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## **JOURNAL HISTORY**

The journal *Annals of Spiru Haret University. Economic Series* was founded in 2000 at the initiative of two professors from Spiru Haret University: professor Ph.D. Gheorghe Zaman – also corresponding member of the Romanian Academy and professor Ph.D. Constantin Mecu – one of the University's founders and vice-rector.

Between 2004-2010, the journal is headed by professor Ph.D. Constantin Mecu, as editor-in-chief, and associate professor Ph.D. Aurelian A. Bondrea, as deputy editor, both of them vice-rectors of the university.

In 2011, associate professor Ph.D. Aurelian A. Bondrea, rector of the university, takes over the presidency as editor-in-chief and leads the journal until present.

The *Annals of Spiru Haret University. Economic Series* was issued annually, once a year, starting 2000, until 2009.

Since 2010, the *Annals* have a new format, with a four-annual issuance exclusively in English, with both redaction and review conditions comparable to the most rigorous international requirements.

In 2007, *Annals of Spiru Haret University. Economic Series* obtained the B+ quotation from The National Council of Research in Higher Education in Romania, becoming a publication of real scientific interest.

Starting 2009, the review is indexed in REPEC, SSRN and Google Scholar and beginning with 2016 our Journal is under a process of rebranding, the new team trying to rethink the journal indexing strategy in international databases, suggesting a greater external visibility.

Along the years, in the journal pages, the members of the teaching personnel – professors, associate professors, lecturers and teaching assistants – active in six economics faculties and distinct specialty departments, as well as in the Central Scientific Research Institute, functioning within Spiru Haret University, present the results of their scientific research. The journal also hosts many studies of professors, researchers or Ph.D. students from other universities and research institutes all over the world.

The subject of the publication firstly reflects the concern for the modernization of teaching economic science in University: marketing, management, finance, banking, accounting, audit, international economic relations, trade, business, tourism, administrative data processing, politic economy, commercial law, cybernetics, environmental economics, statistics, ethics in economics, insurance, advocacy & lobby, economic philosophy, econometrics etc.

In the published materials, there are analyzed theoretical and practical issues of edification and consolidation of the Romanian market economy, as well as the fundamental directions of the technical and scientific progress, the actual state and ways of its promotion in the Romanian economy, the issue of developing the new world economy, the directions of globalization and contemporaneous

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## FOREWORD

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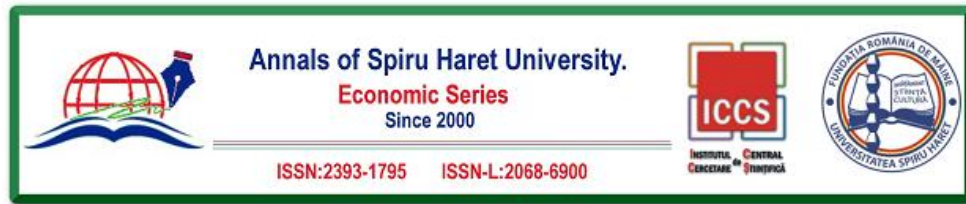
According to *World Economic Outlook, October 2020: A Long and Difficult Ascent*, the global economy is recovering after the Great Lockdown in April 2020. But with the COVID-19 pandemic continuing to spread, many countries have slowed reopening and some are reinstating partial lockdowns to protect susceptible populations. While recovery in China has been faster than expected, the global economy’s long ascent back to pre-pandemic levels of activity remains prone to setbacks.

Global growth is projected at  $-4.4\%$  in 2020, a less severe contraction than forecast in the *June 2020 World Economic Outlook (WEO) Update*. The revision reflects better-than anticipated second quarter GDP outturns, mostly in advanced economies, where activity began to improve sooner than expected after lockdowns were scaled back in May and June 2020, as well as indicators of a stronger recovery in the third quarter. Global growth is projected at  $5.2\%$  in 2021, a little lower than in the June 2020 WEO Update, reflecting the more moderate downturn projected for 2020 and consistent with expectations of persistent social distancing. Following the contraction in 2020 and recovery in 2021, the level of global GDP in 2021 is expected to be a modest  $0.6\%$  above that of 2019. The growth projections imply wide negative output gaps and elevated unemployment rates this year and in 2021 across both advanced and emerging market economies.

United Nations in its *World Economic Situation and Prospects: September 2020 Briefing, No. 141* also agrees that the COVID-19 pandemic has compressed global trade by magnitudes last seen during the 2008 global financial crisis. Trade has dropped sharply in developing countries, though with differences between regions. While projections point to a limited recovery in 2021, there are questions about the longer-run climate for trade.

The outbreak exacerbated an already subdued trade environment, both globally and among developing countries. Besides COVID-19, trade has been weakened in recent years by more systemic issues, such as slow economic growth and protectionist policies.





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However, the deterioration of trade in the medium-term has economic implications for investment and productivity growth, especially in developing countries relying on trade-led growth strategies.

As a policy option, a turn to more regional trade and regional value chains is gaining ground and might become an essential component of developing countries' exit strategies out of crisis.

Regarding policy priorities, near-term imperatives and medium-term challenges, *World Economic Outlook, October 2020: A Long and Difficult Ascent* is telling us that besides combating the deep near-term recession, policymakers have to address complex challenges to place economies on a path of higher productivity growth while ensuring that gains are shared evenly and debt remains sustainable. Many countries already face difficult trade-offs between implementing measures to support near-term growth and avoiding a further build-up of debt that will be hard to service down the road, considering the crisis's hit to potential output. Policies to support the economy in the near term should, therefore, be designed with an eye to guiding economies to paths of stronger, equitable, and resilient growth.

Tax and spending measures should privilege initiatives that can help lift potential output, ensure participatory growth that benefits all, and protect the vulnerable. The additional debt incurred to finance such endeavours is more likely to pay for itself down the road by increasing the size of the economy and future tax base than if the borrowing were done to finance ill-targeted subsidies or wasteful current spending. Investments in health, education, and high-return infrastructure projects that also help move the economy to lower carbon dependence can further those objectives. Research spending can facilitate innovation and technology adoption – the principal drivers of long-term productivity growth. Moreover, safeguarding critical social spending can ensure that the most vulnerable are protected while also supporting near-term activity, given that the outlays will go to groups with a higher propensity to spend their disposable income than more affluent individuals. In all instances, adhering to the highest standards of debt transparency will be essential to avoid future rollover difficulties and higher sovereign risk premiums that raise borrowing costs across the economy.

Given the global nature of the shock and common challenges across countries, strong multilateral efforts are needed to fight the health and economic crisis. A key priority is funding advance purchase commitments at the global level for vaccines currently under trial to incentivize rapid scaling up of production and worldwide distribution of affordable doses (for example, by bolstering multilateral initiatives for

vaccine development and manufacture, including the *Coalition for Epidemic Preparedness Innovations and Gavi, the Vaccine Alliance*). This is particularly important given the uncertainty and risk of failure in the search for effective and safe vaccines. A related priority is to help countries with limited health care capacity. Beyond assistance with medical equipment and know-how, several emerging market and developing economies – in particular low-income countries – require support from the international community through debt relief, grants, and concessional financing. Where debt restructuring is needed, creditors and low-income-country and emerging market borrowers should quickly agree on mutually acceptable terms. The global financial safety net can further help countries deal with external funding shortfalls. Since the onset of the crisis, the *International Monetary Fund* has expeditiously provided funding from its various lending facilities to about 80 countries at unprecedented speed.

For many countries, sustaining economic activity and helping individuals and firms most in need – while ensuring that debt remains sustainable – is a daunting task, given high public debt, the spending needs triggered by the crisis, and the hit to public revenues. Governments should do all that they can to combat the health crisis and mitigate the deep downturn while being ready to adjust policy strategy as the pandemic and its impact on activity evolve. Where fiscal rules may constrain action, their temporary suspension would be warranted, combined with a commitment to a gradual consolidation path after the crisis abates to restore compliance with the rules over the medium term.

Room for immediate spending needs could be created by prioritizing crisis countermeasures and reducing wasteful and poorly targeted subsidies. Extending maturities on public debt and locking in low interest rates to the extent possible would help reduce debt service and free up resources to be redirected toward crisis mitigation efforts. Although adopting new revenue measures during the crisis will be difficult, governments may need to consider raising progressive taxes on more affluent individuals and those relatively less affected by the crisis (including increasing tax rates on higher income brackets, high-end property, capital gains, and wealth) as well as changes to corporate taxation that ensure firms pay taxes commensurate with profitability.

Countries should also cooperate on the design of international corporate taxation to respond to the challenges of the digital economy. With the pandemic continuing to spread, all countries – including those where infections appear to have peaked – need to ensure that their health care systems can cope with elevated demand. This means securing adequate resources and prioritizing health care spending as needed,

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including on testing; contact tracing; personal protective equipment; life-saving equipment, such as ventilators; and facilities, such as emergency rooms, intensive care units, and isolation wards.

Countries where infections continue to rise need to contain the pandemic with mitigation measures that slow transmission. Lockdowns are effective in bringing down infections. Mitigation measures – a much-needed investment in public health – set the stage for an eventual economic recovery from the downturn brought on by mobility constraints. Economic policy in such cases should limit the damage by cushioning income losses for affected people and firms while also supporting resource reallocation away from contact-intensive sectors that are likely to be constrained for an extended period of time. Retraining and reskilling should be pursued to the extent feasible so that workers can look for jobs in other sectors. Because the transition may take a while, displaced workers will need extended income support as they retrain and search for jobs.

Complementing such measures, broad-based accommodative monetary and fiscal responses – where fiscal space exists – can help prevent deeper and longer-lasting downturns, even if their ability to stimulate spending is initially hampered by mobility restrictions. As countries reopen, policies must support the recovery by gradually removing targeted support, facilitating the reallocation of workers and resources to sectors less affected by social distancing, and providing stimulus where needed to the extent possible. Some fiscal resources freed from targeted support should be redeployed to public investment – including in renewable energy, improving the efficiency of power transmission, and retrofitting buildings to reduce their carbon footprint.

Moreover, as lifelines are unwound, social spending should be expanded to protect the most vulnerable where gaps exist in the safety net. In those cases, authorities could enhance paid family and sick leave, expand eligibility for unemployment insurance, and strengthen health care benefit coverage as needed. Where inflation expectations are anchored, accommodative monetary policy can help during the transition by containing borrowing costs. Beyond the pandemic, multilateral cooperation is needed to defuse trade and technology tensions between countries and address gaps – for instance in services trade – in the rules-based multilateral trading system.

Countries must also act collectively to implement their climate change mitigation commitments. Joint action – particularly by the largest emitters – that combines steadily rising carbon prices with a green investment push is needed to reduce

emissions consistent with limiting increases in global temperature to the targets of the *2015 Paris Agreement*. A broadly adopted, growth-friendly mitigation package could raise global activity through investment in green infrastructure over the near term, with modest output costs over the medium term as economies transition away from fossil fuels toward cleaner technologies. Relative to unchanged policies, such a package would significantly boost incomes in the second half of the century by avoiding damages and catastrophic risks from climate change. Moreover, health outcomes would begin to improve immediately in many countries thanks to reduced local air pollution.

The global community should also take urgent steps to strengthen its defences against calamitous health crises, for example by augmenting stockpiles of protective equipment and essential medical supplies, financing research, and ensuring adequate on-going assistance to countries with limited health care capacity, including through support of international organizations.

On the other side, *June 2020 Global Economic Prospects, A World Bank Group Flagship Report* shows that the COVID-19 pandemic and the economic shutdown in advanced economies and other parts of the globe have disrupted billions of lives and are jeopardizing decades of development progress. The global economy is suffering a devastating blow. *The World Bank Group* forecast envisions the deepest global recession since World War II. The COVID-19 recession is the first since 1870 to be triggered solely by a pandemic. The speed and depth with which it has struck suggests the possibility of a sluggish recovery that may require policymakers to consider additional interventions. For many emerging market and developing countries, however, effective financial support and mitigation measures are particularly hard to achieve because a substantial share of employment is in informal sectors. Beyond the staggering economic impacts, the pandemic will also have severe and long-lasting socio-economic impacts that may well weaken long-term growth prospects – the plunge in investment because of elevated uncertainty, the erosion of human capital from the legions of unemployed, and the potential for ruptures of trade and supply linkages.

The pandemic and economic shutdown in advanced economies and elsewhere are hitting the poor and vulnerable the hardest – through illnesses, job and income losses, food supply disruptions, school closures and lower remittance flows. Thus, policy makers face unprecedented challenges from the health, macroeconomic and social effects of the pandemic. To limit the harm, it is important to secure core public services, maintain a private sector and get money directly to people. This



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will allow a quicker return to business creation and sustainable development after the pandemic has passed. During this mitigation period, countries should focus on targeted support to households and essential public and private sector services; and remain vigilant to counter potential financial disruptions. During the recovery period, countries will need to calibrate the withdrawal of public support and should be attentive to broader development challenges.

*The 2020 Global Economic Prospects Report* discusses the importance of allowing an orderly allocation of new capital toward sectors that are productive in the new post-pandemic structures that emerge. To succeed in this, countries will need reforms that allow capital and labour to adjust relatively fast – by speeding the resolution of disputes, reducing regulatory barriers, and reforming the costly subsidies, monopolies and protected state-owned enterprises that have slowed development. To make future economies more resilient, many countries will need systems that can build and retain more human and physical capital during the recovery – using policies that reflect and encourage the post-pandemic need for new types of jobs, businesses and governance systems. Emerging market and developing economies are devoting more public resources to critical health care and support for livelihoods during the shutdown, adding to the urgency of their allowing and attracting more private sector investment. This makes the financing and building of productive infrastructure one of the hardest-to-solve development challenges in the post-pandemic recovery. The transparency of all government financial commitments, debt-like instruments and investments is a key step in creating an attractive investment climate and could make substantial progress this year.

Faster advances in digital connectivity are also necessary and should get a vital boost from the pandemic, which heightened the value of teleworking capabilities, digital information, and broad connectivity. Digital financial services are playing a transformative role in allowing new entrants into the economy and making it easier for governments to provide rapidly expandable, needs-based cash transfers. The speed and strength of the recovery will depend on the effectiveness of the support programs governments and the international community put in place now; and, critically, on what policymakers do to respond to the new environment.

In the current context, the authors found forums for discussions and debates and have written articles for the current issue trying, as far as possible, to look at some solutions for the current problems facing the new world state of economy. Whether or not they succeeded in responding to the challenges, we leave it to you to determine.

The first article of the current issue is written by **Adina TRANDAFIR** who is debating the *Human Development Inequalities by Regions in Romania*. In order to determine the inequalities in human development by regions in Romania, the author used the human development index adjusted to inequalities. This index is used when there are inequalities in distribution for each value in part across the population and, especially, when there are inequalities between people. It is also based on a distribution-sensitive class of composite indices and is created after a model proposed by Foster *et al.* (2005), which was built on Atkinson's family of inequality measures (1970). While the Human Development Index is based on country-level aggregates, such as national income accounts, the Inequality-adjusted Human Development Index must rely on additional data sources to obtain distribution information. This article aims to highlight, on the one hand, the inequalities in human development that exist in Romania, and on the other hand the correlation between economic and human development in the eight regions. Therefore, the analysis was divided into two parts. First, based on empirical data calculated the dimension of Inequality-adjusted Human Development Index (IHDI) then, on the other hand, using an econometric analysis, the author Adina Trandafir determined which is the correlation between human and economic development in each of the eight Romanian regions.

Regarding the role of management in education, the authors **Anca UNGUREANU**, **Mariana IATAGAN** and **Adrian UNGUREANU** wrote the article called *The Importance of Managerial Education in Pre-University Education*. Education is one of the tools through which society motivates, guides and controls development processes. Managerial education is a discipline of education through which students are taught to be business leaders, principals, managers and administrators. Managerial education will become more and more experimental. That is why the authors think that the pre-university education sector is of crucial importance for the development of its prominent role in laying the foundations for building human capital.

Going ahead with the sector of education, the Bulgarian author **Elitsa PETROVA** wrote a *Scientific Research on the Motivation for Learning as an Important Element of Economic and Social Sciences in the Context of Security and Defence*. This article gives a brief overview of a study conducted on motivation for learning as an important element of social and economic sciences in the context of the sphere of security and defence. The research is an important scientific work of the author and was developed in the 2012-2018 period. At present, its results have been

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approved, considered appropriate and acceptable and are applied at the National Military University in Bulgaria.

The purpose of the empirical study written by **Shiraz AYADI** and **Houda BEN SAID**, named *The Financial Contagion Effect of the Subprime Crisis on Selected Developed Markets*, is to explore and compare the effects of subprime crisis on some of developed markets (e.g. France, Germany, the United Kingdom and Japan). The VECM model and Johansen's cointegration approach (1988) have been used to verify the existence of potential short and long run relationships between the United States market, where the subprime crisis has been triggered, and the other markets. The results indicated that all the markets are cointegrated in the long run and there is long run equilibrium. Dynamic interactions between the developed markets and the US increased during the subprime crisis. Authors' results shed light on financial contagion as the element that dramatically spreads the shock to the entire financial system as well as other financial markets. This contagion is a top priority for investors, financial regulators and international organizations whose goal is to improve the global financial regulation system and make it more resistant to shocks.

The study called *The Impact of External Debt on Stimulating Economic Growth in Nigeria: Mediating on the Role of Public Sector Financial Management*, written by **Oladipo Niyi OLANIYAN**, **Olubunmi Omotayo EFUNTADE**, **Olatunbosun Ayo FALANA** and **Cecilia Dada TAIWO**, examined the impact of external debt in stimulating economic growth in Nigeria: mediating on the role of public sector financial management. Secondary data was explored using ex post facto. The variables employed involves Gross Domestic Product (GDP) as endogenous variable while Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio (INFR), Interest Service Ratio (ISR) and Exchange Ratio (EXR) as exogenous variables and were obtained from World Bank International Debt Statistic and Central Bank of Nigeria Statistical Bulletin for the period of 1989-2019. Diagnostic tests were conducted using Auto Regressive Distributed Lag (ARDL), Augmented Dick Fuller (ADF) Unit Root Test, and Cointegration model.

The result revealed the presence of cointegration among the variables with clear indication that external debt has a significant and positive relationship with economic growth with strong emphasis on public sector financial management as mediating factor. It was concluded that Nigeria debt crisis was attributed to both exogenous and endogenous factors due to dwindling economy.

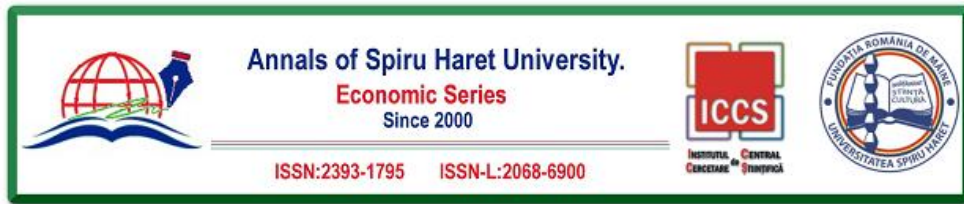
The study recommends that government should develop home-grown policies to enhance the country's competitive advantage in the global market. The authors

strongly believe that government should exit from all forms of commercial debts that expose the country to another regime of debt overkill.

**Marius SURUGIU** and **Raluca MAZILESCU**, in their paper entitled *The Impact of Trust (in) and Power of the Authorities on Tax Compliance in the Case of Romania*, are telling us that tax compliance is important for governments, for the proper functioning of the tax authority, having an impact on the level of the budget revenue. In this paper, the influence of trust (in) and power of the authorities on tax compliance is analysed, using data for Romania during 2007-2017 period. The extent to which trust (in) and power of the authorities may influence the tax compliance continues to attract the attention of scholars and the results of the paper may represent a starting point for various measures needed to support the voluntary tax compliance. The results suggested that “trust” variable has a statistically significant impact on tax compliance, in the case of Romania. Another goal of this paper is to underline the importance of checking the hypotheses for a regression model, because any violation may lead to inaccurate results.

Another interesting paper is the one of **Akinrinde OLAWALE**, who is talking to us about *Africanity and the Politics of African Xenophobia: A Study of Two Parallels*. The search for sustainable homemade solutions to both internal and external challenges, especially the colonialist and neo-colonialist epistemologies as well as the Eurocentric construction of African history that Africa is faced with has, in part, led to the call and coining of the concept of Africanity. While this call has, on several occasions, been racially discredited by the West, it has now assumed a pivotal space in Africa’s developmental agenda. Again, while efforts geared towards the re-awakening of the consciousness and belief in the African Indigenous system and its capacity to spearhead the much desired goal of Africa’s development continue to be intensified, the recent manifestations of the xenophobic attitudes in Africa now negates the spirit of Africanity and the goal of a united Africa, consequently posing a major hindrance to Africa’s development. Findings have however shown that the concept and propagation of Africanity in the wake of the xenophobic experience in Africa is largely paradoxical. It has been observed that Africans are equally neck-deep in what this concept is set out to achieve. As a corrective response to the racist and sexist ontology of the West, it has paradoxically failed to illuminate the true Africanness of Africans in contemporary racist, sexist and xenophobic Africa. Consequently, this paper concludes that the whole concept of Africanity in contemporary Xenophobic Africa is paradoxical. It can however turn out to be a reality only when the continent is eventually cleansed from the pathologies the concept is set out to achieve.





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The last but not the least important article of our issue is written by **Gunel MAHARRAMLI**, who is talking about *The Impact of Bad Digital Marketing Strategies on Companies' Profit and Brand Image*. This research has been conducted to help us understand how digital marketing mistakes have a negative impact on the future, reputation and profitability of brands. Over recent times, digital marketing has become one of the most commonly used areas in marketing, and its development continues from day to day. Using a number of different types of research methods, it has been shown that the existence of the Internet has also provided numerous strategies and tools for the development of this field. In this research, you can understand that having so many conditions and perspectives, however, does not mean that everything will always be easy and that everything will be on the way. In this article, it is possible to learn about some of the wrong advertising strategies or methods used. The article also provides statistical information on the most commonly used areas in digital marketing. This article will also help you understand where a lack of information can make you ineffective and how you can prevent it.

We hope that our journal issue caught your attention and made you read it. Also, we strongly believe that all the articles are interesting and deserve to be appropriated by those who are interested in understanding the specific issues of the global economy.

If you've liked our articles, please visit our website at **<http://anale-economie.spiruharet.ro/>**. If you want to write an article in our journal, we are waiting you to expose your ideas in new studies published by us.

Finally, hoping that you found interesting Issue 4/2020, I strongly invite you to address your comments and suggestions at [ashues@spiruharet.ro](mailto:ashues@spiruharet.ro) and, of course, to submit your own paper via online submission system, using the following link: **<http://anale.spiruharet.ro/index.php/economics/login>**.

*Research is the breath of the future. Let's shape the world together!*

**Associate Professor Elena GURGU, Ph.D. in Economics**  
**ASHUES Deputy Chief Editor**

# **ACADEMIA PAPERS**



## HUMAN DEVELOPMENT INEQUALITIES BY REGIONS IN ROMANIA

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### Abstract

*In order to determine the inequalities in human development by regions in Romania, the human development index adjusted to inequalities will be used. This index is used when there are inequalities in distribution for each value in part across the population and, especially, when there are inequalities between people. It is also based on a distribution-sensitive class of composite indices and is created after a model proposed by Foster et al. (2005), which was built on Atkinson's family of inequality measures (1970). While the Human Development Index is based on country-level aggregates, such as national income accounts, the Inequality-adjusted Human Development Index must rely on additional data sources to obtain distribution information. This article aims to highlight, on the one hand, the inequalities in human development that exist in Romania, and on the other hand the correlation between economic and human development in the eight regions. Therefore, the analysis will be divided into two parts. First, based on empirical data will be calculate the dimension of Inequality-adjusted Human Development Index (IHDI) then, using an econometric analysis, we will determine which is the correlation between human and economic development in each of the eight Romanian regions.*

**Keywords:** human development; economic growth; Inequality-adjusted Human Development Index



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JEL Classification: O15, R11, R15

### *Introduction*

Concerns for human development are not new, the Human Development Report of 1990 (UNDP, Human Development Report 1990. Concept and Measurement of Human Development) clearly outlined the concept of human development, this being the first report introducing a new measurement for welfare levels and progress – Human Development Index (HDI). The first chapter of the Report, Defining and Measuring Human Development, begins with the assertion that people are the true wealth of a nation, and the main objective of development is to create an environment that allows them to live long and creative lives.

The concept of human development, its measurement indices, but also human development itself, have evolved with society. As the basic standard of living gap narrows, with an unprecedented number of people escaping poverty, hunger and disease, the skills that people must compete in the immediate future have evolved. Although we live in a globalized society, the great differences in human development between countries or even within country denote a clear increase in inequalities and a non-functionality of this society.

The 2019 Human Development Report (UNDP, Human Development Report, Beyond income, beyond averages, beyond today: Inequalities in human development in the 21<sup>st</sup> century) focuses on deepening the problems of inequalities in today's society. The Report proposes addressing inequalities beyond incomes, because today's social problems are powered by rooted interests – the social and political norms incorporated in a nation or a group history and culture, the power of the few, the powerlessness of many and the collective power to demand change. This report highlights the emergence of a new generation of inequalities in human development.

This article will focus on the existing inequalities between regions and aims to highlight, on the one hand, the inequalities in human development that exist in Romania, and on the other hand, the correlation between economic and human development in the eight regions. Therefore, the analysis will be divided into two parts. First, based on empirical data will be calculate the dimension of Inequality-adjusted Human Development Index (IHDI) then, using an econometric analysis, we will determine which is the correlation between human and economic development in each of the eight Romanian regions.



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## ***1. Challenges in Identifying and Measuring the New Generation of Inequalities in Human Development***

### **1.1. Evolution of inequalities in human development**

The 2030 Agenda for Sustainable Development [UN, Resolution adopted by the General Assembly on 25<sup>th</sup> of September] – Sustainable Development Goals (SDGs) focus to action in critical areas to humanity and planet. Regarding humanity, we are talking about the aspiration to reduce inequality on several dimensions. According to that, in addressing inequality, revenues must be exceeded, the focus must be on the new inequalities of the 21<sup>st</sup> century, and addressing the capabilities is appropriate to understand and confront these new generations of inequalities. In addressing the capabilities, a distinction must be made between the basic and the enhanced ones.

As can be seen from the recent reports [UNDP, Human Development Report], there was a convergence in the basic capacities that were the main focus of the human development reports in the early 1990s, but divergences in other indicators are opened, both within the country and abroad, such as it would be Life expectancy at older ages which is becoming more unequal, as is access to tertiary education.

In other words, despite the improvement and convergence of the core capabilities, set out in the Millennium Declaration [UN, United Nations Millennium Declaration] and the Millennium Development Goals, however, some gaps remain, and new ones open in capacities that will increasingly determine the differences between those who can and those who cannot fully take advantage of the new opportunities of the 21<sup>st</sup> century. Again, the analysis shows that countries and people at the bottom are capable of basic capabilities, while those above are moving away from improved capabilities. It is expected to reach 2030, with avoidable disparities in child mortality, out-of-school children and extreme income poverty.

A new indicator of how opportunities and well-being are distributed among groups of people and even between countries refers to access to health, education, new technologies, green areas and pollution-free areas. Every gap or grow that persists is a call to respond to the injustice of inequality with effective policies. Inequality can take many forms, but with some of these, humanity has been facing for a long time, such as income inequality or gender inequality, and considerable progress has been made in this area across the globe. Namely, inequalities in basic capabilities that reflect extreme shortages are declining, according to the latest reports [UNDP, 2019 Human Development Report]. For instance, the world is moving towards average gender equality in access to primary and secondary



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education. At the same time, inequalities that reflect higher levels of empowerment tend to be larger and, in some cases, increase. One of these concerns the representation of women at the top political level.

Summarizing, it can be said that a comprehensive assessment of inequality should consider income and wealth, but must also understand the differences between other aspects of human development and processes leading to them. Addressing inequalities in human development will have to outline the perspectives of people who could live in the 22<sup>nd</sup> century. A changing world requires consideration of what will shape inequality in the future.

### 1.2. Classifying inequalities – a new approach

The traditional approach to inequalities in human development revolves around income inequalities, obtaining it at the highest level, being regarded as an essential thing in the life of each individual. However, the evolution of human society has led to the opening of a new spectrum of approaches and, consequently, to new inequalities.

Today we can speak about a new gap in tertiary education, for example, opportunities once considered luxuries, are now considered critical to compete and belong, especially in a knowledge economy in which more and more young people are educated and connected to one large scale of elections.

Also, climate change, gender inequalities, healthy life expectancy or violent conflicts are equally required as fundamental and new inequalities.

The analysis of inequalities must exceed their one-size-fits-all approach. In trying to structure inequalities, we will take into account both the past and the present, but especially the future challenges that human society will face, thus:

In terms of capacities, inequalities in human development [UNDP, 2019] can be:

a) inequalities in basic capacities, which in turn are given by: survival in childhood, primary education, access to basic technology, resistance to recurrent shocks;

b) inequalities in enhanced capacities, which refer to: access to quality health at all levels, high quality education at all levels, efficient access to current technologies, resistance to unknown new shocks.

According to the data published by UNDP in the 2019 Report, in all regions of the world, the loss of human development due to inequality decreases, reflecting

the progress in the basic capacities, thus in the region of the Arab States, in 2018 compared to 2010, the loss in human development due to the basic inequalities decreased by 2.9% (from 27.4% to 24.5%). The East Asia and Pacific region recorded the highest decrease of this loss by 5.3%, from 21.9% in 2010 to 16.6% in 2018. In Europe and Central Asia, it decreased by 4.4% (from 16.1 per cent to 11.7 per cent). In Latin America, the reduction was 3%, and in South Asia region - 3.7% (from 29.6% to 25.9%). In the Sub-Saharan Africa region, the loss in human development due to inequalities decreased by 4.6% (from 35.1% to 30.5%), and the world average of the reduction recorded in the 2010-2018 period was 3.2% (from 23.4% to 20.2%) [UNDP, 2019, HDR, p.35].

Depending on the level at which it manifests, inequalities may be:

- a) horizontal inequalities, those inequalities between groups/countries/regions;
- b) vertical inequalities, encountered between individuals within the same group.

According to the data published by UNDP, there are intra-household inequalities, for example, in 30 sub-Arab countries, about three-quarters of underweight women and undernourished children are not in the poorest 20% of households, and about half are not in the poorest 40% [UNDP, 2019, HDR, p. 13].

Inequalities are not necessarily a cause of the economic, political and social situation. Some of the situations/processes that generate inequalities are often seen as unfair and become a legitimate source of anger and frustration. Thus, depending on when they start to manifest, we can talk about:

- a) inequalities acquired through birth;

There are several factors that constitute inequality of birth opportunity, including, but not limited to, family background, gender, race, or place of birth – all essential to explain income inequality. [UNDP, OPHI, 2019].

Parents, through their actions and decisions, convey to their children the qualities that the labour market values or devalues, partly explaining how the family fund determines personal income. The achievement of the education of the children depends on the socioeconomic status of their parents, which also determines the health of the children, starting before birth and the cognitive capacity, partly through stimuli from childhood. This statute also determines the neighbourhood in which they grow, the schools in which they participate and the opportunities they have in the labour market, partly through their knowledge and networks.

In countries with high income inequality, the association between parents' incomes and their children's incomes is stronger – that is intergenerational mobility





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between incomes is lower. This relationship is known as the Great Gatsby Curve [Corak, 2013], often presented in a cross-country data diagram with income inequality on the horizontal axis and a measure of the correlation between parents' and children's income on the vertical axis.

One of these inequalities, which start before birth, may compound over the person's life and lead to persistent inequalities.

b) lifelong inequalities – inequalities that we acquire throughout our lives. These are due to several factors, such as: the health status throughout the life (which can be connected with another approach of inequalities such as healthy life expectancy or enhanced healthy longevity), the economic and geopolitical characteristics of the region in which an individual chooses to live, the personal way of coping with a certain level of competition, the ability to integrate in different socio-economic environments, pollution, etc.

According to the data published by UNDP, healthy life expectancy index suggests large discrepancies among countries. Healthy life expectancy for very high human development countries is about 68 years, compared to only about 56 years for low human development countries. [UNDP, 2019, HDR, p. 38].

As inequality begins at birth, it defines the freedom and opportunities of children, adults and the elderly and penetrates the next generation, as well as inequality prevention policies can follow the life cycle.

From previous investments in the labour market, in the health and nutrition of young children to investments in the internal and post-labour market around access to capital, minimum wages and social services, politicians and decision-makers have a number of options that, if they are correctly combined for the context of each country or group, it will translate into a lifelong investment in equality and sustainability [Kahneman, & Deaton, 2014].

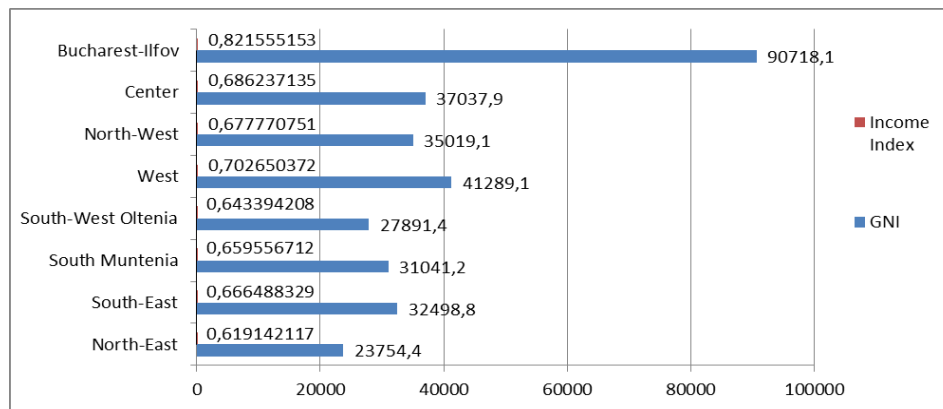
## ***2. Human Development Inequalities in Romania***

### **2.1. Some key aspects of human development inequalities in Romania**

One of the important questions in detecting inequalities in human development concerns the characteristics of the models that lead to them. Another issue, equally important in addressing them, is which and where are the opportunities to rectify these inequalities. The most frequent response to these problems was focused on the income inequality thesis, which has major negative effects on human development.

Therefore, reducing income inequality – mainly through redistribution using taxes and transfers – would also improve capabilities and make them evenly distributed.

Analysing the situation of the eight regions of economic development in Romania, it can be observed very clearly, that in this case, the income inequalities (see fig. 1) are the main cause of the gaps in human development between these regions.



**Fig. 1. Income Inequalities by regions in Romania**

Source: Own processing of data available on National Institute of Statistics site ([www.insse.ro](http://www.insse.ro))

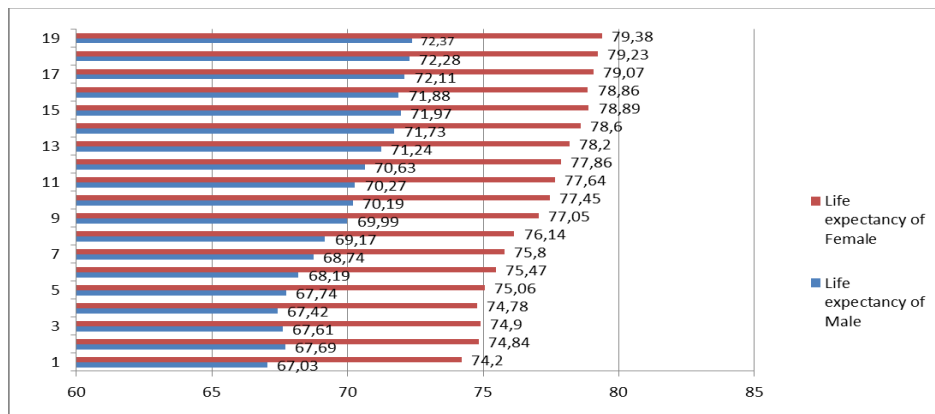
In the figure above (Fig. 1), are presented comparatively two indicators for each of the eight regions, respectively Gross Net Income (GNI) per capita and Income Index. For GNI per capita the data are available on the Romanian Institute of Statistics site, but Income Index was calculated by the author using the methodology proposed by UNDP, which will be detailed in the next sub-chapter.

As is shown in the previous figure, there are some essential gaps between incomes by region. The region with the lowest level of income is the North-East region, closely followed by the South-West Oltenia region. In these two, the income index recorded values of 0.619 (North-East) and 0.643 (South-West Oltenia). The highest value was registered in the Bucharest-Ilfov region, where the income index registered a value of 0.822. The next two regions, West and Center, are at big gaps

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from the first position with index values of 0.703, respectively 0.686. Between the first and the last region there is a difference of 0.203 points between the income indices, which translates to a difference of 66963.7 RON per capita.

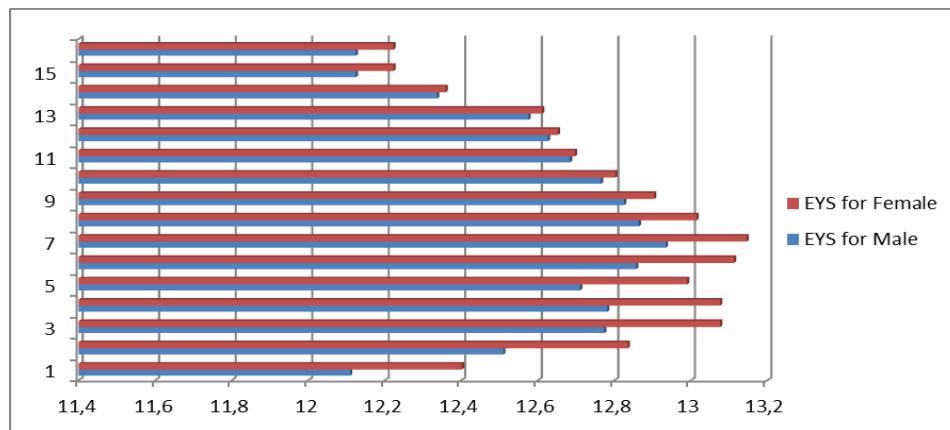
Inequalities in human development can also be addressed in terms of gender inequalities, respectively the inequalities between women and men on various indices of human development. From this point of view, we can discuss about gender life expectancy inequalities in Romania.



**Fig. 2. Life Expectancy Inequalities by Gender in Romania between 2000 and 2018**  
 Source: Data available on National Institute of Statistics site ([www.insse.ro](http://www.insse.ro))

As it can be seen, there are very big differences in terms of life expectancy at birth between women and men in Romania. For the analysed period, 2000-2018, life expectancy has seen a constant upward trend for both women and men, from 67.03 years in 2000 to 72.37 years in 2018 for men, and for women from 74.2 years in 2000 to 79.38 years in 2018. In the 19 years considered, the Health Index ranged from 0.724 to 0.806 for men, and from 0.834 to 0.914 for women (own processing of data available on the Romanian National Institute of Statistics site using the UNDP methodology). Both indicators (Life expectancy and Health Index) show very large gaps between women and men in terms of life expectancy at birth in Romania. The biggest gap was recorded in 2003 by 7.36 years, which means 0.113 points in terms of Health Index.

Other inequalities in human development may refer to the expected years of school (EYS), which in Romania is manifested, according to data processed by the World Bank, also between men and women, but the differences are not as great as in the case of life expectancy. Thus, between 2002 and 2017, these inequalities were as follows:



**Fig. 3. Expected Years of School Inequalities by Gender in Romania between 2002 and 2017**

Source: Data available on World Bank site  
 (<https://data.worldbank.org/country/romania?view=chart>)

During the analysed period, this index reached the maximum value in 2008 for both women (13.145 years) and for men (12.934 years), after which it started to fall steadily, reaching in 2017 lower values than in 2002 in the case of women (12.22 years in 2017 compared to 12.40 years in 2002).

Even if inequalities are registered in other aspects of human development in Romania as well, the biggest problem is still income inequalities, this being the main cause that leads to inequalities in human development in our country.

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## 2.2. Measuring Inequality-adjusted Human Development Index in Romania

### 2.2.1. Methodology

Both the Human Development Index (HDI) and the Inequality-adjusted Human Development Index (IHDI) are calculated using the methodology proposed by UNDP (United Nations Development Programme) in 2018. The IHDI adjusts the HDI to the inequalities of the distribution between the populations and is based on a class sensitive to the distribution of composite indices proposed by Foster et al (2005), which is based on the Atkinson family (1970) of inequality measures.

The Inequality-adjusted Human Development Index (IHDI) is calculated as a geometric mean of the inequality-adjusted dimensional indices:

$$IHDI = \sqrt[3]{I_{Health}^* \cdot I_{Education}^* \cdot I_{Income}^*} = [(1 - A_{Health}) \cdot (1 - A_{Education}) \cdot (1 - A_{Income})]^{1/3} \cdot HDI \quad (1)$$

IHDI accounts for inequalities in HDI dimensions by reducing the average value of each dimension according to its level of inequality. IHDI equals HDI when there is no inequality between people, but falls under HDI as inequality increases. In this sense, IHDI measures the level of human development when inequality is accounted for.

Based on the Atkinson family (1970) of unequal measures, IHDI sets the aversion parameter  $\epsilon$  equal to 1. In this situation, the measure of inequality is  $A = 1 - g / \mu$ , where  $g$  is the geometric mean and  $\mu$  is the arithmetic mean of the distribution. This can be written as:

$$A_x = 1 - \frac{\sqrt[n]{X_1 \cdot \dots \cdot X_n}}{\bar{X}} \quad (2)$$

where  $\{X_1, \dots, X_n\}$  represents the basic distribution in the index size.

$A_x$  is calculated for each variable (life expectancy, years of schooling and household disposable income). According to the methodology proposed by UNDP, the geometric mean in equation 2 does not allow zero values. For mean years of schooling, one year is added to all valid observations to calculate inequality. Outside values per capita – extremely high incomes, as well as negative and zero incomes – were treated by truncating the upper 0.5 per cent of the distribution to

reduce the influence of extremely high incomes and by replacing negative incomes and zero with the minimum value of 0.5 lower percentile of positive income distribution.

Inequality dimension indices are obtained from HDI dimension indices,  $I_x$ , by multiplying them with  $(1 - A_x)$ , where  $A_x$ , defined by equation 2, is the corresponding Atkinson measure:

$$I_x^* = (1 - A_x) \cdot I_x \quad (3)$$

For instance, the income index adjusted for inequality,  $I_{income}^*$ , is based on the index of recorded income values,  $I_{income}$  and inequality in the distribution of income calculated using income at levels. This allows IHDI to take into account the full effect of income inequality.

The IHDI is based on the Atkinson index, which satisfies the subgroup's consistency. This property ensures that the improvements (deteriorations) of the distribution of human development within a certain group of society involve improvements (deteriorations) in the distribution throughout the society. The main disadvantage is that IHDI is not sensitive to association, so it does not surprise the overlapping inequalities. In order to raise awareness of the association, all data for each person must be available from a single survey source, which is currently not possible for a large number of countries. (UNDP)

Also, HDI is a summary measure of the achievements in three key dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. HDI is the geometric mean of the normalized indices for each of the three dimensions:

$$HDI = \sqrt[3]{I_{Health} \cdot I_{Education} \cdot I_{Income}} \quad (4)$$

### 2.2.2. Results

Using the methodology proposed by UNDP for the calculation of IHDI and HDI, the following results were obtained for the eight regions of economic development in Romania:

**Table 1. HDI Values by Regions in Romania**

Region	Health Index	Expected Years of School Index	Mean Years of School Index	Education Index	Income Index	HDI
North-East	0.859	0.794	0.733	0.7638	0.619	0.741
South-East	0.859	0.794	0.733	0.7638	0.666	0.759
South Muntenia	0.859	0.794	0.733	0.7638	0.659	0.756
South-West Oltenia	0.859	0.794	0.733	0.7638	0.643	0.750
West	0.859	0.794	0.733	0.7638	0.702	0.773
North-West	0.859	0.794	0.733	0.7638	0.677	0.763
Centre	0.859	0.794	0.733	0.7638	0.686	0.767
Bucharest-Ilfov	0.859	0.794	0.733	0.7638	0.821	0.814

Source: Own processing data available on Romanian National Institute of Statistics ([www.insse.ro](http://www.insse.ro))

Because, for indicators such as life expectancy, expected years of school and mean years of school, the data did not vary across the eight regions, according to the National Institute of Statistics, the differences in value in HDI between regions are given by income inequalities.

As we discussed previous (see subchapter 2.1), there are important gaps between incomes, gaps that are reflected in the values of HDI. For this reason, the lowest level of human development was registered in the North-East region (0.741), followed by the South-West Oltenia region (0.750), and the highest level was registered in the Bucharest-Ilfov region (0.814), region with the highest level of income per capita.

To determine the value of IHDI, the calculation methodology proposed by UNDP was used, and the results are as follows:

**Table 2. Inequality-Adjusted Human Development Index**

Indicator	Value	Dimension Index	Inequality Measure ( $A_x$ )	Inequality-adjusted Index ( $I^*_x$ )
Life Expectancy (years)	75.85	0.859	0.000417	0.858
Expected Years of School (years)	14.3	0.794	-	-
Mean Years of School (years)	11	0.733	0.0127	0.724
Education Index	-	0.7639	0.0127	0.7542
Gross National Income per capita	39,906.25	0.6846	0.0819	0.6285
<b>Human Development Index</b>			<b>Inequality-Adjusted Human Development Index</b>	
0.7659			0.73115	
<b>Loss due to Inequality (%)</b>			<b>Coefficient of Human Inequality (%)</b>	
$\text{Loss (\%)} = \left(1 - \frac{\text{IHDI}}{\text{HDI}}\right) \cdot 100 = 4.54\%$			$\frac{A_{\text{Health}} \cdot A_{\text{Education}} \cdot A_{\text{Income}}}{3} * 100 = 3.17\%$	

Source: Own processing data available on Romanian National Institute of Statistics (www.insse.ro)

The loss suffered by human development as a result of the income inequalities registered in the eight regions of economic development in Romania was 4.54%, leading to a coefficient of human inequality of 3.17%. The value of IHDI (0.731) does not have a significantly lower value than that of HDI (0.766) due to the fact that only one of the three dimensions recorded significant variations in the regions considered. Both values, including the one adjusted for inequality, indicate a high level of human development, according to the UNDP classification.



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### 2.3. Correlation between HDI and Economic Growth by Regions in Romania

An original and perhaps most lasting contribution of HDI to our thinking about development is to show that the levels and trends of human development can differ significantly from income levels and GDP growth trends. For example, one of the most surprising results of human development research in recent years, confirmed in UNDP 2010 Human Development Report, is the lack of a significant correlation between economic growth and improving health and education, at least in the medium term.

To show the relation between human development and economic development in the eight regions of Romania, we started from the hypothesis that the level of income, at least in our country, has a significant influence on the level of human development. In this case, we used an econometric model with a simple linear regression equation, of the form:

$$HDI_{Region\ x} = c(1) + c(2) \cdot GDP_{Region\ x} \quad (5)$$

where:  $HDI_{Region\ x}$  = is the value of human development index for one of the eight Romanian development region

$GDP_{Region\ x}$  = is regional gross domestic product

x = Romanian development regions

c(1), c(2) = are the regression equation parameters.

In this case, HDI it was considered as dependent variable, and the economic growth as an independent variable, reflected by regional gross domestic product (RGDP). This equation has to show the influence of economic growth on HDI by regions in Romania in the last 7 years.

The results are presented in table 3.

The results of the regression equation show us that at a change with a percentage of RGDP, regional HDI changes in the same sense with values between 17.7% (Western Region) or 13.8% (Center) and 5.1% (South-West Oltenia Region) or 6.02% (South-East Region). This means that, for the analysed period, in the western and central regions, the regional level of economic development had a greater impact on the level of human development. At the opposite pole are the South-West Oltenia Region and the South-East Region.

**Table 3. Correlation between Human Development Index and Economic Growth by Region**

Region	C(1)	C(2)	Std. Error	t-Statistic	Prob.	R-squared	Adjusted R-squared
North-East	0.046913	0.067762	0.143862 0.014879	0.326101 4.554262	0.7576 0.0061	0.805760	0.766912
South-East	0.135720	0.060187	0.106337 1.276326	0.010926 5.508583	0.2579 0.0027	0.858535	0.830242
South Muntenia	0.070202	0.065585	0.106557 0.658824	0.010801 6.072198	0.5391 0.0017	0.880587	0.856705
South-West Oltenia	0.226112	0.051923	0.227257 0.994965	0.3654 0.024273	2.139162 0.0854	0.477862	0.373435
West	0.11293	0.17738	0.636679 0.5523	0.064492 0.018452	3.495145 0.0174	0.709573	0.651488
North-West	0.063927	0.100980	0.633064 0.5545	0.067329 0.010328	6.518920 0.0013	0.894729	0.873674
Center	0.100271	0.138756	0.722645 0.5023	0.064180 0.014219	4.513756 0.0063	0.802948	0.763537
Bucharest-Ilfov	0.17846	0.08584	2.079088 0.0922	0.056048 0.008080	6.936808 0.0010	0.905872	0.887047

Source: Own processing data available on Romanian National Institute of Statistics ([www.insse.ro](http://www.insse.ro)), UNDP ([www.undp.org](http://www.undp.org)), National Bank of Romania ([www.bnr.ro](http://www.bnr.ro)) sites

The coefficients of determination for regressions (R-squared and Adjusted R-squared) signify the fact that a percentage between 48% (South-West Oltenia Region) and 91% (Bucharest-Ilfov Region) of the regional HDI variation is explained by the modification of the economic growth.

Those results show that, on the short term, it is a positive direct correlation between human development and economic growth.

### **Conclusions**

Addressing human development, the following aspects should be taken into account:

- inequalities in human development remain widespread, despite the reduction of inequalities in primary needs;



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- the new generation of inequalities leads to a divergence in the increased capacities, despite the convergence in the basic capacities;
- inequalities accumulate throughout life, leading to profound power imbalances, gender and chance inequalities;
- inequalities can be corrected if they act promptly, before the economic power imbalances will be anchored in political.

Regarding the results of the studies carried out in this article, it can be said that:

- the inequality-adjusted human development index suffered a loss of 4.54% compared to HDI, mainly due to the income inequalities between the eight regions in Romania;
- according to the regression equations results, on the short term (seven years), there is a positive direct connection between HDI and EG in the eight regions considered.

It is certain that the evaluation, analysis and reaction to the new generations of inequalities, requires a revolution in the metric. It is necessary to consider now aspects that can affect the generations that will live in the next century.

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## THE IMPORTANCE OF MANAGERIAL EDUCATION IN PRE-UNIVERSITY EDUCATION

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### Abstract

*Education is one of the tools through which society motivates, guides and controls development processes. Managerial education is a discipline of education through which students are taught to be business leaders, principals, managers, principals and administrators. Managerial education will become more and more experimental. The pre-university education sector is of crucial importance for the development of its prominent role in laying the foundations for building human capital.*

**Keywords:** *managerial education; business; research; knowledge; skills; abilities; value.*

**JEL Classification:** M10



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### Introduction

Education is one of the tools through which society stimulates, guides and controls development processes. Knowledge and mastery of managerial art is essential because knowledge of management as a complex process does not mean “guidance”, and managers do not immediately ensure the success of an action. Leadership activity is defined in the literature as a set of “actions of planning, organization, guidance, control, decision on a system (organization, institution, group of people, process, technology), actions likely to ensure the achievement of the purpose set”. From the point of view of education, management is a system of concepts, methods, tools of guidance and leadership, coordination, used to achieve the objectives of education, at the level of expected performance. The pre-university education sector is of crucial importance for the development of its prominent role in laying the foundations for building human capital. The global recognition of the importance of managerial education in this context has grown steadily in recent times.

Most specialists who study the importance and necessity of managerial education in the pre-university environment consider that it is as important as other disciplines. The prediction given by specialists is that managerial education will become more and more experimental. The fact that technology allows the democratization of the content of managerial education is really an added value for this field. This is especially true for essential but difficult skills to master, such as leadership, critical thinking, communication, problem-solving, empathy, learning agility, and the like. These are skills that require constant practice, reflection and feedback.

### Literature Review

Managerial education emerged as a distinct field of study – the form of scientific management, in the first half of the last century in the United States, expanded and developed rapidly after the 1960s, and in Europe, especially in the United Kingdom, where there were a number of institutions such as the National School Development Center for Education Management in Bristol (1983), the School Management Working Group (1989) and the Teacher Training Agency (TTA) (1989), which were set up to impose national professional qualifications for directors.

The transformation of organizations in the industrial society into a knowledge society (80s and 90s of the twentieth century) led to the diversification of management concepts and the emergence of some such as learning organization,



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(intellectual capital, core competency, TQM Total Quality Management), knowledge management specific to educational management.

The complex nature of managerial education cannot be included in a single managerial model. Among the first modern authors to propose such models, Cuthbert (1984), Bolman & Deal (1997), Morgan (1997), who, according to the elements considered as main factors, identify and propose several types of managerial approaches. Cuthbert (1984) presents the following group of models: analytical-rational, pragmatic-rational, political and phenomenological and interactionist. Bolman and Deal (1997) launch four models: structural, political, symbolic and human; and Morgan (1997) associates metaphors with organizations as mechanical, organic, contemplative, cultural, political, considering management as a direct consequence of their type. Later, Bush (2010), based on the level of agreement, on the objectives, the concept of structure, the level of environmental influences and leadership strategies appropriate to educational organizations, and defines five managerial models, developed in close connection with leadership style. The author proposes five managerial models – formal, collegial, political, ambiguity, cultural. All the models proposed over the years have among the design criteria the structure of the organization, the objectives and reporting of members to the organization, the organizational culture, the relationship between the organization and the environment in which it operates, the institutional background and the employees' relations, their hierarchical position.

### **Paper content**

How can we define Managerial Education?

1. Managerial education is a discipline of education through which students are taught to be business leaders, principals, managers, directors and administrators.

Research is recognized as an important facet of both social and economic development. In fact, the progress of mankind is very much based on the speed of research. But the term “research” and research skills are seen more in the context of graduates of science and social sciences, and less in the context of management discipline. Therefore, it aims to highlight the need to increase research skills, with a focus on management graduates. After all, if organizations are to become sustainable and be governed in a more ethical manner, there is a need to change thinking from leadership education to create managers and researchers who will be able to create newer and better ways of doing things, organizational growth and therefore the development of society.



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2. The act or process of passing on or acquiring knowledge and skills to develop the members of the executive or administration of an organization or business, managers or employers collectively. The process of being trained in techniques, practice, or the science of managing, controlling, or occupying, in the skilful use of resources, materials, time, etc.

“Competence” is “an acquired personal ability that is demonstrated in a person’s ability to provide a consistently appropriate or high level of performance in a specific function.” However, competency mapping models and theories about human aptitude, IQ, emotional IQ and, in general, everything related to human behaviour in terms of work, logic and emotions dates from the early 16<sup>th</sup> century in India.

According to Boyatzis [1982], competence refers to a capacity that exists in a person that leads to a behaviour that meets the requirements of the job in the parameters of the organizational environment and which, in turn, brings desired results. Thus, a skill is a basic characteristic of a person that is related to effective performance in a workplace or in a situation.

- Competence: a concept related to the person that refers to the size of the behaviour behind a competent performer.
- Competence: a set of knowledge, skills and attitudes needed to perform an efficient and effective job.

Thus, a skill is something that describes how an excellent job could be done and only describes what needs to be done, not how. Basic competence is something that cannot be copied and is the pillar on which the individual rests. However, competence or competences refer to skills, both explicit and tacit knowledge and abilities that include the human and behavioural dimension required for competence and excellent performance.

According to Raven & Stephenson [2001], individuals must demonstrate general competence in the following four areas:

- Competence in meaning: Understanding the culture of the organization and acting accordingly.
- Relationship competence: creating and maintaining connections with stakeholders in the task or organization.
- Learning competence: identifying solutions for tasks and reflecting experiences, so that what is learned improves the next completed task.
- Change of competence: acting in new ways when the task or situation requires it.



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Managerial education is a higher education discipline through which students are taught to be business leaders, managers and administrators.

3. Managerial education is a higher education discipline through which students are taught to be business leaders, managers and administrators. Managerial education focuses on the process of transmitting or acquiring knowledge to develop the members of the executive or administration of an organization or business, managers or employers collectively, or to be trained in the techniques, practices or science of managing, controlling or occupying, in skilful way or resource use of materials and time.

The classroom is an experimental laboratory for students because they spend a significant portion of their school and college training years on learning goals. It is essential that the school and college environment be able to include positive behavioural traits among students in order to be able to develop the required skills and attitudes. Education is the basis for empowerment and development for every nation. It plays a crucial role in transforming culture, beliefs and values.

4. In all businesses and organizations, regardless of size, including private, non-profit, public and mixed property, this is the act of bringing people together to achieve the desired goals, using available resources efficiently and following ethical guidelines, striving create integrity and sustainable organizations and care as much as possible for their communities.

Impediments to the acquisition of integrity skills in learning institutions may be the result of poor management of integrity, lack of consultation with employees and owners or their representatives / general managers of the company / managers who perpetuate in the knowledge of a toxic management environment. Personality conflicts that may exist in the process of providing the transfer of knowledge and skills may lead to delays or refusal to communicate a philosophy of integrity in the management process.

The personal attitudes of individual employees, which may be due to lack of motivation or dissatisfaction at work, can lead to the teaching of insufficient or inappropriate integrity. Integrity suggests a person whose self is solid, undivided and complete. Learning integrity challenges us to face new experiences and allows us to develop a global mindset. Self-examination of personal, cultural or organizational values can come from new experiences, from leaving the security of what we know and living something new and different. To embrace innovation, people need to learn to teach by addressing adaptability and flexibility to be able to cope with changes



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that occur with the speed of light. Integrity process and educational philosophy, information transfer using e-learning, blended learning, social media and personalized learning environment can be one of the effective ways to acquire integrity skills in management. [Odrakiewicz, 2010]

5. An academic management discipline that transmits knowledge intended especially to members of the executive or administration of an organization or business, managers or employers. The management discipline aims to train students in the techniques, practices to manage, control or treat, skilfully or with the help of other resources the use of materials, time, etc.

Quality management in the higher education system has gained importance in the recent global past. Many regions of the world have taken many initiatives to standardize criteria related to quality management and quality assurance. Globalization and liberalization have also placed emphasis on increased quality standards in managerial education. In order to be endorsed for maintaining quality standards and quality assurance, most management institutes focus on accreditation by renowned national and world agencies. In the last two decades, the number of business schools seeking accreditation has grown rapidly. Accreditation has been defined as “the status granted to an institution or program within an institution that has been evaluated and whose value meets or exceeds the quality criteria of education”. [Young *et al.*, 1983] According to McFarlane [2010], the concept of quality has become synonymous with accreditation. Accreditation serves several purposes for business schools, including quality assurance for schools and stakeholders, the ability to make referrals and network with their peers, marketing benefits. This is why international accreditation bodies have recently developed and become popular as a marker of distinction by business schools around the world. [Nelson, 2011]

6. The link between religious beliefs and ethical attitudes in the workplace

Although more research is needed, the positive link between religious beliefs and ethical attitudes in the workplace has been increasingly documented. Empirical research linking religion and ethical values, as well as managerial attitudes, decision-making, and responsible business conduct, finds that people with a religious inclination tend to show better decision-making in ethical contexts, accepting less questionable ethical behaviour, and have a higher level of focus on corporate social responsibility.

7. The educational process in business schools prepares students to become future managers in order to have the skills and abilities to lead others.



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Competence is a set of knowledge, skills and attitudes needed to perform a job effectively. Thus, a skill is something that describes how an excellent job could be done and only describes what needs to be done, not how. Basic competence is something that cannot be copied and is the pillar on which the individual rests. But competencies refer to both explicit and tacit knowledge and skills that include the human and behavioural dimension needed for excellent competence and performance. According to Mkrttchian & Stephanova [2013], individuals must demonstrate general competence in the following four areas:

- a) Understood competence: Understanding the culture of the organization and acting accordingly;
- b) Competence in the relationship: creating and maintaining connections with stakeholders of the task or organization;
- c) Learning competence: identifying solutions for tasks and reflecting experiences, so that what is learned improves the next completed task;
- d) Change of competencies: acts in new ways when the task or situation requires it.

#### 8. Difficulties in recruiting and retaining talented teachers

The field of managerial education has difficulties in recruiting talented teachers.

Recent studies indicate that there is a limited supply of positions in managerial education. These offers feature attractive salary packages and many other benefits. At the same time, the demand for these jobs is very low.

Why is it so difficult to attract and retain talented management teachers? What could be the secret in this field of managerial education that would make outstanding teachers love their profession? From the late 1960s to the early 1980s there was a strong interest in job satisfaction and teacher satisfaction. In the last decade, little attention has been paid to teacher satisfaction or its effect on students. Teacher motivation is strictly connected with teacher well-being and job satisfaction, as it looks international surveys focused on teachers and school leaders in relation to six areas: learning environment; appraisal and feedback; teaching practices and classroom environment; development and support; school leadership; self-efficacy and job satisfaction.

#### Conclusions

Three predictions about the future of managerial education can be made.

First and foremost, advances in technology and information converge towards the continued democratization of managerial education. If management is ubiquitous and



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difficult to do and counts for organizational performance, then we cannot avoid the conclusion that managerial education will continue to evolve to serve a wider range of pupils / students. This is especially true for “content”: theories, concepts and techniques associated with management and will be more accessible on socio-economic backgrounds, age demographics, etc. Schools need to be recognized for their efforts and expertise in working with distant learners, especially with distance education becoming more mainstream and expected of all instructors. [Simons *et al.*, 2019]

Consequently, managerial education will continue its dynamic migration from content providers to various categories of consumers.

The second prediction is that managerial education will become more experimental. While technology allows for the democratization of the content of managerial education, it is also an advance to provide what is truly considered added value. This is especially true for essential but difficult skills to master, such as leadership, critical thinking, communication, problem-solving, empathy, learning agility, and the like. These are skills that require constant practice, reflection and feedback. In our experiential future, the value of education will depend less on the time spent in class and more on our ability to turn actions into perspectives. Given the role of teachers as leaders of learning, there is logic in considering teachers as role models to their students. By acting as role models, teachers influence the morality, work ethic, citizenship, and character of their students. [Nadelson *et al.*, 2020] Experiences will result not only in personal and professional transformations, but also in social capital, the genre that brings together different perspectives and is vital for creativity and innovation.

We will increase the value in the space between work and education – between work and learning. We will develop business leaders in the future. And here many business schools will thrive. Teachers should tend to be content and process-based, which may reflect a perspective of teachers as managers, rather than being based on organizational structure, which would reflect teachers as leaders. [Nadelson *et al.*, 2020] Success in the world of changing managerial education will not be guaranteed. Some schools will not adapt fast enough. As in other businesses, some will not use the right talent – the only thing harder than practicing management is learning it. Some will not reinvent their programs for a world where managerial education is more fragmented and personalized, with students following their own paths and consuming education from a larger number and variety of providers, in smaller parts attached to credentials that “stack” together in a multitude of ways.



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The third prediction is both less obvious and less reliable. Managerial education will become the driving force of positive change in business and society. The aim is to focus first on attitudes, which later lead to skills. Their role is to develop communication, critical and creative thinking, problem solving, effective collaboration and local identity. In terms of business, it promotes the accumulation of knowledge on market analysis, the wider economy, marketing and sales. Because it will be more accessible, it will reach and have more potential leaders. Because it is more experiential, it will become more meaningful. As management counts for performance and social welfare in a multiplicative way, the overall impact will be significantly amplified.

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## SCIENTIFIC RESEARCH ON THE MOTIVATION FOR LEARNING AS AN IMPORTANT ELEMENT OF ECONOMIC AND SOCIAL SCIENCES IN THE CONTEXT OF SECURITY AND DEFENCE

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### Abstract

*This article gives a brief overview of a study conducted on motivation for learning as an important element of social and economic sciences in the context of the sphere of security and defence. The research is an important scientific work of the author and was developed in the 2012-2018 period. At present, its results have been approved, considered appropriate and acceptable and are applied at the National Military University in Bulgaria.*

**Keywords:** *learning, motivation, academic management, economic sciences*

**JEL Classification:** I21, I 23

### Introduction

This article gives a brief overview of a study conducted on motivation for learning as an important element of social and economic sciences in the context of





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the sphere of security and defence. The research is an important scientific work of the author and was developed in the period 2012-2018. At present, its results have been approved, considered appropriate and acceptable and are applied at the National Military University in Bulgaria.

The idea that human beings are rational and human behaviour is guided by reasons is one of the first to reflect motivational salience. Much of western philosophy, from which political and economic theories originate, is based on the idea that people are rational actors who always act in their own interest. Modern studies on this construct however refute the idea of *homo economicus* or perfect rationality in favour of bounded rationality and paying attention in limits of rationality of economic agents. The statement for the presence of perfect rationality is increasingly being disputed by modern management theories about motivational salience, which view human behaviour as more complex and nuanced.

The study is structured in four main chapters. Chapter One “Genesis and Development of Research on Motivational Salience through the Prism of Human Cognitive Activity and Its Importance to National and International Security” examines the strategic security environment and the military education system; motivational expression as motivated behaviour of the individual in the learning process; self-esteem and social learning as socio-cognitive models of building individual behaviour; motivation and satisfaction of human activity as determinants of motivational excellence and sets the foundations of the methodology for conducting research on motivational salience in the learning process and its relationship with satisfaction.

Chapter Two “Experimental Study on Motivational Salience in the Learning Process and Its Relationship with Satisfaction Using the Example of Students at the Vasil Levski National Military University, Veliko Tarnovo, Bulgaria” presents: the diagnostic and main stages of conducting a study on the motivational manifestation in the process training and its relationship with satisfaction, in which the analysis of the participants in the study and the distribution of military specializations and gender and comparison of the array of the general population with the general population with the main emphasis was carried out – conducted an experimental study on the motivational salience of cadets from the Vasil Levski National Military University.

Chapter Three “Experimental Study on Motivational Salience in the Learning Process and Its Relationship with Satisfaction with the Participation of Control

Groups Following the Example of Learners at the Vasil Levski National Military University in Veliko Tarnovo, Bulgaria” presents the surveyed control groups focus on conducting experimental research on motivational salience in the learning process and its relation to the satisfaction of the participation of control groups.

Chapter Four “Research on Motivational Salience and Satisfaction with Training in the Field of Security and Defence with the Inclusion of Some Higher Education Institutions in Europe” examines distributions of observed variables to conduct research on the motivational salience of learners and satisfaction from training at the Vasil Levski National Military University based on expert assessments and provide information on the research on the motivational salience in some European educational institutions in security and defence area on the basis of expert opinions.

Motivational salience has been investigated as a result of a thorough preliminary theoretical study of the concepts and theories directly related to it, considering:

- Cognitive school.
  - Behavioural school.
  - Socio-cognitive direction.
- A socio-cultural direction.
- Direction for behavioural physiology.

During the theoretical study, motivational theories were also studied in terms of the content of needs and the process of motivation. Fundamental content and procedural motivation theories are considered as follows: content motivational theories, including Henry Murray’s motivational taxonomy, Abraham Maslow’s hierarchy of needs, Frederick Herzberg’s two-factor theory of motivation, Atkinson’s theory of achievement, ERG concept by Clayton Aderfer, David McClelland’s theory of socially acquired needs, Paul Lawrence’s and Noriya theory of the four impulse; and Procedural motivational theories, including Adams’ theory of justice and social comparison, Edwin Locke’s definition theory, the theory of the task’s characteristics by Heckmann and Oldham, theory of expectation by Vrum, Porter and Lawler’s complex motivation theory.

The study consists of:

- Diagnostic stage of the study on motivational salience and satisfaction with training in the field of security and defence.
- Main stage of the study on motivational salience and satisfaction with training in security and defence.
- Final stage of conducting research on the motivational salience.



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### **Experimental Study on Motivational Salience in the Training Process**

The analysis of the results obtained from an experimental study on motivational salience in the training process and its relation with the satisfaction using the example of the learners at the Vasil Levski National Military University, Bulgaria has identified the following positive trends:

- Satisfaction with the choice of academic specialty and military specialization is significant.
- The study of specialized subjects and disciplines is considered an important stage in the professional development of learners as future military leaders.
- It is reported that coercive measures adversely affect the behaviour and motivation of learners in the process of learning, and positive reinforcements in the form of material or moral awards and incentives have a positive effect on motivational salience.
- The strong positive influence of the military organizational culture was found, including values, norms, symbols, rules and traditions, on the individual performance of learners.

At the same time, several problem areas were found. In order to build an academic atmosphere that supports the entire university education and the establishment and formation of cadets as future professionals and military leaders must take certain actions aimed at improving the motivational salience in the learning process by both the learners themselves and by academic and command staff.

*First.* Personal participation of learners during seminars and exercises and participation in the initiation of extra-curricular activities in order to develop the personal qualities and skills of learners should be enhanced. *Second.* The strictness of the program at the university should be used as a source of influence on students' academic achievements. *Third.* "The successful connection of training and presentation of students during the training course" as a future professional expression to be validated. *Fourth.* Establishing the relationship between obtained results and effort. *Fifth.* *Sixth.* Improving the material base; modernize the techniques and technologies used in the training, increase hours spent on general military training and hours spent on specialized disciplines. *Seven.* Updating the teaching material taught and the teaching methods used. *Eighth.* Building trust, co-operation, help and mutual support between teachers, commanders and learners. *Ninth.* Taking measures to avoid subjective evaluation.



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### **Comparison of the Answers of Cadets and Students in an Experimental Study on Motivational Salience in the Training Process**

The empirical study found that the respondents' answers did not depend on the heterogeneity of the respondents, respectively the division of the target group of civilian students and cadets, and no significant differences were found in the responses between the first-time civilian students and the first-year cadets. There were no significant differences in the responses between the control groups and the studied groups of alumni cadets. There were found significant differences between the responses of grade levels cadets 2013/2014, 2014 /2015, 2015 /2016 compared with the data obtained from respondents from the last academic year studied, namely the class of 2016/2017.

The data from the chi-square analysis and the statistical significance of differences in the responses show:

- Comparison of the answers of cadets and students from the first training did not reveal statistically significant differences.
- When comparing the answers of cadets and students from the first year of study for the academic year 2013/2014 and the class 2013/2014, some of the questions reveal statistically significant differences.
- When comparing the answers of all alumni classes of cadets, their answers reveal statistically significant differences.

#### *Positive trends.*

1. There is a sufficient degree of satisfaction, from the choice of an academic specialty and the choice of military specialization / civic specialty for all respondents to the study, which decreases in the last 2016/2017 academic year surveyed, when indifference and dissatisfaction are rising sharply.

2. The bachelor's degree studied in a particular specialty is considered to be an important stage in the professional development of the cadets.

3. The motivational reinforcements used have a high degree of motivational prominence demonstrated by the respondents.

4. Reinforcement and collective negative renunciation are rejected as a method of sanctioning that leads to positive learning outcomes and daily military activities by all respondents, except for one control group of first-year students.

5. It is believed that military and/or civilian training at the university prepares learners to be future military or civilian leaders.



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### *Negative Trends.*

1. Strictness at university has a diminishing influence on academic performance for all respondents.
2. The learning outcomes are not considered to be related to the intellectual effort made by all respondents to the study.
3. Levels of personal involvement and initiative during seminars / exercises and levels of initiation of activities related to vocational and academic preparation are insufficient; there is indifference to such initiatives.
4. The time provided for general and special military / civic training for all respondents is considered insufficient by the learners.

### **Experts' Assessments on the Problems in the Training and Motivation of the Learners at Educational Institutions in the Sphere of Security and Defence**

At the final stage of the survey, conducted in the 2017-2018 period, a study of the organizational culture and the problems in the training and motivation of the learners at the National Military University and in foreign educational institutions in the sphere of security and defence is performed. Experts with a major academic and / or commanding experience from Bulgaria and abroad are attracted into the study. Experts were asked to provide feedback in six consecutive modules:

- Module One. Presentation of learners in the training process.
- Module two. Methods used to motivate learners.
- Module third. General satisfaction of the trainees in the specific institution.
- Module Fourth. Organizational culture.
- Module Five. Problems in academic practice when working with learners.
- Module Six. Opportunities for increasing the motivation and academic achievement of the learners.

Expert assessments are provided by educational institutions from Austria, Belgium, Bulgaria, Estonia, Spain, Lithuania, Poland, Portugal, Romania, Slovakia, the Netherlands, the Czech Republic, Sweden, and Switzerland, providing education and training in the field of security and defence. The research is scientifically supported by:

1. National Military University, Bulgaria;
2. Military University of Technology, Poland;
3. Theresian-Military Academy, Austria;
4. University of Public and Individual Security, Poland;



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5. Armed Forces Academy, Slovakia;
6. Carol I National Defence University, Romania;
7. Netherlands Defence Academy, Netherlands;
8. War Studies University, Poland;
9. Swiss Military Academy, Zurich, Switzerland;
10. Military Academy of Portugal, Portugal;
11. University of Defence, Czech Republic, Brno;
12. Koninklijke Militaire School, Belgium;
13. Spanish Army Military Academy, Spain;
14. Nicolae Balcescu Land Forces Academy, Romania;
15. Swedish Defence University, Sweden;
16. Cuiavian University in Wloclawek, Poland;
17. Estonian National Defence College, Estonia;
18. University of Mykolas Romeris, Lithuania;
19. Major-general Vasile Roman, Romania.

This section presents some of the problems identified and possible solutions proposed to improve the motivational salience among cadets in higher education institutions in the field of security and defence in Europe.

#### **Important Results and Contributions**

– The existing knowledge and skills in the theory and practice of motivation and motivational expression are enriched. The essence of motivational salience has been analysed and its significance has been clarified in the context of national and international security, as well as being a precursor and imperative for successful training and education in the field of security and defence.

– A new approach to the management of motivational salience in the context of national and international security is proposed as the basis of modern security knowledge. It assures the continuity and the natural evolutionary transition from basic, fundamental research in science and practice to modernization of approaches, innovation in the proposed object and subject of the research aimed at building new abilities and practical results from them.

– A scientifically-based methodology for conducting an empirical study on motivational salience in the training process and its relation to the satisfaction of the training according to the specifics of the object and the subject of the research has been established.



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– An empirical study on the motivational performance of trainees in the “Organization and management of military formations at the tactical level” specialty, Land Forces Faculty, Vasil Levski National Military University was organized, scientifically grounded and implemented with subsequent analysis of the results of the empirical study, identification of major problem areas, possible solutions identified, recommendations formulated to improve the students’ motivation, activities and events for improvement are made.

– Research on motivational highlighting has been organized in higher education institutions in the field of security and defence in Europe. Scientifically grounded and implemented, the results were analysed, the main problem areas identified, possible solutions identified and recommendations formulated on the basis of which a common scientific platform and a team of experts in security and defence education from different institutions should be built.

– The results of scientific research undoubtedly demonstrate the academic performance of students and the satisfaction they receive from their training during academic training which depends on the quality and intensity of their efforts and the external motivational methods used by academic and command staff, which determines a certain motivational expression in the form of a certain individual behaviour.

– A coherent system of generalizations and suggestions on the problems of motivation and motivational salience in the field of education and training was created, as a result of the study of the real state and dynamics of motivational expression in the environment of education and training in the field of security and defence, and the need to develop the educational capacity of human resources as a precursor to national and international security was substantiated.

The development of the study is characterized by a high degree of innovation, and for the first time in Bulgarian science attention is paid not only to the motivation for training in the field of security and defence, but also to the subsequent motivational salience or the manifestation of individual behaviour motivated by various instruments, means inherent in both internal and external motivation. An important point to highlight is the scale of the study, which covers 19 security and defence educational institutions in 13 European countries. The development is of interest to the academic staff of the military universities and academies of Austria, Belgium, Bulgaria, Estonia, Spain, Lithuania, Poland, Portugal, Romania, Slovakia, the Netherlands, the Czech Republic, Sweden, Switzerland and others.



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## THE FINANCIAL CONTAGION EFFECT OF THE SUBPRIME CRISIS ON SELECTED DEVELOPED MARKETS

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### Abstract

*The purpose of this empirical study is to explore and compare the effects of subprime crisis on some of developed markets (e.g. France, Germany, the United Kingdom and Japan).*

*The VECM model and Johansen's cointegration approach (1988) have been used to verify the existence of potential short and long run relationships between the United States market, where the subprime crisis has been triggered, and the other markets.*

*The results indicated that all the markets are cointegrated in the long run and there is long run equilibrium. Dynamic interactions between the developed markets and the US increased during the subprime crisis.*

*Our results shed light on financial contagion as the element that dramatically spreads the shock to the whole financial system as well as other financial markets. This contagion is a top priority for investors, financial regulators and international organizations whose goal is to improve the global financial regulation system and make it more resistant to shocks.*



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**Keywords:** *financial contagion effect; subprime crisis; developed markets, VECM.*

**JEL Classification:** G15

### **1. Introduction**

Initiated in September 2008 by the bankruptcy of Lehman Brothers, the global financial crisis spread rapidly to almost all emerging and advanced economies by contagion effect. Financial contagion refers to “the spread of market disturbances – mostly on the downside – from one country to the other, a process observed through co-movements in exchange rates, stock prices, sovereign spreads, and capital flows”. [Dornbusch *et al.*, 2000] Trade links, competitive devaluations, and financial links are the most fundamental causes of financial contagion. Trade links in goods and services and exposure to a common creditor can explain earlier crises clusters, not only the debt crisis of the early 1980s and 1990s, but also the observed historical pattern of contagion. [Kaminsky & Reinhart, 2000] Any major trading partner of a country in which a financial crisis has induced a sharp current depreciation could then experience declining asset prices and large capital outflows or could become the target of a speculative attack as investors anticipate a decline in exports to the crisis country and hence a deterioration in the trade account. Also known as a currency war, Competitive devaluation is when multiple countries compete against one another to gain a competitive advantage by having low exchange rates for their currency. “Devaluation in a country hit by a crisis reduces the export competitiveness of the countries with which it competes in third markets, putting pressure on the currencies of other countries; especially when those currencies do not float freely.” [Dornbusch *et al.*, 2000] This action causes countries to act irrationally due to fear and doubt. “If market participants expect that a currency crisis will lead to a game of competitive devaluation, they will naturally sell their holdings of securities of other countries, curtail their lending, or refuse to roll over short-term loans to borrowers in those countries.” [Dornbusch *et al.*, 2000] Financial links come from financial globalization since countries try to be more economically integrated with global financial markets. Allen and Gale (2000) and Lagunoff and Schreft (2001) analyse financial contagion as a result of linkages among financial intermediaries. The former explained a small liquidity preference shock in one region can spread by



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contagion throughout the economy and the possibility of contagion depends strongly on the completeness of the structure of interregional claims. The latter explained interrelated portfolios and payment commitments forge financial linkages among agents and thus make two related types of the financial crisis can occur in response.

The crisis had severe, long-lasting consequences for the US which entered a deep recession, with nearly 9 million jobs lost during 2008 and 2009, roughly 6% of the workforce. The number of jobs did not return to the December 2007 pre-crisis peak until May 2014 [U.S Bureau of Labour Statistics, 2018]. Household net worth declined by nearly \$13 trillion (20%) from its Q2 2007 pre-crisis peak, recovering by Q4 2012 [US Board of Governors of the Federal Reserve System, 2018]. Housing prices fell nearly 30% on average and the US stock market fell approximately 50% by early 2009, with stocks regaining their December 2007 level during September 2012 [S&P Dow Jones Indices LLC]. One estimate of lost output and income from the crisis comes to “at least 40% of 2007 gross domestic product” [Simon, 2013].

Financial crisis has hit the European Union in early 2008 and had non-negligible repercussions due to substantial purchases of subprime securities by European banks and financial institutions. Those repercussions occurred in two stages. In the first one, the EU has faced the economic recession, following the global economic downturn. In this stage, the macroeconomic indicators have modified significantly both at EU level and in the individual countries: the real GDP dropped, the unemployment rate of the euro area increased, budget deficits exceeded the limit of 3% of GDP and public debts exceeded 60% of the GDP. In the second one, the EU has faced the sovereign debt crisis that firstly began in Greece [Yurtsever, 2011]. Due to the global financial shock, in late 2009, a number of countries announced increases in deficit/GDP ratios, among these Greece announcing a deficit forecast of 12.7% of GDP for 2009. From this point on, the sovereign debt crisis enhanced. Consequently, Greece was shut out of the bond market in May 2010. In 2011, GDP shrunk by a further 6.8%, leaving total economic output now 16% below the pre-crisis peak in 2011. Greece’s economy declined further in 2012, by an estimated 4.4%. In this year, this country entered its 5th year of recession. Also, Spain and Cyprus sought official funding in 2012. Germany’s industrial output was down 2.4 per cent in May, the fastest rate for a decade. Orders have fallen for six months in a row, the worst run since the early 1990s. The German Chamber of Industry and Commerce warned of up to 200,000 job losses in coming months. German retails sales fell 1.4 per cent in June more than any expectations. The German economy



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declined by 0.5 per cent in the second quarter. France too saw a decline in its economy in the second quarter by 0.3 per cent to fell into recession in the first quarter of 2009. The economy of the United Kingdom has also been hit by the credit crisis. The economic output increased by just 0.2 per cent in the second quarter 2008, the joint-slowest pace since 2001. The mortgage approvals fell by a record of nearly 70 per cent. Growth in the British economy was at zero, the worst since the second quarter of 1992. The current slowdown has ended 16 years of continuous economic growth, the longest period of economic expansion in Britain since the 19<sup>th</sup> century. Unemployment increased by 32,500 in August 2008 to reach 904,900. Between May and July, joblessness rose by 81,000 to reach 1.72 million, the largest increase since 1999.

Our empirical research deals with the process of contagion in selected capital markets during 2005 to 2015. We examine the existence of a contagion effect from the USA to four developed markets (France, Germany, the United Kingdom and Japan) which will be measured by increased linkages between these markets. The values of stock market indexes provide the most concise information about the situation in the different capitals markets. In the aggregate equity market indexes, the contagion effect from the US can explain a large portion of the variance in stock returns in such markets. So we verify if the interdependencies of these markets with the US are important and sensitive during the period of crisis.

This paper is thus organized as follow: we present in first a literature review. Next we present our data sources and we introduce our methodology, after, we present and we discuss our empirical results, we present in the end our conclusion.

### **2. Literature Review**

Without a doubt, financial market contagion is an issue of enormous interest in the finance literature. The first empirical study on financial contagion was given by King and Wadhvani (1990). This study defined the contagion as significant increase in correlation between asset returns during the stock market crash of October 1987. Using correlation analysis, Lee and Kim (1993) found evidence of contagion in the global stock markets after the 1987 US stock market crash.

Baig and Goldfajn (1998) investigated the contagion effect from the Asian crisis. They consider the presence of contagion between equity and currency markets during the Asian currency crisis on Thailand, Malaysia, Indonesia, South Korea and the



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Philippines. During the Asian crisis too, Kaminsky and Schmukler (1999) concluded that movements were triggered by local and neighbouring countries and that news about agreements with international organizations and credit rating agencies have the most weight.

Baig and Goldfajn (2000) examined whether there was contagion during the Russian crisis with regard to Brazil and concluded that contagion occurred and that the mechanism of propagation was the debt securities market. They also noted the sudden halt in capital flows to Brazil and Russia.

Ang and Bekaert (2001) and Longin and Solnik (2001) showed that cross-correlations of international equity markets are higher during periods of volatility, which is true for major events such as financial crises. One year later, Sola *et al.* (2002) tested the contagion effects during the emerging market currency crises and have found evidence of contagion from the South Korean crisis to Thailand but not to Brazil. However, with Forbes and Rigobon (2002), Pearson's correlation coefficients were conditional on market volatility, and therefore, their increase in turbulent periods does not necessarily indicate that contagion existed. In the presence of heteroscedasticity, for instance, linear correlation between markets may increase after a crisis, even when there is no increment in the underlying links, thus leading to biased conclusions.

Rigobon (2003) tests contagion during Mexican, Asian and Russian crises. For the Mexican crisis, the mechanism for the transmission of crises remained relatively constant, providing evidence of interdependence. At the same time, evidence of a structural breakdown existed for the Russian crisis and particularly for the Asian crisis. Caporale *et al.* (2003) also conclude that there was evidence of contagion during the Asian crisis. In 2003 too, Bae *et al.* noted that contagion was more serious in Latin America than in Asia; contagion from Latin America to other regions was more important than that in Asia; the United States was not contaminated by the Asian crisis; and contagion is predictable and subject to prior information. However, Khalid and Kawai (2003) did not find any evidence to strongly support contagion.

Fernandez-Izquierdo and Lafuente (2004)'s empirical results tended to support the contagion hypothesis, i.e., significant leverage effects are the result of negative shocks within the market itself and foreign negative shocks. Alper and Yilmaz (2004) presented an empirical analysis of real stock return volatility contagion on the Istanbul Stock Exchange (ISE) from emerging markets and produced evidence of a volatility contagion from financial centres, particularly on the aftermath of the Asian crisis to the ISE.



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Collins and Gavron (2005) studied 44 events of contagion in 42 countries and find that the Brazilian and Argentinean crisis generated most of the contagion events. However, Bekaert *et al.* (2005) produced no evidence that the Mexican crisis caused contagion. Boschi (2005) too was unable to provide evidence of contagion between Argentina and Brazil, Venezuela, Uruguay, Mexico and Russia. Trivedi and Zimmer (2005) suggested that, of the 18 analysed countries, only Croatia and Romania exhibited significant evidence of contagion. Testing the contagion effect between Hong Kong, the ten emerging nations and the G7 countries Corsetti *et al.* (2005) suggested that five of the seventeen countries showed symptoms of contagion.

Cappiello *et al.* (2006) also concluded that, during periods of financial turmoil, equity market volatilities show important linkages and conditional equity correlations among regional groups increase dramatically. In the same year, Khalid and Rajaguru (2006) note that linkages and/or interdependence amongst financial markets increase because of a financial crisis and Hu (2006) found that, although it is not possible to assess how two markets are related in volatile periods using simple correlation coefficients, as they only measure the level of dependence, with copula models it is possible to study both the level and the structure of dependence.

Chiang *et al.* (2007) revealed the contagion effect in Asian markets and have identified two phases (contagion and herding behaviour of correlation) of correlation amongst these markets. Sovereign credit rating agencies have played a vital role in shaping the structure of dynamic correlation in the Asian markets.

Lucey and Voronkova (2008) found that in the long run the Russian equity market remained isolated from the influence of several developed international markets as well as the equity markets of Hungary, the Czech Republic and Poland, before and after the 1998 crisis.

Horta *et al.* (2008) assess whether capital markets of developed countries reflect the effects of financial contagion from the US subprime crisis and, in such case, if the intensity of contagion differs across countries. The results suggest that markets in Canada, Japan, Italy, France and the United Kingdom display significant levels of contagion, which are less relevant in Germany. Canada appears to be the country where the highest intensity of contagion is observed.

Meric *et al.* (2008) show that during the GFC, integration has increased between the US stock market and the European and Australian developed stock markets and that the US stock returns led European and Australian stock returns with a high level of statistical significance.



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Abd Majid and Hj Kassim (2009) noted that emerging stock markets in Indonesia and Malaysia tend to show a greater degree of integration or increased co-movements with US stock market during the a crisis period. However, in the early stages of GFC (from January 2007 to the summer of 2008), it shows that emerging markets are isolated and differentiated from developments in the US.

Huyghebaert and Wang (2010) revealed that the relationships among East Asian stock markets were time-varying while stock market interactions were limited before the Asian financial crisis started. Longstaff (2010) presents strong recent evidence of contagion in the financial markets. His results support the hypothesis that financial contagion was propagated primarily through liquidity and risk-premium channels rather than through a correlated information channel.

Syllignakis and Kouretas (2011) provided evidence that the stock markets of the Central and Eastern European countries were partially integrated with the developed stock markets of the US and Germany. Moreover, there were strong contagion effects among the US, German, Russian and Central and Eastern European (CEE) stock markets. Aloui *et al.* (2011) found evidence of strong co-movement between the BRIC markets and the US market during the crisis period. The magnitude of contagion effects is more in the cases of Brazil and Russia compared to emerging markets, like China and India. In 2011 too, Kenourgios et al confirmed the contagion effects of five different financial crises during 1997–2002 on BRIC, US and U.K. stock markets, while the emerging stock markets have greater financial contagion effects. Their study was, however, unlikely to cover the global financial crisis of 2008. Chudik and Fratzscher (2011) study twenty-six economies (defining the Euro area as a single economy and excluding China) and found that the tightening of financial conditions was the key transmission channel in advanced economies, whereas the real side of the economy was the main channel in emerging economies. Another conclusion of their paper is that Europe suffered a greater effect than other advanced economies from the decline in risk appetite. Coudert *et al.* (2011) found that contagion spread from one to other neighbouring emerging countries' foreign exchange markets during a global crisis. The empirical results are inconclusive.

Graham *et al.* (2012) revealed a low degree of co-movement between the US and the 22 individual emerging markets and that the degree of stock market integration was changing over time. Lin (2012) revealed that the Asian emerging markets have strong co-movement between exchange rates and stock prices during crisis periods.





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Gharsellaoui (2013) showed that the Tunisian financial market does not seem to be very influenced by the subprime crisis and explained this result by the intrinsic characteristics of the Tunisian market, an underdeveloped market and elemental thing that can make him more or less immune to that crisis. Employing a multivariate GARCH model for four major, international equity markets, namely the USA, EMU, China and Japan Dimitriou and Simos (2013) provided empirical evidence of contagion in all markets with the US market through various channels, which have not been discussed in other related studies. Specifically, Japanese and EMU markets have been directly affected from the crisis. However, while China's equity market has been mainly unaffected by the US subprime crisis, it has been affected indirectly through Japan. Moreover, the Japanese equity market exhibits positive and significant spillovers effects with China and EMU, revealing an indirect volatility transmission channel of US subprime crisis.

Mollah *et al.* (2014) demonstrated the existence of contagion in the financial markets during the global crisis. However, the crisis originated in the US and its effects escalated immediately to the other global markets. In the same year and in their comprehensive study of 58 countries, Morales and Andreosso-O'Callaghan (2014) documented that there are no significant contagion effects derived from the US stock markets, either at world level and or at a regional level. Moreover, there was a spillover effect of the US subprime crisis on selected markets rather than contagion to most of the countries. Dungey and Gajurel (2014) provided strong evidence of contagion effects on both emerging as well as on advanced equity markets. For financial sector indices, however, the results are slightly different. Particularly in the case of advanced markets, there is a weak indication of contagion in the aggregate indices. However, Bekaert *et al.* (2014) recognized the small effect of contagion from the US market to the global financial sector during the crisis, and it did not spread extensively across countries and sectors. Further, they found that the countries suffering from high unemployment, great political risk and a huge deficit in both the government budget and current account balance experienced a high magnitude of contagion.

Horta *et al.* (2014) investigated contagion effects of both USA financial crisis and European sovereign debt crisis in the stock markets of Belgium, France, Greece, Japan, Netherlands, Portugal and the UK. The authors first assessed these markets' efficiency and subsequently using copula models to investigate their dependence structures. The results suggested that there was significant contagion from both crises, with the former displaying more prominent effects.



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Bae and Zhang (2015) exposed that stock market integration was evident only in emerging countries in the financial crises of 1997 and 2008. Syriopoulos *et al.* (2015) on BRICS economies also confirmed the evidence for volatility and shock spillover between India, Russia, Brazil and the US stock markets and business sectors during the 2008 financial crisis. Daugherty and Jithendranathan (2015) concluded that the European markets received more information flows from USA markets and that integration increased with the financial crisis but not with the European debt crisis.

Using cointegration and Granger causality tests to examine contagion risk associated to the subprime crisis, Boubaker *et al.* (2016) found evidence of contagion in both developed (Canada, France, Germany, Japan, UK), and emerging markets (Brazil, Russia, China, Malaysia and Singapore). The study of Yarovaya and Lau (2016) indicated that the Chinese stock market is the most attractive option for UK investors.

Jiang *et al.* (2017) noted that the correlation of stock markets between the US, Britain, Germany, Japan and Hong Kong increases markedly after the crisis, while it exhibits a reverse trend with the Chinese stock market. Olbry's and Majewska (2017) found that the correlation between USA-S&P500 and France-CAC, and UK-FTSE and Germany DAX markets increased during the 2008 crisis period compared to the pre-crisis period. Turk *et al.* (2017) found that during the GFC period, 27 European countries were subject to a contagion effect due to integration with the United States and there was no decoupling. One year after, Sosa Castro *et al.* (2018) analysed the contagion effect among the stock markets of the BRIC+M block (Brazil, Russia, India, China plus Mexico). The contagion effect is proved through increases on dependence parameters during crisis periods. Empirical results show strong evidence of time-varying dependence among those markets and an increasing dependence relation during the global financial crisis period.

Mohti *et al.* (2019) assesses contagion from the USA subprime financial crisis on a large set of frontier stock markets. Copula models were used to investigate the structure of dependence between frontier markets and the USA, before and after the occurrence of the crisis. Statistically significant evidence of contagion could only be found in the European region, with the markets of Croatia and Romania being affected. The remaining European markets in our sample and the others, located in America, Middle East, Africa, and Asia, appear to have been isolated from the subprime crisis impact. Gulzar *et al.* (2019) examined the financial cointegration and spillover effect of the global financial crisis to emerging Asian financial markets



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(India, China, Pakistan, Malaysia, Russia and Korea). The analysis used daily stock returns, divided into three time periods: pre-, during and post-crisis from 1 July 2005 to 30 June 2015. Applying the Johansen and Juselius cointegration test, the vector error correction model (VECM) and the G.A.R.C.H.-B.E.K.K. model for an examination of integration and conditional volatility, authors found long-term cointegration between the US market and emerging stock markets, and the level of cointegration increased after the crisis period. The VECM and impulse response function reveal that a shock in the US financial market has a short-term impact on the returns of emerging financial markets. Past shocks and volatility have more effect on the selected stock markets during all time periods. The Korea Composite Stock Price Index and the Bombay stock exchange (B.S.E.) are the only stock markets that have cross-market news and volatility spillover effects during the crisis period. After the crisis period, news effects are positive on the B.S.E. and the Russian Trading System and have a negative effect on the Kuala Lumpur Stock Exchange and the Shanghai Stock Exchange.

### 3. Methodology

We investigate the correlations between the daily returns of the USA stock index and four developed financial markets returns and we study if the co-movements between the USA and other stock markets are statistically significant. It is clear that when we analyse linkages among international stock markets, it is of interest to determine if there are any common forces driving the long-run movement of the data series or if each individual stock index is driven solely by its own fundamentals; this relationship can be captured by cointegration analysis. We start to use the cointegration test to measure the relationships between different markets. The idea behind this cointegration is that multivariate time series are integrated.

#### 3.1. Cointegration approach

Testing cointegration among stock markets is a test of the level of arbitrage activity in the long run. If markets are not cointegrated, this implies that there is no arbitrage activity to bring the market together in the long run, and hence, the investors can potentially obtain long-run gains through portfolio diversification. If the cointegration is found, this means even if a set of variables are non-stationary, they never drift apart in the long run.



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So when cointegration exists, the variables are cointegrated and the Error Correction Term (ECT) has to be included in the VAR. The model becomes a VECM which can be seen as a restricted VAR. The variance decomposition and impulses analysis must be constructed on the ECMs. If there is no cointegration, then the analyses will be based on the regression of first differences of the variables by utilizing a standard VAR framework.

The notion of cointegration makes it possible to demonstrate stable long-term relationships between stationary series. This concept reproduces the existence of a long-term equilibrium and the error term at time  $t$  can be interpreted as a distance to the period  $t$  with respect to this equilibrium. The cointegration relation is an equilibrium relation between series in a balanced growth regime but shocks can affect this short-term relationship in order to have temporary effects. The problem consists therefore in determining if the series are cointegrated and then to estimate the short- and long-term relationships between the variables. It is clear that when the number of series is greater than 2, then it is possible to obtain integrated series of different order which are cointegrated. In general, let  $N$  be the number of series, there may exist  $N-1$  linearly independent cointegrating vectors and thus  $N-1$  cointegration relations which govern the joint evolution of the variables. When the number of variables exceeds 2, the Engel and Granger approach becomes insufficient because it considers only a cointegration relation. We use in this case the VAR approach developed by Johansen to carry out the cointegration tests and to construct a VECM with several equations. Using multivariate cointegration approach and VECM, we investigated the dynamic linkages among the US market and four developed markets (countries are: France, Germany, the UK, and Japan). Prior to estimating VAR model specified above, we start our analysis by testing for stationarity using both the Augmented Dickey Fuller (ADF) Unit Root test and the Phillips-Perron (PP) Unit Root test. The Unit Root tests are conducted in first, to examine the stationary property of each series.

### 3.2. The VAR model

To examine how American financial market had affected the all of the other developed markets during and post the global financial crisis and to demonstrate how the spillovers of a crisis are transmitted within the markets, we explore the relationships of these markets within a VAR framework.

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The application of the VAR model proposed by Forbes and Rigobon (2002) allows us to directly examine whether links between markets in times of crisis, differ from those in periods of calm.

Our VAR models can be written as:

$$R_{FR_t} = c_1 + \sum_{i=1}^p \alpha_{1,i} \cdot R_{FR_{t-i}} + \sum_{j=0}^p \beta_{1,j} \cdot R_{US_{t-j}} + \varepsilon_{1,t} \quad (1)$$

$$R_{GE_t} = c_2 + \sum_{i=1}^q \alpha_{2,i} \cdot R_{GE_{t-i}} + \sum_{j=0}^q \beta_{2,j} \cdot R_{US_{t-j}} + \varepsilon_{2,t} \quad (2)$$

$$R_{UK_t} = c_3 + \sum_{i=1}^r \alpha_{3,i} \cdot R_{UK_{t-i}} + \sum_{j=0}^r \beta_{3,j} \cdot R_{US_{t-j}} + \varepsilon_{3,t} \quad (3)$$

$$R_{JP_t} = c_4 + \sum_{i=1}^s \alpha_{4,i} \cdot R_{JP_{t-i}} + \sum_{j=0}^s \beta_{4,j} \cdot R_{US_{t-j}} + \varepsilon_{4,t} \quad (4)$$

Before running the Johansen test, the selection of lag length and the identification of deterministic components should be done first. To select the optimal lag length, two methods are generally applied. One way is a likelihood ratio test, and the other is the information criteria, such Akaike Information Criterion (AIC) and Schwarz Information Criterion (SIC). The best model is the one that maximize LR, or minimize the information criteria. Compared with the LR ratio test, the information criteria method is more powerful.

To test whether the variables are cointegrated or not, one of the well-known tests is the Johansen trace test. The Johansen test is used to test for the existence of cointegration and is based on the estimation of the ECM by the maximum likelihood, under various assumptions about the trend or intercepting parameters, and the number k of cointegrating vectors, and then conducting likelihood ratio tests.

**3.3. The Johansen tests**

The Johansen tests are called the maximum Eigen value test and the trace test. The Johansen tests are likelihood-ratio tests.

The Johansen cointegration proposed two test statistics through the VAR model that are used to identify the number of cointegrating vectors, namely, the trace test statistic and the maximum Eigen value test statistic. So there are two tests: The

maximum Eigen value test, and the trace test. For both test statistics, the initial Johansen test is a test of the null hypothesis of no cointegration against the alternative of cointegration.

These test statistics can be constructed as:

$$\lambda_{trace}(r) = -T \cdot \sum_{i=r+1}^n \ln(1 - \hat{\lambda}_i^2) \tag{5}$$

$$\lambda_{max}(r, r + 1) = -T \cdot \ln(1 - \hat{\lambda}_{r+1}^2) \tag{6}$$

where are the Eigen values obtained the  $\lambda_{trace}$  tests the null that there are at most  $r$  cointegrating vectors, against the alternative that the number of cointegrating vectors is greater than  $r$  and the  $\lambda_{max}$  tests the null that the number of cointegrating vectors is  $r$ , against the alternative of  $r + 1$ . Critical values for the  $\lambda_{trace}$  and  $\lambda_{max}$  statistics are provided by MacKinnon-Haug-Michelis of MacKinnon *et al.* (1999).

If the cointegration relation exists between our series, the VECM will be used to identify the equilibrium or a long-run relationship among the variables, and can also improve longer term forecasting. Johansen (1988)'s cointegration test will be used to investigate the long-run relationship between the variables. Besides, the causal nexus between United States and selected developed stock markets will be investigated by estimating the following VECM Johansen (1988) and Johansen and Juselius (1990).

### 3.4. Vector Error Correction Model: VECM

The estimation of the VECM yields insight into short- and long-run linkages between our different markets. This model is useful for determining short term dynamics between variables by restricting long-run behaviour of variables. It restricts long run relationships through their cointegrating relations and ECT which represented the deviation from long run equilibrium.

In a VECM, short-term causal effects are indicated by changes in other differenced explanatory variables. The long-term relationship is implied by the level of disequilibrium in the cointegration relationship. That is, the lagged ECT.

If the cointegration relation exists between our series, so the corresponding VECM form with the cointegration rank could be constructed as:

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$$\Delta R_{FR_t} = c_1 + \phi_1 \cdot R_{FR_{t-1}} + \gamma_1 \cdot R_{US_{t-1}} + \sum_{i=1}^p \alpha_{1,i} \cdot \Delta R_{FR_{t-i}} + \sum_{j=0}^p \beta_{1,j} \cdot \Delta R_{US_{t-j}} + \lambda_1 ECT_{t-1} + \varepsilon_{1,t} \quad (7)$$

$$\Delta R_{GE_t} = c_2 + \phi_2 \cdot R_{GE_{t-1}} + \gamma_2 \cdot R_{US_{t-1}} + \sum_{i=1}^q \alpha_{2,i} \cdot \Delta R_{GE_{t-i}} + \sum_{j=0}^q \beta_{2,j} \cdot \Delta R_{US_{t-j}} + \lambda_2 ECT_{t-1} + \varepsilon_{2,t} \quad (8)$$

$$\Delta R_{UK_t} = c_3 + \phi_3 \cdot R_{UK_{t-1}} + \gamma_3 \cdot R_{US_{t-1}} + \sum_{i=1}^r \alpha_{3,i} \cdot \Delta R_{UK_{t-i}} + \sum_{j=0}^r \beta_{3,j} \cdot \Delta R_{US_{t-j}} + \lambda_3 ECT_{t-1} + \varepsilon_{3,t} \quad (9)$$

$$\Delta R_{JP_t} = c_4 + \phi_4 \cdot R_{JP_{t-1}} + \gamma_4 \cdot R_{US_{t-1}} + \sum_{i=1}^s \alpha_{4,i} \cdot \Delta R_{JP_{t-i}} + \sum_{j=0}^s \beta_{4,j} \cdot \Delta R_{US_{t-j}} + \lambda_4 ECT_{t-1} + \varepsilon_{4,t} \quad (10)$$

Since we deal with the stock market cointegration, it is of special interest to know how one market responds to innovations in a complex system. The cointegration test measures the relationships between different markets in the long-run while the other two tests (variance decomposition and impulses analysis) are utilized to examine the short-run aspects. Thus and in order to show the interactions between the equations, variance decompositions analysis would be applied. We generally just regard variance decomposition as a confirmation of impulse responses

### 3.5. Impulse Response Function

For dealing with dynamic systems, impulse response analysis has now become a common tool. Impulse response functions allow tracing out the direct and the indirect effect of an exogenous shock, or an impulse, in one variable to the system over time. This function investigates the time horizon of variables and their response for any sudden shock in any variable in the model with time which passes.

An impulse response function traces both direct and indirect effects of a shock to one variable on current and future values of all of the endogenous variables in the VAR model.

### 3.6. Variance Decomposition Test

Sometimes there are sudden shocks that affect variables. Thus we use in this case variance decomposition analysis to analyse the error in the evaluation process that is resulted from other variables in the VECM model. Therefore, we used this test in our study in order to assess to what extent shocks to developed markets (French–German–The UK–Japanese) are explained by the US market. Meaning, it



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tends to show the percentage of forecast error variance for each of the selected index that may be attribute to its own shocks and to fluctuations in S&P500 index.

#### 4. Empirical Results

In the first step we investigate the data of developed markets (France, Germany, the UK and Japan).

Table 1. Data Description

Database (data description)	Period (daily data)
<b>R_US:</b> Return of S&P 500 Index of the US market	From <b>April 01, 2005</b> to <b>December 31, 2015</b>  (2805 observations)
<b>R_FR:</b> Return of CAC 40 Index of the French market	
<b>R_GE:</b> Return of DAX Index of the German market	
<b>R_UK:</b> Return of FTSE 100 Index of the UK market	
<b>R_JP:</b> Return of Nikkei 225 Index of the Japan market	

Table 2. Descriptive Statistics

	R_US	R_FR	R_GE	R_UK	R_JP
Mean	-0.000142	7.54E-05	-0.000204	1.81E-05	-9.14E-05
Median	-0.000658	-0.000261	-0.000762	0.000000	-0.000364
Maximum	0.099324	0.099346	0.077167	0.097073	0.128749
Minimum	-0.103782	-0.100527	-0.102350	-0.089574	-0.123962
Std. Dev.	0.012619	0.014535	0.013982	0.011986	0.015470
Skewness	0.576406	0.135387	0.163972	0.332503	0.778702
Kurtosis	14.05593	8.903404	8.835084	11.33959	11.74920
Jarque-Bera Probability	14441.38 0.000000	4081.683 0.000000	3991.954 0.000000	8180.191 0.000000	9230.089 0.000000
Sum	-0.397770	0.211528	-0.572555	0.050903	-0.256494
Sum Sq. Dev.	0.446542	0.592426	0.548202	0.402804	0.671041
Observations	2805	2805	2805	2805	2805

We use daily data for the following series and we generate returns for S&P 500 index of the US market, for the CAC 40 index of the French market, for the DAX



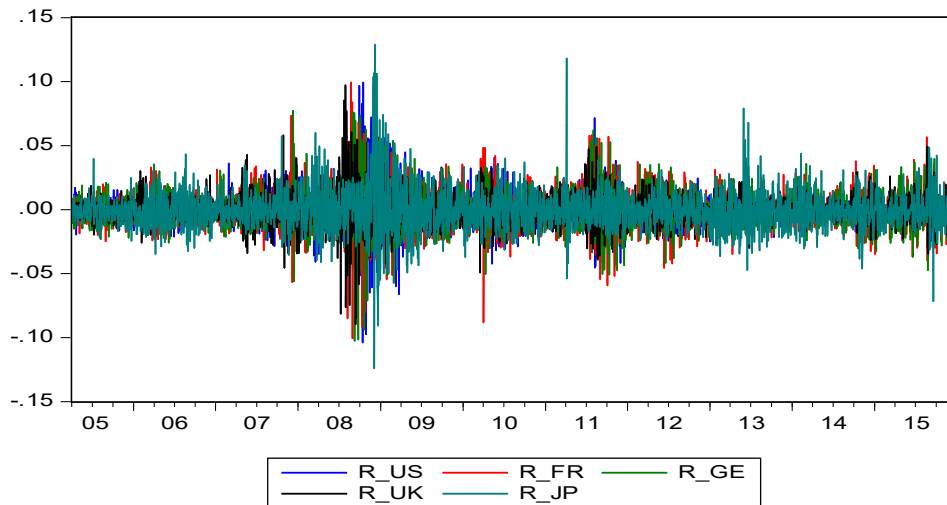
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index of the German market, for FTSE 100 index of the UK market, and for Nikkei 225 index of the Japan market. The daily series returns are calculated by taking the natural logarithm of daily prices of each index from April 01, 2005 to December 31, 2015 (Table 1).

We then analyse the summary of descriptive statistics of the variable, so Table 2 presents the results where sample, means, standard deviation, skewness and kurtosis, and the Jacque-Bera statistic and p-values have been reported.

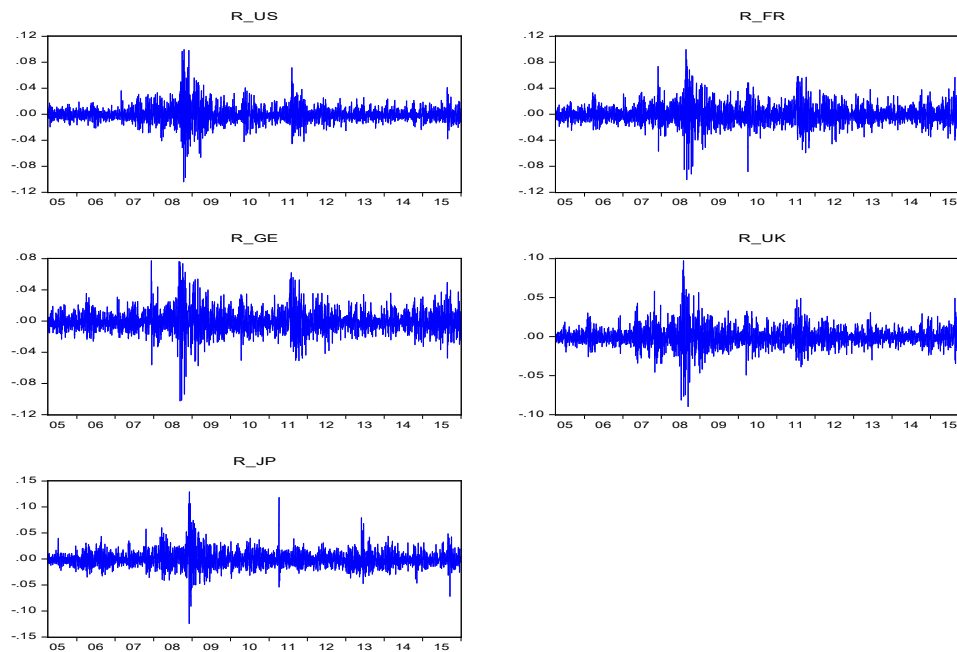
We also report in the following table the descriptive statistics of daily return of all indexes.

The results indicate that over the sample period, all the series evidence such as the skewness and the kurtosis are significant. The Jarque–Bera tests show that all five series depart from normality.



**Fig. 1. Single Graph of Indexes Returns (April 01, 2005 - December 31, 2015)**

We observe in one Figure and separately the distributions of daily returns of all indexes (Fig. 2 and Fig. 3).



**Fig. 2. Multiple Graphs of Indexes Returns (April 01, 2005 - December 31, 2015)**

Prior to identifying the possibility of long-term relations of our series, we present the stationarity results for all the variables, based upon the Augmented Dickey–Fuller unit root test as well as the Phillips–Perron test, which corrects any possible presence of autocorrelation in the standard ADF test, in a non-parametric way.

We have applied the ADF and PP unit root tests to examine the integrating properties of the variables.

The results of the two tests reported in Table 3 reveal that all series appear to have the absence of unit root in their levels, while they are also stationary in their first differences form. Thus, we conclude that all variables are integrated at the level, i.e.  $I(0)$ .

**Table 3. Unit root tests results**

		R_US	R_FR	R_GE	R_UK	R_JP
<b>Augmented Dickey–Fuller</b>	Level	- 57.33157* (0.0001)	- 33.49702* (0.0000)	- 51.65105* (0.0001)	- 54.02786* (0.0001)	- 53.49795* (0.0001)
	$\Delta$	- 93.18763* (0.0001)	- 23.54484* (0.0000)	- 19.20442* (0.0000)	- 20.43169* (0.0000)	- 20.88665* (0.0000)
<b>Phillips–Perron</b>	Level	- 57.54819* (0.0001)	- 53.76839* (0.0001)	- 51.66568* (0.0001)	- 54.19887* (0.0001)	- 53.50634* (0.0001)
	$\Delta$	- 645.1136* (0.0001)	- 549.4632* (0.0001)	- 820.8641* (0.0001)	- 648.2722* (0.0001)	- 994.5288* (0.0001)

$\Delta$  is the first difference term. The optimal lag length stands for the lag level that maximizes the Schwarz Information Criteria (SIC). P-values are in parentheses.\*indicates significance at the 1% level.

The results of stationarity tests confirm that return of all indexes are stationary and don't seem to follow a random walk. They do interact with each other and have stationary equilibrium relationship which assures that the indexes never drift too far apart. This is presuming that all series are co integrated in same order and exist a cointegration relationship between ours series. The Johansen cointegration technique is used in this study to detect the presence of cointegration among the variables studied. The results of cointegration were reported in Table 5.

Thus to examine how financial crisis had affected the all of the markets, and to demonstrate how the spillovers of a crisis are transmitted within markets we explore the relationships of these markets within VAR framework. We can also consider the estimation of a VECM model. To do this, the number of delay  $p$  of the model VAR ( $p$ ) must be first determined using the information criterion.

The significance of the model coefficients (i.e. interactions between the variables) is affected in our work by many factors such as the lag length selected and the number of variables included in the appropriate lag lengths and that are determined by the information criteria, such AIC (Akaike Information Criterion), LR (sequential modified LR test statistic), FPE (Final Prediction Error), HQ

(Hannan Quinn information criterion) and SIC (Swhartz Information Criterion). However, it is worth mentioning that the VAR estimation output indicates that the model has relatively good statistical properties.

**Table 4. Choice of Optimal Lag**

VAR Lag Order Selection Criteria (max lag 13)

Sample: 04/01/2005 12/31/2015

Included observations: 2795

	Max (LR)	Min (FPE)	Min (AIC)	Min (SIC)	Min (HQ)
$R_{FR} = f(R_{US})$	8	8	8	0	3
$R_{GE} = f(R_{US})$	10	10	10	0	2
$R_{UK} = f(R_{US})$	11	5	5	0	2
$R_{JP} = f(R_{US})$	12	12	12	0	2

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SIC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

The results presented in Table 4, LR, FPE and AIC suggest VAR models with different lag length, the appropriate lag length is 8 for the French market, 10 for the German market, 5 for the UK market, and 12 for the Japanese market.

The Johansen (1988)'s setup permits the test of hypotheses about the long-run equilibrium between the variables. The results of cointegration were reported in Table 5.

The Johansen (1988)'s test can detect the presence of cointegrations among the variables studied; this test is based on the calculation of the trace statistic and maximum Eigen value. Returning to the Table 5, the trace statistics are very high with an almost zero probability. Trace and maximum Eigen value indicate the presence of cointegrating between the variables of the 4 models at 5% significant level.

**Table 5. Johansen Cointegration Test**

Unrestricted Cointegration Rank Test (Trace)					
	Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
<b>R_FR = f(R_US)</b>	None *	0.112665	659.6401	15.49471	0.0001
	At most 1 *	0.109872	325.4275	3.841466	0.0000
<b>R_GE = f(R_US)</b>	None *	0.084326	470.6678	15.49471	0.0001
	At most 1 *	0.077217	224.5296	3.841466	0.0000
<b>R_UK = f(R_US)</b>	None *	0.163809	958.3953	15.49471	0.0001
	At most 1 *	0.150841	457.6606	3.841466	0.0000
<b>R_JP = f(R_US)</b>	None *	0.081553	405.5202	15.49471	0.0001
	At most 1 *	0.058398	168.0018	3.841466	0.0000

Trace test indicates 2 cointegrating eqn (s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

This implies that there is a well-defined long-run equilibrium relationship among the major stock markets, which suggests the stock market indexes move together and have high correlation in the long-run. The cointegration relationships between stocks markets imply that there is a common force, such as arbitrage activity which brings the stock markets together in the long run. We therefore deduce the existence of cointegrations relationship and we pass from VAR model to the VECM model.

Let we remember that if the variables are cointegrated, the ECT has to be included in the VAR. The model becomes a VECM which can be seen as a restricted VAR. But if the variables are not cointegrated, the variables have first to be differenced in times and have a VAR in difference.

In addition, having found two statistically significant cointegration tests, this specification corresponds to the results from the maximum Eigen value test which only founded 2 significant cointegrating vectors.

The cointegration relationship exists between our series, so we proceed to our investigation by estimating a VECM model for each set of variables to report the corresponding equation of each VECM associated with the particular stock price index presented in the above equations (1-4).

Table 6.1. VECM Estimation Results of France

Regressors	<i>ΔR FR</i>			Cointegrating Eq:	
	Coefficients	t-ratio		Coefficients	t-ratio
<i>ΔR FR(-1)</i>	-0.798802	-26.1581*	<i>R FR(-1)</i>	1.000000	
<i>ΔR FR(-2)</i>	-0.714494	-21.6621*	<i>R US(-1)</i>	-2.854769	-17.8846*
<i>ΔR FR(-3)</i>	-0.665493	-19.6590*	<i>Constant</i>	-0.000484	
<i>ΔR FR(-4)</i>	-0.512793	-15.1298*			
<i>ΔR FR(-5)</i>	-0.461276	-14.1331*			
<i>ΔR FR(-6)</i>	-0.337392	-11.2957*	<i>ECT</i>	-0.099790	-3.8312*
<i>ΔR FR(-7)</i>	-0.185101	-7.19590*			
<i>ΔR FR(-8)</i>	-0.089703	-4.69324*	R <sup>2</sup>	0.459968	
			F	139.1845*	
<i>ΔR US(-1)</i>	-0.295380	-4.21348*			
<i>ΔR US(-2)</i>	-0.267698	-4.10940*			
<i>ΔR US(-3)</i>	-0.264750	-4.41886*			
<i>ΔR US(-4)</i>	-0.226183	-4.15318*			
<i>ΔR US(-5)</i>	-0.158836	-3.26391*			
<i>ΔR US(-6)</i>	-0.041731	-0.99255			
<i>ΔR US(-7)</i>	-0.006159	-0.18401			
<i>ΔR US(-8)</i>	-0.018470	-0.80588			
<i>Constant</i>	2.45E-06	0.00850			

\* and \*\* denote the significance at 1% and 5% levels, respectively; DW indicates Durbin-Watson statistic.

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Table 6.2. VECM Estimation Results of Germany

Regressors	<i>AR GE</i>			Cointegrating Eq:	
	Coefficients	t-ratio		Coefficients	t-ratio
$\Delta R \text{ GE}(-1)$	-0.555613	-12.5797*	$R \text{ GE}(-1)$	1.000000	
$\Delta R \text{ GE}(-2)$	-0.536267	-12.2461*	$R \text{ US}(-1)$	-1.645075	-14.0131*
$\Delta R \text{ GE}(-3)$	-0.511517	-11.8834*	<i>Constant</i>	-4.76E-05	
$\Delta R \text{ GE}(-4)$	-0.427253	-10.2029*			
$\Delta R \text{ GE}(-5)$	-0.397145	-9.91481*			
$\Delta R \text{ GE}(-6)$	-0.346576	-9.18685*	<i>ECT</i>	-0.365422	-8.38428*
$\Delta R \text{ GE}(-7)$	-0.277250	-7.93039*			
$\Delta R \text{ GE}(-8)$	-0.202629	-6.53186*	R <sup>2</sup>	0.465719	
$\Delta R \text{ GE}(-9)$	-0.178679	-6.92283*	F	115.0612*	
$\Delta R \text{ GE}(-10)$	-0.067981	-3.55359*			
$\Delta R \text{ US}(-1)$	-0.509200	-7.34811*			
$\Delta R \text{ US}(-2)$	-0.423568	-6.37898*			
$\Delta R \text{ US}(-3)$	-0.340977	-5.38341*			
$\Delta R \text{ US}(-4)$	-0.279740	-4.69434*			
$\Delta R \text{ US}(-5)$	-0.199570	-3.60242*			
$\Delta R \text{ US}(-6)$	-0.184869	-3.64556*			
$\Delta R \text{ US}(-7)$	-0.144871	-3.17922*			
$\Delta R \text{ US}(-8)$	-0.088504	-2.24752**			
$\Delta R \text{ US}(-9)$	-0.079346	-2.52857**			
$\Delta R \text{ US}(-10)$	-0.052369	-2.43107**			
<i>Constant</i>	1.46E-06	0.00539			

\* and \*\* denote the significance at 1% and 5% levels, respectively. DW indicates Durbin-Watson statistic.

Table 6.3. VECM Estimation Results of the UK

Regressors	<i>ΔR UK</i>			Cointegrating Eq:	
	Coefficients	t-ratio		Coefficients	t-ratio
<i>ΔR UK(-1)</i>	-0.435514	-13.5006*	<i>R UK(-1)</i>	1.000000	
<i>ΔR UK(-2)</i>	-0.386462	-12.3101*	<i>R US(-1)</i>	-2.854769	-15.0578*
<i>ΔR UK(-3)</i>	-0.323636	-11.2102*	<i>Constant</i>	0.000150	
<i>ΔR UK(-4)</i>	-0.155798	-6.19740*			
<i>ΔR UK(-5)</i>	-0.089360	-4.75894*			
			<i>ECT</i>	-0.484665	-3.8312*
<i>ΔR US(-1)</i>	0.518830	14.0967*			
<i>ΔR US(-2)</i>	0.418955	12.1262*	R <sup>2</sup>	0.468788	
<i>ΔR US(-3)</i>	0.300170	9.60448*	F	223.5900*	
<i>ΔR US(-4)</i>	0.197312	7.64487*			
<i>ΔR US(-5)</i>	0.097715	5.37571*			
<i>Constant</i>	1.94E-06	0.00822			

The results in the Tables (Table 6.1, Table 6.2, Table 6.3 and Table 6.4) above presented the adjustment's coefficients, for the set of series used in our investigation. The ECT results in our markets are found statistically significant with the anticipated negatives signs (-0.099790, -0.365422, -0.484665, -0.663715). The adjustment's coefficients associated with the stock price index are negative and statistically significant. This is sufficient to confirm the presence of a stable long-run relationship between indexes and this confirms the finding in Johansen cointegration tests presented previously, which has suggested a bi-directional long run relationship between indexes.

We then import empirical results of impulse response functions, and variance decompositions analysis. Usually, there are two methods to widen our investigation and study the effects of shocks to the return of indexes. We compute variance decompositions and impulse-response functions, which serve as tools for evaluating the dynamic interactions and strength of causal relations among variables in the system.



Table 6.4. VECM Estimation Results of Japan

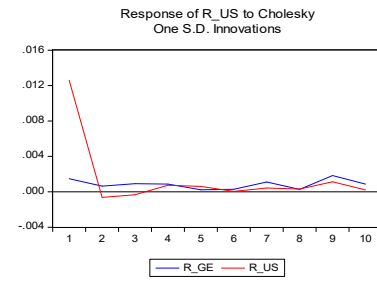
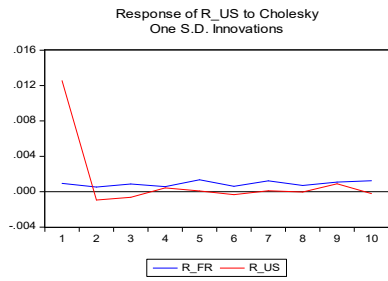
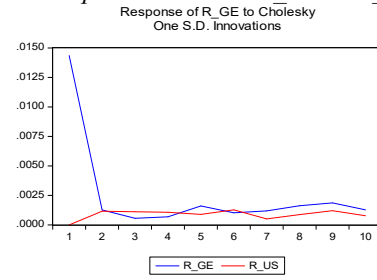
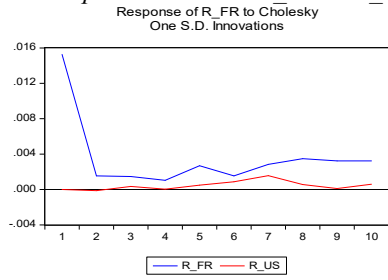
Regressors	$\Delta R_{JP}$			Cointegrating Eq:	
	Coefficients	t-ratio		Coefficients	t-ratio
$\Delta R_{JP(-1)}$	-0.332991	-6.54899*	$R_{JP(-1)}$	1.000000	
$\Delta R_{JP(-2)}$	-0.306292	-6.13924*	$R_{US(-1)}$	-1.406760	-11.8928*
$\Delta R_{JP(-3)}$	-0.312920	-6.44143*	Constant	-0.000128	
$\Delta R_{JP(-4)}$	-0.326640	-6.92902*			
$\Delta R_{JP(-5)}$	-0.288324	-6.33643*			
$\Delta R_{JP(-6)}$	-0.280429	-6.42165*	ECT	-0.663715	-12.7147*
$\Delta R_{JP(-7)}$	-0.229161	-5.53396*			
$\Delta R_{JP(-8)}$	-0.203144	-5.24771*	R <sup>2</sup>	0.505495	
$\Delta R_{JP(-9)}$	-0.158896	-4.51366*	F	113.0990*	
$\Delta R_{JP(-10)}$	-0.104895	-3.37391*			
$\Delta R_{JP(-11)}$	-0.042471	-1.63084			
$\Delta R_{JP(-12)}$	-0.043923	2.34530**			
$\Delta R_{US(-1)}$	-0.866400	-11.8860*			
$\Delta R_{US(-2)}$	-0.809879	-11.2311*			
$\Delta R_{US(-3)}$	-0.760912	-10.7443*			
$\Delta R_{US(-4)}$	-0.717823	-10.4479*			
$\Delta R_{US(-5)}$	-0.628989	-9.48005*			
$\Delta R_{US(-6)}$	-0.523764	-8.31323*			
$\Delta R_{US(-7)}$	-0.405471	-6.85726*			
$\Delta R_{US(-8)}$	-0.317320	-5.82046*			
$\Delta R_{US(-9)}$	-0.276635	-5.62266*			
$\Delta R_{US(-10)}$	-0.194250	-4.53760*			
$\Delta R_{US(-11)}$	-0.116199	-3.39239*			
$\Delta R_{US(-12)}$	-0.004833	-0.20591			
Constant	-1.22E-05	-0.04140			

\* and \*\* denote the significance at 1% and 5% levels, respectively. DW indicates Durbin-Watson statistic.

**Fig. 3. Impulse Response Functions**

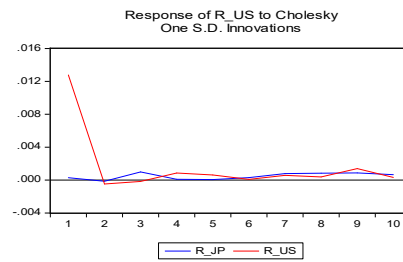
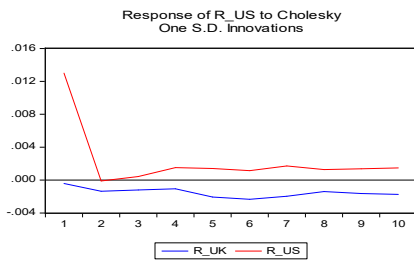
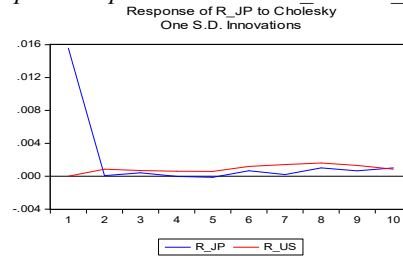
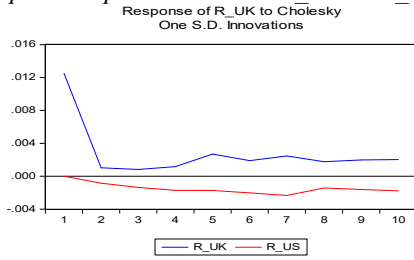
*Impulse responses between R\_FR & R\_US*

*Impulse responses between R\_GE & R\_US*



*Impulse responses between R\_UK & R\_US*

*Impulse responses between R\_JP & R\_US*



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The figures above present the impulse response functions. This function which can produce the time path of dependent variable, in the system of equation developed within the VECM framework, to shocks from all the explanatory variables.

**Table 7. Variance Decompositions**

*Variance decompositions between R\_FR & R\_US*

Variance Decomposition of R_FR:			
Period	S.E.	R_FR	R_US
1	0.015261	100.0000	0.000000
2	0.015339	99.99278	0.007220
3	0.015413	99.94307	0.056927
4	0.015447	99.94261	0.057389
5	0.015687	99.84839	0.151609
6	0.015787	99.54825	0.451749
7	0.016116	98.62287	1.377133
8	0.016498	98.56896	1.431044
9	0.016812	98.61807	1.381926
10	0.017131	98.54964	1.450360

Variance Decomposition of R_US:			
Period	S.E.	R_FR	R_US
1	0.012582	0.565413	99.43459
2	0.012628	0.733012	99.26699
3	0.012674	1.205554	98.79445
4	0.012695	1.406273	98.59373
5	0.012766	2.500521	97.49948
6	0.012785	2.720122	97.27988
7	0.012844	3.609484	96.39052
8	0.012863	3.896895	96.10311
9	0.012940	4.548362	95.45164
10	0.013001	5.412448	94.58755

*Variance decompositions between R\_GE & R\_US*

Variance Decomposition of R_GE:			
Period	S.E.	R_GE	R_US
1	0.014353	100.0000	0.000000
2	0.014456	99.35830	0.641696
3	0.014509	98.77616	1.223841
4	0.014564	98.25070	1.749298
5	0.014680	97.90918	2.090821
6	0.014771	97.18621	2.813788
7	0.014827	97.09203	2.907970
8	0.014942	96.79371	3.206294
9	0.015106	96.23245	3.767548
10	0.015179	96.01069	3.989311

Variance Decomposition of R_US:			
Period	S.E.	R_GE	R_US
1	0.012680	1.351154	98.64885
2	0.012712	1.599193	98.40081
3	0.012749	2.106646	97.89335
4	0.012800	2.553310	97.44669
5	0.012817	2.577891	97.42211
6	0.012820	2.624247	97.37575
7	0.012875	3.343132	96.65687
8	0.012882	3.384254	96.61575
9	0.013060	5.258103	94.74190
10	0.013090	5.670529	94.32947

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*Variance decompositions between R\_UK & R\_US*

Variance Decomposition of R_UK:			
Period	S.E.	R_UK	R_US
1	0.012516	100.0000	0.000000
2	0.012587	99.54419	0.455812
3	0.012687	98.40368	1.596316
4	0.012855	96.67262	3.327382
5	0.013246	95.17588	4.824123
6	0.013534	93.13572	6.864276
7	0.013954	90.73715	9.262851
8	0.014138	89.95442	10.04558
9	0.014367	89.01701	10.98299
10	0.014619	87.90769	12.09231

Variance Decomposition of R_US:			
Period	S.E.	R_UK	R_US
1	0.013009	0.103650	99.89635
2	0.013080	1.174930	98.82507
3	0.013142	2.009781	97.99022
4	0.013271	2.607396	97.39260
5	0.013504	4.851990	95.14801
6	0.013753	7.567135	92.43287
7	0.013999	9.275278	90.72472
8	0.014127	10.08662	89.91338
9	0.014286	11.16712	88.83288
10	0.014467	12.33437	87.66563

*Variance decompositions between R\_JP & R\_US*

Period	Variance Decomposition of R_JP:		
	S.E.	R_JP	R_US
1	0.015563	100.0000	0.000000
2	0.015587	99.69588	0.304124
3	0.015608	99.49958	0.500417
4	0.015620	99.34657	0.653428
5	0.015632	99.20503	0.794971
6	0.015692	98.62831	1.371685
7	0.015757	97.83169	2.168312
8	0.015872	96.82904	3.170956
9	0.015941	96.17347	3.826532
10	0.015996	95.91301	4.086992

Period	Variance Decomposition of R_US:		
	S.E.	R_JP	R_US
1	0.012778	0.050616	99.94938
2	0.012788	0.063399	99.93660
3	0.012827	0.653207	99.34679
4	0.012856	0.656607	99.34339
5	0.012871	0.657051	99.34295
6	0.012875	0.712694	99.28731
7	0.012912	1.086845	98.91316
8	0.012944	1.500057	98.49994
9	0.013049	1.928323	98.07168
10	0.013070	2.179016	97.82098

While impulse response functions trace the responses of all endogenous variables to innovations in one endogenous variable, variance decompositions indicate the relative importance of each random innovation in affecting the variables in the system. Thus, variance decompositions determine the proportion of the variance of the forecast error for any variable in the system that is explained by



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innovations in other endogenous variable by breaking down the forecast error variance for each variable into its components.

The tables above presented the results of the variance decomposition. They have showed that there are significant roles played by the Subprime crisis in most of markets accounting for the fluctuations in the return indexes.

Variance decomposition gives the proportions of the movement in dependent variables that are due to their “own” shocks, versus shocks to the other variables. The results of variance decomposition over a period of 10 years’ time horizon are presented in Table 7. The results indicate that 94.58755% of the variation in the forecast error for variability return in the French market is explained by the effect of subprime crises, while 87.66563% of the variation in the forecast error for variability return in the UK is explained by the effect of Subprime crises. 94.32947% of the variation in the forecast error for variability return in the German market is explained by the effect of subprime crises and 97.82098% of the variation in the forecast error for variability return in the Japanese markets was explained by the effect of subprime crises. Thus we conclude the existence of the strong link between the variability prices and the subprime crises which affects directly the developed markets.

### 5. Summary and Conclusion

“Like a pretty girl: difficult to define, but recognizable when seen [Kindleberger & Laffargue, 1982], financial crisis had a powerful impact upon the whole world economies. Our main objective was to study its impact on some developed countries via the contagion effect.

Our results concluded that the subprime financial crisis had seriously affected these countries. Considering daily data from April 2005 to December 2015, we found that financial stress was equally transmitted from the US market to the French, German, the UK, and Japanese markets. The analysis clearly showed that there are long-run relationships between the developed markets and the US market during the sample period.

Using approach of cointegration of Johansen (1988) and the estimation a VECM which provides an insight in the short and long run linkages in our system of return markets we can clearly see that all the markets are cointegrated in the long run and there are long run equilibriums. So, the subprime crisis in the US return markets has a significant influence on the whole of the cointegration patterns

of our sample. We also observed that the dynamic interactions between the developed markets and the US have increased during the subprime crisis.

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## THE IMPACT OF EXTERNAL DEBT ON STIMULATING ECONOMIC GROWTH IN NIGERIA: MEDIATING ON THE ROLE OF PUBLIC SECTOR FINANCIAL MANAGEMENT

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### Abstract

*This study examined the impact of external debt in stimulating economic growth in Nigeria: mediating on the role of public sector financial management.*

*Secondary data was explored using ex post facto. The variables employed involves Gross Domestic Product (GDP) as endogenous variable while Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio (INFR), Interest Service Ratio (ISR) and Exchange Ratio (EXR) as exogenous variables and were obtained from World Bank International Debt Statistic and Central Bank of Nigeria Statistical Bulletin for the period of 1989-2019. Diagnostic tests were conducted using Auto Regressive Distributed Lag*



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(ARDL), Augmented Dick Fuller (ADF) Unit Root Test, and Co-Integration model.

The result revealed the presence of co-integration among the variables with clear indication that external debt has a significant and positive relationship with economic growth with strong emphasis on public sector financial management as mediating factor. It was concluded that Nigeria debt crisis was attributed to both exogenous and endogenous factors due to dwindling economy.

The study recommends that government should develop home-grown policies to enhance the country's competitive advantage in the global market. Government should exit from all forms of commercial debts that expose the country to another regime of debt overkill.

**Keywords:** external debt; economic growth; gross domestic product; debt management; debt ratio export.

**JEL Classification:** H63, F43, H63, F55

### 1. Introduction

Generally, the need for external borrowing arose when the availability of public funds made it impossible to take over a nation's development project, because capital accumulation improves productivity, which in turn improves economic growth. There is sufficient evidence in the available literature to demonstrate that foreign borrowing improves the growth and development of a nation. Soludo (2003) was of the view that countries borrow for two main purposes, the first is of macroeconomic reason that is to enhance more investment and human capital development, secondly is to reduce country financial constraint through budget by financing fiscal and balance of payment deficits. In addition, Ezeabasili, Isu and Mojekwu (2011) argue that countries, particularly underdeveloped countries, borrow to increase capital formation and investment because of their low level of domestic savings.

Chenery (1996) eventually highlighted his own reasons why countries borrow up to two main reasons that are to bridge the gap between "saving and investing" and "the exchange rate gap". Chenery (1996) stressed further that countries borrow to supplement insufficient savings and investment in that country. The dual-gap analysis justifies the need to resort to external borrowing as an effort to bridge the gap between the savings and investment of the nation. For a progressive development of



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any nation to occur, there must be a reasonable level of investment that is a function of domestic saving and the level of domestic saving is not sufficient to ensure such a progressive development [Elbadawi *et al.*, 2011]. The second reason for borrowing in developing countries is also to bridge the currency gap (imports-exports). For many developing countries like Nigeria, the constant balance of payment deficit has hindered capital inflow which will bring about growth and development. Since the foreign exchange earnings required to finance this investment is insufficient, external borrowing may be the only available option of gaining access to the resources needed to achieve rapid economic growth. [Efuntade *et al.*, 2020]

The external debt is an evil that every country needs to survive. External debt is the part of a country's debt which is obtained from foreign lenders, including commercial banks, governments, or international financial institution such as International Monetary Fund and World Bank, in turn will encourage the fund to be used in public sector for the needed infrastructure which can enhance the progressive development of the country with effective economic growth and also to improve the fiscal output of the country [Arnone *et al.*, 2005]

According Amoateng and Amoaka (2016), the myriad of increase in external debt is a common challenge among developing nations across the world as their economy is growing where domestic savings are low compare to their public expenditure which is on the high side due to their high population which thrown their budget into deficit and capital imports are necessary to augment domestic resources. External source of income become their alternative source of revenue mobilization in other meet up with their statutory obligation and commercial activities [Albert *et al.*, 2005]. The original cause for the external borrowing was the excess borrowing by the public sector to finance their existing debt which their current expenditure could not take care off. This happened due to the continuous increase in population and growth rate which lead to adverse effect on human capital development which create a viable option for the public sector to finance their capital project through external borrowing as a result of many countries experiencing a large fiscal deficit [Bamidele, & Joseph, 2013]. The high level of economic challenges is stretching the country to depend on external debt which has become widely accepted across the world

The study has employed the framework of Musgrave and Solow theory of growth and external debt sustainability theory which were developed to address the effort of government to invest more on infrastructural facilities in the country which will attract greater height of economic development in all ramification considering the





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corporate world and the general course of value addition; it recommended that the utmost significant components of every country is the bilateral relationship between one country and others, also it's connection which collectively improves cross boarding business success.

Therefore, this study offers a valuable contribution and knowledge on how external debt impact economic growth of a country through public sector financial management as a mediating factor. The current study adds to the increasing scope of recent research studies on the subject by providing indispensable information to academicians and government leading to fruitful outcome for the country's fiscal output. The literature review in different areas help to reveal the study a relationship between external debt and economic growth, external debt and public sector financial management, financial management and economic growth, and the Musgrave and Solow Foreign Debt Theory, that previous research has ignored.

## 2. Literature Review

### 2.1. Related Conceptual Review

#### 2.1.1. External Debt

Eduardo (2009) defined external debt as the total debt that residents of a country have acquired from foreign creditors to supplement their capital savings and to supplement their domestic debt with domestic lenders. The debtors may be the government, corporations or citizens of this country. The debt comprises loans granted by private commercial banks, foreign governments or international financial institutions such as the International Monetary Fund (IMF) and the World Bank. One of the major concepts of external debt is debt sustainability, which is the level of debt that allows a debtor country to meet its current and future debt service obligations in full, without any further debt relief or rescheduling, avoiding accumulation of arrears, also allowing an acceptable level of economic growth. [Campbell, 2009]

#### *Debt Servicing*

Eaton (2013) found that debt service was a contractually fixed charge on real income and domestic savings. As debt goes up or interest rates go up, debt service charges go up. Debt service is paid only with export gains, reduced imports or other external borrowings. Eaton (2013) concluded that debt servicing was a contractually fixed charge on actual income and domestic savings.

### *Debt Sustainability*

Ezeabasili (2006) defined debt sustainability as the ability to keep a constant debt GDP ratio over a period of time. Sustainability is challenged when the debt-to-GDP ratio reached an excessive value. Elmendorf and Mankiw (2009) thought that a number of factors come into play when establishing if a country is able to service its debt. These factors include the stock of existing debt and associated debt service, the projected path of its deficits, the combination of debt financing and its capacity to repay in terms of the foreign exchange value of GDP exports and government receipts. [Ezeabasili, 2006]

#### *2.1.2. Economic Growth*

Schumpeter, Todaro and Smith (2013) define economic growth as gradual and steady change in the long run which comes about by gradual increase in the rate of savings and population. Ajayi and Olugboye (2012) perceived economic growth as the increment over time of a country real output of commodities and services. Freedman, Todaro, and Smith (2015) considered economic growth to be an explanation of the system in one or more dimensions with no change in its structure. However, economic growth is linked to the quantitative and sustained increase in output or per capita income of the country, accompanied by an expansion of labour input, the level of consumption, capital and the volume of trade. This represents an increase in a country's real gross domestic product over a given period, typically a fiscal year. [Hameed *et al.*, 2008]

#### *2.1.3. The Impact of External Debt on Economic Growth*

Kasidi and Said (2013) pointed out that external debt has been seized as one of the economic troubles faced by developing countries, especially in Africa as in Nigeria, because these are countries characterized by inadequate internal capital formation due to a savage circle of low productivity, low income and low savings. The guarantee of an outside loan is unavoidable for any public spending when the economy is facing financial crises. Manghyreh and Hashemite (2013) expressed the government's use of borrowing to fill the gap created by spending and revenue gaps. Generally speaking, developing countries will adopt external borrowing to cover part of the government's proposed spending in a given fiscal year. The debt alternative is becoming the likely option that governments can provide citizens with social infrastructure and overhead if they cannot compromise macroeconomic



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stability by printing more currency notes and if the governmental taxes are limited [Matitti, 2013].

Several studies have analysed the influence of external debt on economic growth and their result revealed that external debt has a positive impact on economic growth. [Elbadawi *et al.*, 2011; Elmendorf *et al.*, 2009; Ajayi *et al.*, 2012; Ezeabasili, 2006; Ezeabasili *et al.*, 2011; Hameed *et al.*, 2008; Freedman *et al.*, 2015; Kasidi *et al.*, 2013; Manghyreh *et al.*, 2013; Matiti, 2013; Ogege *et al.*, 2010] It has also been proven that annual export growth rate has a positive relationship with economic growth. [Banker & Mashruwala, 2014] However, contrary studies are imposing no relationship between external debt servicing and economic growth. [Efuntade *et al.*, 2020; Omoruyi *et al.*, 2011; Fatile *et al.*, 2009; Sanusi *et al.*, 2012; Siddique *et al.*, 2015]

There is also a researcher who opts for a neutral position regarding the relationship between external debt and economic growth due to the high level of debt financing that leads to over-indebtedness. [Matte, 2013; Momodu, 2012; Ogege & Ekpudu, 2010] A recent study on foreign debt servicing has had long-term and short-term negative impacts on economic growth in Nigeria. Increase in capital spending, the increase rate of exports, and external debt stock had a positive impact on economic growth while external debt servicing and interest rates were inversely related to the development of the economic system

### 2.1.4. *Influence of Public Sector Financial Management on Economic Growth*

There are comprehensive studies that link the influence of public sector financial management on economic growth, thereby increasing economic growth in the country. The economic situation in each country depends on the effective and efficient use of available resources to achieve government development goals. [Okoye, & Ani, 2004] There exists a consensus in the literature that an equal and efficient public sector financial management is vital to any successful development process aimed at achieving high employment, sustainable economic growth, cost stability, long viability of the remainder of payments and external balance. Futile and Adejuwon (2012) provide an explanation of the problems, lessons and future directions of the public sector. According to them, the public service has always been the tool made available to Nigerian governments for the implementation of development goals and targets and also considered crucial for economic growth. The paper reviews the nature of Nigeria's current public sector, lessons learned



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from international and African perspectives, and the future directions of Nigerian public sector reform. Salawu (2013) argued that the reform is in the interest of the conservative international financial institutions that were merely interested in globalizing the neo-liberal economic orthodoxy for the interest of powerful global capital and not in promoting autonomous development, which is what Africa needs for economic progress. It is therefore concluded that an effective reform of the public sector in Africa should take into account the behavioural model, the social context, as well as the cultural milieu of the people for whom the reform is intended.

#### *2.1.5. Influence of Public Sector Financial Management on External Debt*

However, for Siddique, Selvanathan, and Selvanathan (2015), it is noteworthy, that external debt is a devil, which every country across the world lives with, and if it is properly used for productive investment of highest priorities, than it would have a positive and significant impact on economic growth. However, the external debt could be described as a mosquito proboscis for sucking blood from its victims, its burden dramatically limiting developing countries, its huge external debt throwing the economy into a series of “serious” economic problems and its obligation continues to be an obstacle to economic development and development. Therefore, if foreign debt is well managed in the public sector, it will reduce the debt service surplus and have an enormous impact on the management of public finances. [Omoruyi, 2006]

External debt is a key driver of economic growth and government productivity, as it has significant benefits and high potential to motivate gross domestic product. [Bamidele *et al.*, 2013] It was analysed that the efficient and effective use of public funds generated by external debt will have a positive impact on the fiscal management of the public sector. Financial management of the public sector has also been argued to be positively linked to external debt [Amone *et al.*, 2005] through public accountability, transparency and prudence. Therefore, public sector financial management being an integral part of government finance is considered as an important tool through which government controls their public spending in return for the public service and is beneficial as it points out toward an improvement in a long-term growth of the economy. [Elbadawi *et al.*, 2011]

#### **2.2. Related Theoretical Review**

Several theories have been promulgated by researchers with the aim of explaining the question surrounding external debt and its relationship with economic growth.



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Some of these theories which are related to this study will be described in this section, and they are: Musgrave's theory, the theory of over-indebtedness, Solow's growth model and external debt.

### 2.2.1. *Musgrave Theory of Public Expenditure*

Musgrave theory of public expenditure was proposed by Musgrave in (1969), it focused on the development of infrastructure, such as health, education, the transportation system and other social facilities. It was built in the evolving functions of the public sector during the development phase and therefore relies on structural factors to account for government growth. [Blinder, 2008] According to Musgrave (1969), economies in the early development phase were confronted with a high demand for public capital formation to install basic infrastructure, etc. At a later stage of development, private capital formation institutions are becoming more advanced, which makes it possible to reduce the share of public expenditure. [Musgrave, 1969] In particular, Musgrave's theory related public sector financial management in terms of mobilizing resources towards public spending to short- and long-term economic progress.

### 2.2.2. *Debt Overhang Theory*

The concept of the theory of over-indebtedness was worked out by Krugman (1988). The theory of over-indebtedness is based on the premise that if the debt exceeds the country's ability to repay with some likelihood in the future, the expected debt service is likely to be an increasing function of the country's level of production. Over-indebtedness occurs in a situation where the debtor country benefits very little from the yield of any additional investment due to debt service obligations. When foreign obligations cannot be fully met existing resources and actual debt payments are determined by some negotiation process between the debtor country and its creditors, the amount of payments can become linked to the economic performance of the debtor country, with the consequence that at least part of the return to any increase in production would in fact be devoted to debt servicing. [Yucel, 2009; Tamasehke, 1994]

### 2.2.3. *Solow Growth Model and External Debt*

Solow's growth model relies on a closed economic framework that utilizes labour and capital as a means of production. The effect of external debt on growth in this



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context can be explained by the effect of domestic saving, which in turn is used as an investment in a closed model. The overall effect of external debt on Solow's growth pattern can be analysed by examining the individual effect of the theory of over-indebtedness and over-indebtedness on Solow's growth theory. Under the assumption of over-indebtedness, the government is trying to promote the taxation rate on accumulated debt in the private sector as a means of transferring resources to the public sector. This will discourage private sector investment and also reduce government infrastructure spending because the resources are being used to service the debt instead of being used wisely. [Derek, 2013]

### 2.3. Related Empirical Review

There are comprehensive studies available which have been carried out on the effect of external debt on the economic growth. Kasidi and Said (2013) looked at external debt and its effect on economic growth in Tanzania using time series 1990-2010. The study showed that external debt has an important impact on economic growth, whereas total external debt stock has a positive effect on economic growth. A similar study of Antique and Malik (2012) examined the impact of domestic and external debt on the economic growth of Pakistan separately over a period of 1980-2010 using an ordinary Least Square approach (OLS) to co-integration. As a result, there is a positive relationship between domestic debt and economic growth, and foreign debt and economic growth. The results of Amooteng and Amoako (1996) examined the relationship between external debt and economic growth in 35 African nations. Granger's causation test was carried out. The outcome revealed a positive and unidirectional causal link between economic growth and debt servicing.

Manghyereh *et al.* (2013) examined the result of external debt on the economic development of Nigeria using gross domestic product as the endogenous variable measuring economic development as a function of ratio of external debt to export, inflation and exchange rate proxy as the exogenous variable. Data were collected over the 1970-2010 period. The data analysis was carried out using the ordinary lesser square econometric technique. The outcome showed that external debt has made a positive contribution to the Nigerian economy.

However, a contrary study by Hameed *et al.* (2011) examined how external debt affects growth, particularly if debt affects growth through factor accumulation or overall factor productivity growth. It also tested for the presence of non-linearity in the effect of debt on the different source of growth. The study covered 61 developing



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countries over the period of 1996-1998. The result showed that the negative impact of high debt on growth has a strong negative effect on budget capital accumulation and on total factor productivity growth. A similar research was carried out by Schumpeter *et al.* (2013) and had a similar result. Ogege and Ekpudu (2010) examined the impact of debt burden on the Nigerian economy using 1970-2007 time series. The Least Ordinary Square (ODM) was used to test the relationship between debt burden and Nigerian economic growth. The result showed a negative relationship between the stock of internal and external debt and gross domestic product, meaning that an increase in the stock of debt will cause a reduction in the growth rate of the Nigerian economy.

Momodu *et al.* (2012) reported on the relationship between debt servicing and economic growth in Nigeria. The study showed a relationship between Gross Domestic Product (GDP) and Gross Fixed Capital Formation of Current Prices (GFCF) using the Ordinary Least Square multiple regression method. The study revealed that the payment of debt to Nigerian creditors has an insignificant impact on GDP and GFCF. Moreover, Ezeabasili, Isu and Mojekwu (2011) investigated the relationship between external debt and economic growth in Nigeria between 1975 and 2006, while error correction was used to analyse the data. The result revealed that foreign debt is negatively linked to economic growth in Nigeria.

In similar work, Bamidele and Joseph (2013) examined the impact of external debt management on economic growth in Nigeria using GDP as an endogenous variable while the exogenous variables measuring economic growth were foreign direct investment, the foreign debt, external reserves, inflation and rough exchange rates. Annual time series for 1980 to 2010 were used. OLS, Augmented Dickey Fuller (ADF) unit root tests and the Granger causality test were used in analysis. Results have revealed mixed results: there is a positive relationship between FDI and economic growth, whereas there is a negative relationship between external debt and economic growth.

Generally, as narrated through reviewed literature, majority of the available empirical evidence were centred on external debt and its impact on economic development, there is no comprehensive study available that strengthens the nexus between external debt and economic growth while taking public financial management as a mediating factor. From this perspective, the researcher is interested in undertaking a study that was based on the intention to examine the externally mediated debt on the financial management of the public sector and its impact on



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economic growth in Nigeria. This study will contribute to the research of the field in the aspects that need to be developed and considered for analysis and to lead to the revelation of the real impact of the Musgrave theory.

### 3. Research Method

This study explores the co-integrating relationship between Economic Growth being proxy for gross domestic product (GDP) as endogenous variable while Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio (INFR), Interest Service Ratio (ISR) and Exchange Ratio (EXR) being proxies for External Debt as exogenous variables. The data has been collected from World Bank International Debt Statistic and Central Bank of Nigeria Statistical Bulletin for the period of 1989-2019. The co-integrating approach is used for information investigation to more likely understand the relationship between external debt and economic growth.

#### 3.1. Model Specification

The following mathematical model was developed to analysed the relationship between external debt and economic growth in Nigeria using Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio (INFR), Interest Service Ratio (ISR) and Exchange Ratio (EXR) as the exogenous variables and regressed against Gross Domestic Product (GDP) as endogenous variable used as proxy for Economic Growth.

This study employed the model specified below.

$$GDP_{it} = f(DGR_{it}, DER_{it}, INFR_{it}, ISR_{it}, EXR_{it}) \quad 3.1$$

$$Y_{it} = \alpha_{it} + \beta_1 DGR_{it} + \beta_2 DER_{it} + \beta_3 INFR_{it} + \beta_3 ISR_{it} + \beta_3 EXR_{it} + \varepsilon_{it} \quad 3.2$$

$$GDP_{it} = \alpha_{it} + \beta_1 DGR_{it} + \beta_2 DER_{it} + \beta_3 INFR_{it} + \beta_3 ISR_{it} + \beta_3 EXR_{it} + \varepsilon_{it} \quad 3.3$$

where Y represents Economic Growth measured by Gross Domestic Product (GDP);  $\alpha$  = the constant term; DGR = Debt to GDP Ratio; FDER = Foreign Debt to Export Ratio; INFR = Inflation Ratio, ISR = Interest Service Ratio; EXR = Exchange Ratio;  $\beta$  = the coefficient of the function;  $\varepsilon$  = error term.



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### 3.2. *Apriori* Expectation

Theoretically, there is an expectation that the debt-to-GDP ratio, the external debt-to-export ratio, the inflation ratio, the interest rate ratio and the foreign exchange ratio would have a positive relationship with gross domestic product, while the interest rate would have a negative relationship with real GDP in Nigeria.

## 4. *Results and Discussion*

This section of the study focused on the presentation of the estimated results and consequently, discusses the results in line with the objectives of the study.

### 4.1. Unit Root Test

This test is employed to investigate the presence of a unit root in the variables under study through the application of the Augmented Dickey-Fuller (ADF) unit root test with or without trend and intercept. The results are illustrated in the table 1 below.

**Table 1. ADF Unit Root Test on External Debt variables and Gross Domestic Product Trend and Intercept**

Variables	Level		First Difference		Remarks	
	ADF Statistic	5% Critical Value	ADF Statistic	5% Critical Value		
GDP	0.558959	2.951125	5.500945	2.954021	Stationary	I(1)
DGR	0.646149	2.951125	5.860625	2.954021 **	Stationary	I(1)
FDER	0.896063	2.954021	9.754072	2.954021 **	Stationary	I(1)
INFR	-1.044285	-2.951125	-7.075043	-2.954021 *	Stationary	I(1)
ISR	-2.287258	-2.951125	-5.745783	-2.954021 *	Stationary	I(1)
EXR	-0.762918	-2.954021	-3.172998	-2.954021	Stationary	I(0)

Source: Researcher's computation from E-view 9 (2020) \*\* denote 5%

Table 1 above illustrates the results of the ADF stationarity test between actual GDP and its determinants. Based on the results, the estimate showed that all variables, including LGDP, LDGR, FDER, INFR and LSR except EXR, were not stationary at the level; however, all variables were stationary after the initial difference. This was revealed through ADF statistics and critical values of various



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exogenous variables. Consequently, the achievement of the integration of the same order among the series implies that the variables possessed long-term properties. This also means their variance, average and covariance are constant overtime. Therefore, they should be used in the investigation as they are not appropriate for the unit root at this level.

#### 4.2. Auto Regressive Distributed Lag (ARDL) Bounds Co-integration Tests

The ARDL Bounds test is the estimation procedure that mirrors the analysis of the long-term relationship and short-term dynamic interactions between the underlying variables. This model was developed by Pesaran & Shin (1999) to look at the long-term relationship and short-term dynamic interactions among various variables. The model requires that not all series are integrated in the same order to be well applied to this search. As such, it can be applied even when variables are integrated in order one, order zero or partially integrated. The ARDL model is quite effective even when the data size is so small and finite. According to Harris & Sollis (2003), the technique ensures unbiased estimation results of the long run model. The model of ARDL is expressed as:

$$\Delta y_t = \beta_0 + \sum \beta_i \Delta y_{t-i} + \sum \gamma_j \Delta x_{1t-j} + \sum \delta_k \Delta x_{2t-k} + \theta_0 y_{t-1} + \theta_1 x_{1t-1} + \theta_2 x_{2t-1} + e_t$$

Meanwhile, results ARDL are shown down below, in table 2.

Table 2 below reflects the results of the ARDL bounds cointegration test between external debt variables and economic growth. The results depict that personal income tax (LDGR) at lag zero has a positive and insignificant influence on real gross domestic (LGDP) while foreign debt to export ratio (LFDER) lagged has negative and significant influence on gross domestic product (LGDP). These results are proven by the coefficients and p-values of the variables under consideration. From the results, the coefficients of LDGR and LFDER are 0.011191 and -0.093344 while their respective p-values include 0.6387 and 0.0008. Similar results revealed that LINFR and LISR lagged have a positive and insignificant impact on real GDP, while exchange rate LEXR and interest saving rate (LISR) at lag zero have a negative and insignificant impact on gross domestic product (LGDP).

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**Table 2. ARDL Bounds Cointegration Test between External Debt variables and Economic Growth**  
**Exogenous Variable: LGDP**

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LGDP(-1)	0.924425	0.163236	5.663115	0.0000
LGDP(-2)	-0.361459	0.191788	-1.884680	0.0716
LDGR	0.011191	0.023532	0.475576	0.6387
LFDER	-0.093344	0.024216	-3.854594	0.0008
LINFR	0.116189	0.080564	1.442187	0.1622
LISR	-0.031286	0.033654	-0.929625	0.3618
LEXR	0.073871	0.081560	0.905729	0.3741
C	1.921115	0.806131	2.383131	0.0254
R-squared	0.984597	Mean dependent var		6.076082
Adjusted R-squared	0.979462	S.D. dependent var		0.417888
S.E. of regression	0.059888	Akaike info criterion		-2.565689
Sum squared resid	0.086077	Schwarz criterion		-2.157550
Log likelihood	51.33387	Hannan-Quinn criter.		-2.428363
F-statistic	191.7616	Durbin-Watson stat		1.897275
Prob(F-statistic)	0.000000			

Source: Researcher's computation from E-view 9 (2020)

These are evidenced by the coefficients and p-values of the variables under investigation. From the results, the coefficients of LDGR, LFDER, LINFR and ISR are 0.116189, -0.031286, 0.073871, and -0.004133 with the associated p-values being 0.1622, 0.3618, 0.3741 and 0.2957 respectively. These results are in accordance with the findings of Elbadawi *et al.* (2011); Elmendorf *et al.* (2009); Ajayi *et al.* (2012); Ezeabasili (2006); Ezeabasili *et al.* (2011); Hameed *et al.* (2008); Freedman *et al.* (2015); Kasidi *et al.* (2013); Manghyreh *et al.* (2003); Matiti (2013) & Ogege *et al.* (2010) who examined external debt and economic growth in various countries and found that external debt has a positive influence on economic growth. However, the results negate the finding of Ogar & Oka (2016) who carried a similar study and found that external debt does not have significant influence on economic growth in the country.

**Table 3. ARDL Short-run and Long-run Coefficients Tests between External Debt and Economic Growth**

<b>Short Run Coefficients</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
D(LGDP(-1))	0.361459	0.191788	1.884680	0.0716
D(LDGR)	0.011191	0.023532	0.475576	0.6387
D(LFDER)	-0.093344	0.024216	-3.854594	0.0008
D(LINFR)	0.116189	0.080564	1.442187	0.1622
D(LISR)	-0.031286	0.033654	-0.929625	0.3618
D(LEXR)	0.073871	0.081560	0.905729	0.3741
ECT	-0.437033	0.169571	-2.577288	0.0165
<b>Cointeq = LGDP - (0.0256*LDGR -0.2136*LFDER + 0.2659*LINFR -0.0716 *LDFER + 0.1690*LISR -0.0095*EXR + 4.3958 )</b>				
<b>Long Run Coefficients</b>				
<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
LDGR	0.025607	0.057734	0.443542	0.6613
LFDER	-0.213586	0.099590	-2.144653	0.0423
LINFR	0.265858	0.229461	1.158623	0.2580
LISR	-0.071587	0.074212	-0.964634	0.3443
LEXR	0.169029	0.146852	1.151018	0.2611
C	4.395811	0.261244	16.826472	0.0000

**Source:** Researcher's computation from E-view 9 (2020)

Furthermore, the F statistic is 191.7616, while the Prob statistic (F statistic) is 0.000000, implying that the joint influence of the explanation is statistically significant. More so, the results suggest a multiple coefficient determination, R2 of is 0.984597, which implies that 98.5% of the changes in gross domestic product (LGDP) are accounted for by the explanatory variables, including LDGR, LFDER,

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LINFR, LISR, and EXR whereas the remaining 1.5% is assigned to other variables excluded from the model. The results also showed Durbin Watson (DW) statistically at 1.897275. The lower limit for DW (dL) is 1.271 and the upper limit is 1.651. Therefore, given that the DW statistic of 1.897275 is above the upper bound value of 1.651, the study concluded that the serial correlation is not present in the model. To confirm this claim, Breusch-Godfrey performed a serial LM correlation assay. Based on the results, the observed R-square value given is 0.006781 and the chi-square prob is 0.9966. As a result, the Prob.Chi-Square value exceeds the critical value by 5%, the study accepts the initial statement and concludes that there is no serial correlation in the study model.

Table 3 above presents the results of the tests of the long-term and short-term ARDL coefficients between the variables of external debt and economic growth. Results indicate that there is one (1) equation of co-integration between variables. Since at least one co-integration equation is found amongst the variables, it implies that there is a long-term relationship between the variables indicating LGDP, LDGR, LFDER, LINFR, LISR, and EXR. This is demonstrated by the p-values from the variables. From the results, the p-values of LGDP, LDGR, LFDER, LINFR, LISR, and EXR are 0.66113, 0.0423, 0.2580, 0.3443, 0.2611 and 0.3849 respectively at the 5% level of significance. Furthermore, the results showed short-term linkages between the variables. This is indicated by the FDER p-value of 0.0008, which is smaller than 5% of the critical value.

The result of the FDER indicates that the *a priori* expectation is met and that the stability requirement for conducting such an investigation is met. The result showed that the desired signs for each of the equations are met in each of the estimations. The FDER is therefore significant, fractional and negative, which is the necessary condition for acceptance of such estimation results. From the estimation results, the coefficient of FDER is -0.213586 while the p-value is 0.0423, which implies that the speed of adjustment from short-run disequilibrium towards long-run relationship annually is 42%.

#### 4.4. Policy Implications of the Results

This study examined the impact of foreign debt on economic growth in Nigeria between 1989 and 2019. The results of the short- and long-term ARDL-coefficients test revealed the impact of endogenous variables on short- and long-term exogenous variables. Similarly, the effects of the ARDL bounds co-integration test



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indicated that Debt to GDP ratio (LDGR), Foreign debt to export (LFDER), and Exchange Ratio (EXR) have a positive and significant relationship with GDP in Nigeria while Inflation Ratio, (INFR), Interest Saving Ratio (ISR) has a negative and significant relationship with GDP in Nigeria.

As a result, an average estimated 1% increase in debt to GDP or a single increase in debt to GDP will increase Nigeria's GDP by 0.011191 units, whereas an increase of 1% in export debt will lead to an increase of 0.0%. Furthermore, the results show that the inflation rate (LINFR) and the interest saving rate (LISR) have a negative and significant impact on Nigeria's real GDP. Thus, it is estimated on average that the 1% decrease of LINFR and LISR will increase GDP by 0.116189 and 0.073871 units respectively. The results also showed that the exchange rate (LEXR) and the interest rate (INR) have an adverse and insignificant impact on the real gross domestic product (GDP-LR) of the economy. As a result, the study estimated that 1% increases in LEXR and INR will decrease Nigeria's GDP by 0.031286 and 0.004133 units respectively.

### 5. Conclusion

This study examined the external debt and its impact on Nigerian economic growth over the 1989-2019 period. Auto Regressive Distributed Lag (ARDL) bounds co-integration test and its associated ARDL short run and long run coefficients test were employed in the analysis. The variables employed in the examination include gross domestic product (LGDP), Debt to GDP Ratio (DGR), Foreign Debt to Exports Ratio (FDER), Inflation Ratio (INFR), Interest Service Ratio (ISR) and Exchange Ratio (EXR). Stationarity test was carried out through the application of the Augmented Dickey-Fuller (ADF) unit root test. The results revealed that all the variables except EXR were non-stationary at level; however, all the variables became stationary after first differencing at 5% level of significance.

On the basis of the study, it was concluded that Nigeria's debt crisis can be attributed to external and endogenous factors, in particular due to the nature of the economy, economic policies, total dependence on oil revenues and falling foreign exchange revenues. As a result, external debt has become a major alternative to fill the financial shortfall in order to address internal financial challenges and stimulate the economy.

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### 5.1. Recommendations

The study arrived to the following recommendations, which were considered necessary for the efficient and effective use of external debts in Nigeria.

- The government must develop local policies to enhance the country's competitive advantage in the international marketplace in an era of globalisation. Moreover, conscious efforts must be made to obtain the total outflow of all forms of commercial debt which exposes the country to another regime of over-indebtedness. Nigeria also needs to explore and expand more export products beyond crude oil.

- The Debt Management Office (DMO) should make sure that loans are used for their intended purpose. The government could do this by ensuring that it is properly managed financially.

- The loans contracted should be invested in profitable businesses, therefore bringing forth a sensible amount for debt repayment. External funding should only be used for priority projects like mineral resources, education and agriculture projects.

- Foreign borrowing by private and public organizations should be adequately monitored by the government debt agency – Debt Management Office (DMO) and all the external loans contracted should be described to the agency so that an up to date record of the volume of debt can be preserved. Transparency and accountability have a strong place in modern debt management practices.

- The composition of foreign debt should be subject to regular monitoring in order to prevent problems related to the bundling of debt servicing obligations.

- Adequate safeguard measures should be put in place to deal with the sudden or unexpected shortage of revenue from exports or planned expenditure on imports.

- Nigeria's main vulnerability is the unlimited load of higher interest payments. The use of a superior method in negotiating fixed interest payments and various depreciation regimes is necessary. Nigeria should request a multi-year rollover rather than an annual rollover.

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## THE IMPACT OF TRUST (IN) AND POWER OF THE AUTHORITIES ON TAX COMPLIANCE IN THE CASE OF ROMANIA

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### Abstract

*Tax compliance is important for governments, for the proper functioning of the tax authority, having an impact on the level of the budget revenue. In this paper, the influence of trust (in) and power of the authorities on tax compliance is analysed, using data for Romania during 2007-2017 period. The extent to which trust (in) and power of the authorities may influence the tax compliance continues to attract the attention of scholars and the results of the paper may represent a starting point for various measures needed to support the voluntary tax compliance. The results suggested that “trust” variable has a statistically significant impact on tax compliance, in the case of Romania. Another goal of this paper is to underline the importance of checking the hypotheses for a regression model, because any violation may lead to inaccurate results.*

**Keywords:** *tax behaviour; tax compliance; Romania.*

**JEL Classification:** H21, H26



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### Introduction

Tax revenues contribute to the financing of public projects. The policymaker may adopt various measures to ensure the sustainable financing of public goods. Tax compliance refers to the compliance with tax legislation. Taxpayers who do not comply and do not pay their taxes on time may face fines or penalties.

Tax compliance may be influenced by various economic and non-economic factors. In this paper, the influence of trust and power of authorities on tax compliance is analysed, using data for Romania during 2007-2017 period. In the following section, a review of the literature on tax compliance is developed. Section three presents the methodology used. Section four contains the analysis and a discussion of the results. The last section concludes the paper.

### Literature Review

A report from the European Commission (2007) describes various measures adopted by countries to reduce tax compliance costs for enterprises. Its aim is to facilitate the exchange of good practices between countries and to support the distribution of methods to improve the business environment. The report analyses the situation of income taxes and payroll taxes, and underlines some of the reasons for high tax compliance costs of small businesses, such as the frequent changes in tax legislation or the complexity of tax systems.

There are various studies in the literature on the topic of tax compliance. Kirchler *et al.* (2008) use the interaction between power of tax authorities and trust in tax authorities to understand tax compliance, and variables such as fines, audit probabilities, tax rate, knowledge, attitudes, norms and fairness are discussed. Power of authorities is related to tax legislation and to the support from the population (information about misconduct), and underlines the taxpayers' perception on detecting tax evasion by tax officers. Trust in authorities underlines the fact that tax authorities are interested in the common good. By using power and trust, the compliance may be enforced in the first case and voluntary in the second one. [Kirchler *et al.*, 2008]

Related to trust and power of authorities' variables, an approach is developed in the literature, named the slippery slope framework: tax compliance may be encouraged by deterrence of tax evasion (audits and fines) and by building a trusting relationship with taxpayers (services and support). The slippery slope appears with the reduction of power / trust, and is related to a negative influence on the tax compliance level. [Prinz *et al.*, 2014] According to the framework, tax compliance

can be encouraged by increasing trust in the authorities or by increasing the perception of the power of the authorities. Increasing trust in the authorities leads to voluntary compliance, while increasing the power of the authorities generates enforced compliance. [Kogler *et al.*, 2013]

Prinz *et al.* (2014) discuss about two groups of taxpayers: compliance-minded and evasion-minded persons. The authors underline that the parameters of the taxpayers' reaction functions are important.

Pukelienė and Kažemekaitytė (2016) suggest that taxpayers' motivation to pay taxes, other than legal obligation (tax morale), socio-cultural determinants and the relationship between the tax authority and taxpayers, have a significant impact on tax behaviour. The authors built a model for the analysis of the slippery slope framework (refers to the perceived fairness of and trust in the tax authorities). Compliance behaviour is represented by tax revenues (measured as % of GDP). The paper analyses the effect of trust, power, and the relationship between them, on tax compliance. The authors use the following variables: trust in tax authority, an indicator that measures government effectiveness, and describes how aspects such as quality of public services, the quality of policy development and implementation, and the government's commitment to such policies are perceived. The perception of the tax authority power is the proxy for government power, an indicator of the rule of law. It shows the extent to which individuals trust and abide by the rules in a society (emphasizing the quality of police and court work, enforcement of contracts and property rights, and the prospect of criminal or violent activities). It was found that the power of tax authorities is mainly associated with a negative reaction to coercive measures, while the trust has a positive impact on compliance.

According to Kogler *et al.* (2013), the slippery slope framework integrates different determinants of compliance. Tax compliance depends on factors such as trust in authorities and perceived power of authorities. Trust encourages voluntary compliance, while power leads to enforced compliance. The highest level of voluntary tax compliance and the lowest level of tax evasion were found in conditions of high trust and high power. The authors use the corruption index as proxy for trust, and the "rule of law" variable as proxy for the state power, measuring the quality of the enforcement of the contracts, the property rights, the police and the courts, as well as the likelihood of crime and violence. The results show that both trust and power are important determinants of tax compliance.

Kosonen and Ropponen (2015) study the level of unintentional mistakes made by companies in submitting tax documents and how this level may be influenced



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by providing information about the tax code. The results indicate that informing companies about tax rules significantly reduces the level of unintentional mistakes in tax reporting. Informing taxpayers about tax legislation may lead to an increase in their tax compliance.

Kastlunger *et al.* (2013) underline that the trust has a positive relationship with voluntary tax compliance. Also, trust has a negative relationship with the coercive power and a positive one with the legitimate power. Coercive and legitimate powers are correlated with enforced compliance, leading to increased tax evasion.

Pavel and Vitek (2014) present an analysis of tax compliance costs (TCC). The paper highlights what factors influence the size of the TCC at taxpayer level, and analyses how the size of the taxpayer and other factors influence the relative volume of the TCC. The authors underline that the compliance costs are more important for small taxpayers.

According to Hofmann *et al.* (2017), the socio-demographic characteristics have a low impact on compliance. Characteristics of data collection, such as the region in which they were collected, have an impact on the relationship between socio-demographic indicators and tax compliance.

In the literature, the tax compliance analysis is related to the decision of paying or evading taxes. The emphasis is placed on the impact of various indicators on tax compliance. In the following section, the methodology used in this paper is presented, together with the descriptive statistics of the variables and the hypotheses regarding the relationships between them.

**Research Methodology**

In this paper, an annual dataset for the 2007-2017 period was developed for Romania. The variables used in analysis are presented in the following table.

**Table 1. The Variables Used in Analysis**

Acronym	Explanation	Unit	Source
TAXCI	Tax compliance (the taxpayer's behaviour)	index	National Institute of Statistics
TRUST	Public trust in politicians		World Bank
POWER	Rule of law		

Source: developed by authors.

Note: TAXCI is computed as a ratio between tax on individual income and GDP.

The descriptive statistics are presented in the following table. This table is presenting important information (mean, median, standard deviation, skewness, kurtosis) regarding the data series.

**Table 2. Descriptive Statistics of the Variables**

	TAXCI	TRUST	POWER
Mean	0.035	1.947	0.493
Median	0.035	1.959	0.500
Maximum	0.037	2.317	0.530
Minimum	0.032	1.745	0.410
Std. Dev.	0.001	0.180	0.043
Skewness	-0.052	0.692	-0.837
Kurtosis	2.881	2.684	2.378
Jarque-Bera	0.012	0.923	1.461
Probability	0.994	0.630	0.482
Sum	0.382	21.421	5.420
Sum Sq. Dev.	1.44E-05	0.324	0.018

Source: developed by authors.

Both variables, TRUST and POWER, are sourced from the World Bank. Those variables may underline the influence of the trust in authority and the power of authority regarding the tax compliance, for the Romanian case. We expect a positive relationship between TRUST variable and the dependent variable, and a negative one between POWER variable and the dependent one, underlining the impact exerted by the state in this tax matter.

### Results and Discussion

The analysis aims to develop an econometric model to highlight the relationships between tax compliance and variables such as trust in tax authority and power of the tax authority (state) regarding tax compliance, for the case of Romania, considering the 2007-2017 period. Using the Least Squares method, the regression model is described as follows:

$$Y_t = \alpha + \beta X_t + u_t \quad (1)$$

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where  $Y_t$  is the dependent variable (tax compliance – TAXCI) and  $X_t$  is the set of explanatory variables (TRUST and POWER). In the following, the hypotheses of the regression analysis are checked. [Săvoiu, 2011]

The absence of measurement errors in observed values is checked by validating the relationships  $x \in (\bar{x} \pm 3\sigma_x)$  and  $y \in (\bar{y} \pm 3\sigma_y)$ . Descriptive statistics is the starting point for testing this hypothesis. Thus, the data in Table 2 validates the hypothesis of the absence of measurement errors. The validation of the hypothesis is obtained through the following steps:

- $y \in (\bar{y} \pm 3\sigma_y)$ , for  $y = (0.035 \pm 3 \times 0.001)$  or the interval (0.032, 0.038) which captures the values of  $y$  (TAXCI);
- $x \in (\bar{x} \pm 3\sigma_x)$ , for  $x_1 = (1.947 \pm 3 \times 0.180)$  or the interval (1.407, 2.487) which captures the values of  $x_1$  (TRUST); for  $x_2 = (0.493 \pm 3 \times 0.043)$  or the interval (0.364, 0.622) which captures the values of  $x_2$  (POWER).

The hypothesis regarding the absence of measurement errors in observed values ( $x_i$  and  $y_i$ ) is satisfied, having all of the values in the computed intervals.

Another hypothesis is the following: errors' mean is equal to zero (tends to zero). This hypothesis is checked by using the residuals' descriptive statistics and observing the value of the residuals' mean. Also, there are the following steps in the analysis:

- a) in the group of variables, the correlation relationships between  $y$  and  $x_1$ , and between  $y$  and  $x_2$ , are checked with the correlation matrix;

**Table 3. Results Regarding the Correlation between Variables**

	TRUST	POWER
TAXCI	0.644	0.165

Source: developed by authors.

The correlation coefficient underlines an average intensity relationship between TAXCI and TRUST, but between TAXCI and POWER the relationship is not significant.

- b) the parameters are estimated.

**Table 4. Estimation of the Regression Model Parameters**

Dependent Variable: TAXCI				
Method: Least Squares				
Sample: 2007 2017				
Included observations: 11				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TRUST	0.004	0.002	2.310	0.050
POWER	-0.001	0.008	-0.127	0.902
C	0.027	0.005	5.945	0.000
R-squared	0.417	Mean dependent var		0.035
Adjusted R-squared	0.271	S.D. dependent var		0.001
S.E. of regression	0.001	Akaike info criterion		-10.702
Sum squared resid	8.40E-06	Schwarz criterion		-10.594
Log likelihood	61.862	Hannan-Quinn criter.		-10.771
F-statistic	2.856	Durbin-Watson stat		1.043
Prob(F-statistic)	0.116			

Source: developed by authors.

In the following, the descriptive statistics for the residuals is checked, to see if the mean tends towards zero or equals zero.

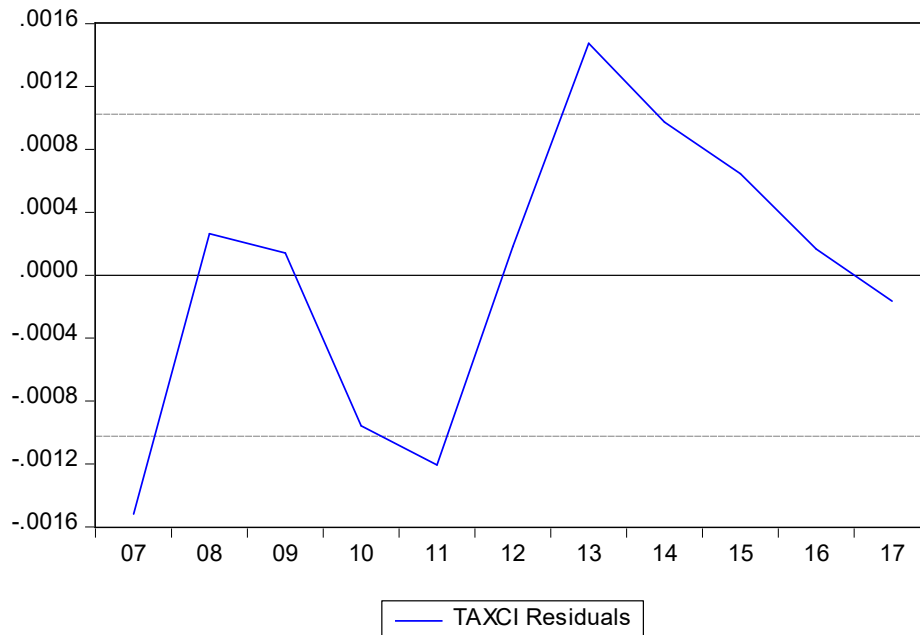
**Table 5. The Residuals and the Descriptive Statistics for the Residuals**

Obs.	Residual	The descriptive statistics	
2007	-0.0015	Mean	-5.95E-18
2008	0.0003	Median	0.0002
2009	0.0001	Maximum	0.0015
2010	-0.0010	Minimum	-0.0015
2011	-0.0012	Std. Dev.	0.0009
2012	0.0002	Skewness	-0.2335
2013	0.0015	Kurtosis	2.1983
2014	0.0010	Jarque-Bera	0.3946
2015	0.0006	Probability	0.8210
2016	0.0002	Sum	-6.59E-17
2017	-0.0002	Sum Sq. Dev.	8.40E-06

Source: developed by authors.



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**Fig. 1. The Variation of the Residuals around Zero Mean**

Source: developed by authors.

According to the results, the mean tends towards zero ( $-5.95 \times 10^{-18}$ ). Regarding the model's homoscedasticity or heteroscedasticity, the White test may be used to check these aspects. The homoscedasticity of the model refers to a constant variance of the residuals in relation with any value of  $x_i$  variable. White test results show that the heteroscedasticity is not present (see Table 6).

For a significance threshold of 0.05 with a value from the table of the  $\chi^2$  test ( $0.05/5 = 11.070$ ), with the White test statistics of 6.776 (or  $n \times R^2 = 11 \times 0.616$ ), we can see that the model is not heteroscedastic ( $LM < \chi^2_{0.05/5}$ ). The hypothesis of homoscedasticity is confirmed.

**Table 6. White Heteroscedasticity Test**

F-statistic	1.604	Prob. F(5,5)	0.308	
Obs*R-squared	6.776	Prob. Chi-Square(5)	0.238	
Scaled explained SS	2.147	Prob. Chi-Square(5)	0.828	
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Sample: 2007 2017				
Included observations: 11				
Variable	Coefficient	Std. Error	t-Statistic Prob.	
C	8.80E-05	6.31E-05	1.396	0.222
TRUST^2	3.26E-06	8.71E-06	0.374	0.724
TRUST*POWER	5.88E-05	5.64E-05	1.043	0.345
TRUST	-4.48E-05	3.05E-05	-1.467	0.202
POWER^2	3.94E-05	0.000	0.225	0.831
POWER	-0.000	0.000	-0.788	0.467
R-squared	0.616	Mean dependent var	7.63E-07	
Adjusted R-squared	0.232	S.D. dependent var	8.76E-07	
S.E. of regression	7.68E-07	Akaike info criterion	-25.018	
Sum squared resid	2.95E-12	Schwarz criterion	-24.801	
Log likelihood	143.601	Hannan-Quinn criter.	-25.155	
F-statistic	1.604	Durbin-Watson stat	1.830	
Prob(F-statistic)	0.308			

Source: developed by authors.

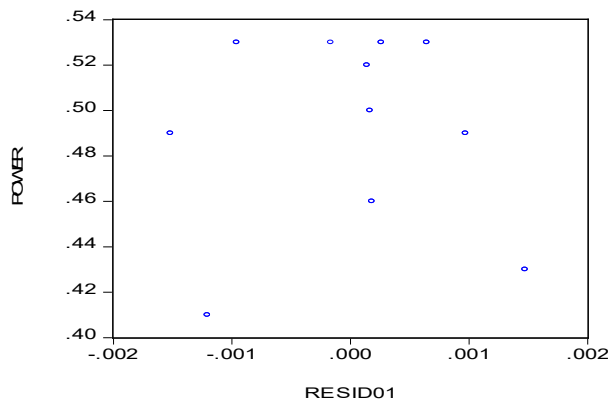
In the following, the Durbin-Watson test is used to check the hypothesis of independent residuals or uncorrelated errors. In this case,  $d = 1.043$ , and the values for  $d_L$  and  $d_U$ , for  $n = 11$ , are 0.758, and 1.604 respectively, generating the situation  $d_L \leq d \leq d_U$ , meaning an indecision, the test is inconclusive for 0.05 threshold.

For the analysis of the independent residuals in relation to exogenous variables, the scatter charts with the relationships between residuals and exogenous variables are developed, showing that there is no relationship between them (see Fig. 2).

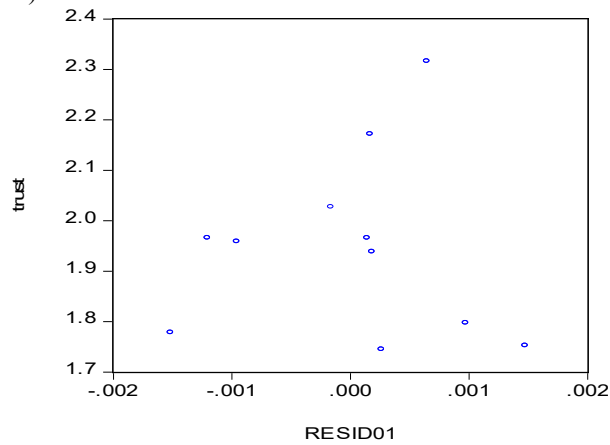
Regarding the independent variables influence on tax compliance and the obtained signs of the coefficients, the results are consistent with the expectations in both cases, of the relationship between TRUST variable and tax compliance (positive

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sign), and also in the case of the relationship between POWER variable and tax compliance (negative sign). In the case of the coefficient of POWER variable, the result is not statistically significant.



a.) Resid vs. Power



b.) Resid vs. Trust

**Fig. 2. The Relationships between Residuals and Exogenous Variables: (a) RESID vs. POWER; (b) RESID vs. TRUST**  
 Source: developed by authors.



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### Conclusions

In this paper, the model developed underlined the impact of trust (in) and power of tax authority on tax compliance, with data for Romania, for the 2007-2017 period. The analysis identified statistically significant relationships between TRUST variable and tax compliance. The importance of this topic requires further research and the use of other variables which may influence the tax compliance. Another goal of this paper is to underline the importance of checking the hypotheses for a regression model. Violations of those hypotheses may lead to inaccurate results. Thus, the hypotheses are presented and checked.

Tax compliance is important for governments, for the proper functioning of the tax authority, and for attracting revenue to the budget, so necessary for the development of public projects. Tax compliance may be influenced by various factors. The results may underline the need to improve the tax compliance level. The policymaker may adopt measures to support voluntary tax compliance.

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## **AFRICANITY AND THE POLITICS OF AFRICAN XENOPHOBIA: A STUDY OF TWO PARALLELS**

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### **Abstract**

*The search for sustainable home-made solutions to both internal and external challenges especially the colonialist and neocolonialist epistemologies as well as the Eurocentric construction of African history that Africa is faced with has, in part, led to the call and coining of the concept of Africinity. While this call has, on several occasions, been racially discredited by the West, it has now assumed a pivotal space in Africa's developmental agenda. Again, while efforts geared towards the re-awakening of the consciousness and belief in the African Indigenous system and its capacity to spearhead the much desired goal of Africa's development continue to be intensified, the recent manifestations of the xenophobic attitudes in Africa now negates the spirit of Africinity and the goal of a united Africa, consequently posing a major hindrance to Africa's development. Findings have however shown that the concept and propagation of Africinity in the wake of the xenophobic experience in Africa is largely paradoxical. It has been observed that Africans are equally neck-deep in what this concept is set out to achieve. As a corrective response to the racist and sexist ontology of the West, it has paradoxically failed to illuminate the true Africanness of Africans in contemporary racist, sexist and xenophobic Africa. Consequently, this paper concludes that the whole concept of Africinity in contemporary Xenophobic Africa is paradoxical. It can however turn out to be a*



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*reality only when the continent is eventually cleansed from the pathologies the concept is set out to achieve.*

**Keywords:** *Africa; Africanity; African xenophobia; paradox; and pathologies.*

**JEL Classification:** N4, N3

### ***Introduction***

For most parts of history, Africa and its people had, for so long, been defined, portrayed and viewed from the Eurocentric lens. Borrowing from Asante's words "Africa was seen as being marginal, uncivilized and one sitting on the periphery of historical consciousness". [Asante, 1990] European standards and values were used to evaluate the African people and their way of life. And once a deviation from the western way of life is noticed in Africans' lifestyle, Africans are then perceived as being barbaric, primitive and less civilized by the West. Over time, the western narratives have been providing distorted versions of the African worldview and its philosophies. Motivated partly by the need for the glorification of their homelands and several untold economic rewards, most western writers had chosen to neglect the truth by twisting the hands of history and constructing African history as one that's got no roots and incapable of lifting the faith and self-belief of the African people in developing themselves. This challenge and several internal complications have plagued and robbed the continent of the needed firepower to kick-start its development goals. This has led to the search for a viable means of providing superior evidence to counter the Eurocentric denigration and downplaying of African worldview, history and philosophies. However, the search for sustainable home-made solutions to both internal and external challenges, especially the colonialist and neocolonialist epistemologies as well as the Eurocentric construction of African history that Africa is faced with has, in part, led to the call and coining of the concept of Africanity which was first conceived by one of the Afrocentric greats, Alli Muzrah, to correct the racist, xenophobic, and the sexist ontologies and epistemologies of the West in Africa.

Paradoxically, Africanity, as a vision, is now being triggered and championed in an environment and by people that are highly xenophobic, racist, sexist and sentimental. It has however become nothing other than a paradox to see both



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Africanity and xenophobia being championed in the same environment, though from differing set of persons. It is now observed that so many Africans are equally neck-deep in what this xenophobia and racism concept is set out to achieve. And as result, despite being a corrective response to the racist and sexist ontology of the West, it has paradoxically failed to illuminate the true Africanness of Africans in contemporary racist, sexist and xenophobic Africa. In fact, there is virtually no region within the African continent that has not played a host to xenophobia. This intolerance is not only peculiar to the Xenophobic Attacks witnessed recently in South Africa, it had manifested in the Ghana Must Go Saga in Nigeria in 1983. It was also identified in the way the people from Burkina Faso who have settled in the cocoa plantations in Côte d'Ivoire for many generations were humiliated and made targets of racial discrimination in that respective region. While Ivoirité suddenly became the new identity for true citizens of the country, being Mossi became synonymous with anti-Ivoirité or non-Ivoirité. And consequently, it exposed all the Mossi tribes to constant danger of attacks. Equally, in Northern Africa, the same thing occurred. Libyans hardly welcome Sub-Saharan Africans. And when job seekers from the sub-Saharan region of the continent found their way to Libya, they suffered attacks and, many a times, they were forced to leave the country of President Muarmuar Ghadafy and return to where they came from. These and many more cases abound. The bigger question here is that how then can the vision of Africanity materialize in Africa when Africans have phobia for fellow Africans? Or can Africa give or present what it doesn't have? This then draws us to the proposition made earlier in this paper that unless Africa is cleansed from the internal pathologies the concept of Africanity is meant to correct on the larger-scale in Africa, the goal and vision of Africanity might not see the light of the day in Africa.

#### ***Understanding the Concepts of Africanity, African Xenophobia and Vision***

**Africanity** connotes simply an ideal and a quest for unity, cooperation and justice for Africans on the continent and diaspora. It's an evolving orientation for more cohesion and wholeness amongst the African peoples to suppress the continued fragmentation, dislocation and dehumanization that was occasioned by years of xenophobic slavery, colonialism and neo-imperialism by the West in contemporary times. [Muzrah, 2002] It's a rising consciousness for greater unity and African solidarity amongst the African peoples which has equally led to the establishments of common Pan-African Organizations such as the African Union and other regional





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bodies with a view to providing a dialectic interface and connection between where Africa is coming and its envisaged future. Since, according to Ngugi, memory is the link between the past and present, between space and time, and the base of one's dream, Africanity then becomes the reservoir of memories needed in knowing and connecting the African roots with its promising future. [Ngugi, 2009] Africanity has also assumed a pivotal role in the developmental agenda of virtually all African states. It has been realized that it is not only instrumental in challenging the Eurocentric conception of African worldview but also capable of drawing the African solidarity, oneness, wholeness, brotherliness, and togetherness needed amongst the African peoples for the advancement of Africa's development. It is now seen by African states as a call and means towards achieving greater cooperation, friendliness, harmony, tolerance and integration amongst the African peoples and states. This suffices to imply that the onward advancement of Africa's development is now hinged on this concept. Africanity can thus be regarded as a state of development. If attained, it is capable of heralding another phase of development. It is a state of development that other spheres of development are dependent on. If conceived as a state of unity, oneness, selflessness, harmony, togetherness, solidarity and allegiance to the black heritage, it then goes to say that it Africanity now connotes a means to end (which is development) and actual state of development itself because the afore-mentioned qualities are indicators of a developed society. In this light, this paper construes Africanity as not just a means to an end but an end in itself. It is thus taken as a vision, and when realized it becomes an actual state of development that is capable of heralding another sphere of development.

**African Xenophobia:** Whilst it might not be fallacious to aver that xenophobia is a worldwide phenomenon, it will be too mechanistic and deterministic to suggest that xenophobia is the same world over without considering the environmental peculiarities of the scene where it is manifesting. It is not peculiar to Africa alone but its causes have African peculiarities just as its causes elsewhere are peculiar to where it is manifesting. According to Center for Human Rights (2009), xenophobia is basically a perceived fear, hatred or dislike of a non-native or foreigner in a particular country. Being a product of two Greek words, xenophobia is made up of xeno and phobos which literally connotes the fear of a foreigner. [Bordeau, 2010] So, to this end, xenophobia is taken to mean an embodiment of discriminatory attitudes, dispositions, beliefs, actions and behavioural tendencies that usually culminate into violent attacks on foreigners, refugees and fellow nationals. Simply



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put, it is the fear or hatred of foreigners or strangers embodied in discriminatory attitudes and behaviour which usually culminate into violence, abuses of all types, and exhibitions of hatred. [Mogekwu, 2005] Buttressing this point, Harris (2002) likened it to a form of dislike, hatred or fear expressed by a group of people towards foreigners.

Importantly, however, as Harris (2002: 170) correctly emphasizes, xenophobia is ‘not just an attitude but also an action. As reflected by the South African incidents, xenophobia invariably then entails acts and processes of violence, physical, as well as psychological and social. Furthermore, as also reflected by these incidents, in the South African context, xenophobia is not directed at just anyone. It is largely directed at people especially foreigners of a divergent colour and ethnical background. McDonald *et al.* (1998) competently defined xenophobia as a discreet set of beliefs that can manifest themselves in the behaviours of governments, the general public and the media. This suffices to imply that it’s any form of hatred or fear of foreigners or strangers based on a discreet set of beliefs that may be expressed verbally or manifested in the behaviours of governments, the media and the general public. A more comprehensive and illustrative conceptualization of Xenophobia was given by Bihr (2005:1) who asserts that it literally refers to the fear/hatred of the stranger. He further stressed that xenophobia is “a system that is necessary for the symbolic economy of historical societies as it enables the reconstitution of social unity by exporting internal divisions and conflicts, hiding the internal origin of the latter – for which exogenous figures are held solely responsible.” This therefore means that every xenophobic attack is targeted at people other than the original occupants or indigenes of a given community or state. Bihr (2005:1) also observed that the stranger that is hated is one that is close, “the stranger hated by the xenophobia is not only a neighbour, often living next to him, but also a stranger who is un-foreign as possible so to speak, a stranger who differentiates himself as little as possible, through his social and cultural features from the group of belonging and/or reference of the xenophobe.” In line with the foregoing definitions of xenophobia, the concept can be quipped to refer to a fear and hatred of strangers or foreigners or of anything that is strange or foreign. To Blank and Bucholz (2005), “Xenophobia can also be seen as an economic cost factor since it generates economic cost for a society.” According to them, studies show that foreign African entrepreneurs provide new jobs by establishing businesses or increasing the aggregate demand as a result of cross-border trading. The foregoing assertion is in contrast to the very claim of South



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Africa xenophobes that foreign immigrants in the country take their jobs. However, Kollapan (1999) has warned that xenophobia cannot be separated from violence and physical abuse. In this wise, a review of the notion which sees xenophobia as just an attitude is not only necessary but imminent if a holistic and broader view of the phenomenon is to be achieved. Xenophobia as a term must then be reframed to incorporate practice. It is not just an attitude, it is an activity. It is not just a dislike or fear of foreigners, it is a violent practice that results in bodily harm and damage. More particularly, the violent practice that comprises xenophobia must be further refined to include its specific target, because, in South Africa and elsewhere in Africa, for example, not all foreigners are uniformly victimized. Rather, black foreigners, particularly those from Africa, comprise the majority of victims.

**Vision:** In a loose sense, a Vision is often referred to as the ability to think about or plan the future with great imagination or wisdom. It's all about visualizing and articulating what an institution intends achieving. It's a dreamed or an imagined destination and a state of fulfilment. It can also be a target or a goal. It can be construed as an inspirational description of what an organization would like to achieve or accomplish in the mid-term or long-term future. It is intended to serve as a clear guide for choosing current and future course of actions. [Business Dictionary, 2016] It's a company's roadmap, indicating both what the company wants to become and guiding transformational initiatives by setting a defined direction for the company's growth. [Wikipedia, 2016] A vision focuses on the potentials inherent in the company's future, or what they intend to be. It's basically a description of what the company intends to become in the near future. [Your Dictionary, 2016]

Countries, international organizations, inter-governmental organizations, non-governmental organizations and corporate bodies have been employing the utilities of a Vision in achieving their set out goals. For instance, the Millennium Development Goals was a global vision conceived by the United Nations and implemented by national governments to bring about development in the eight areas identified in vision across the world by 2015. The recent Sustainable Development Goals (SDGs) is another example of a vision with a global scope. In Nigeria, the current Vision 2020 is a vision conceived by the Nigerian government with a view to becoming one of the twenty largest economies in the world by year 2020.

However, a defining and ever constant attribute of all visions is that they could either turn out to be successful or non-successful. While some visions have been completely or partially successful in the past, some have out-rightly failed. This



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then brings us to the question as to whether the Africanity vision in Africa has been a success or a failure in the contemporary xenophobic Africa. The answer is self-evident!

### ***The Chronological Development and Manifestations of African Xenophobia***

It may be shocking to whoever knows that the manifestations of this heinous act date as far back as the 1960s. Its first institutional manifestation was recorded in November, 1969, precisely forty-nine days after the assumption of Kofi Busia into office as Ghanaian Prime minister, following the introduction of the Aliens Compliance Order which was intended to expel undocumented aliens residing in Ghana. Aliens that did not possess work permit were given two weeks' ultimatum to get it and those that couldn't were eventually expelled. [Gocking, 2005] Surprisingly, it was alleged, as Aremu and Ajayi (2014: 176) put it, that foreigners were responsible for the large-scale unemployment that had befallen Ghana at this period in time. It however remains an irony to know that agents of foreign direct investments could also be accused of stealing jobs.

Similarly, in 1972, the Ugandan Authorities expelled thousands of foreigners of Asian descents due to the purported deteriorating economic conditions. [Hansen, 2000] Asians from Britain, India, Pakistan, Kenya, Tanzania, and Zambia were given three-month ultimatum to leave Uganda. However, the aftermath of this development did not yield any economic returns as the country further witnessed more economic downturns.

The Gabon had also been a harbour and contributed indirectly to the growth of African xenophobia. In 1978, it expelled all Beninese on the grounds that the Beninese President at this time, Kerekou casted aspersions on President Bongo and the people of The Gabon. [Gray, 1998] While the former had accused the latter of masterminding a foiled mercenary coup that was intended to oust him from power. As a response, president Bongo of the Gabon became enraged and ordered the expulsion of 9,000 Beninese from The Gabon without examination or screening of the Beninese' travel documents. [Henckaerts, 1995]

A similar experience was equally recorded in Nigeria in 1983. Owing to the purported worsening economic situations in Nigeria in the aftermath of the oil boom witnessed in the 1970s, Nigeria had to expel more than two million foreigners from the country. With more than a million of the expelled foreigners being Ghanaians, Nigerian Authorities claimed that foreigners were not only



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responsible for the prevailing economic woes in the country but also the prevalence of crimes. Having realized that the expulsion was not salvaging the dying economy, Nigeria resorted to another round of expulsion of over three hundred thousand (300,000) Ghanaians in 1985. Surprisingly, these expulsions could not stop the deterioration of the Nigerian economy. [Obakhedo, & Otoghile, 2011]

In a related experience, the former Ivorian President, Bedie, came up with the idea of “Ivoirite” in the wake of declining economic situations in Cote d’Ivoire in the 1990s so as to grant the citizens of Cote d’Ivoire unhindered access to the limited political and economic resources at the expense of the foreigners. Migrants from Burkina Faso who have settled in the cocoa plantations in Côte d’Ivoire for many generations became victims of humiliation and racial discrimination in Côte d’Ivoire. While Ivoirité suddenly became the new identity for true citizens of the country, being Mossi became synonymous with anti-Ivoirité or non-Ivoirité. And consequently, it exposed all the Mossi tribes to constant danger of attacks in Cote d’Ivoire. This eventually led to the expulsion of between 8,000 and 12,000 Burkinabe farmers from Cote d’Ivoire following a purported schism between the Ivoirians and the Burkinabe farmers in 1999. [Human Rights Watch, 2001]

In Equatorial Guinea, it was alleged that there was an attempted coup by foreign mercenary against the president. This however spurred a clampdown on foreigners residing in the country whilst Equatorial Guineans who did not belong to security apparatus were ordered along with the conventional security apparatus to arrest those suspected to be illegal foreigners. [Human Rights Watch, 2009] An estimate of about one thousand (1,000) foreigners ended up being expelled from the country. [Human Rights Watch, 2009] Coupled with this, by 2007, the Government of Equatorial Guinea had also banned West African Nationals from owning grocery stores in the country. In cases of violation, those stores were either taken over by the Government or shut down. [IRIN News, 2008]

In 2004, the Angolan Government expelled an estimated hundred thousand (100,000) Congolese from Angola on the pretext that the Congolese were stealing natural resources that naturally belonged to the Angolan people. Buttressing this fact, Adebajo (2011: 91) informed that over one hundred and sixty thousand Congolese were expelled from Angola between December 2008 and December 2009.

As a retaliatory measure, the Democratic Republic of Congo’s government expelled fifty thousand (50,000) Angolans in 2009 following a popular demand for a reprisal to the inhumane treatment meted out by the Angolan government to Congolese residing in Angola. [Human Rights Watch, 2012]



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On the same note, Burundian Authorities expelled almost one thousand two hundred (1,200) foreigners from Burundi on the pretext that a routine of this nature was imminent so as to address high crime rate in the country. [Human Rights Watch, 2012]

Furthermore, in a related development, Tanzania's government expelled close to eleven thousand (11,000) undocumented foreigners with a view to flush out the purported criminal elements in Tanzania. [Ghosh, 2013] This was purportedly informed by the prevalence of armed robbery, bus attacks and hijacking attributed to foreigners in the Kagera axis of Tanzania, and the need to make dividends of governance accessible by the citizens. [Naluyaga, 2013]

The incessant terrorist attacks from the Somali al-Shabaab group in Kenya have purportedly aroused anti-Somali sentiments amongst Kenyans. Following the 2013 Westgate terrorist attack, the Kenyan government initiated the 'Operation Usalama Watch' to serve as a counter-terrorist measure. This operation eventually resulted in the arrest of four thousand (4,000) Somalis. Every time the Kenyan government has tried to combat terrorism, it has been found that the Somali community in Kenya has always been targeted. [Buchana-Clarke, & Lekalake, 2015]

Further, Congo Brazzaville, in 2014, initiated Operation Mbalayabakolo (meaning 'Slap of the elders') with a view to, as purported, flush criminal elements out of the country. [Reuters, 2015] This singular operation eventually led to the expulsion of over fifty thousand (50,000) citizens of the Democratic Republic of Congo. [Reuters, 2015]

Following the suicide bomb attacks in N'Djamena, Chad, in June 2015, by elements of the BokoHaram Terrorist Network, the Chadian government, in a responsive and precautionary measure, expelled close to three hundred (300) Cameroonians [Ernest, 2015] and over two thousand (2,000) Nigerians [Telegraph, 2015] in a bid to flush out undocumented foreigners that were, as purported, perpetrating terrorist and criminal acts in the country.

Xenophobic attacks were first witnessed in South Africa in 1994 when three immigrants of African descents, i.e. two from Senegal and one from Mozambique, were brutally killed in a train, after they have been accused of stealing jobs by South Africans (The Eastern Province Herald of 4<sup>th</sup> September 1998 quoted by Abdi, 2009:1).

Similarly, in 1996, a crowd of approximately one thousand South African inhabitants of an informal housing settlement attempted to drive all foreign nationals



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out of the settlement. Two foreign nationals as well as two South Africans were killed in the ensuing violence. [Hill, & Lefko-Everett, 2008] In 1997, South African informal traders in Johannesburg launched a spate of violent attacks over a 48-hour period against foreign national informal traders. The attacks were accompanied by widespread looting. In 1998, six South African police officers were filmed setting attack dogs loose on three Mozambican migrants while hurling racist and xenophobic invectives at them. [Hill, & Lefko-Everett, 2008] More so, in 1999, it was reported that six foreign nationals accused of alleged criminal activity were abducted by a group of South Africans in Ivory Park, a township on the outskirts of Johannesburg. One of the six managed to escape from the mob's clutches, three others were seriously injured and two were reportedly killed by means of the notorious 'neck-lacing' method. [Hill, & Lefko-Everett, 2008] In 2000, two Mozambican farm workers were assaulted by a vigilante group after they were accused of stealing. One of the workers subsequently died directly as a result of the attack. In 2001, residents of Zandspruit, an informal settlement in Johannesburg, set fire to the houses of hundreds of Zimbabwean migrants forcing them to flee the settlement. In 2006, several Somali shop owners were reported to have been forced to flee a township outside Knysna in the Western Cape Province, as a result of violent intimidation. In 2007, more than 100 shops owned by Somali nationals in the Motherwell area in the Eastern Cape Province were looted during a series of attacks on African refugees over a 24-hour period. [Hill, & Lefko-Everett, 2008]

More recently, in May 2008, South Africa was hit by another wave of violent attacks against foreigners from the majority of the world. These xenophobic attacks resulted in the death of more than 70 persons, many injured and displacement of approximately 120,000 people, all of them people of colour and most of them poor. [Peberdy, 2009]

On the evening of 11<sup>th</sup> of May 2008, in Diepsloot, a township in the north of Johannesburg, in the Gauteng province of South Africa, a Mozambican migrant, Ernesto AlfabetoNhamuavhe, was torched alive while a group of South Africans stood by laughing as he burnt to death. [Worby *et al.*, 2008] In the public memory, it was this cruel and gruesome event, more than any other, which marked the unfurling of a frightening wave of xenophobic violence that was to engulf the South African landscape for several weeks thereafter. [Peberdy, 2009]

When, by June 2008, South Africans took stock of the horrendous excesses committed in their name during the preceding months, it was reported that 120,000



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people had been displaced, 670 had been injured, 70 had been murdered and countless women had been raped. [Matsopoulos *et al.*, 2009; Peberdy, 2009] In 2005, a new wave of xenophobic attacks was incited by the Zulu King resulting in the death of a South African teenager and seven other persons with loss of properties and displacement of thousands of foreigners. [Essa, 2015]

Most contemporary of all these xenophobic attacks is the attacks on foreigners in April, 2016, in Zingalume and Chunga, Zambia, over the allegations that foreigners were using Zambians for rituals in exchange for economic and business prosperities. Shops belonging to foreigners were looted while identified foreigners were descended on at sight. The xenophobic riot followed the discovery of a mutilated body in Zingalume, Zambia on the 16<sup>th</sup> April, 2016. However, the Zambian Police was quick in arresting the event before degenerating into a nation-wide catastrophe. [Financial Watch News, 2016]

#### ***The Rise and Causes of African Xenophobia: A Theoretical Discourse***

Multiple factors that are believed to have contributed in one way or other to the rise and manifestation of African xenophobia are, albeit hypothetically, considered to be diverse. These factors, ranging from citizenship/identity crisis, to poor immigration policy, and media effects, as well as leadership failure on the part of the government to deliver the dividends of governance to its people and general state of dwindling economic conditions, are believed to have accounted for this pathology.

While this study recognizes the plethora of insightful explanations provided by the Isolation thesis and the Relative Deprivation thesis [May *et al.*, 2000; Pillay, 2008] as well as Bronwyn Harris's scapegoating hypothesis (2002) as to the root causes of the xenophobic attitudes and attacks in Africa in general, it finds Nieftagodien's Endemic poverty Explanation (2008) and John Dollard and Neal Miller's Frustration-Aggression theory (1939) more relevant and appropriate to this discourse as they capture the very underlying nitty-gritty and the prima facie of the African xenophobia.

The Relative Deprivation theory cannot be relied upon in providing a convincing explanation on African xenophobia because it doesn't account for why foreigners of colour and particularly African foreigners are the ones who bear the brunt of this anger and resentment. Although, it provides a glimpse of insights as to why there are feelings of hostility from Africans towards foreigners by locating it in the perceptions of being deprived of basic privileges because of others. The South African, Ghanaian





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and Nigerian cases provide an insight as to how deprived citizens could resort to xenophobic attacks in expressing their plights. As May *et al.* (2000) and Pillay (2008) put it, “inequalities in income have become increasingly pronounced amongst blacks since 1994, and that they rank amongst the highest in the world”. While the poor are becoming increasingly poorer, the new political elites in Africa are becoming richer at the expense of the poor. And in the face of this naked display of self-enrichment on the part of the new political and corporate elites, the responses of the marginalized, the unemployed and the working poor to their apparently unchanging plight have turned out to be violent xenophobia. And in a continent, in which xenophobic discourses are encouraged and reproduced by the ruling elites to score cheap political points from their opponents, this anger and resentment are inevitably directed at foreigners and they are being scapegoated for crimes they know nothing about. Moreover, migrants are infinitely easier targets than the new political and corporate elites who typically construct themselves as the allies and champions of the poor in Africa, whereas, it is not so.

Worthy of noting here, as earlier informed, is Bronwyn Harris’s scapegoating hypothesis (2002) which argues that xenophobia occurs when indigenous populations turn their anger, resulting from whatever hardships they are experiencing, against ‘foreigners’, primarily because foreigners are constructed as being the cause of all their difficulties and predicaments. However, like other theories, the traditional criticism directed at the scapegoating hypothesis, of course, is that it does not explain why foreigners are the group that is burdened with the hatred and abuse of autochthonous groups instead of the political class that are constantly milking and cashing out on the poor populace in Africa. More specifically, it does not explain why foreigners of colour in the context of contemporary South Africa invariably bear the brunt of the prejudicial and murderous hatred of the local population instead of the high-profile corrupt politicians so to say.

Now, at this instance, it’s imperative to consider Nieftagodien’s Endemic Poverty Explanation (2008) on the rise of African xenophobia. In his study, Nieftagodien discovered that xenophobia is bound to find fertile ground in areas where there is poverty or worsening economic conditions. For instance, in the case of Ghana, Nigeria, Angola, Uganda, South Africa, and to a lesser extent, Cote d’Ivoire, The Gabon and Equatorial Guinea, xenophobic reactions and attacks were largely spurred by economic considerations. [Akinrinde, 2018] Although, in some instances like Tanzania, Burundi and Congo Brazzaville, xenophobic reactions were considered as



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a product of the need to curb crimes in these countries. In other instances, it can be seen as object of political consideration like the expulsion of Angola from Congo Kinshasa. By and large, the majority of instances of xenophobic attacks that had been witnessed so far in Africa were largely spurred by economic factor. This equally explains the manifestation and the first triggering of the xenophobic attacks in May, 2008 in Alexandra, a town that is considered relatively poorer than many other towns in South Africa. According to Nieftagodien (2008), Alexandra, where the xenophobic attacks of May 2008, took place in South Africa, for instance, is a township area characterized by desperate and brutalizing poverty. Specifically, Alexandra is a township area where the overwhelming majority of a population of 350,000 people live in makeshift shacks that are crammed into a mere 2 km<sup>2</sup>; with an unemployment rate of approximately 30 per cent; and where 20 per cent of households subsist on a paltry monthly income of ZAR 1,000 (i.e. approximately \$128) or less. [Nieftagodien, 2008]

It is, however, worth mentioning here that there are places in the world where people are as poor as or poorer than the inhabitants of Alexandra, where xenophobia has manifested. Yet these places have not witnessed the extremely high levels of xenophobia seen in Africa, especially in Alexandra and similar townships in May 2008. This, of course, alerts us to the probability that endemic poverty or the economic factor on its own cannot account for the African xenophobia and violence.

Another theoretical explanation worth discussing here is the frustration-aggression theory, proposed by two great academics such as John Dollard and Neal Miller. The Frustration-Aggression hypothesis attempts to explain why people scapegoat. It attempts to give an explanation as to the cause of violence. It holds that frustration causes aggression, but when the source of the frustration cannot be challenged, the aggression gets displaced onto an innocent target. This explains why foreigners who are neither culpable nor guilty of the economic woes in places where xenophobia had manifested in Africa were scapegoated and made victims of the citizens' frustration with their system leading to transfer of aggression from them to the foreigners.

Frustration has also led to aggression by unexpected blocking of goals. In other words, the sudden failure of any expected goal could lead to frustration. And it has been arbitrarily proven that frustration is a strong antecedent of aggressive behaviours. [Berkowitz, 1969]

If the assumption given above is juxtaposed with the African experience of xenophobic attacks, it will however not be out of place to infer that the level of



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Aggression vented on the foreigners by natives of African countries where xenophobia had occurred before was as a result of their economic frustration that is hinged on their inability to meet their economic needs.

Conclusively therefore, it should be pointed out here that based on the recognition of the fact that no single theoretical frame can independently and succinctly capture the dynamics of African xenophobia without taking into cognizance other theoretical perspectives, two broad theoretical theses have been adopted in this study to provide us with insightful explanations on the rise and causes of African xenophobia. It must be bore in mind that in trying to fully and holistically capture the causal factors of this xenophobia, several theoretical perspectives must be explored because these factors are not only numerous but equally complex in nature. Nonetheless, the two adopted theses in this study provide us with the linkage between the economic frustrations of the native population from the countries where xenophobia had manifested before and the attendant aggression that was expressed in physical attacks on foreigners in these countries. This then implies that if poverty and other economic problems are not resolved by African governments in areas where unemployment and poverty hold sway, the quest to banish xenophobia from Africa may not be actualized. There is therefore the need for African governments to tackle the source of their peoples' frustration that is leading to aggressive xenophobic behaviour.

#### *The Stupendous Oxymoron and Paradox of the Vision of Africanity in Xenophobic Africa*

First, it's nothing but a paradox to be talking of Africanity in an environment that is devoid of the basic ideals of Africanity itself. If Africanity is still what it was conceived to be by the great Ali Muzrah, then it remains a paradox to be propagating this vision when the continent itself is against it while also embracing its antithesis. The whole concept of Africanity as conceived by its originator, Ali Muzrah, is a vision, a consciousness, that when tapped into, is capable of defacing the already constructed Eurocentric view of African worldview, and one that is capable of unleashing African solidarity, belief, unity and togetherness for Africa's development. Ironically, it's the antitheses of this vision that are being embraced in contemporary Africa. Xenophobia, racism, ethnic cleansing to mention but a few are defining characters of the African continent. It's now laughable to be seeing scholars and even government officials talking about the importance and utility of using the Ideals of Africanity to provide an alternative African stance to the arrogant



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Eurocentric worldview when the continent is still wallowing in those pathologies the vision of Africanity is aimed at correcting at the global level. Isn't it a paradox?

From the time the vision was conceived up to this present day, it has failed to deliver its inherent prospects that are capable of transforming the African continent and catapult it to an enviable level owing largely to the African version of xenophobia otherwise known as African xenophobia. Africanity talks about maintaining a united front to any imperialistic tendencies of any sort, but Africans still have phobia for fellow Africans. Where then are the ideals of Africanity that can bring about the true state of Africanity as a state of development that is capable of heralding other phases of development in Africa? Evidently, Africanity has failed to yield the desired results because of Africans, their attitudes towards one another and their tolerance level. The ideals of Africanity were evident in relations amongst Africans prior to the advent of colonialism. These ideals were evident in the way Africans traded with one another especially between the Sahara and Sub-Sahara merchants. Africans lived and co-existed peacefully as brothers. Although, one of the reasons that have been put forward by the colonialists as justification for colonizing Africa was that African societies were into war with one another but this narrative has been discredited by Afrocentric scholars for being fallacious and baseless. [Adu, 1989] One of the legacies of European rule in Africa is the disarticulated economies inherited by Independent African States that they are still grappling with after many years. This undoubtedly is the foundation of the worsening economic conditions that is fuelling the embers of xenophobia amongst Africans.

However, since it was identified, through the manifestation of these xenophobic attacks in Africa, that most of them were stimulated by the economic factor, the emphasis was on finding a solution. African governments could move forward in their attempt to enshrine the ideals of Africanity and drive away the threat of xenophobia.

### ***Conclusion and Recommendations***

In concluding a paper of this nature, two basic questions need to be answered. First, what is the focus of this paper's argument? Has this paper contributed to the search for sustainable solutions to the identified societal problem such as xenophobia and the failures of Africanity? These questions will serve as the launching pad to providing an all-round concluding remark here. In light of these, the paper has argued that the current propagation of the vision of Africanity in the



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face of African xenophobia is nothing other than a paradox. Or how can two sides of a coin and opposites be reconciled? A failed vision, I guess. The paper has recounted how series of xenophobic manifestations have stalled the realization of the ideals and vision of Africanity in contemporary Africa. The paper has also been able to identify a common attribute to most of the xenophobic manifestations in Africa. The attribute is grounded in economic factor. It however argued conclusively that, unless the bane of what the paper itself regards as African xenophobia due to its African peculiarities, is urgently quenched, the Vision of Africanity as conceived by its originator, Ali Muzrah, might not be redeemed from its present pit of failures. Needless to say, for now, that the Vision of Africanity remains a failed vision but nevertheless, it is not beyond redemption if revisited and repositioned on the path of success by eliminating its greatest enemy, African xenophobia. How then can African xenophobia be banished from Africa?

First, since it was discovered that worsening economic conditions in terms of unemployment rate, literacy level and standard of living of the places where the attacks had been perpetrated in Africa contributed immensely to the African xenophobia, we need to point out here that African governments might need to take the economic needs of their people seriously.

Second, African governments must, through the auspices of a supra-national continental body like the African Union, endeavour to institute a mass awareness and sensitization program across the continent on the ills of xenophobic attacks. More so, the media outlets in Africa should be charged towards upholding the ethics of their profession rather than engaging in sensational journalism by misrepresenting facts and figures as well as telling the people what they want to hear in lieu of reporting actual facts. Similarly, the Police, Security agencies and other governmental authority that directly deal or relate with foreigners in African countries should be tutored on the importance of upholding their oath of practice rather than giving room for the temptations that could ignite xenophobic, racial, discriminatory tendencies within them.

Third, since education is the key in any human organization, as it has been observed in the course of this research, African governments need to do more in tackling illiteracy amongst its citizenry. The colonial legacy of educational disparity still subsists in Africa as a whole and statistics further show that majority of Africans that participated in these xenophobic attacks are illiterates and ignorant of the African philosophy of peaceful coexistence and brotherhood. In fact,



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according to an Afro-barometer survey, within the South African context for instance, South African natives living in the rural areas harbour more xenophobic sentiments than people in the city. [Afro-barometer, 2016] Hence, the need for promotion of mass literacy level in Africa.

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**PAPERS OF YOUNG RESEARCHERS  
(STUDENTS / MASTERS / DOCTORAL  
AND POSTDOCTORAL STUDENTS)**



## THE IMPACT OF BAD DIGITAL MARKETING STRATEGIES ON COMPANIES' PROFIT AND BRAND IMAGE

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### Abstract

*This research has been conducted to help us understand how digital marketing mistakes have a negative impact on the future, reputation and profitability of brands. Over recent times, digital marketing has become one of the most commonly used areas in marketing, and its development continues from day to day. Using a number of different types of research methods, it has been shown that the existence of the internet has also provided numerous strategies and tools for the development of this field. In this research you can understand that having so many conditions and perspectives, however, does not mean that everything will always be easy and that everything will be on the way. In this article, it is possible to learn about some of the wrong advertising strategies or methods used. The article also provides statistical information on the most commonly used areas in digital marketing. This article will also help you understand where a lack of information can make you ineffective and how you can prevent it.*

**Keywords:** digital marketing; internet; strategy; advertisement; tools; traditional marketing.

**JEL Classification:** M31

### Introduction

The increase of using internet in the world, people spending most of their time on internet and even making online shopping are the reasons to increase the role of internet in business and special in marketing sector. These processes give the opportunity for the digital marketing to enhance, to open new fields and to be a primary part of every enterprise. Firms now also begin to compete through internet and to use online delivery in order to boost their profit. A lot of people use internet to learn what they need, what kind of innovations it has and how they can get things easier. It is why nowadays social media plays the appropriate role for advertising. Sharing a post or a story about a product or a service as an active user is creating an opportunity for millions of people to receive this advertisement in a second. Of course, the advantages of this process are that it is easy to reach customers, expand the number of consumers and make contact with them whenever they want. But this also has disadvantages. The result of advertising depends on how people will perceive and give feedback. The farther the successful promotion takes the brand, the more the unsuccessful promotion it pushes it back and is a reason to destroy the image and even leads to the loss of many customers. After that, for a brand is very difficult to gain customers back. Not only does this happen when it comes to promotion, but other parts of digital marketing also may be faced with this. For this reason, the company must first clearly understand digital marketing, its tools and strategies, and then implement it.

### Research Methodology



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### Introduction

The increase of using internet in the world, people spending most of their time on internet and even making online shopping are the reasons to increase the role of internet in business and special in marketing sector. These processes give the opportunity for the digital marketing to enhance, to open new fields and to be a primary part of every enterprise. Firms now also begin to compete through internet and to use online delivery in order to boost their profit. A lot of people use internet to learn what they need, what kind of innovations it has and how they can get things easier. It is why nowadays social media plays the appropriate role for advertising. Sharing a post or a story about a product or a service as an active user is creating an opportunity for millions of people to receive this advertisement in a second. Of course, the advantages of this process are that it is easy to reach customers, expand the number of consumers and make contact with them whenever they want. But this also has disadvantages. The result of advertising depends on how people will perceive and give feedback. The farther the successful promotion takes the brand, the more the unsuccessful promotion it pushes it back and is a reason to destroy the image and even leads to the loss of many customers. After that, for a brand is very difficult to gain customers back. Not only does this happen when it comes to promotion, but other parts of digital marketing also may be faced with this. For this reason, the company must first clearly understand digital marketing, its tools and strategies, and then implement it.

### Research Methodology

Primary and secondary data were collected for the preparation of this article. In general, qualitative research has been used to gain more knowledge on present day digital marketing. TEDx videos were used to construct the primary data. Secondary data was collected on the question of how the failed strategies have a negative impact on market shares. Extensive information on this subject was collected through the case study research method. Community meetings have contributed to the development of primary data. A literature review is one of the most important research methods and plays a major role in the development of the article. In general, the article contains errors in digital marketing, examples of them, and some suggestions as to how to correct those inconsistencies.



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### *Role of the digital marketing*

Internet users are on the rise day by day. Who knows how much the number of internet users will increase while reading this article. That is an unquestionable fact that the Internet, particularly social media, is an inseparable part of our lives. Innovations, activities that happen can easily have an impact on us. People are no longer interested in radio, TV, and the newspaper. Instead of these, they spend time on the phone, the laptop, in short, on devices that have an internet connection. Of course, this development has given rise to the appearance of a new version of traditional marketing, which is called digital marketing, different and used on the Internet. This development contributes to the formation of new strategy approaches, promotions (blogging, email marketing, online advertising, affiliate marketing, SMM, PPC, SEO), tools and new perspectives.

Digital marketing is a field that can create a connection with the customer at the right time and at the right place. For a business starting from 0, digital marketing can be used in a more efficient way and helps to improve faster than the traditional one. For example, if a company promotes a product on TV, a newspaper or a billboard, this will of course require costs. But if brand has an active user account on social media, and it is going to share about any campaign itself, this post would help the brand make a lot of people aware of it without any cost requirement.

As is acknowledge, right research is needed to grow faster in business and attain the target more quickly. One of the gifts that digital marketing has given us is the ability to dissect huge demographics. Whittle them down into much targeted groups to get super-focused on a specific kind of person. [Sean, 2019] Several internet tools and websites not only enable researchers to collect secondary data, but also allow primary data to be generated. As an example in recent times, researchers can obtain consumer feedback through a social media questionnaire and in this way the necessary information can be obtained in a shorter time from a large number of people. Of course, depending on the type of business, researchers can identify the type of social media from which more and more useful information can be collected. One of the top 10 reasons people say they're on social media is to buy products advertised to them. They spend around 37% of their social media time interacting with branded content. [Sean, 2019]

Perhaps in traditional marketing, marketers are only trying to make good promotions and advertisements to increase profits. But digital marketing gives marketers an opportunity to make a valuable and impressive story about brands,



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products, services and promotions. This also contributes to the development of content marketing. 70% of marketers are actively investing in content marketing. [HubSpot, 2020] Thus, the brand will be able to convey its story to a wider audience and attract new consumers. Because people become more emotional, especially on social networks, proper advertising facilitates the growth of marketing revenue this time as well. As a result, the role of social media marketing increases. Sometimes even active users can be asked what kind of problems they have with the brand or they can receive advice and exchange impressions. Or it could be a successful activity to watch the pages of some loyal customers and take some ideas from them for new campaigns. Marketers should be able to touch people's lives in this way and pay attention. It would be even more appealing not only to annoy them with company posts and promotions, but also to share interesting general information, to be one of them. Digital marketing thus helps to establish a strong and sincere relationship with individuals, which is one of the key components of general marketing.

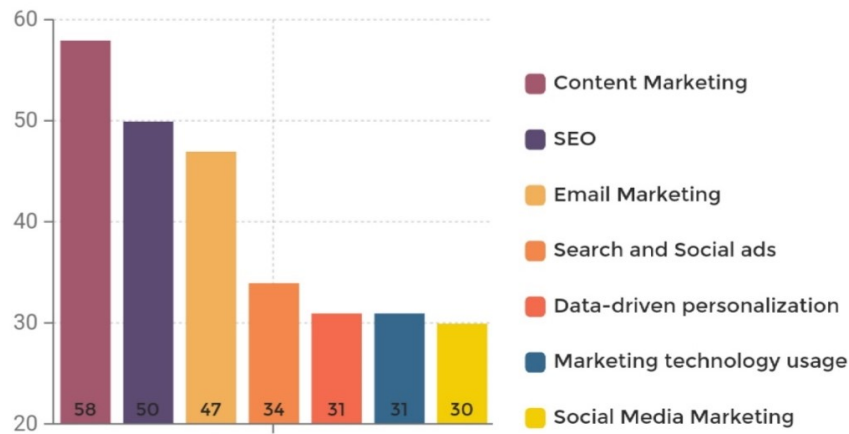
As with traditional marketing, celebrities are also used in digital marketing. With a certain payment, celebrities can share a post as sincere about the product or service and the satisfaction they got from using it. Followers are not affected by promotions on television, but they can be affected and believe whatever celebrities share.

It is possible to place advertisements everywhere on the internet. While watching a movie, listening to music and playing games people face ads. We can see them with limited time. The difference between online ads and traditional ones is that people cannot postpone them. If a person wants to continue his or her work, he or she should wait until the end of the advertisement. And at this limited time, any fragment or information on promotion can impress and attract the attention of the individual.

Digital marketing allows the company to create a website and provide rich information about products, content to which consumers in the traditional system do not have access. The company may publish its ads even on sites that may interconnect the content for commercial purposes. This creates the optimal conditions for people who visit a site only for the purpose of obtaining information to also receive an offer of product or service. And maybe this ad helps the individual find out what's being searched for.

As a result, digital marketing, which differs from traditional marketing, requires any quantity of money, offers a lot of tools and strategies, and promotes the interests of both the brand and the customers. [Sherman, 2019] It is possible to determine which tools or strategies can be used the most, depending on the type of

business. Therefore, it is necessary to know which areas have been more active in the recent years.



**Fig. 1. 2019 Digital Marketing Strategies Survey**

Source: <https://www.convinceandconvert.com/digital-marketing/2019-digital-marketing-research/>

### Threats and Negative Sides of Digital Marketing

In some areas, most of or parts of the work is done by robots and programs through technology. But even though technology is used, in marketing humans play the main role. As a result of the technology impact, digital marketing was created and continues to grow.

In the marketing environment, projects appear at the same time with the ideas, research and development of specific groups of individuals. The aim is to make the project perfect and spectacular and to obtain desired reactions from people. But we are humans and sometimes we can make some mistakes. Despite long-term preparations, little nuances can cause all efforts to be wasted and achieve the opposite result. In short, it can do more damage and expense to company than raise income.

Advertising is also one of the main reasons why a business can move forward and the most important step in helping a new business or the innovations in





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business in presenting them to people. Sometimes, even from the beginning, a new business can fail due to bad advertising, or the company can go from growth and maturity to decline.

In traditional marketing, it is a little easy to eliminate the harm of bad advertising. As a result, it is enough to stop printing that day's edition of the newspapers, to ask TV channels to stop showing of the advertising, and to change billboards.

However, today it is difficult to overcome the failures of the digital marketing sector and a difficult issue is to regain people and make people forget about information that is spreading very fast in the world with the push of a button. This information may be deleted by the main resource, but it can be copied to other data. So, if this data is collected in a competitor, it can make a terrible situation for a firm. Anti-propaganda can begin. Even the presence of social media can be a cause for growing risks and bad results for the company. People can talk about negative information for a long time. Then the company should make a bigger and better campaign to survive and get good attention back to it. Additional digital marketing techniques may be used for these.

### **Statistics in Marketing Environment**

Before starting work in this area, it is necessary to know what is most used in the general market and has a greater impact. For this reason, a few statistics need to be considered. With about 3 billion people on social media globally, understanding how to market on various social platforms has become an integral part of every business's success. [HubSpot, 2020] Facebook is the number 1 social channel used by marketers, with the highest return on investment. [HubSpot, 2020] 74% of global marketers invest in social media marketing. [HubSpot, 2020] "Too many ads", "annoying or irrelevant ads" and "intrusive ads" are the top three motivations for ad-blocking. [VPN Mentor, 2019] More than 50% of consumers prefer video content over other forms of content such as emails, social, and blogs. [HubSpot, 2020] 87% of industry professionals say they use video as a marketing tool. [Wyzowl, 2019] Message Personalization is the number 1 tactic used by email marketers to increase engagement rates. [HubSpot, 2020] Roughly 80% of marketers have reported an increase in email engagement over the past 12 months. [HubSpot, 2020] 78% of consumers have unsubscribed from emails because a brand was sending too many emails. [Disruptive Advertising, 2018] 47% of internet users globally use an ad-blocker today. [Digital Information World, 2019]



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### **12 Main Strategies for Better Digital Advertising**

It is not completely possible to use formulas in digital marketing. That needs more skill in imagination and empathy. Perhaps people think that digital marketing only has one button to monitor. But a big planning and preparing process remains at the background of this.

Sometimes companies don't find it so important and refuse to contact specialists because of having less expenditure. As a result, we face bad promotions and strategies.

Every day, new thoughts and ideas are formed. It's not that easy to keep up with them. In particular, to understand what the customer wants. There should certainly be an attempt to understand what the target audience needs and how they want to get. Otherwise, individuals get long-term negative feelings as a result of such negligence.

One of the most important approaches is creating client empathy, as well as ignoring this strategy. Kellogg's one tweet for a hungry child, AT&T's post which included the September 11<sup>th</sup> accident, Epicurus's offer of a delicious breakfast meal after the Boston Marathon attack, and the other company's cruise discount ad below the cruise accident video on YouTube can be examples. To show the goodness of this type, to use the sad days of people, to ignore and share ads in places that are unavailable, not to make good ads, to make anti-advertising – such campaigns have led to people's criticism and the loss of potential customers. That's why, which type of reaction can be received by consumers should be taken into account before campaigning.

Digital marketing is more than just advertisement. Organizations can turn their business online. But it is not an easy job as it seems. Because most businesses are using this and it means that there are a lot of competitors out there. Carelessness can be an advantage for them in this side. Well, what kind of carelessness can be the reason for that?

Almost every company now has an online site. But why can't all of them increase profits? The reason is not using effective strategies.

1. Not choosing the right product or service. Before deciding which product or service will be produced, marketers should look at what and what type consumers want to buy from the Internet. Choosing wrong thing can waste all effort. Sometimes it can be more successful to do different things than others. As you know, it's the internet, and it gives you a lot of chances to have new experiences.

2. Not setting prices that can compete with others. This is one of the main reasons people are doing online shopping. Online shopping is a great way to



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overcome junk costs. After not asking for the right price, it is very difficult to attract consumers. They can go to the competitors who have a lower price.

3. The lack of a proper content structure of the site. Lack of sophisticated design has, from the very first glance, a negative effect on the consumer. After all, the people who are doing online shopping and service are hesitant because it is online and they are trying to keep their jobs safe and secure. However, a chaotic design, lack of content, unnecessary information and pop-ups may undermine people's interests, and they may think that this site will waste their time and effort.

4. Lack of app accessibility. Because the app helps people do their job even at the last moment. Maybe someone's going to a birthday party, but forgot to buy any gift. With a few clicks, they can be ready with the app. When the online sales company does not have an app on the phone, it can be a cause for customers to turn to the competitor.

5. The use of poor quality product information and the use of photos that cannot relate to the actual product. After one mistake, consumers are deviating from using the same site again.

6. Wasting money for the advertisement on useless sites is one of the most common mistakes made. This is just a reason to fall from value, not to reach target audiences and to increase costs. To prevent this accident, the company should be sure that the site is efficient and effective.

7. Wrong advertising approaches. Brands should make one choice that can make the company more effective. For example, advertise regularly. Because not making successful promotions accessible in time and place proves that the organization has a lack of strategy.

8. Lack of a good marketing team. This can, of course, happen in the international and digital spheres. Many people think this is an additional cost. Hiring experts once or training for the marketing department brings long-term benefits and is better than spending money on worthless places.

9. Not using SEO in the right way. When people need something, they're first searching for it on Google. It is one of the best tools for retaining customers. If you fall behind the rivals in the search results, you will lose potential customers before you begin.

10. It is a wrong strategy to alter or renew something too late at the company's site. Everyday views, tastes and preferences change, so the company needs to keep up with potential customers. Lack of new design, ads, and promotions can lead to

potential customers missing out. The business therefore always needs to renew its site. Then customers will see something changed and they may be more interested.

11. Not providing online service for customers. Obviously, no matter how rich the web, the consumer will have very different questions. The lack of question answering services, however, can also lead to losses.

12. No discounts. One reason people are able to get online purchase comes from discounts. Receiving updates or on site time-limited promotions will determine them to make quick decisions.

### Conclusion

The conclusion is that without marketing, the business cannot exist. Digital marketing is also enhancing its role in this area. Everyone who enters a business should understand marketing, know its purpose, and not put it in a careless manner. As a result, it helps to identify the customer, to introduce the product to the consumer, to inform customers about innovations, to build a strong relationship and, most importantly, to make a profit. As we have already discussed, digital marketing offers a large number of suggestions for this. In a word, it plays a key role in the development process. Small negligence can lead to long-term problems, and many examples can be found for this kind of issue. One of the main reasons, we said, is that the strategies are not properly constructed. In fact, when the strategy is incorrect, the customer receives the wrong message which, in turn, has a negative impact on the image and profit of the brand.

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