeria. Ia mengukur tahap literasi ekonomi, pengurusan faktor risiko, dan prestasi universiti sambil menganalisis kesan literasi ekonomi terhadap faktor risiko dan prestasi universiti. Selain itu, ia juga menilai kesan faktor risiko terhadap prestasi universiti serta peranannya sebagai pengantara dalam hubungan antara literasi ekonomi dan prestasi universiti. Berasaskan fungsi pengeluaran Cobb-Douglas, Pandangan Berasaskan Sumber, dan teori Pengurusan Risiko Perusahaan, kajian ini menggunakan reka bentuk penyelidikan tinjauan. Seramai 662 pentadbir dari 15 universiti awam wilayah Barat Daya Nigeria dipilih melalui persampelan berkadar. Berdasarkan Pemodelan Persamaan Struktur Kaedah Kuasa Dua Terkecil Separa (PLS-SEM), ujian kolineariti penuh menunjukkan tiada bukti kecenderungan kaedah umum. Dapatan kajian menunjukkan hubungan yang signifikan antara literasi ekonomi dan faktor risiko (β=0.489, nilai t=16.630, $p<0.01$), pengurusan faktor risiko dan prestasi universiti (β=0.548, nilai t =16.027, $p<0.01$), serta peranan pengantara faktor risiko dalam hubungan antara literasi ekonomi dan prestasi universiti (β=0.268, nilai t =11.186, $p<0.01$). Walau bagaimanapun, hubungan langsung antara literasi ekonomi dan prestasi universiti (β=0.052, nilai t =1.33, $p>0.01$) tidak signifikan. Dapatan kajian menunjukkan pengantara separa kompetitif dan kesan penindasan. Kesan penindasan ini menunjukkan pengabaian amalan pengurusan risiko, kecenderungan optimistik, dan logik institusi menyumbang kepada hubungan yang tidak signifikan. Oleh itu, menjadi keperluan universiti di Nigeria untuk merangka semula amalan pengurusan risiko, memperkukuh literasi ekonomi, dan menubuhkan unit pengurusan risiko khusus bagi meningkatkan kelestarian dalam pendidikan tinggi.

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LIST OF ABBREVIATIONS

ASSET	Assessment of Economics and Financial Literacy
ASUU	Academic Staff Union of Universities
AVE	Average Variance Extracted
BET	Basic Economic Testing
BSC	Balance Score Card
CB-SEM	Covariance-based Structural Equation Modeling
CCA	Confirmatory Composite Analysis
CEE	Council for Economics Education
CMB	Common Method Bias
CMV	Common Method Variance
CR	Composite Reliability
CRS	Constant Returns to Scale
DRS	Decreasing Returns to Scale
EFA	Exploratory Factor Analysis
EK	Economic Knowledge
EL	Economic Literacy
ER	Economic Rationality
ERM	Enterprise Risk Management
ESR	Enrolment Supply Risk

ETR	Ethical Risk
FGN	Federal Government of Nigeria
FP	Financial Performance
FR	Financial Risk
GDP	Gross Domestic Product
HEIs	Higher Education Institutions
HND	Higher National Diploma
HTMT	Heterotrait-Monotrait ratio of Correlation
IBP	Internal Business Process Performance
IEP	Individual Economic Planning
IGR	Internally Generated Revenue
IRS	Increasing Returns to Scale
KBV	Knowledge-Based View
KPIs	Key performance indicators
LG	Learning and Growth Performance
MAR	Missing at Random
MCAR	Missing Completely at Random
MMAT	Mixed Method Appraisal Tools
MP_K	Marginal Productivity of Capital
MP_L	Marginal Productivity of Labor
MVA	Missing Value Analysis
NBTE	National Board for Technical Education
NCCE	Nigeria Commission for Colleges of Education
NCDMB	Nigerian Content Development & Monitoring Board

NCE	Nigeria Certificate in Education
NCREL	North Central Regional Educational Laboratory
NUC	National Universities Commission
OECD	Organisation for Economic Co-operation and Development
OND	Ordinary National Diploma
PLS-SEM	Partial Least Squares Structural Equation Modelling Model
PRISMA	Preferred Reporting Items for Systematic reviews and Meta-Analyses
RBV	Resource Based View
RF	Risk Factor Management
RR	Reputation Risk
SEM	Structural Equation Modelling
SET	Socioeconomic Thinking
SS	Stakeholder Satisfaction Performance
TCE	Transaction cost theory
TEK	Test of Economic Knowledge
TEL	Test of Economic Literacy
TETFUND	Tertiary Education Trust Fund
TFP	Total Factor Productivity
THE	Times Higher Education
TUCE	Test of Understanding in College Economics
TUESA	Test of Understanding Economics in South Africa
UCI	University College Ibadan
UP	University Performance
VIF	Variance Inflation Factor

WOS	Web of Science

APPENDIX LIST

CHAPTER 1

INTRODUCTION

1.1 Introduction

Higher education in Nigeria is defined as post-secondary education provided by universities, polytechnics, colleges, and other institutions (Federal Government Republic of Nigeria (FGN, 2014). Basically, the universities award four years bachelor's degrees and other postgraduate degrees while colleges of education and polytechnic do not award bachelor's degrees and other postgraduate degrees. The polytechnic and colleges of education award Ordinary National Diploma (OND), Higher National Diploma (HND) and Nigeria Certificate in Education (NCE) respectively. The Ordinary National Diploma and Higher National Diploma are two years programmes each and Nigeria Certificate in Education is a three years programme.

In Nigeria, Higher Education Institutions (HEIs) are managed by the Federal Ministry of Education. Universities are overseen by the National Universities Commission (NUC), while colleges of education are managed by the National Commission for Colleges of Education (NCCE). The National Board for Technical Education (NBTE) oversees polytechnic education. These commissions are saddled with the responsibility of policy decisions affecting institutions under their management, maintenance of quality assurance framework through a continuous periodic accreditation of courses, disbursement and supervision of government funding, selection of members of governing councils of each higher institution, and the everyday running of the institutions (Ahaotu & Ogunode, 2021).

Meanwhile, ownership of higher institutions (university, polytechnic and colleges of education) in Nigeria can be categorize into public or private ownership, while public ownership is divided into federal and state-owned institutions. The private institutions are owned, controlled, financed and managed by private entities. Also, federal institutions are owned, controlled, financed, and managed by the federal government, while state institutions are owned, controlled, financed, and managed by the state government. However, both public institutions are regulated by policy documents from the NUC, NBTE, or NCCE, as well as the Ministry of Education.

The federal government often situates at least one federal university in each state, while state governments also establish state universities, as education falls under the concurrent list. This means that the federal government and other tiers of government can also participate or invest in the sector.

Table 1.1

Universities by Geo-Political Zone

Geo-Political Zone	Public (Federal)	Public (State)	Private	Total
South-West	8	12	37	57
South-South	8	13	17	38
South-East	5	7	15	27
North-West	13	8	9	30
North-East	7	6	1	14
North-Central	8	8	20	36
Total	49	54	99	202

National Universities Commission (NUC, 2022)

Table 1.1 above shows the number of universities by geopolitical zone in Nigeria. In total, there are 202 universities in Nigeria, of which 103 are public (federal and state), while 99 are private. By region, the South-West has the highest number of universities, with 57, followed by the South-South and North-Central with 38 and 26, respectively. However, the North-East has the fewest universities, with only 14. Out of these 202 universities, the top ten universities in the country are listed below:

Table 1.2

Top Ten Nigeria Universities Ranking & Performance Indicators

S/N	University	Ownership	World Ranking	Continental Ranking	Country Ranking	Impact Ranking	Openness Ranking	Excellence Ranking
1	University of Ibadan	Public	1231	14	1	2251[3]	822[1]	1373[2]
2	Covenant University, Ota	Private	1370	16	2	3045	1140	1345[1]
3	Obafemi Awolowo University	Public	1477	17	3	1866[2]	1105	2019
4	University of Nigeria	Public	1622	19	4	3797	931[2]	1649[3]
5	University of Lagos	Public	1766	22	5	3553	1064[3]	1990
6	University of Port Harcourt	Public	1923	26	6	1300[1]	1529	3371
7	Federal University of Technology, Akure	Public	2252	28	7	7455	1302	1834
8	Ahmadu Bello University	Public	2262	30	8	5408	1459	2309
9	Landmark University	Private	2415	36	9	5170	2200	2444
10	Federal University of Technology, Minna	Public	2577[1]	43	10	4176	1486	3285

Source: Webometrics Universities Ranking (2022)[1]

[1] Webometrics Universities Ranking (2022) *Impact ranking* means Web content impacts derived from Numbers of external network (subnets) linking to institutions webpages (50%). *Openness ranking* means Top cited researchers derived by Numbers of citations from 210 authors (10%) while *Excellence ranking* means Top cited papers derived from Numbers of papers among the top 10% most cited in each one of all the 27 disciplines of the full database (50%). Majority of Nigeria universities reporting officers don't usually update their annual records with Times Higher Education, so it may be difficult to use THE because, quite numbers of universities ranking are not capture.

Table 1.2 shows Nigeria's top ten universities according to Webometrics. The Webometrics indices assess a university's commitment to instruction, intellectual achievements, international visibility, and engagement with the public, particularly its connections to the economic and industrial sectors. Among the top ten universities, eight are public institutions, while two are private.

In the continental, world, and national rankings, the University of Ibadan, Covenant University, and Obafemi Awolowo University secured the first, second, and third positions, respectively. Based on the impact ranking indicator, public universities such as the University of Port Harcourt, Obafemi Awolowo University, and the University of Ibadan ranked first, second, and third, respectively, among the top ten universities.

The openness ranking indicated that the University of Ibadan, the University of Nigeria, and the University of Lagos, all public institutions, secured the first, second, and third positions among the top ten universities in Nigeria. The excellence ranking indicators demonstrated that a private institution, Covenant University, secured the top position in the excellence ranking, while public institutions such as the University of Ibadan and the University of Nigeria ranked second and third, respectively.

1.2 Background of the Study

Higher education has provided tremendous benefits for economic growth and development in Nigeria, from the colonial to the post-colonial era, by educating the

country's technical workers, administrators, researchers, scientists, and engineers for industrial productivity. It produces unique, priceless, and irreplaceable intellectual resources that have advanced the economy (Mohammed, 2022). The need to establish universities to drive Nigeria's economic development led to the report of the Elliot Commission in 1943.

The report led to the establishment of the first university, University College Ibadan (UCI), in 1948. It was an affiliate of the University of London. In April 1959, the government established the Ashby Commission to provide recommendations on the nation's higher education needs for its first two decades. The Elliot Commission and the Ashby Commission laid the foundation for the growth of Nigerian universities. From 1948 to 2022, two hundred and two (202) public and private universities were established across Nigeria's six geopolitical zones.

The funding of higher education in Nigeria has undergone significant changes. Initially, it was solely financed through public funds from the establishment of the earliest universities in 1948 until the early 1970s. The period from 1973 to 1983 was known as the era of economic boom due to the increase in crude oil prices in the international market (Okebukola, 2016). The surplus revenue from crude oil proceeds resulted in higher funding for universities, leading to the cancellation of tuition and hostel fees, which had previously been set at N90 (0.90 RM). However, universities later experienced a decline in government grants. This was due to the collapse of the oil boom in the mid-1980s. Attempts to increase hostel fees and reintroduce tuition fees to offset the reduction in subventions faced strong resistance from stakeholders, including students, alumni, and parents.

Mohammed (2022) opined that the federal government's establishment of more universities in 1975, along with the policy prohibiting the payment of school fees at all public universities, led to a financial crisis in the Nigerian university system. This was due to the escalating economic recession, the increase in the number of universities, and the rising demand for university education. The reduced funding of universities has affected the performance of public universities in Nigeria, particularly in terms of global competitiveness, their ability to attract students both locally and internationally, student retention, and the successful completion of studies.

These challenges stem from inadequate facilities and resources (Ofulue & Ogunleye, 2019). Universities performance has further deteriorated due to the privatisation and deregulation of tertiary education, which has led to a rapid increase in the number of private universities and a significant outflow of educational migrants to developed and emerging economies (Sityata et al. 2021; Mohammed, 2022).

Despite the vital role higher education plays in a country's development, persistent financial challenges continue to undermine its ability to fulfil its mandate. In Nigeria, these financial constraints have contributed to what Ogunode, Yiolokun, and Akeredolu (2019) describe as 'institutional failure,' as the performance of higher education institutions has deteriorated in recent years. One critical factor influencing this decline is the inadequate implementation of risk management strategies within higher education institutions.

Denhere (2023) points out that Enterprise Risk Management (ERM) is well-established in the corporate sector but remains underdeveloped in higher education.

Similarly, Al-Subari et al. (2020) highlight that risk management practices in non-profit organizations, including universities, lag behind those in business sectors, making higher institutions more vulnerable to financial instability and operational challenges. Without a structured risk management framework, Nigerian universities face challenges in addressing both financial and non-financial risk factors effectively, worsening institutional failures and impeding overall performance.

The level of economic literacy among university managers has been identified as a significant factor in promoting the financial stability of universities, particularly through prudent decision-making, the efficient utilisation of available resources, and the management of risk factors amid funding crises from government revenue (Ying, Hassan, & Ahmad, 2019). Economic literacy refers to the ability to identify economic problems and alternative solutions, analyze costs and benefits in a given economic situation at work, assess the outcomes of changes in economic circumstances and public policies, and interpret and organize economic findings to support the growth of economic entities such as households, businesses, governments, and interstate transactions (North Central Regional Educational Laboratory [NCREL], 2003).

Also, economic literacy often provides the necessary capacities to improve an institution's performance through the effective management of business risks. Gustafsson and Omark (2015) claimed that individuals with a higher level of economic literacy generally have a higher overall risk score. Conversely, they found a link between economic literacy and risk consciousness, suggesting that such individuals are better managers of organizational resources, contributing to competitive advantage and sustainability. Based on this, this study seeks to investigate

the mediating effect of risk factors on the relationship between economic literacy and the performance of public universities in southwestern Nigeria.

1.3 Statement of the Problem

In recent years, public universities worldwide have faced significant challenges due to shifts in public funding and rising expectations for improved performance. These pressures have triggered a persistent financial crisis, driven by escalating costs, growing student enrolment, and declining government subvention (Tran, 2025; Argento et al., 2020; Mamat et al., 2021). In Nigeria, this crisis is further aggravated by inadequate resource management, poor financial decision-making, poorly designed marketing approaches for higher education programs and low internal revenue generation (Manishimwe, et al., 2025). Many university administrators struggle to effectively utilize allocated funds, often failing to comply with financial ethics in capital project expenditures, leading to delays in fund retirement and restricted access to new tranches from TETFund and other agencies (Okebukola, 2016). Additionally, universities' over reliance on government subventions and student tuition limits their capacity to explore alternative revenue sources, such as endowments, industry partnerships, research commercialization, and alumni engagement.

These financial challenges are exacerbated by the absence of effective risk management frameworks. While structured risk management in higher education was introduced globally in the 1980s (Wu et al., 2017), its adoption in Nigerian universities remains uncommon (Priyarsono et al., 2019). Unlike universities in

developed economies, which have well-established risk mitigation strategies, Nigerian universities lack proactive measures to address financial risk, enrolment supply risk, ethical risk, and reputation risk (Eniola et al., 2023). Instead, risk management efforts have been concentrated in industries classified as high-risk, such as banking and manufacturing (Eniola et al., 2023), leaving public universities vulnerable to operational disruptions.

The impact of this neglect is evident in the frequent closures and disruptions of academic activities. Between 1999 and 2022, Nigerian universities experienced sixteen (16) instances of nationwide strikes, significantly disrupting academic operations (Haruna et al., 2022). A major shutdown occurred between February 7 and October 17, 2022, due to ASUU's demands for better funding and improved conditions of service (Mohammed et al., 2019; Mohammed, 2022). Without a structured risk management framework, universities remain susceptible to financial instability, declining enrolment, ethical violations, and reputational damage—ultimately threatening the performance and effectiveness of higher education in Nigeria.

Shamsi (2020) argues that the current risk management strategies in higher education institutions are often ineffective. In many cases, universities treat risk management as a formal requirement for accreditation rather than a practical tool for addressing real challenges. According to Shamsi, risk factor management largely rely on subjective judgment, classifying risks as low, medium, or high without a standardized evaluation system. This approach can lead to significant financial losses, harm institutional reputation, and negatively affect the national economy.

Additionally, universities often have hidden gaps that go unnoticed, which can severely impact their overall performance and reputation.

At the core of these challenges is the low level of economic literacy among university administrators. Economic literacy is the ability to make informed and rational financial decisions by evaluating risks and optimizing outcomes (Yayar & Karaca, 2017). Administrators with higher economic literacy can effectively manage financial resources, mitigate financial and ethical risks, and identify alternative revenue streams to reduce overdependence on government funding. However, despite financial autonomy policiess encouraging diverse funding sources such as private sector investments and alumni endowments (FRN, 2014; Ogunode & Abubakr, 2020), Nigerian university administrators often lack the economic knowledge necessary to transform institutions for long-term sustainability.

The challenge for Nigerian universities is made worse by the conflict between making financially smart decisions and following the institution's core values and stakeholder expectations (Baker, 2024; Cai & Mountford, 2021). While institutional values focus on ethical and mission-driven decisions, they often overlook the financial strategies needed to improve performance. This can cause university leaders to avoid revenue-generating activities or cost-saving measures because they fear these actions may harm academic standards. However, avoiding such strategies can lead to inefficiencies and missed opportunities for financial growth. On the other hand, focusing too much on financial goals can damage trust and harm the university's reputation. To succeed, Nigerian universities must find a balance between staying

financially healthy and upholding their educational mission while managing risks related to finances, student enrollment, ethics, and reputation.

Despite the critical role of economic literacy in addressing these challenges, research on its impact within higher education institutions remains limited, particularly in developing countries like Nigeria. Most existing studies have examined economic literacy in the context of consumer economic behavior, such as spending, investment, and savings, rather than organizational decision-making. Furthermore, much of the available research focuses on private industries in developed economies such as the USA, UK, and Australia, leaving a significant gap in understanding how economic literacy and risk management influence universities performance in resource-constrained settings (Grimes et al., 2021; Rošulj & Petrović, 2020; Jianmu & Kulathunga, 2019).

To bridge this gap, this study investigates the mediating effect of risk factors on the relationship between economic literacy and the performance of public universities in southwestern Nigeria. By addressing this research gap, the study aims to provide actionable insights for improving economic literacy, risk factor management, and overall university performance in the Nigerian higher education sector.

1.4 Objectives of the Study

The general objective of the study is to investigate the mediating role of risk factor management in the relationship between economic literacy and the performance of public universities in Southwestern Nigeria. Within this objective, the specific objectives are to:

i. Measure the level of economic literacy, risk factor management, and performance among public universities in Southwestern Nigeria.
ii. Analyse the effect of economic literacy on the performance of public universities in Southwestern Nigeria.
iii. Analyse the effect of economic literacy on risk factor management in public universities in Southwestern Nigeria.
iv. Examine the effect of risk factor management on the performance of public universities in Southwestern Nigeria.
v. Ascertain the mediating effect of risk factor management on the relationship between economic literacy and the performance of public universities in Southwestern Nigeria.

1.5 Research Questions

The following research questions will guide the study:

i. What is the level of economic literacy, risk factor management, and performance among public universities in Southwestern Nigeria?

ii. What is the effect of economic literacy on the performance of public universities in Southwestern Nigeria?

iii. Does economic literacy have a significant and positive effect on risk factor management among public universities in Southwestern Nigeria?

iv. Do risk factor management have a significant and positive effect on the performance of public universities in Southwestern Nigeria?

v. Is there a significant and positive mediating effect of risk factor management on the relationship between economic literacy and the performance of public universities in Southwestern Nigeria?

1.6 Research Hypotheses

Based on the aforementioned objectives, the study proposes the following alternative hypotheses:

H1: Economic literacy has a significant and positive effect on the performance of public universities in Southwestern Nigeria.

H2: Economic literacy has a significant and positive effect on risk factor management among public universities in Southwestern Nigeria.

H3: Risk factors have a significant and positive effect on the performance of public universities in Southwestern Nigeria.

H4: There is a significant and positive mediating effect of risk factor management on the relationship between economic literacy and the performance of public universities in Southwestern Nigeria.

1.7 Conceptual Framework

The conceptual framework that guides this study hinged on the Cobb Douglas production function, Resource Base View (RBV) and Enterprise Risk Management theory. The conceptual framework (figure 1.1) explains the relationship between the independent (economic literacy), dependent (universities performance) and mediating variables (risk factors management).

Figure 1.1

Conceptual Framework

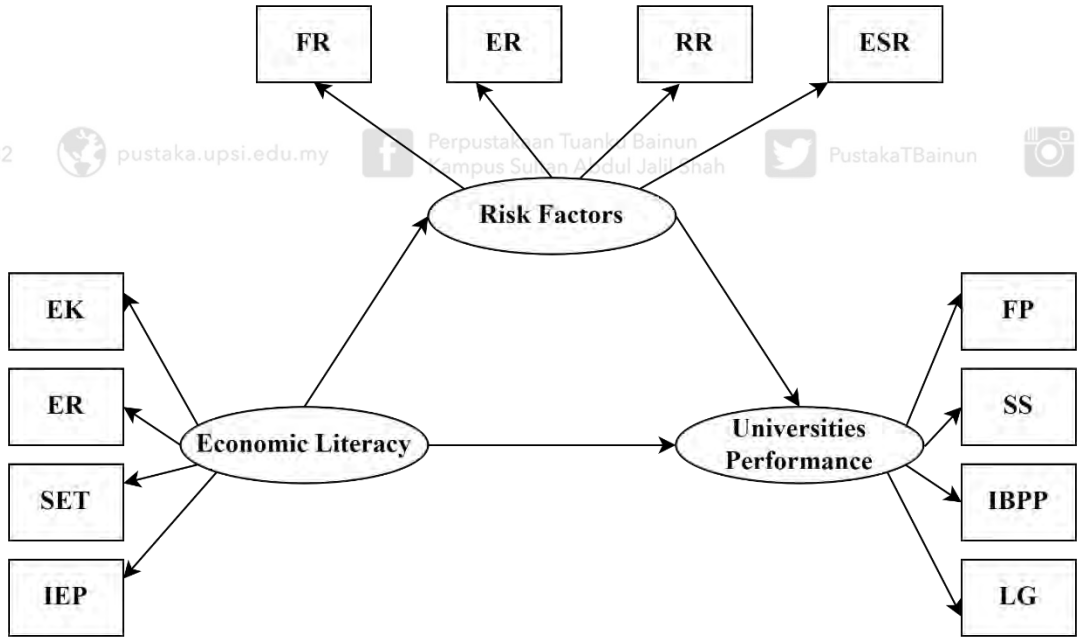

Table 1.3

Latent & Observed Variable

	Economic Literacy		Risk Factors		Universities Performance
EK	Economic Knowledge	FR	Financial Risks	FP	Financial Performance
ER	Economic Rationality	ER	Ethical Risks	SS	Stakeholder Performance
IEP	Individual Economy Planning	RR	Reputation Risks	IBPP	Internal Business Process Performance
SET	Social-economic Thinking	ESR	Enrolments Supply Risks	LG	Learning & Growth Performance

1.7.1 Cobb-Douglas Production Function (EL → UP)

The Cobb-Douglas Production Function is commonly applied in economics to analyze the contribution of various inputs, such as labor and capital, to production outcomes. In this study, it is adapted to demonstrate how universities operate as knowledge-centered institutions, where economic literacy serves as a vital factor influencing performance. Similar to how firms utilize resources to enhance productivity, universities rely on well-informed decision-making to optimize efficiency and ensure long-term performance and sustainability.

The Cobb Douglas production function claimed that the attainment of allocative efficiency is a necessary condition but not sufficient conditions to attain

optimum productivity or high institutional performance in the area of financial, customer, internal process and learning and growth performance. Universities may not be technically efficient despite attainment of allocative efficiency due to the existences of low level of economic literacy in decision making and the existence of significant risk factors within the operating environment of the institutions (Adedoyin et al., 2016).

When university administrators possess strong economic literacy, including knowledge of financial planning, resource management, and economic reasoning, they can make more informed decisions that enhance revenue generation, reduce costs, and promote long-term institutional stability (Sityata et al., 2021; Bamiro et al., 2024a). This, in turn, leads to better academic services, stronger student support, and a more effective learning environment. Many financial missteps arise from inadequate economic literacy (Lusardi & Mitchell, 2014; Kulathunga et al., 2020), underscoring its role in institutional performance is therefore neccessary. Additionally, institutions with high economic literacy are better positioned to secure research funding, manage grants efficiently, and foster innovation. Ultimately, this perspective highlights that when universities invest in economic literacy, they build stronger foundations for success, enhancing both institutional performance and long-term sustainability (Jianmu & Kulathunga, 2019).

1.7.2 Enterprise Risk Management (ERM) Framework (RF → UP)

The Enterprise Risk Management (ERM) Framework offers a structured way for universities to anticipate and manage risks before they become major challenges (Jankensgård 2019). Rather than reacting to crises as they arise, institutions that integrate ERM into their strategic planning can create a more stable and resilient environment for learning and research. This study focuses on four key risks: financial, reputation, enrollment supply, and ethical risks.

Financial risk in universities exists when universities heavily depend on tuition fee, existence of financial fraud, poor fund monitory system and low return from commercial ventures and endowment which can threaten a university's long-term performance. Reputation risk, on the other hand, stems from governance failures, academic misconduct, or weak stakeholder relationships. Universities that prioritize transparency, ethical leadership, and consistent quality assurance can strengthen their credibility and maintain public trust.

Enrollments supply risk arises from shifting demographics, market competition, and evolving labor demands, all of which can impact student intake. Institutions that stay ahead of these trends by adapting their academic programs, strengthening their brand, and improving student engagement can maintain stable enrolment levels. Ethical risk relates to issues such as unethical research procedure, unethical process in grant management and student extortion and exploitation, governance integrity, academic honesty, and regulatory compliance.

The presence of ethical risks can damage a university's reputation, increasing its exposure to significant credibility challenges. Adopting Enterprise Risk Management (ERM) principles allows institutions to shift from a reactive stance to a proactive approach, strengthening financial sustainability, institutional integrity, and student retention (Ruzic-Dimitrijevic & Dakic, 2014). A comprehensive risk management framework not only minimizes potential threats but also improves operational effectiveness, ensuring long-term institutional success in a dynamic academic environment (Olayinka et al., 2017).

1.7.3 Resource-Based View (RBV) Theory (EL → RF) & (EL → RF → UP)

The Resource-Based View (RBV) Theory asserts that institutions achieve a sustainable and long-term performance by leveraging it intellectual capital such as economic literacy. Within the university context, economic literacy serves as a vital intangible asset that strengthens risk management capabilities and enhances institutional resilience, enabling universities to navigate financial uncertainties and operational challenges effectively.

1.7.3.1 Economic Literacy and Risk Factors (EL → RF)

Universities with a high level of economic literacy can anticipate financial challenges, optimize resource allocation, and develop long-term strategic plans to mitigate risks (Ye & Kulathunga, 2019). High level of economic literacy increases universities

administrators drive to generate and manage fund in order to improve performance of universities (Bamiro, et al., 2024a). Increase in administrators drive for fund generation reduces universities exposure to financial risk and other forms of risks factors that could inflate financial risks such as ethical risk, reputation risk and enrolment supply risk. Strong economic literacy equips institutions with the ability to manage funding effectively, minimize financial inefficiencies, and maintain economic stability (Lontchi, et al., 2022). By fostering a deep understanding of market dynamics, policy shifts, and evolving funding structures, economic literacy enables universities to proactively navigate uncertainties and implement risk-mitigation strategies.

1.7.3.2 The Mediating Role of Risk Factor Management (EL → RF → UP)

Risk factors can significantly hinder university performance (Deloitte, 2018). However, economic literacy equips institutions with the ability to formulate effective risk management strategies to address these challenges (Bamiro, et al., 2024b). By fostering data-driven decision-making, universities can strengthen institutional governance, enhance financial operations through disciplined fiscal management and strategic investments, and improve their adaptability to policy changes and economic fluctuations. Grounded in the Resource-Based View (RBV) theory, this study posits that economic literacy is a crucial driver in developing resilient risk management practices, ultimately contributing to improved university performance (Ye & Kulathunga, 2019). By incorporating these theoretical perspectives, this study offers a

comprehensive understanding of how economic literacy and risk factors management collectively shape university performance in Nigeria.

A review of fifty previous studies across various continents (Table 3.9) reveals that most research frameworks have primarily examined the impact of financial literacy on individual economic and non-economic behaviors. Some studies conceptual framework has explored economic literacy in relation to consumer behavior, but only a limited number have investigated its effect on organizational performance, particularly in the higher education sector. This gap in the literature highlights the need for a more comprehensive conceptual framework that connects economic literacy with university performance.

A key contribution of this study is its novel approach to risk factor management as a mediator in the conceptual model. Unlike previous studies that have focused on financial risk, risk attitude, or risk tolerance in isolation, this research incorporates multiple enterprise risk components including ethical risk, reputational risk, enrollment supply risk, and financial risk as second order construct which are particularly relevant to higher education institutions. Furthermore, prior studies have often treated risk-related variables as isolated constructs rather than integrating them holistically into a broader risk management framework.

Another distinction of this study conceptual model is its methodological advancement. While many previous models have employed first-order constructs, this study adopts a second-order conceptual model in which risk factors, economic literacy, and university performance are all designed as second-order constructs. This

higher-order modelling approach provides a more robust and comprehensive assessment of the relationships between these variables. By addressing these gaps, the proposed framework offers a deeper understanding of how economic literacy and risk factor management collectively influence university performance, contributing significantly to the frontiers of knowledge in this domain.

1.8 Theoretical Framework

This study was guided by the Cobb-Douglas production function, Enterprise Risk Management (ERM), and the Resource-Based View (RBV).

1.8.1 Cobb-Douglas Production Function

This study used the Cobb Douglass production function as its theoretical foundation. In the tradition of neo-classical economics, the production function has been a significant instrument for economic study. According to Okorie (2017), although Philip Wicksteed is generally acknowledged as the first economist to algebraically formulate the relationship between input and output, there are some indications that Johann Von Thunen did so in the 1840s. A frequently used production function is the Cobb-Douglas model in equation 2.1.

$Y=AL^{\alpha}K^{\beta}$ 2.1

A = f (economic literacy, risk factors) ……..2.2

where: Y represents university performance (measured using a Balanced Scorecard framework, including stakeholder satisfaction, financial performance, internal processes, and learning & growth). L denotes labor inputs (stock of academic and senior administrative staff employed in the universities). K refers to capital inputs (infrastructure, technology, funding). A represents Total Factor Froductivity (TFP), which captures the effects of economic literacy and risk factors management (equation 2.2). α (alpha) and β (beta) are the elasticities of labor and capital, showing their contributions to university performance.

Economic literacy can be viewed as a strategic intangible resource that enhances decision-making, financial management, and institutional efficiency in universities. Universities that invest in financial and economic literacy programs for administrators and staff can optimize resource allocation, improve budgeting, and minimize inefficiencies thus, enhancing A (TFP) as opined by (Gerhart & Feng, 2021; Bojan & Tamara, 2017). Institutional knowledge contributes to TFP, aligning with the RBV's emphasis on internal capabilities as drivers of long-term competitive advantage.

Risk factor management (e.g., financial risk, operational risk, reputation risk and ethical risk) plays a critical role in ensuring efficiency in university operations. Universities with strong risk management frameworks experience greater financial stability, improved academic planning, and resilience to uncertainties (Yang, Ishtiaq & Anwar, 2018). Effective risk governance reduces inefficiencies, allowing labor (L) and capital (K) to be utilized more productively and improving TFP (A).

1.8.1.1 Returns to Scale in the Context of University Performance

The sum of $\alpha + \beta$ determines the nature of returns to scale, which reflects how efficiently universities convert labor and capital inputs into institutional performance outcomes.

1.8.1.1.1 Constant Returns to Scale (CRS) ($\alpha + \beta = 1$)

If $\alpha + \beta = 1$, the system exhibits constant returns to scale, meaning that a proportional increase in labor (L) and capital (K) leads to a proportional increase in university performance (Y). This suggests an efficient allocation of resources, where economic literacy among university administrators ensures that faculty hiring, infrastructure investments, and funding allocations are optimized for balanced growth. In such a scenario, risk factors are well managed, preventing resource misallocation.

1.8.1.1.2 Decreasing Returns to Scale (DRS) ($\alpha + \beta < 1$)

When $\alpha + \beta < 1$, increasing labor and capital inputs results in less than a proportional increase in university performance. This inefficiency may arise due to factors such as poor economic literacy among university administrators, misallocation of financial resources, bureaucratic inefficiencies, or risk factors such as declining government funding and policy uncertainty. Under such conditions, universities may experience

diminishing productivity, where adding more faculty or expanding infrastructure does not necessarily improve graduate employability or research output.

1.8.1.1.3 Increasing Returns to Scale (IRS) ($\alpha + \beta > 1$)

If $\alpha + \beta > 1$, the system experiences increasing returns to scale, meaning that an increase in inputs leads to a more-than-proportional increase in university performance. This suggests that universities operate at high efficiency, where economic literacy among decision-makers enables strategic investments in faculty development, digital learning, and research infrastructure that significantly enhance institutional performance. Universities in this category successfully manage risk factors through strong financial planning, adaptive policies, and innovative revenue-generation strategies (e.g., industry collaborations, international funding).

Economic literacy among university administrators plays a crucial role in determining whether a university achieves CRS, DRS, or IRS: Informed decision-making leads to optimal resource allocation, ensuring CRS or IRS, where university performance grows sustainably. Low economic literacy and unmanaged risks contribute to DRS, limiting institutional efficiency and reducing the impact of increased funding or faculty recruitment. Effective risk management strategies can shift universities from DRS to IRS, allowing them to maximize the productivity of their academic and administrative resources. By incorporating economic literacy and risk factors into the Cobb-Douglas framework, this study highlights how universities

can achieve sustainable growth in performance despite financial and policy-related challenges.

1.8.1.2 Technical and Allocative Efficiency in Universities Performance

The concepts of technical and allocative efficiency serve as fundamental principles for assessing and understanding the performance of economic decision-making units across different contexts (Kalirajan & Shand, 1999). The Cobb-Douglas production function serves as a robust tool for evaluating economic efficiency for sustained performance and growth. Efficiency in universities can be categorized into two main types: allocative efficiency and technical efficiency (Adedoyin et al., 2016). These two dimensions of efficiency are influenced by economic literacy and risk factors, which act as mediators in determining university performance.

1.8.1.2.1. Allocative Efficiency in Higher Education

Allocative efficiency occurs when inputs are utilized in a way that maximizes net revenue while aligning with prevailing market conditions (Kalirajan & Shand, 1999). In the context of this study, allocative efficiency occurs when universities distribute resources (faculty, infrastructure, funding) in a manner that maximizes educational and research outcomes. Economically literate administrators play a crucial role in optimizing budget allocation to ensure investments in technology, faculty development, and student support services generate high returns. When economic

literacy is high, universities can mitigate financial waste, ensuring resources are channeled to the most productive areas. However, various risk factors such as financial risk, reputation risks, ethical risk and enrolment instability can disrupt optimal allocation. These risks may lead to inefficiencies, such as underfunded research programs or an imbalance in staffing, reducing the marginal productivity of labor (MP_L) and capital (MP_K). Consequently, university performance (Y) declines when resource misallocation occurs.

1.8.1.2.2. Technical Efficiency in Higher Education

A firm demonstrates technical efficiency when it maximizes output using the least possible amount of production inputs, including labor, capital, and technology (Huynh & Hoang, 2021; Ghoshal & Goswami, 2017). In the context of this study, technical efficiency measures how well universities convert inputs into outputs by maximizing graduate quality, research impact, and institutional reputation given available resources. Universities with administrators possessing strong economic literacy are more likely to implement cost-effective policies, such as leveraging digital learning tools to expand access without excessive capital investment.

However, in high-risk environments such enrolment instability, funding cut, reputation challenges, or policy inconsistencies may force universities to operate below the production frontier, leading to inefficiencies such as outdated curricula, faculty underperformance, and infrastructure decay. A technically efficient university operates at the production frontier, utilizing all available resources optimally. When

risk factors push an institution inside this frontier, strategic interventions (e.g., financial planning, policy reforms) can help restore optimal performance.

1.8.1.3 Linking Economic Literacy, Risk Factors, and University Performance

Economic literacy plays a dual role in enhancing both allocative and technical efficiency in universities. By understanding financial risks, administrators can optimize decision-making, ensuring that institutions sustain high levels of educational output despite external economic shocks. However, when risk factors such as financial instability, reputation challenges, policy uncertainty, or institutional mismanagement are not properly managed, they mediate the relationship between economic literacy and university performance, leading to inefficiencies and suboptimal institutional outcomes.

Thus, in the context of public universities in Southwestern Nigeria, the Cobb-Douglas production function provides a theoretical foundation to explain how economic literacy enhances university performance, while risk factors act as mediators that either amplify or diminish this relationship. This study empirically investigates these dynamics to provide insights into how HEIs can achieve optimal efficiency through informed decision-making and strategic risk management.

1.8.2 Enterprise Risk Management Theory

The Enterprise Risk Management (ERM) Theory provides a comprehensive framework for understanding how institutions, including public universities, manage risk exposures that may influence their performance outcomes. As Jankensgård (2019) asserts, ERM is a structured approach to assessing, managing, and mitigating cumulative risks that affect an organization's ability to achieve its objectives. Within the context of public universities, risk factors such enrolment challenges, reputation risk, ethical risks and funding generation and management can significantly impact institutional performance.

ERM emphasizes the proactive identification, assessment, and mitigation of risks that affect organizational sustainability (Sax & Torp, 2015). Universities, as complex institutions, face multifaceted risks, including funding uncertainties, changes in regulatory frameworks, and fluctuations in student enrolment. By integrating risk management into strategic decision-making, public universities can safeguard their financial health and operational stability. In this regard, economic literacy among university administrators becomes a critical determinant of institutional performance, as economically literate administrators are better equipped to anticipate, evaluate, and mitigate financial and operational risks (Yang, Ishtiaq, & Anwar, 2018).

Rather than eliminating risks, ERM focuses on optimizing risk-taking behaviors to maximize returns while minimizing potential threats (Olayinka, Emoarehi, Jonah, & Ame, 2017). In the context of public universities, economic literacy equips administrators with the skills to implement ERM-driven strategies,

enabling them to make informed decisions regarding budget allocation, resource management, and long-term financial planning. Consequently, the presence of strong risk management mechanisms mediates the relationship between economic literacy and university performance, ensuring that risks are effectively managed rather than being detrimental to institutional sustainability.

ERM also underscores the importance of risk governance and risk aggregation in organizational success (Jankensgård, 2019). Risk governance addresses the under- or over-management of specific risk categories, ensuring balanced decision-making that enhances financial sustainability. Risk aggregation, on the other hand, ensures that all risk-related information is systematically processed, allowing university administrators to maintain a holistic perspective on financial and operational risks. This strategic approach enhances economic capital, which is crucial for sustaining the long-term growth and performance of public universities (Jankensgård, 2019).

Furthermore, Bromiley, McShane, Nair, and Rustambekov (2015) highlight three core assumptions of ERM that reinforce its relevance to university performance:

i. Holistic risk management – ERM assumes that managing risks at the institutional level is more efficient than handling risks at the departmental level, making it particularly useful for public universities that operate with diverse stakeholders.
ii. Diverse risk exposure – ERM accounts for multiple risk dimensions, including financial, operational, strategic, and reputational risks, all of which are relevant to the performance of public universities.
iii. Competitive advantage through risk management – Universities that effectively implement ERM strategies gain a competitive edge by leveraging risk

management as an opportunity for institutional growth rather than merely as a defensive mechanism.

ERM serves as the foundation for explaining how risk factor management mediate the relationship between economic literacy and university performance. Administrators who possess financial literacy are better equipped to implement risk management measures that align with ERM principles, ultimately improving university efficiency, financial sustainability, and overall performance (Yang et al., 2018). By fostering a structured approach to risk governance, public universities can mitigate financial volatility, ensure regulatory compliance, and enhance their long-term sustainability in an increasingly uncertain economic environment.

1.8.3 Resource-Based View (RBV) Theoretical Framework

The Resource-Based View (RBV) of the firm, originating from Penrose (1959), conceptualizes firms as organizations comprising a combination of creative resources, both physical and human (Curado & Bontis, 2006). Physical resources include tangible assets such as land and equipment, while human resources encompass knowledge and expertise, which contribute significantly to value creation within an organization. RBV posits that the utilization of these resources varies based on strategic implementation and organizational capabilities, leading to differences in productivity and performance (Curado & Bontis, 2006).

RBV focuses on a firm's internal resources and capabilities to explain economic returns and performance variances within an industry (Makhija, 2003; Hoopes, Madsen, & Walker, 2003). Firms with valuable, rare, inimitable, and non-substitutable (VRIN) resources achieve competitive advantages that lead to superior financial and non-financial outcomes (Hitt, Bierman, Shimizu, & Kockhar, 2001). The theory underscores that firm performance is driven by resource accumulation and strategic deployment rather than external industry dynamics (Roos, Bainbridge, & Jacobsen, 2001).

In the context of public universities in Southwestern Nigeria, economic literacy represents a specialized knowledge resource that can enhance institutional performance. RBV suggests that the effective application of economic literacy enables universities to develop value-driven strategies, optimize decision-making, and achieve sustainability (Rahmeyer, 2010). Furthermore, risk factors may mediate this relationship by influencing how economic literacy translates into performance outcomes. For instance, universities with robust risk mitigation strategies can better leverage their knowledge assets to enhance academic and operational efficiency.

RBV also highlights the role of human capital and intellectual resources in sustaining competitive advantage (Gerhart & Feng, 2021; Kaufman, 2015; Barney et al., 2012). The theory posits that firms, including universities, must continuously develop and integrate their knowledge assets to maintain performance and mitigate risks associated with resource constraints. Kaufman (2015) noted that firms could create imperfect labor market competition through strategic investment in internal labor markets, fostering productivity and efficiency. This insight applies to

universities, where investments in faculty development and student training can enhance institutional performance.

The RBV framework differentiates itself from other strategic approaches, such as Porter's monopoly-driven model and Barney's monopsony-based approach, by emphasizing the internal accumulation of valuable resources (Gerhart & Feng, 2021). Universities, as knowledge-intensive organizations, rely on their intellectual capital to drive sustainable performance. Malerba (2000) argued that organizational strategies rooted in specialized knowledge foster continuous innovation and institutional resilience. Similarly, Teece (2007) highlighted that universities' long-term success depends on the ability to explore, learn, and transfer knowledge effectively.

Davies and DeWitt (2021) further reinforced that RBV perceives firms as social institutions that integrate human capital and other assets to secure long-term economic returns. This perspective is particularly relevant for public universities, where the alignment of economic literacy with risk management strategies can optimize performance. Effective decision-making, resource allocation, and maintenance of knowledge assets are crucial for realizing the productive potential of institutional resources (Julienti & Ahmad, 2010).

Financial performance metrics include funding stability, revenue generation, and cost efficiency, while non-financial indicators encompass academic excellence, research output, and student employability. Studies suggest that intangible resources, such as knowledge and innovation, significantly influence institutional growth (Ray,

Barney, & Muhanna, 2004). Therefore, universities must strategically harness their intellectual assets to navigate risks and maintain competitiveness.

As RBV has evolved from its foundational stage (Penrose, 1959) to its current maturity (Teece, 2007; Sirmon, Hitt, & Ireland, 2007), it underscores its applicability in analyzing the impact of economic literacy on university performance. This framework provides a robust explanation for how universities can achieve sustainable growth through resource optimization and risk management. However, while RBV highlights the importance of resource accumulation and deployment, it does not fully explain the mechanisms through which knowledge itself becomes the most critical strategic asset for organizational success.

1.8.3.1 Knowledge-Based View (KBV)

Building upon RBV, the Knowledge-Based View (KBV) of the firm extends the resource-based perspective by asserting that knowledge is the most critical resource for achieving competitive advantage and long-term sustainability. Nonaka (1991, as cited in Curado & Bontis, 2006) emphasized knowledge as the key driver of firm performance, while Blackler (2002) highlighted its role in sustaining success. In public universities, KBV provides deeper insights into how economic literacy, mediated by risk factors, affects institutional performance.

Technical knowledge, tacit routines, and management capabilities are identified as essential resources to firm performance, with intangible resources

shaping competitive advantage (Rouse & Daellenbach, 2002). These assets, being rare and difficult to imitate, enhance organizational resilience (Umemoto, 2002). Public universities, as knowledge-intensive institutions, rely on effective knowledge accumulation and application to navigate economic challenges.

KBV emerged in response to Coase's (1937) transaction cost economics (TCE) model, which focused on cost efficiency (Williamson, 1979, as cited in Young, 2013). While TCE minimizes exchange costs, KBV underscores knowledge as a strategic asset (Young, 2013), reinforcing the need for universities to enhance economic literacy and knowledge management.

Knowledge can be internally cultivated or externally acquired (Szulanski, 2003), with external knowledge being costly yet useful when integrated with inimitable internal expertise (Zack, 2002). Effective coordination of these resources strengthens universities' strategic positioning. Unlike traditional production factors, knowledge generates increasing returns when systematically utilized (Kim & Mauborgne, 1999, as cited in Curado & Bontis, 2006) and remains a critical determinant of institutional sustainability (Spender, 2002).

Sustainable competitive advantage is rooted in intellectual capital (Hunter, 2002). Universities depend on their ability to develop, apply, and disseminate knowledge for performance optimization. Grant (1996, as cited in Bojan & Tamara, 2017) identified knowledge as the primary source of value, while Spender (1996, as cited in Bojan & Tamara, 2017) conceptualized organizations as knowledge networks.

Universities that efficiently manage knowledge achieve superior outcomes (Bojan & Tamara, 2017).

KBV distinguishes between explicit and tacit knowledge (Polanyi, 1966, as cited in Blomqvist & Pöyhönen, 2006). Explicit knowledge, such as theoretical models, is easily transferable, whereas tacit knowledge rooted in experience is difficult to articulate (Blomqvist & Pöyhönen, 2006). Faculty members' tacit knowledge in pedagogy and research plays a crucial role in institutional effectiveness. Universities must integrate both forms of knowledge to maintain their competitive edge.

In conclusion, KBV builds upon RBV by emphasizing human intellectual capital as the primary determinant of competitive advantage (Kohlbeck & Mayhew, 2004). While RBV highlights resource optimization, KBV underscores the strategic role of knowledge in navigating economic uncertainties and optimizing institutional outcomes. Therefore, a holistic approach that integrates both frameworks is essential for understanding the mediating role of risk factors in the relationship between economic literacy and public university performance.

1.9 Scope of the Study

The scope of the study is limited to public universities in southwestern Nigeria. The justification for using South-West geo-political zone of Nigeria as scope of this study is based on the fact that (i) the region houses the best university rank between 1-

1000th at global level (Higher Times, 2021). (ii) The four highly rated universities also serve as the national benchmark for higher education and national development plan for higher education in 2025 are domiciled in this region (National Development Plan, 2021) see table 1.4

Table 1.4

HEIs Ranking

S\N	Higher Times Ranking	University	State in Nigeria	Ownership Structure	No. of FTE Students	No. of Student Per Staff	International Student	Female : Male Ratio
1	401-500	University of Ibadan	Oyo State	Federal	38,170	25.7	1%	47:53
2	501-600	Lagos State University, Ojo	Lagos State	State	23,421	33.9	0%	44:56
3	601-800	University of Lagos	Lagos State	Federal	34,514	19.9	0%	49:51
4	801-1000	Covenant University	Ogun State	Private	8601	16.0	0%	43:57

Times Higher Education, (THE, 2021)

Equally, the National Universities Commission (NUC, 2021) ranking of Nigerian universities shows top ten best universities across private, state and federal universities base on the six geopolitical zone. The table 1.5 below shows that using the NUC twelve-point index, the number of universities in southwestern geopolitical

zone that made up the top ten universities in each ranking index is the highest. The overall ranking index shows that seven out of the top ten university is domicile in southwest. While, eight out of the top ten university in the southwestern geo-political zone made the ranking index of ranking Per Capita ALL Citations, Per Capita i-10 index and Knowledge Economy.

Table 1.5

Top 10 Universities by Geo-Political Zone (2021 Nigerian University System Ranking)

Geo-Political Zone	South-West	South-South	South-East	North - West	North-East	North-Central
Overall Ranking	7	1	-	-	-	2
Student-Teacher Ratio	4	3	3			
Percentage of Female Students	6	2	2			
Full Professor	6	1	1	1		1
International Staff	4		2	1	1	2
International Student	4	1	2		1	2
Efficiency	6	1				3
Per Capita ALL Citations	8					2
Per Capita h-index	6	1				3
Per Capita i-10 index	8					2
Per Google Scholar Presence	7	3				
Knowledge-Economy	8					2

National Universities Commission (NUC, 2021)

Although there exist diverse risks management practices that impact on performance of university but this study is only interested in financial risk, ethical risk,

reputation risk and enrolment supply risk while the institutional performance index that form focus of this study are financial performance, customer satisfaction performance, learning and innovative performance and internal business process performance. It must be noted the economic literacy sub-themes that form scope of this study are economic rationality, economic knowledge, individual economic planning and social economic reflection.

1.10 Significant of the Study

1.10.1 National

This study is driven by the critical need to address the challenges limiting the performance of Nigeria's higher education sector, particularly in light of the fact that Nigerian universities are ranked among the top fifty institutions in Africa, with ten of them making the list. This notable achievement underscores the potential for Nigeria's higher education system to outshine other African universities and become a key player in the global academic arena. By capitalizing on this strength, Nigeria can increase its global footprint, attract international students, and generate more revenue, thereby contributing to both institutional and national development.

A significant aspect of this study will focus on identifying and analyzing the sources and intensity of various risks namely financial, ethical, reputational, and enrolment supply risks that impact the institutional performance of Nigeria’s higher education institutions (HEIs). Financial risks, for instance, could stem from

fluctuating funding levels, reliance on government grants, or mismanagement of institutional finances. Ethical risks might include issues such as academic integrity, corruption, and transparency in administration. Reputational risks could emerge from poor academic performance, low international rankings, or negative media coverage, while enrolment supply risks relate to inconsistencies in student intake, admission policies, or demographic changes. Understanding these risk factors is crucial as it will allow university administrators to develop targeted mitigation policies that can strengthen institutional resilience and ensure sustainable growth.

This study will also investigate the economic literacy of university administrators, as their financial decision-making capacity plays a pivotal role in the performance and survival of HEIs. The level of economic literacy among decision-makers within universities will inform the types of training programs that are necessary to equip them with the skills to manage financial risks effectively. Such training would not only improve institutional financial performance but also contribute to the long-term stability of the education sector in Nigeria. By enhancing their economic acumen, university leaders can make more informed and strategic decisions, ensuring that their institutions are financially sustainable and better positioned for future growth.

Another key dimension of this research will be to explore the impact of administrative decisions on financial risks and how these risks, in turn, affect overall institutional performance. The study aims to establish a clear link between sound financial management and improved performance metrics within HEIs, including financial health, student satisfaction, internal operational efficiency, and innovation.

Through this lens, the study will also reveal how the economic literacy of staff particularly those in key administrative positions can reduce financial risks, optimize resource allocation, and ultimately translate into enhanced financial performance across Nigeria's higher education landscape.

Furthermore, the study will offer a comprehensive evaluation of the performance and risk factors affecting Nigeria's higher education sector. By providing a detailed performance analysis in areas such as financial management, customer satisfaction, internal business processes, and innovation, the study will highlight best practices from leading institutions across the country. Universities in Nigeria's southwestern and northern regions, in particular, can draw inspiration from these best-performing institutions, using their strategies as models for improving their own economic efficiency and institutional performance. This, in turn, will contribute to national development by strengthening the overall quality and competitiveness of Nigeria's higher education system.

The research will also have broader implications for regulatory bodies overseeing higher education in Nigeria, such as the National Universities Commission (NUC), the Tertiary Education Trust Fund (TETFUND), and the Ministry of Education. By analyzing the risks and challenges facing HEIs, the study will offer recommendations that can help these bodies redefine their policies and operations to ensure excellence in institutional performance. This is particularly important in the context of Nigeria’s National Development Plan (NDP) vision 2025 and beyond, as it will enable the higher education sector to align more closely with the country’s long-term development goals.

One of the study's significant contributions will be the introduction of the Balanced Scorecard (BSC) approach as a tool for assessing university performance in Nigeria. While the current focus of most regulatory bodies is on academic metrics, this study will advocate for the adoption of a more comprehensive set of performance indicators that reflect the overall health and global competitiveness of Nigerian universities. The BSC will provide regulatory bodies and university administrators with a broader framework for evaluating performance across multiple dimensions, including financial sustainability, innovation, internal processes, and student satisfaction. This shift in focus will not only improve the national benchmarking process but also enhance Nigeria's standing in the global academic community.

Finally, this study will emphasize the importance of economic literacy and strategic decision-making in higher education institutions. By examining the impact of both operational and strategic decisions on the financial and institutional health of HEIs, the research will provide valuable insights for universities seeking to achieve greater global impact and higher rankings. Institutions that aspire to be globally recognized will benefit from the lessons learned in this study, gaining a better understanding of the challenges and opportunities facing Nigeria's higher education sector. In doing so, this research will contribute to the development of a more resilient and competitive higher education system in Nigeria, capable of driving national development and securing a prominent place in the global academic landscape.

1.10.2 Global Contribution

This study addresses issues that institutions around the world face and makes substantial contributions to higher education globally. Higher education institutions (HEIs) must conduct a thorough risk analysis in order to ensure their long-term viability and growth in an increasingly interconnected and competitive global environment. In spite of regional differences, the study presents a globally applicable framework for evaluating the risk exposure of HEIs. Through its examination of problems such as financial instability, governance issues, and reputational risks, the research gives institutions the knowledge and skills they need to overcome these challenges and support cross-border sustainable growth.

The study also promotes a worldwide change in the standards for evaluating institutional performance. It suggests abandoning the narrow focus on academic performance and putting in place a multifaceted assessment model that takes into account other indicators of success, like social contributions, stakeholder relationships, and financial stability. By taking a comprehensive approach, organizations can more effectively recognize and address new global trends, opportunities, and challenges that affect their operations.

The research places significant emphasis on the transformative potential of intellectual capital, specifically economic literacy, in shaping the global landscape of higher education. Economic literacy becomes crucial for faculty, staff, and administrators to make informed decisions about resource management and strategic planning as HEIs deal with increasingly complex financial and operational

environments. This study highlights how strengthening institutional growth through the promotion of economic literacy can strengthen governance, improve resource allocation, and increase financial resilience in the global higher education sector.

Furthermore, the knowledge gained from this research lays the groundwork for HEIs to collaborate internationally. Institutions from different regions can collaborate more successfully, share best practices, and pool resources to address shared challenges by recognizing shared risks and implementing comparable performance evaluation models. Together, these international networks of risk-averse universities will improve higher education's competitiveness, sustainability, and quality worldwide.

To sum up, the research significantly advances international higher education by providing a framework for universal risk assessment, endorsing a thorough assessment model, emphasizing the value of intellectual capital, and fostering cross-border cooperation. These will ensure the resilience, expansion, and success of HEIs around the globe as they adjust to the changing nature of education.

1.11 Operational Definitions of Terms

1.11.1 Economic Literacy & Sub-themes

Dİlek et al. (2018) define to economic literacy as consisting of sub-themes such as: economic situation, economic education, economic interest, and belief in the benefits

of economic literacy. Fourie and Krugell (2015) perceive economic literacy as the level of understanding of microeconomics and macroeconomics. The basic economic problem (scarcity, opportunity cost, and production variables), demand, supply, and elasticity, consumer theory, and theory of production are all covered in microeconomics. The exam includes macroeconomic questions like GDP, inflation, and unemployment, as well as monetary and fiscal policy and international economics. Based on this study, Economic literacy refers to an individual's ability to understand, analyze, and apply economic principles in decision-making processes related to personal finance, business, and societal economic policies. It encompasses knowledge of key economic concepts, rational decision-making, socio-economic awareness, and financial planning. Economic literacy dimensions in this study are economic knowledge, economic rationality, socio-economic thinking and individual economic planning.

Economic knowledge involves understanding fundamental economic principles and recognizing their impact on both national and individual economic well-being. Building on this foundation, economic rationality refers to the capacity to make logical and well-informed financial decisions by analyzing available economic data and assessing potential risks. Socio-economic thinking emphasizes integrating social, ethical, and economic considerations into financial decision-making to promote equitable and efficient resource utilization. Complementing these aspects is individual economic planning, which focuses on the effective management of personal financial resources to achieve stability, foster growth, and prepare for future uncertainties.

1.11.2 Institutional Performance & Sub-themes

Felizardo et al. (2017) argued that institutional performance perceived as consisting of financial analysis, customer satisfaction, quality, innovation and growth factors. In this study, Institutional performance refers to the overall effectiveness of an educational institution in achieving its financial, stakeholder satisfaction, operational, and developmental goals. It is measured through financial performance, stakeholder engagement, internal business process, and learning and growth performance.

Financial performance is characterize as including sources of income, methods of allocating income, rates of income growth, and efficiency of expenditures (Aprilya, 2019). High return on sales, increased profit, high employee and customer/citizen happiness, return on equity, return on assets, investment, quick product delivery, and employee training are all viewed as indicators of financial performance (Cignitas et al., 2022). Based on this study, financial performance is the ability of an institution to generate sufficient financial resources to support its academic and administrative functions sustainably.

Stakeholder / Customer satisfaction performance is seen as the unique value proposition, which encapsulates an organization's distinctive blend of product improvement, corporate brand, customer satisfaction, attracting new consumers, and retaining current consumers with superior customer satisfaction (Cignitas et. al., 2022). Customer viewpoint is characterised by students' levels of satisfaction, expectations of students as consumers of educational services, and other factors (Aprilya, 2019). In this study, Stakeholder/Customer Satisfaction is the degree to

which students, faculty, alumni, and external partners are satisfied with the institution's services and policies.

Internal Business Processes/Organizational Internal Performance is defined as developing new goods and services, tapping into untapped markets, cutting costs associated with internal operations, and managing quality, cycle time, and capacity utilisation (Cignitas et al., 2022). Internal business performance is defined as the caliber of resources and infrastructure, the workflow, and the level of satisfaction among lecturers and university staff (Aprilya, 2019). In this study, Internal Business Processes is the efficiency and effectiveness of an institution's internal operations, including governance, communication, and performance evaluation.

Learning and Growth/Innovative and growth performance are indications of facilities and infrastructure, possibilities for personal growth, innovation, and the working environment for both university faculty and staff (Aprilya, 2019). Competencies and skills, IT-tech, 21st-century skills, employee motivation, and interaction between the company and the employee make up innovative and growth performance (Cignitas et. al., 2022). Learning and Growth performance in this study is conceived as the institution's commitment to fostering continuous learning, professional development, and knowledge expansion for staff and students.

1.11.3 Risk Factors & Sub-themes

Deloitte (2018) define risk factor in HEIs as business model risks, reputation risks, operating model risk, enrollment supply risk and compliance risks while Aetdinova et. al. (2020) perceived risks factors in HEIs as measured as socioeconomic risks consisting of political risk, compliance risks, financial risks, academic risks and reputation risk. Also, Thanh et. al. (2017) conceived risks factors in HEIs as consisting reputation risks, operational risk and teaching risk. In this study, risk factor management denote risk management practices in HEIs. It entails administrators' ability to manage the potential challenges and uncertainties that can impact the financial stability, ethical standards, reputation, and enrolment sustainability of an institution. These risks can arise from financial mismanagement, ethical misconduct, institutional reputation threats, and declining student enrolment.

Deloitte (2018) perceive financial risks as consisting of financial fraud, tuition dependency, poor endowment returns and and inappropriate cash monitory system. Ruzic-Dimitrijevic & Dakic, (2014) defined financial risk in HEIs as risks that consist of economic crisis, lower enrollment rate, impossibility to charge professional projects and poor engagement in projects. Based on this study, financial risk is the likelihood of financial instability or constraints that affect an institution's ability to meet operational and developmental needs.

Enrolment Supply Risks are risks that emanate from a fall in international student enrollment as a result of stringent immigration law, economic shocks, job market consideration and rising student debt (Deloitte, 2018) while Ruzic-

Dimitrijevic and Dakic (2014) claimed that enrollment supply risk emanates from the competition, unpopular programs, expensive scholarship, bad advertisement, anonymity of institution and bad information about school. In this study, enrollment supply risk is the risk of fluctuations in student enrolment due to institutional policies, financial constraints, or external competition..

Reputation risk is generated from brand management, campus safety and student activism (Deloitte, 2018). Reputation risk emanates from institution's actions or from external actions such as media on image of the university (Raanan, 2008) while according to this study, reputation risks is the potential threats to an institution's public image and credibility, which may affect stakeholder trust and institutional competitiveness.

Ethical risk is view as a compliance requirement violation that may result in funding loss, accreditation loss, lawsuits, or prosecutions against institutions or management (Deloitte, 2018). In this study, ethical risk is the risk of unethical behaviors that compromise institutional integrity and fairness in academic and administrative practices.

1.12 Summary of Chapter

This chapter serves as the introductory section of the thesis, establishing the foundation for the subsequent chapters. It outlines the background of the study, identifies the key problem the research seeks to address, and presents the study's

objectives, research questions, and hypotheses. Additionally, it introduces the conceptual framework, scope, significance of the research, and defines key terms used throughout the study.

Chapter Two provides an overview and presents the theoretical framework that guides the analysis. It reviews the psychometric properties of economic literacy measures and examines how risk factors influence economic literacy in relation to organizational performance. The chapter also discusses the concept of risk, key performance indicators (KPIs) for universities, and sustainable strategies for managing risks in higher education. It concludes by identifying gaps in the existing literature, setting the stage for deeper exploration into the relationship between economic literacy, risk factors, and university performance.

Chapter Three focuses on the study's methodology, detailing the research design, model, population, sample size, sampling procedures, research instruments, pilot testing, data analysis methods, and ethical considerations. It also covers the assessment of the measurement and structural models, as well as mediation testing. Chapter Four outlines the data collection process, presentation and analysis of the collected data, and the findings based on the research questions. Finally, Chapter Five provides a detailed discussion of the results, their implications, conclusions, recommendations, and suggestions for future research.