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EDITORIAL
Ferhat Topbas

ARTICLE(S)

VOLUME 3   ISSUE 1

EDITORIAL

The Editor-in-Chief and the Editorial Board are proud to present the first issue of the third volume of Focus on Research in Contemporary Economics (FORCE). We are driven to establish FORCE which is dedicated to create a well- established venue for high quality research in contemporary Economics. Its content mirrors widespread scholarly approaches and interests within the dimensions of Economics, Finance, Accounting, Banking, Business Administration, Marketing, Management, and other related areas in Social Sciences. Therefore, FORCE's contributions are not limited to a specific disciplinary philosophy or a particular approach.

This issue features six research articles that report essential findings and implications in Contemporary Economics. In the first article, Ojugbele, Ogunlela, & Tengeh (2022) evaluate the potential role of public entrepreneurship in improving public sector service delivery in South Africa, with special emphasis on showing the practicability of public entrepreneurship despite the marked differences between the public and the private sector where entrepreneurship originates from.

In the second article, Boukraine (2022) investigate the long run relation between financial development and income inequality by exploring the shape of the curve that describes it for the BRICS countries namely Brazil, Russia, India, China and South Africa.

In the third article, Ebi & Uwen Etim (2022) examine the relative impact of federal and state level expenditures as well as capital and recurrent expenditures on private consumption in Nigeria for the period 1981 to 2017. Auto Regressive Distributed Lag estimation method was applied to estimate the desired relationship among the variables.

In the fourth article, Barbier & Tengeh (2022) analyses the relationship between Public Administration, Knowledge Management and Service Delivery and to understand if improved Knowledge Management in the South African Government can improve public sector service delivery.

In the fifth article, Akkaş (2022) examines the moderating effects of cultural values of allocentrism and idiocentrism on the relationship between organizational distributive/procedural justice and turnover intention.

In the sixth article, Alamur & Gümüştekin (2022) try to detect the intrapreneurship of members in mature organizations.

I would like to thank our authors, reviewers, and readers for their continuous support.

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PUBLIC ENTREPRENEURSHIP: A RECIPE FOR IMPROVED SERVICE DELIVERY IN SOUTH AFRICA'S PUBLIC SECTOR

Hammed Olabode Ojugbele, Oyebanjo Ogunlela, & Robertson K. Tengeh |

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PUBLIC ENTREPRENEURSHIP: A RECIPE FOR IMPROVED SERVICE DELIVERY IN SOUTH AFRICA'S PUBLIC SECTOR

Hammed Olabode Ojugbele*, Oyebanjo Ogunlela, & Robertson K. Tengeh

ABSTRACT

This paper aims to evaluate the potential role of public entrepreneurship in improving public sector service delivery in South Africa, with special emphasis on showing the practicability of public entrepreneurship despite the marked differences between the public and the private sector where entrepreneurship originates from.

In other words, we are seeking to answer question how exactly can public entrepreneurship work in practice in South Africa and beyond? We attempted to answer this question in this paper through a rigorous review of public entrepreneurship and exploration of a case study. We concluded and showed that public entrepreneurship is realisable with the right kind of leadership, institutional-wide entrepreneurial orientation and, of course, a bit of managerial flexibility. We went on to assert that entrepreneurship is innovation and not necessarily new venture creation. This is the primary component that is coveted in public entrepreneurship. However, there is vast places for other elements of entrepreneurship in the public sector.

KEY WORDS: *Public entrepreneurship, Innovation, New venture creation, Entrepreneurs, Public institutions, South Africa*

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1. INTRODUCTION

The quest for ways of improving the performance of the public sector is a global and age long one (Boyne 2003). Various efforts and interventions have been proposed in the past to rejuvenate or improvement the public sector

performance; this includes but not limited to structural and administrative overhaul as advocated by the New Public Management model (Osborne & Gaebler 1992), ethical reforms (OECD 1998), digitalisation (Lips 2019, Terlizzi 2021) just to mention a few. Public entrepreneurship (PE) is another one of such initiatives or approaches to reform the public sector and promote good governance (Strow & Strow 2018). PE primarily entails promoting an entrepreneurial mind-set within public institutions (Fedele, Brusati and Ianniello, 2016). It has also been argued that entrepreneurship could be used in public bureaucracies and government institutions as a change agent, to bring about more flexible and proactive institutions which will result in improved service delivery through persistent, innovative ideas (Walker 2014).

1.1. Entrepreneurship and the entrepreneur

Entrepreneurship is understood to involve innovation, process improvement and start-up of new business ventures. As a result of this conceptualisation, it is assumed that entrepreneurship takes place in either a market, organisation, university and private or government institutions (Slaughter and Leslie, 1997). Klein (2008) posited that some conceptualisations regarding entrepreneurs could help gain a better understanding of innovation in public institutions(PI).

As Morris and Jones (1999) explained, entrepreneurship deals with the setting up of new business through creative and innovative ideas by people based on identified needs in society. Therefore, an entrepreneur, according to Casson (1982:23), "is someone who specialises in taking judgemental decisions about the coordination of scarce resources". Entrepreneurship involves many skills and qualities: the ability to take risk, being innovative, gathering and making use of available resources effectively, and imaginative thinking, with entrepreneurs, highlighted as business leaders, playing essential roles in economic growth (Palanivelu and Manikandan, 2015).

As such, an entrepreneur starts a new business bearing all risk and uses available resources, including people, in an entirely new field or market, thereby creating job opportunities in a manner that will foster socio-economic development (Palanivelu and Manikandan, 2015). Therefore, the general perception about entrepreneurship is that it is connected to innovation, being creative, starting a new business, or developing new ideas or discovery (Klein

et al., 2010).

1.2. Public entrepreneurship and the public entrepreneurs

The concept of Public Entrepreneurship (PE) is not new and is gradually gaining global attention (Weiss, 2014). According to Kearney and Meynhardt (2016), PE is assumed to be a process within Public Institutions (PIs), which usually leads to innovativeness by enhancing old processes and developing new innovative processes and technologies that could enhance process improvement within the institution.

Public entrepreneurs are individuals within government institutions that can identify opportunities, leading to the development of new business ideas that could help achieve socio-political objectives by harnessing resources to help achieve the identified objectives (Ramamurti 1986). Thus, they act as both public servants and entrepreneurs. Thus, it can be said that those initiatives undertaken by public servants, to create value within government institutions in an innovative way, could be construed as PE, since the staff of such institutions usually implements activities and policies formulated by government institutions (Dhliwayo 2017). Kropp and Zolen (2008) identified and grouped entrepreneurs as; political, policy, executive and bureaucratic entrepreneurs.

It has been noted that the public entrepreneur could be individuals within the public sector, a working group or institution(s). At the individual level, the public entrepreneurs are induvial in the public sector who actively seek opportunities for dynamic changes in policy or politics (Schneider, Teske, and Mintrom, 2011). They are often the strategists in the public organization who drive innovative changes or deploy resources (Mintzberg 2009; Ongaro and Ferlie, 2020). Institutional entrepreneur speaks to the concept of institutions as the public entrepreneur which is a common practice in the USA. This usually takes the format of collaboration among some institutions to drive specific innovative outcomes (Etzkowitz and Gulbrandsen 1999).

Morris and Jones (1999) mentioned that public entrepreneurs are those PIs' staff who possess a mix of power, always in pursuit of achievement through innovation, with the ability to think and operate strategically, and always taking one step at a time, while also having strong cross-boundary collaboration ability, are politically connected, highly confident and willing to take risk, as well as

being tolerant. Ali, Irfan and Salman (2019) ascertained some objectives public entrepreneurs attempt to achieve as follows; they act as change agents to

organisational processes, develop new ideas in an innovative manner such that efficiency is improved to enhance service delivery, act as partners of progress in a way that value is added in public service institutions, and solve problems in order to satisfy identified public needs, as well as being exposed to opportunity for discovery and exploitation. In addition, public entrepreneurs generate initiatives that will lead to economic development at all levels of government, thus promoting an entrepreneurial attitude and mind-set, along with making use of entrepreneurial models in value creation, as corroborated by Moghaddam et al. (2015), who posited that when an entrepreneurial approach is incorporated into the public sector, the value will be created within the system.

In the final analysis, PE is an ongoing process that results in innovation and pre-emptive activities by the respective officers. The innovation of streamlined processes that will enhance service delivery, reduce waiting time, and introduce an entirely new organisation that could be an offshoot from of an existing institution, while being pre-empted by PIs, is to conceive of what may likely happen to a system or operation ahead of time that generates preventive measures before they occur (Morris and Jones 1999).

1.3. Clarifications: "Publicness"

It is worth clarifying publicness or what makes an institution or entity public. As simple as it appears, 'publicness' may be construed as a complex process, especially when viewed in line with the various formats of achieving public benefit through various forms of government-private or government-market interactions (Moulton, 2009; Brinkerhoff and Brinkerhoff, 2011). Publicness is a ubiquitous term that has a home in a lot of disciplines, including philosophy, investment and mortgage, political sociology, studies of civil society, economics, political science and architecture; and it has correspondingly acquired different context specific meanings over time (Godsell, 2017)

In the public service, Publicness is a term that describes an entity's organisational attachment to public sector values like accountability, due process, and welfare provision (Antonsen and Jørgensen, 1997; Haque, 2006). Thus, for the purpose of this paper we take public institutions or organisations

as those under ownership and control of a political community such as a nation-state or a municipality (Petrovsky, James, and Boyne, 2015).

2. METHODOLOGY

In line with the aim of the study, we adopted a theoretical approach to examine the practical applicability of the concept of PE. We proceeded by looking at the existing definitions and their practical limitations. Next, we sieved out the core elements of entrepreneurship advocated by the different authors on PE. Then, we attempted a "quasi-validation" of the ideas we came up with by analysing the far-reaching reforms that were done in what is arguably South African best performing public institution- South African Revenue Services (SARS) to see the role played by entrepreneurship principles in the success of the institution. We draw on the literature on entrepreneurial orientation and PE as well as other relevant literature as at when needed to put our findings into perspective.

Theoretical papers focus on advancing or broadening our thinking by attempting to bridge existing theories in provocative and exciting ways, which sometimes involve linking work across disciplines to provide new insights (Gilson & Goldberg, 2015). Whetten (1989) maintained that such papers should rigorously meet the following seven criteria: (1) What's new? (2) So what? (3) Why so? (4) Well done? (5) Done well? (6) Why now? and (7) Who cares. Gilson and Goldberg (2015) noted that while not all papers will meet the seven criteria, the "what is new" criterion is of utmost importance. The overarching methodological approach employed in this paper is a mix of theory adaption and theory synthesis (Jaakkola, 2020).

3. DISCUSSION

According to Slaughter and Leslie (1997), there is a perception that the entrepreneurship concept takes place, for example, in new markets, companies or private institutions and academic institutions. In their opinion, most innovation or novelty does not necessarily lead to being entrepreneurial. Klein (2008) posited that literature has further provided more conceptualisation regarding entrepreneurship, which is essential to shedding more light on how innovation is achieved in PIs. Some of the characteristics of entrepreneurship identified in the literature relates to attentiveness and being observant in a manner that opportunities are specified and harnessed (Kirzner, 1973); ability to make informed decisions under conditions of uncertainty (Knight, 1921); and

innovation in relation to products, processes and the market (Schumpeter, 1934). Shane and Veukataraman (2000:220) stated that "To have entrepreneurship, you must first have entrepreneurial opportunities…situations in which new goals, services, raw materials, and organising methods can be introduced and sold at greater than their cost of production". Casson (1982; 2010) argued that the motive behind entrepreneurship is economic and not as being perceived as an organisational practice. Thus, it could be taken that entrepreneurs in PIs often can identify opportunities and harness them to create value (Lewis, 1980).

Dhliwayo (2017) noted that value creation is based not only on opportunity identification but also on the ability to effectively use those opportunities. Furthermore, he posited that some opportunities are social in nature, termed "social opportunities", and are construed as those opportunities left unattended over a period that could be diverse in nature, ranging from being socio-economic to being political in nature (Dhliwayo, 2017). Thus, when these identified opportunities have been harnessed and adequately acted upon, it is assumed PE has occurred in that space in a manner whereby value has been created.

In their study to ascertain the application and concepts of entrepreneurship in the public sector, Morris and Jones (1999) surveyed 152 public managers in South Africa. The findings indicated that in the view of a substantial number of the respondent managers, this concept is relevant to their environment and the implementation challenges do not differ much when compared to what is obtainable in the private sector (Morris and Jones, 1999). The authors determined that the process of entrepreneurship can essentially be divided into two; an 'event' and 'agent'; explaining that entrepreneurship as an event, is the process of conceiving and execution of such idea, process, product or service, while entrepreneurship as an agent, has to do with a person or group of persons able to take responsibility to ensure the 'event' becomes a reality. Mcgaham Zelner and Barney (2013) noted that proper engagement into the inquiry of PE and its relationship with the public sector would require proper conceptualisation.

3.1. Actualising PE in South African Public Sector

As mentioned earlier, the South African public service has been described to be grossly inefficient, and this is evident from the frequent and ubiquitous service

delivery protests that are rife in the country, especially in the past few years (Alexander, 2010, Managa, 2012, Lavhelani and Ndebele, 2017, Mamokhere, 2020). The situation is made more complex because the populace's demand for service delivery is on the rise (Maphumulo and Bhengu, 2019). The situation thus, naturally call for new thinking and ways of doing this within the public sector. PE is a panacea for such problematic situations. This is because it has the propensity for creating public value through the creative improvement of efficiency without being constrained by resources' paucity resources (Edwards et al., 2002, Zerbinati and Souitaris, 2005). However, situating PE properly in the public sector requires a proper understanding of the public sector's nature, especially in the South African context.

Generally, the public sector is usually taken to be synonymous with "bureaucratisation," and it is associated with routine behaviours, risk avoidance, and paucity or (total) lack of initiatives (Bernier and Hafsi, 2007). They are usually hierarchical organisations with multiple stakeholders who usually pull in different directions. They are ring-fenced within rigid detailed procedures and guidelines. Inflexible financial control and budgeting systems are religiously guided by managers highly invested in power and security, with little or no incentive for risk-taking (Zerbinati and Souitaris, 2005). These features of the public sector and other marked differences between public and private enterprises have made the applicability of entrepreneurship principles in the public sector highly contended (Morris and Jones, 1999, Ali et al., 2019, McSweeney and Safai, 2020). In fact, some authors think the whole idea of PE, like many other acclaimed public service reforms (Hood, 2000), is no more than myth and rhetoric as noted by Edwards et al. (2002:1541) that:

> *"Entrepreneurship in public management can thus be understood less as a 'what is happening' descriptor than as a rhetorical label or device to win support amongst certain stakeholders for public service reform".*

One of the strong arguments of the proponents of the incommensurability of entrepreneurship principles and the public sector is that both sectors' distinctive features make them different. They held that these differences (summarised in Table 1) make it impossible to transfer learning from the private to the public sector (Morris and Jones, 1999, Mühlenkamp, 2015).

S/N	Public Sector	Private Sector
1	No profit motive but guided by social and political objectives	Profit is usually the primary motive
2	Strive towards multiple and often eclectic objectives	Fewer and well-structured measurable objectives
3	Less exposed to market forces	Full exposure to market-related factors like a high incentive for cost reduction and efficient resource allocation
4	Political and equity considerations guide resource allocation	Resource deployment is primarily based on profit maximisation
5	Multiple and hard to identify customer	Well define and identifiable customer base
6	Have guaranteed and "unlimited resource that derives from involuntary taxpayers	Revenue only accrue from satisfied and happy customers
7	Subject to public scrutiny and need to consider the interest of diverse stakeholder	Only accountable to stakeholders with commercial interests in the business
8	Has no motivation to take risks or is risk-averse	Always make risk /profit trade-offs
9	The managers act more as implementers of policies with little or no strategic decision-making power	Managers are empowered and have the flexibility to make decisions they deem best for the interest of the entity

Table 1: Features of Public and Private Enterprises (*culled from* Morris and Jones, 1999, Mühlenkamp, 2015)

3.2. South African public sector: the reforms and guiding principles

South African democratic government post-1994 inherited a demographically and functionally dysfunctional civil service that comprises over 95% of the white minority and does not prioritise service provision to the majority (Franks, 2014, Fernandez and Lee, 2016). To redress this, the public service was taken through a series of reforms (since the end of apartheid), culminating in adopting the new public management principles. Thus, signifying a move from the old traditional public administration paradigm to revolutionise public service by bringing about "improvement in the performance of government organisations through a focus on policy implementation and the strategic actions of top-level decision-makers" (Naidoo, 2015:25).

The reborn South African public service aspires to be professional in outlook

and approach, accountable and transparent, committed to excellence and impartiality, participatory in decision and policy-making, efficient, effective and equitable, and developmental in orientation (DPSA, 2018, Franks, 2014). This

reformed public service was designed to be driven by a participative and flexible management structure that will thrive more on the creative use of consultation and teamwork rather than on applying rules and procedures (Naidoo, 2015). However, because of the weak institutional foundation upon which the reforms were built (and other reasons), the country's public service does not represent these ideals. A situation that was aptly predicted by Picard (2005:370) that:

> *"The failure to focus on institutional strengthening in the first decade of non-racial government may have long-term implications for South Africa."*

A good understanding of the basics of New Public Management (NMP) is critical for the appraisal of South Africa public service's practical reality and the extent of the deviation of its espoused ideals, and the dire need for the adoption of PE.

NPM has been described as one of the major frameworks for implementing managerialism in the public sector. That is, the application of managerial tools and ideas from the business world to the public sector to improve its efficiency and effectiveness (McSweeney and Safai, 2020). It is an ensemble of market-centric approaches like corporate governance, emphasising value for money through insistence on increased efficiency, openness to outsourcing, the setting of performance targets and measurable metrics (Diefenbach, 2009). It also enables and equips public sector managers to become entrepreneurial in their approach, seeking to create public value by seeking and exploiting opportunities irrespective of resources at their disposal, thus, freeing themselves from the shackles of old routines (Callaghan et al., 2010).

At the core of the NPM is brokering collaboration with external stakeholders outside government and political circles to improve the government's ability to deliver services and create value for the citizens. The focus is to generate new ways, ideas, or mechanisms for deploying public resources to pursue public interest. This implies that the pursuance of public interest remains paramount regardless (McSweeney and Safai, 2020).

However, the question remains how successful the application of these principles in South African public service is. The application of NPM principles in practice in the South African public sector has been confounded by a myriad of challenges. These include lack of the requisite skills and capacity to implement most of the enshrined principles, lack of commitment to the principles as indicated by the lack of political will to allow decentralisation which is an essential ingredient for NPM to thrive. There is also the effect of political patronage and the attendant reluctance by the political actors to give the public managers a free hand to experiment with or influence resource deployment (Naidoo, 2015, Munzhedzi, 2020).

3.3. Public entrepreneurship to the rescue

It is worth restating that this article proposes ways of taking PE beyond discourse-level or what some authors have termed rhetoric as mentioned earlier and conceptualise it as a feasible way of doing public service business. It is evident; many of the espoused ideals of South African public service align with the PE tenents, aside from the usual question of legitimacy that always comes whenever an attempt is being made to transfer market-oriented principles to the public service (Klein et al., 2010, Liddle and McElwee, 2019).

However, achieving the above aim requires reiterating the compatibility and commensurability of the PE approach with other extant management approaches in the public service, understanding the true nature of the envisioned changes, and finally creating an appropriate working or contextual definition of entrepreneurship definition for PE. First, it must be understood that adopting an entrepreneurial style of government does not mean a total overhaul or rejection of any other governance style. It can co-exist with them and has the propensity to add value to them (Edwards et al., 2002, Miao et al., 2018). It is also essential to understand that changes in complex systems like the public service are gradual and take time to manifest no matter the effort's intensity (Sterman, 1994, Allen, 2001). This gradualism and subtlety are succinctly captured by Bernier and Hafsi (2007:488):

> "Public entrepreneurs do not create new artefacts, nor do they design grandiose projects, but they slowly reinvent their organisations and, in so doing, transform the systems that control government effectiveness and efficiency".

We shall align our conceptualisation of PE with Schumpeter's (1934) work, which argued that the real essence of entrepreneurship is innovation and not just the creation of new ventures. He goes on to define innovation as the application of a new idea in practice. If viewed through this periscope of

entrepreneurship as innovation, then a good number of the available definitions of PE (e.g Bernier and Hafsi, 2007, Morris and Jones, 1999, McSweeney and Safai, 2020, Ali et al., 2019, Lucas, 2018) could be reduced to the application of innovative changes in public sector organisations and operations. Such contextual definition makes it easier for different public enterprises or public managers to embark on PE adoption within the need and reality of their context at different paces.

To achieve this, we propose a two-step approach: the entrenchment of entrepreneurial orientation and the encouragement of entrepreneurial activities. We contend that the only practicable step to making PE work in public service is establishing entrepreneurial orientation (EO) as a public sector attribute. This is because EO has been found to mediate the relationship between an organisation's environment and its performance or how it does things (Rosenbusch et al., 2013, Roxas and Chadee, 2013). It does this by fostering innovations (Kollmann and Stöckmann 2014) or directly influences its performance by influencing how it identifies, assimilates, and exploits new knowledge (Hernández-Perlines et al., 2017).

EO traditionally refers to the pervasive behaviour within an organisation regarding proactiveness, innovativeness, autonomy, and risk-taking (Correa et al., 2017, Covin and Wales, 2012, Pearce et al., 2010). The literature is replete with many predictors and antecedents of EO like entrepreneurship education and training (Al-Awlaqi et al., 2018, Bilić et al., 2011, Lina et al., 2018), strategy and strategy making process (Covin and Wales, 2012, de Villiers Scheepers et al., 2014), leadership style (Harris and Ozdemir, 2020) and organisational culture (Engelen et al., 2014). However, in the case of the South African public sector, we are suggesting a widespread and persistent awareness creation within all hierarchies of the personnel on the relevant ideals and principles of the public service previously mentioned like proactiveness, commitment to excellence, participatory planning, flexibility, creativity instead of rigid adherence to rules and procedures, efficiency and effectiveness. Though they exist theoretically on the records, these are largely missing from the South African

public sector. We think that the widespread awareness of these principles can change the way things work in the public service.

3.4. A South African case study : South African Revenue Service

This section was based on the accounts of Hausman (2010) and Alam et al. (2016).

The South African Revenue Service (SARS) is the national tax and revenue collecting authority in the Republic of South Africa. It was established through the merger of two previous government agencies, which were the former Inland Revenue and the Customs and Excise Directorates in the Department of Finance (now the National Treasury). It was set out as an autonomous agency responsible for administering the South African tax system and customs service. The autonomy frees the agency from many of the country's civil service rules to allow it more flexibility.

Post-apartheid South African democratic government was confronted with a huge task of planning and making provisions for most South Africans who were hitherto never considered in national planning. The new government must now extend services such as electricity, water health care, and housing provision to this previously unserved segment of the population. However, the government saw the need to keep tax low in order not to scare away investors from the country which can at that point said to be politically fragile. It is also germane to mention that at that point, there is vast apathy to tax payment as refusal to pay any form of revenue to the previous discriminatory regime was seen as a form of protest. This is further complicated by the popular perception of the revenue collection agency as being inefficient and highly corrupt. This is the situation in which the country aspired to significantly increase revenue collection to enable the new government to meet its social mandate.

Thanks to far reaching and innovative reforms in its structure and operation, the goal was achieved. "Between 1998 and 2009, the South African Revenue Service dramatically improved tax compliance, increasing the number of income-tax payers from 2.6 million to 4.1 million people". In fact, tax revenue rose from 22.9 percent of GDP in 1994 to 27 percent of GDP in 2008, despite tax cuts in 2002/03 (South Africa, National Treasury 2002). We contend that the success secret can be attributed to the entrepreneurship orientation of the

agency leadership, which was then systematically transferred across the organisation, innovation, and a bit of risk taking.

3.5. A growth or improvement focus

The new leadership that drove the transformation had a clear focus to improve patronage by building a reputation of service excellence. The processes and structure of the agency were redesigned to improve their efficiency and improved communication with all their stakeholders, especially the clients which include taxpayers, tax practitioners and banks. Thus, the beginning of their journey to fostering a better relationship with business and citizens. The new service orientation was passed down the line (i.e entrepreneurial orientation) and the leadership employed motivation as a tool to achieve that. Despite the dire and constitutional need to change the staff demography, existing employees were assured that none would lose their job. This worked, different offices of the agency took the service orientation to new levels as will be shown a little later.

3.6. Innovations

In order to achieve its primary goal of increasing tax payers based, a lot of innovative changes were brought into place but it is worth noting that rather than emphasizing technology, the process started with people, then processes. The leadership found a way to keep and retain the dominantly white but skilled and experienced staff without a single job loss and brought in many people from the other demographics for balance. It harnesses its autonomy, allowing it to use a pay scale that does not conform to the public service standard to attract skilled and brilliant people from all sectors of the country. Processes reform was focused on making the experience for taxpayers friendlier and easier and more understandable. Some of the notable operational reforms include setting up contact points on the premises of large organisations during the annual tax filing periods and helping their staff out with the filing, setting up operations in libraries and city centers, fostering improved relationship with tax practitioners and banks, introduction of electronic filing system, as well as small acts like some branches offering queuing taxpayers tea and biscuits on a cold day. At the core of process reforms is the improvement of staff professionalism and integrity. People were allowed to innovate in their own ways, just like the tea serving branches mentioned earlier.

3.7. Risk taking

The risking taking dimension of the reforms is best captured in the following words of the agency's head:

"One of the things that we did as far as our people were concerned … we took huge bets on them—meaning we couldn't wait for 10 years for somebody to get 10 years' experience and then say 'Now you can take on this one simple position,'" Gordhan said. "So taking bets meant judging a person's character, level of commitment, and capability and placing them in a completely new position, which they might not have been adequately trained for. Most of them did marvelously; some didn't. But we learned by actually doing."

This goes to show that risking taking does not have to literarily be the same as in private entrepreneurship which is predicated majorly on the deployment of resources. And same goes for the application of other entrepreneurship concepts in the public sector, they can be applied within the proper context in the appropriate format.

3.8. The outcomes and success secret

As mentioned at the beginning, the transformation was a resounding success with about 129 percent growth in the tax payers register in a span of about 5 years (2009 to 2014), and tax revenue levels rose from R 114 billion in 1995 to R 900 billion in 2014. While it is often argued that the agency owes its success to the improved autonomy which it enjoyed compared to other public institutions which enable it to be more proactive, innovative, and flexible, the fact still remains that the management style or the managerial use of the autonomy is the main driver. When viewed surgically, it becomes obvious that the thinking behind the reforms is entrepreneurial, even if that is not formally espoused. The reforms were built around a combination of growth and efficiency mindset powered by far reaching innovative thinking and element of risk taking where and when required.

3.9. A process-based model

Sequel to the public service members' reorientation on the fundamental ideals

of the service or promotion of EO in a general context, we offer a simple framework (see Figure 1) that could gradually make the public sector or public enterprises genuinely entrepreneurial in thinking and approach to dealing with issues.

Resources Evaluation

- How else can we generate resources?
- How can we deploy the resources more efficiently?
- Who else do we need on-board that

Solving a New Problem or Exploiting a New

Method

- Can we do it another way?
- Can it be done better?
- How can it be done cheaper?

Outcomes & existing services

- What can we do to bring about a small change in quality?
- How can it be improved?
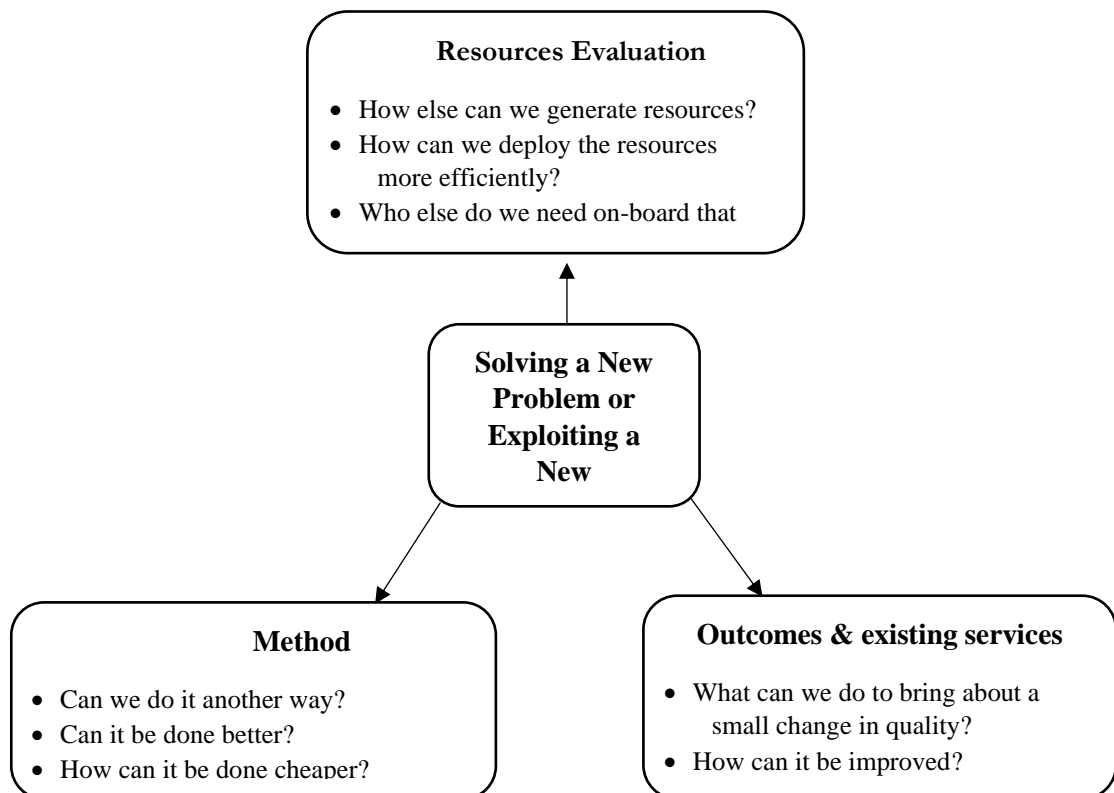
Figure 1: Proposed framework, developed by the researchers (2021)

The framework simply suggests that to improve its way of doing things continuously and innovatively, any new problem to be solved, an opportunity to be exploited (even if it is a routine activity in a public entity), an attempt should be made to answer the simple questions shown as much as possible. We hope that such a routine will gradually bring in the tenets of PE into such an entity over time.

4. CONCLUSION

The nature of the problem we were trying to solve is rooted in a misperception. The fact that public service was designed to be uncompetitive has given rise to

the mediocracy today. This orientation sets it apart from the private sector and entrepreneurship that thrives on competition. While the level of service delivery provided by public institutions in South Africa has not been satisfactory for decades, vital lessons can be drawn from entrepreneurial principles. While some may argue that the public sector is unique, they will agree that its role has changed over time. While some of the changes may be ideological, others are real and primarily driven by technology and international best practices, as we have seen in recent years. While not much has changed in how PIs conduct business, their clients are progressively asserting their claim to better services.

This study made an important contribution by evaluating whether inculcating an entrepreneurial mindset in the execution of public services would improve service delivery in the public sector and the types of entrepreneurial skills and strategies offered by public entrepreneurs in South Africa. We established that the principles of entrepreneurship in the form of PE is not antithetical to the nature and essence of the public sector and it also has the potential to help overcome many of the endemic challenges within PIs. Contrary to popular belief, PE is compatible with other management and governance styles in the public sector. In fact, regarding South Africa, the fundamental principles upon which the public sector is built are essentially the same as the core principles of PE. We also established that PE is nothing but the embracing of entrepreneurial orientation within the public sector through the entrenchment of innovation in identifying and exploiting new opportunities, using and sourcing resources, and deploying existing services or developing new ones.

We opined that a public entrepreneur is any individual, be it a political actor or an employee who strives to innovatively source resources or combine the existing resources in a new to create public value. The underscore fact is that it is not necessary that structural changes need to occur prior to the implementation of PE. This does not imply that building flexibility into PIs will not be value adding when viewed from the periscope of the PE aspirations. However, though we mentioned that an earlier study showed that PI managers claimed PE exists in the South African public sector, an in-depth study must ascertain the extent of the PE implementation in the country and its strategies.

5. RECOMMENDATIONS
PE could start with the introduction of change in institutions' environment or processes, starting a new institution from an existing one, or harnessing

opportunities in areas that the private sector may have neglected in order to create value for the public (Klein et al., 2010). When resources are allocated and used in a new way, through new idea generation, in a manner that is in consonance with public interest, it could be construed that innovation has occurred; this also holds true when institutions combine both public and private resources to achieve socio-economic values (Ostrom, 1990).

According to Brenier (2014), public enterprises could be viewed as different from those institutions that are politically controlled under bureaucracies, instead being an organisation that is autonomous in nature, with the necessary authority that could help to promote entrepreneurship. This was corroborated by Belloc (2014), who posited that publicly owned enterprises tend to encourage innovation in numerous ways, and that most governments have the capacity to finance big projects, as well as research initiatives, where innovative discoveries can be achieved without focusing mainly on profit-making, while at the same time ensuring loss is prevented, where possible; this affords PIs the courage to take on risky projects, thus giving them a competitive advantage (Belloc, 2014).

DISCLOSURE OF CONFLICT
The authors declare that they have no conflicts of interest.

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THE FINANCE-INEQUALITY NEXUS IN THE BRICS COUNTRIES: EVIDENCE FROM AN ARDL BOUND TESTING APPROACH

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THE FINANCE-INEQUALITY NEXUS IN THE BRICS COUNTRIES: EVIDENCE FROM AN ARDL BOUND TESTING APPROACH

Wissem Boukraine*

ABSTRACT

The aim of this paper is to investigate the long run relation between financial development and income inequality by exploring the shape of the curve that describes it for the BRICS countries namely Brazil, Russia, India, China and South Africa. We test the Greenwood and Jovanovich (1990) hypothesis by estimating an Autoregressive Distributed Lag (ARDL) model for the period 1980-2017. We consider three dimensions of financial development: depth, access and efficiency in both markets and institutions, while household income before taxes is the proxy for income inequality. Our findings confirm, except for South Africa, the existence of an inverted U-shaped curve relation in Brazil, Russia, India and China; which validates the Greenwood and Jovanovich (1990) hypothesis and the positive impact of financial development on income inequality. Our policy recommendation for South Africa is the necessity of improving its population's effective access, under regulation, to a range of formal financial services meeting their needs.

KEY WORDS: *Financial development, Income inequality, ARDL, BRICS*

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1. INTRODUCTION

Higher inequality slows down the accumulation of physical and human capital (Aghion et al., 1999), reduces labor productivity (Stiglitz, 2012) and hampers poverty reduction (Ravallion, 2004), which negatively affects the sustainability of economic growth. According to the World Bank site, the BRICS countries account for over a fifth of the global economy. These countries experienced a strong economic growth and an important financial development. According to

the World Bank's web site "where we work" section, until 2014, Brazil knew a decade of economic and social progress as income inequality dropped by 6.6%. Russia, despite a modest annual GDP growth, intends to halve the poverty rate to 6.6% by 2024 through investment on education, health, and infrastructure. India, before 2015, succeeded in reducing extreme poverty from 46% to 13.4%. China is the world's second largest economy; but the same does not apply to its income per capita as a quarter of the population is living below the upper-middle-income poverty line. Poverty declined in South Africa from 33.8% in 1996 to 18.8% in 2015, despite the weak economic growth the country experiences since the global financial crisis of 2008. BRICs economies implemented reforms to mobilize more savings, promote domestic investment and improve their attractiveness of foreign investment through modern financial regulations and policies (Chittedi, 2010). In fact, these countries not only reduced governmental intervention in the financial sector, but also privatized banks and enhanced market capitalization. According to the International Monetary Fund, 87% of the Brazilian population aged 15 and above are in contact with financial institutions in 2018, which makes the country hold one of the highest levels of bank account penetration, right behind South Africa and China, among emerging economies. Russia has a bank account penetration of 67.4% of adults, while India reached 65% in 2015.

The existence of a relation between financial development and inequality has been confirmed in theory but the empirical results are inconclusive, towards the nature of the impact, and can be categorized into three main hypotheses. Greenwood and Jovanovic (1990), proposed an inverted U-shaped hypothesis where income inequality increase at the early stage of financial development and then decrease. Galor and Zeira (1993) and Banerjee and Newman (1993) supported the finance–inequality narrowing hypothesis when financial markets are fully developed. Rajan and Zingales (2003) put forward the finance–inequality widening hypothesis where the development of financial sector increases income inequality. A developed financial system is supposed to reduce income inequality by providing funds, for the rich and for the poor, to invest (Galor and Moav, 2004); but financial imperfections affect the poor more than the rich and widen the gap between these two classes (Beck et al., 2007). Mixed empirical results characterize the finance-inequality nexus as several studies found a negative impact of financial development on income inequality (Hamori and Hashiguchi 2012; Mookerjee and Kalipioni 2010; Law et al. 2014), while others found a positive impact (Jauch and Watzka, 2016; Seven and

Coskun, 2016; Jaumotte et al., 2013).

In this paper we will apply the bound testing approach for cointegration through an Autoregressive Distributed Lag (ARDL) model. This technique was previously used by Shahbaz and Islam (2011) for Pakistan; Shahbaz et al. (2015) for Iran; Tiwari et al., (2013) for India and Destek al (2020) for Turkey, among others. To our knowledge this technique was rarely applied for the case of the BRICS countries, what motivates us to fill this gap is its ability to distinguish long-run relationships from short-run dynamics. The rest of the paper is organized as follows. Section 2 presents the literature review. Section 3 details the data and the methodology, while Section 4 contains the empirical results. The final section is dedicated for the conclusion.

2. LITERATURE REVIEW

There is an extensive recent literature on the finance-inequality nexus based on different estimation methods and proxies for financial development. Burgess and Pande (2005) found that financial inclusion reduced income inequality in India from 1977 to 1990. Clarke et al. (2006) using a panel data set of 83 countries over the period 1960-1995, found a positive impact of financial development on income inequality but no sign of an Inverted-U shaped curve. Bittencourt (2007) found a positive impact of financial development on inequality in Brazil from 1980 to the first half of the 1990s. Jalil and Feridun (2011) using an ARDL bounds testing approach to cointegration, in China over the period 1978-2006, found that financial development reduced income inequality. Tan and Law (2012) used the dynamic panel generalized method of moment's estimation for 35 developing countries over the period 1980–2000 and found a U-shaped curve with the narrowing of income inequality at the early stage of financial development. Ali and Noor (2014) using the Generalized Method of Moments for 7 developed countries over the period 1961-2011 found a negative impact of financial development on income inequality with no evidence of an inverted U-shaped curve. The ARDL bounds testing approach to cointegration was also applied by Giri and Sehrawat (2015) but for India over the period 1982-2012. They found that financial development worsens income inequality. Zhang and Chen (2015) found evidence of an inverted U-shaped curve between financial development and inequality in china from 1978 to 2013. Chen and Kinkyo, (2016) used the pooled mean group approach for 88 countries over the period 1961–2012 and found that financial development reduces inequality in the long-run. Using private credit to GDP as a proxy for financial development in a fixed-

effect two-stage least-squares estimation over the period 1960–2008, Jauch and Watzka (2016) found that financial development reduces income inequality in 138 developed and developing countries. Seven and Coskun (2016) using dynamic panel data methods for 45 emerging countries over the period 1987-2011, found no significant impact of financial development on income inequality. Kaidi and Mensi, (2016) found a positive impact of financial development on income inequality, in both linear and nonlinear context, for 138 countries over the period 1980-2012. They also detected an inverted U-shaped relationship in high income countries and a U-shaped relationship in the lower and middle income countries. Park and Shin (2017) found evidence for a U-shaped relationship between financial development and income inequality for 162 countries over the period 1960-2011. Azam and Raza (2018) using the same technique for the ASEAN-5 countries over the period 1989–2013, also found that financial development reduce inequality but only up to a certain level. The investigation of the nonlinear dynamics of the finance inequality nexus was conducted by many authors. Younsi and Bechtini (2018) found evidence of an inverted U-shaped curve with the generalized method of moment's estimation for the BRICS countries over the period 1995–2015. They used domestic credit provided by banking sector, domestic credit provided to private sector, broad money supply, and stock market capitalization as financial development indicators. Le et al., (2019) analyzed the impact of financial inclusion on income inequality in 22 transition economies from 2005 to 2015 and found a negative relationship. Through the literature many proxies for financial development were used: domestic credit to private sector–GDP ratio (Batuo et al., 2010; Law et al., 2014); the share of market capitalization-to-GDP ratio (Sehrawat and Giri, 2015; Park and Shin, 2017); and the deposit money banks as a share of GDP (Kim and Lin, 2011; Kappel, 2010).

3. DATA AND METHODOLOGY

3.1. Empirical model and data

All annual data used in this paper are from the World Bank except for the financial development index (Svirydzenka, 2016) which have been provided by the International Monetary Fund's financial system stability assessment reports and the GINI index, developed by Gini (1913), from the Standardized World Income Inequality Database (SWIID). Our sample covers the period 1980-2017 for the BRICS countries (Brazil, Russia, India, China and South Africa). The empirical model is as follow:

$$\ln INE = \alpha_0 + \alpha_1 \ln Y_t + \alpha_2 \ln INF_t + \alpha_3 \ln G_t + \alpha_4 \ln FD_t + \alpha_5 \ln FD_t^2 + \varepsilon_t \quad (1)$$

Where t and ε_t are the time period and residual term, respectively. All data $\ln INE$, $\ln Y_t$, $\ln INF_t$, $\ln G_t$, $\ln FD_t$ and $\ln FD_t^2$ are in natural log and designate respectively the $GINI$ index, the real gross domestic product GDP per capita, the consumer price index as a proxy for inflation, government expenditure's share in GDP, the financial development indicator and its square.

The GINI index represents household's income before taxes and it is a proxy for income inequality as it measures the extent to which household's income distribution within an economy deviates from a perfectly equal distribution.

The gross domestic product (GDP per capita: Y) is a proxy for the impact of financial development on steady–state income distribution.

Inflation (INF) affects the purchasing power but its negative impact is stronger on the poor and middle income classes than on the wealthy that can access financial services easier (Easterly and Fisher, 2001).

Government expenditure's share in GDP (G) is a proxy for government size; these expenses are supposed to reduce inequality but in case of corruption, it worsens income inequality because the wealthy are able to secure their access to financial services with their political links.

The financial development index (FD) covers depth, access and efficiency in both markets and institutions.

The square of financial development (FD^2) describes the non-linear relationship between financial development and income inequality.

The impact of financial development on income inequality is determined by the sign and significance of α_4 and α_5. Inequality narrows if $\alpha_4 < 0$ while $\alpha_5 = 0$ and widens if $\alpha_4 > 0$ while $\alpha_5 = 0$. We observe a U-shaped curve relation between financial development and income inequality if $\alpha_4 < 0$ and $\alpha_5 > 0$ but in the opposite case when $\alpha_4 > 0$ and $\alpha_5 < 0$ we have an inverted U-shaped curve relation.

3.2. Empirical methodology

To avoid inefficiency in the predictive power of cointegration techniques, all variables should be integrated of same order (Perron, 1989, 1997; Kim et al., 2004). If not, this is when the Autoregressive Distributive Lag Model or ARDL bounds testing approach to cointegration, developed by Pesaran et al., (2001), comes in handy.

$$
\begin{aligned}
\Delta \ln INE_t = \alpha_{0,1} &+ \sum_{i=1}^{n} \alpha_{1,i}\, \Delta lnINE_{t-i} + \sum_{i=1}^{n} \alpha_{2,i}\, \Delta lnY_{t-i} + \sum_{i=1}^{n} \alpha_{3,i}\, \Delta lnINF_{t-i} \\
&+ \sum_{i=1}^{n} \alpha_{4,i}\, \Delta lnG_{t-i} + \sum_{i=1}^{n} \alpha_{5,i}\, \Delta lnFD_{t-i} + \sum_{i=1}^{n} \alpha_{6,i}\, \Delta lnFD^2_{t-i} + \beta_1 lnINE_{t-1} \\
&+ \beta_2 lnY_{t-1} + \beta_3 lnINF_{t-1} + \beta_4 lnG_{t-1} + \beta_5 lnFD_{t-1} + \beta_6 lnFD^2_{t-1} + \varepsilon_t \quad (2)
\end{aligned}
$$

Where Δ and n are the difference operator and lag length, respectively. The hypothesis of no cointegration $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$ is tested against the alternative hypothesis $H_1: \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq 0$. If there is cointegration among variables, the long-run ARDL equation is estimated as follows:

$$
\begin{aligned}
\ln INE_t = \alpha_{0,1} &+ \sum_{i=1}^{p} \alpha_{1,i}\, \Delta lnINE_{t-i} + \sum_{i=1}^{q} \alpha_{2,i}\, lnY_{t-i} + \sum_{i=1}^{r} \alpha_{3,i}\, lnINF_{t-i} + \sum_{i=1}^{s} \alpha_{4,i}\, lnG_{t-i} \\
&+ \sum_{i=1}^{\tau} \alpha_{5,i}\, lnFD_{t-i} + \sum_{i=1}^{v} \alpha_{6,i}\, lnFD^2_{t-i} + \varepsilon_t
\end{aligned}
$$

Where p, q, r, s, τ, and v in equation (3) are the optimum lag for the series. The short-run coefficients of the variables are estimated with an error-correction model as follows:

$$
\begin{aligned}
\Delta \ln INE_t = \alpha_{0,1} &+ \sum_{i=1}^{p} \alpha_{1,i}\, \Delta lnINE_{t-i} + \sum_{i=1}^{q} \alpha_{2,i}\, \Delta lnY_{t-i} + \sum_{i=1}^{r} \alpha_{3,i}\, \Delta lnINF_{t-i} \\
&+ \sum_{i=1}^{s} \alpha_{4,i}\, \Delta lnG_{t-i} + \sum_{i=1}^{\tau} \alpha_{5,i}\, \Delta lnFD_{t-i} + \sum_{i=1}^{v} \alpha_{6,i}\, \Delta lnFD^2_{t-i} + \gamma ECM_{t-1} \\
&+ \varepsilon_t \quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad\quad (4)
\end{aligned}
$$

Where the coefficient γ of the error-correction term ECM_{t-1} is the speed of adjustment parameter, the sign of this coefficient should be negative and statistically significant.

3.2. Empirical results

The ARDL approach does not require testing for stationarity, in fact the series can have different order of integration as long as it is not I(2) or higher.

Table-1 Unit-Root Estimation

Countries	Variables	Level		1st Difference	
		Adj. t-Stat	Prob	Adj. t-Stat	Prob
Brazil	LINE	-0.959835	0.2950	-2.400071	0.0178**
	LY	-3.586369	0.0639*	-10.36730	0.0001
	LINF	-1.918301	0.6244	-4.471802	0.0057***
	LG	-1.516246	0.8058	-6.617051	0.0000***
	LFD	-2.836456	0.1941	-6.399406	0.0000***
	LFD^2	-2.966276	0.1549*	-6.444773	0.0000***
Russia	LINE	0.854953	0.8893	-1.681426	0.0871*
	LY	-6.352472	0.0012**	-2.878175	0.2111
	LINF	-6.256598	0.0002***	-7.305483	0.0000
	LG	-2.839959	0.1963	-6.584223	0.0001***
	LFD	-1.850618	0.6569	-6.116768	0.0001***
	LFD^2	-1.563781	0.7856	-5.920481	0.0002***
India	LINE	3.121451	0.9992	-1.674884	0.0883*
	LY	-9.021188	0.0000***	-31.74640	0.0000
	LINF	-2.651611	0.2614	-7.243394	0.0000***
	LG	-2.457524	0.3460	-4.119422	0.0133**
	LFD	-1.949206	0.6089	-5.014307	0.0013***
	LFD^2	-1.919012	0.6246	-4.980686	0.0015***
China	LINE	-1.995296	0.2874	-5.151061	0.0002***
	LY	-2.581294	0.2904	-6.903964	0.0000***
	LINF	-3.192195	0.1115	-4.009413	0.0282**
	LG	-2.385150	0.3808	-3.577944	0.0461**
	LFD	-2.120228	0.5171	-5.948175	0.0001***
	LFD^2	-2.018175	0.5714	-6.027681	0.0001***
South Africa	LINE	-1.768075	0.6985	-4.630248	0.0039**
	LY	-0.720159	0.9550	-7.641970	0.0002***
	LINF	-4.644021	0.0037**	-7.508038	0.0000
	LG	-4.336440	0.0076**	-6.470784	0.0000
	LFD	-2.979424	0.1513	-5.702546	0.0002***
	LFD^2	-2.970740	0.1537	-5.679135	0.0002***

*, **, *** denotes significance at 10%, 5% and 1%level, respectively.

The results of the Phillips-Perron (1988) unit root test reported in Table 1 show that income is stationary in level for Brazil, Russia and India, inflation is

stationary in level for Russia and South Africa; while government size is stationary in level only in South Africa. The other series are integrated of order one for all BRICS countries. Before applying the ARDL bounds testing approach, first we check optimal lag order for each country with the final prediction error (FPE), the Akaike information criterion (AIC), the Schwarz information criterion (SC) and the Hannan-Quinn information criterion (HQ). It is important to determine the exact number of lags to be included as regressors as too many lags increase the forecast error while omitting lags may result in an estimation bias.

Table-2 Lag Length Selection

Lag	LogL	LR	FPE	AIC	SC	HQ
Brazil						
2	94.666	5.634*	2.920*	-7.623*	-7.278*	-7.536*
Russia						
1	55.789	15.917*	0.000*	-6.224*	-5.934*	-6.209*
India						
2	125.19	10.396*	2.240*	-7.874*	-7.552*	-7.775*
China						
1	87.928	74.185*	6.410*	-6.827*	-6.533*	-6.749*
South Africa						
1	99.637	44.545*	7.970*	-8.918*	-8.619*	-8.853*

The results in the table above indicate the optimal choice is one lag for Russia, China and South Africa, while it is two lags for Brazil and India. Next, we apply the ARDL cointegration bound test to check the existence of long run relationship.

Table-3 Results of the ARDL cointegration and diagnostic tests

|	Brazil	Russia	India	China	South Africa
Lag order	2,1,0,1,0,0	1,1,0,1,0,1	2,1,0,2,0,0	1.0.0.0.0.0	1.0.0.1.0.0
F-stat	2.97	3.43	2.08	19.34	1.26
Critical values	10%	5%	10%	1%	-
Lower bound	1.81	2.14	1.81	2.82	-
Upper bound	2.93	3.34	2.93	4.21	-
χ^2NORMAL	1.152 (0.562)	0,046 (0.977)	0,725 (0,696)	5.846 (0.054)	0.020 (0.990)
χ^2SERIAL	1.044 (0.418)	0.052 (0.841)	0.029 (0.971)	0.766 (0.394)	0.818 (0.380)
χ^2ARCH	0.831 (0.516)	0.434 (0.528)	0.710 (0.503)	4.126 (0.057)	0.449 (0.515)
χ^2RAMSEY	0.729362 (0.5273)	0.291279 (0.6435)	3.573045 (0.0558)	0.227109 (0.6397)	0.164386 (0.6909)
CUSUM	stable	stable	stable	stable	stable
CUSUMQ	stable	stable	stable	stable	stable

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CUSUM	stable	stable	stable	stable	stable
CUSUMQ	stable	stable	stable	stable	stable

Diagnostic tests in Table 3 indicate the absence of serial correlation or heteroskedasticity in the residuals with the Breusch–Godfrey LM test and the ARCH test, also the result of the Jarque–Berra statistic confirms the normality behavior. The correct functional form is supported by the Ramsey–Reset test, while the stability properties are examined with CUSUM and CUSUMQ tests shown in Figure 1. In addition, as shown in Table 3, the F-statistic exceeds the upper bound for Brazil, Russia and China at 10%, 5% and 1% respectively, while it falls between the lower and upper bound for India at 10%. Therefore, we conclude that there is a long-run relationship between variables for all BRICS countries except South Africa, where the F-statistic is below the lower bound for all critical values.

Figure-1 the cumulative sum and the cumulative sum of the squares of recursive residuals
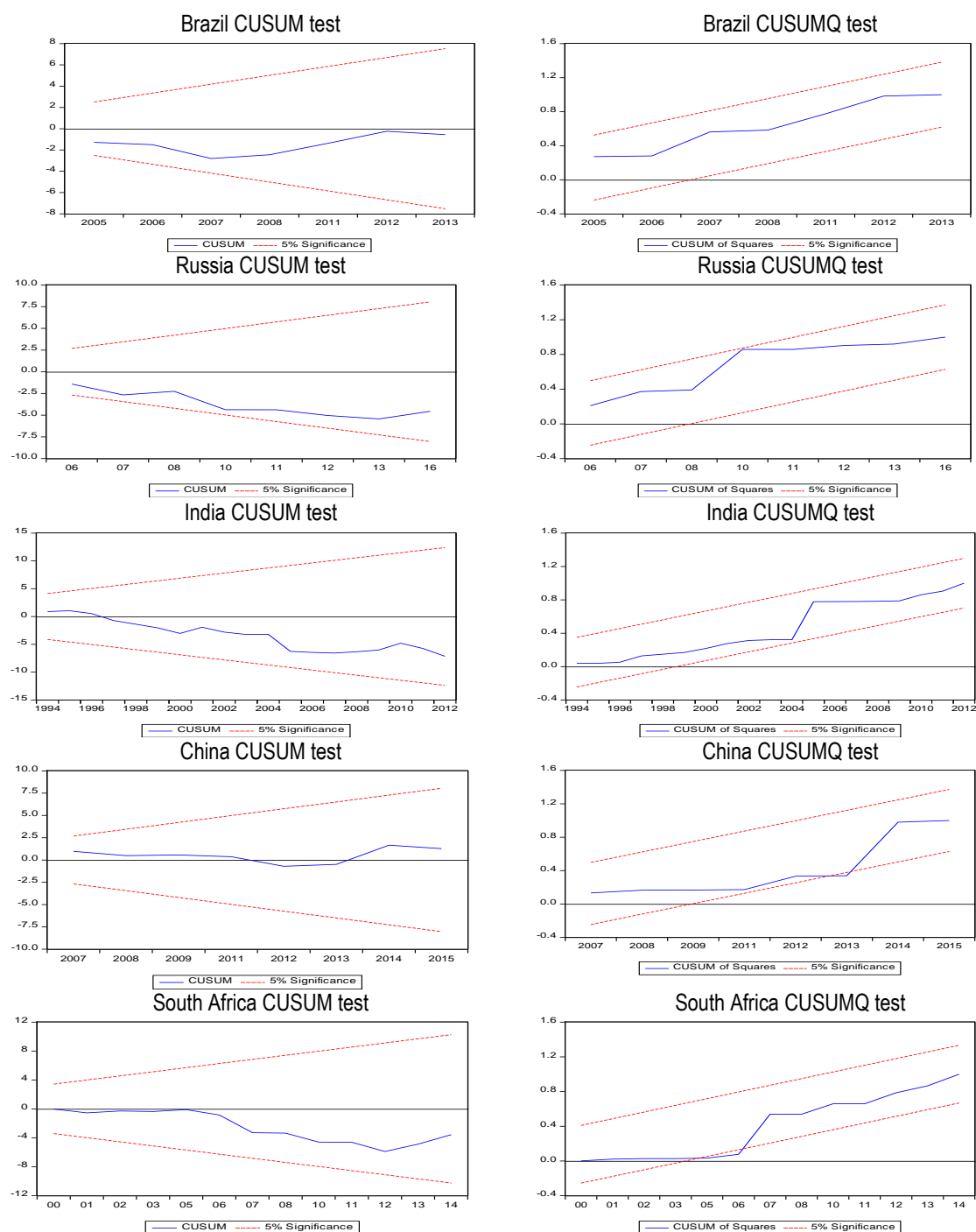
Next, we examined the short-run and long-run effects of income, inflation, government size and financial development on income inequality. In the short run, GDP per capita (Y) has a positive impact on Russia and a negative one in India, government expenditure (G) has a negative impact in both Brazil and

India; and a positive one in Russia, while an increase in financial development (FD) affects income inequality negatively in Russia.

Table-4 The results of the short run and long run

	Brazil	Russia	India	China	South Africa
Lag order	2,1,0,1,0,0	1,1,0,1,0,1	2,1,0,2,0,0	1.0.0.0.0.0	1.0.0.1.0.0
Short-run results					
$\Delta LINE_{t-i}$	0.563 (0.001)	-	0.508 (0.000)	-	-
ΔLY_{t-i}	-	0.030 (0.003)	-0.003 (0.006)	-	-
$\Delta LINF_{t-i}$	-	-	-	-	-
ΔLG_{t-i}	-0.024 (0.033)	0.252 (0.006)	-0.053 (0.035)	-	-
ΔLFD_{t-i}	-	-	-	-	-
ΔLFD^2_{t-i}	-	-0.165 (0.005)	-	-	-
ECT (-1)	-0.035 (0.000)	-0.906 (0.005)	-0.035 (0.000)	-0.058 (0.000)	-
Long-run results					
$LINE_t$	-	-	-	-	-
LY_t	0.080 (0.365)	-0.003 (0.850)	-0.181 (0.129)	0.052 (0.243)	-
$LINF_t$	-0.016 (0.605)	-0.026 (0.249)	0.015 (0.829)	-0.077 (0.063)	-
LG_t	0.258 (0.490)	0.581 (0.044)	0.384 (0.363)	0.124 (0.821)	-
LFD_t	2.587 (0.000)	1.205 (0.007)	1.484 (0.020)	2.419 (0.052)	-
LFD^2_t	-0.462 (0.008)	-0.173 (0.004)	-0.166 (0.081)	-0.396 (0.080)	-

On the long run, economic growth GDP per capita (Y) has a positive impact on income inequality in Brazil and China but not in Russia and India. Inflation (INF) affects negatively income inequality (INE) in Brazil, Russia and China. On the other hand Inflation affects positively India Government expenditure (G) reduces income inequality in all countries as expected except South Africa. Financial development (FD) has a positive impact on income inequality in Brazil, Russia, India and China. For the case of South Africa no long run relationship has been found. The coefficients signs of financial development (FD) and the square of the financial development (FD^2) suggest the existence of an inverted U-shaped curve relation in Brazil, Russia, India and China and it confirm the validity of the GJ hypothesis which is the existence of a non-linear relationship between financial development and income inequality. Therefore income inequality

increases at the early stage of financial development and then decrease. Our results are similar to those of Younsi and Bechtini (2018) who used a different approach.

5. CONCLUSION

Increasing inequality not only raise social pressure but it also keep any economy stuck in the middle-income group despite its strong economic growth. The largest of the middle-income economies are the BRICS countries (Brazil, Russia, India, China and South Africa). In this paper, we investigated the finance-inequality nexus and the shape of the curve that describes it for the BRICS countries by applying the bound testing approach for cointegration through an (ARDL) model. The bound testing approach for cointegration was useful to assess for the existence of long run relation since we used small samples. Our results for the period 1980-2017 confirm the existence of a long run relationship for all BRICS countries except South Africa and the existence of an inverted U-shaped curve relation in Brazil, Russia, India and China; this validates the GJ hypothesis. Our results are in line with previous works like Younsi and Bechtini (2018) even thou we used a different empirical approach based on both short-run and long-run relationships.

But since financial imperfections affect the poor more than the rich and widen the gap between them, financial exclusion should be reduced in order for financial development to boost economic growth without raising inequality. This can be achieved first by promoting financial literacy on one hand and developing customized financial products provided through a robust and efficient digital network on the other hand. Secondly, by developing a partially pro-poor financial system to reduce income inequality which can be achieved with relaxed interest on micro credits for example.

DISCLOSURE OF CONFLICT
The author declares that he has no conflicts of interest.

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TIERS OF GOVERNMENT SPENDING AND PRIVATE CONSUMPTION IN NIGERIA

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TIERS OF GOVERNMENT SPENDING AND PRIVATE CONSUMPTION IN NIGERIA

Bassey Okon Ebi* & Sunday Uwem Etim

ABSTRACT

The paper examines the relative impact of federal and state level expenditures as well as capital and recurrent expenditures on private consumption in Nigeria for the period 1981 to 2017. Auto Regressive Distributed Lag estimation method was applied to estimate the desired relationship among the variables. Results showed that on average: federal government spent more than the 36 state governments over the period of this study; both federal government and aggregate state government expenditures impacted positively and significantly on private consumption, with federal government expenditure exerting greater impact than aggregate state government expenditures; aggregate recurrent expenditure crowd-in aggregate private consumption while aggregate capital expenditure crowd-out aggregate private consumption. The paper concludes that expansion in government spending seemed to be effective and generate crowding in effect more at the country level than states level. The stronger impact of the federal spending over states may be a reflection of the suitability of federal government spending over the heterogeneous nature of production and consumption patterns of states in Nigeria.

KEY WORDS: *Tiers of Government, Capital Expenditure, Recurrent Expenditure, Consumption, Nigeria*

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1. INTRODUCTION

Consumption is the largest components of Gross Domestic Product (GDP) of any economy and constitute essential variable for the analysis of economic-wellbeing of citizenry. For instance, Nigeria's private consumption accounted for 79.9 % of its GDP in 2017 (National Bureau of Statistics, NBS, 2018). This implies that, identifying the factors that affects consumption is important in planning sound economic policies that will improve economic wellbeing of the

people.

In spite of the importance of consumption in determining economic well-being of a country, trends in private consumption expenditure in Nigeria are mixed. Specifically, though Nigeria's private consumption accounted for 79.9 % of its GDP in 2017, compared with 81.5 % in the previous year 2016, Nigeria's private consumption contribution to GDP ratio was on average 54.8 % between 1981 and 2017. The data reached an all-time high of 81.5 % in 2016 and a record low of 9.8 % in 1981 (NBS, 2018).

Fiscal policy, specially expenditure policies of governments can influence a great number of macroeconomic variables including consumption spending. However, trends in government total expenditure compared to consumption in Nigeria between 1981 and 2017, except in 1994 and 2000, increased consistently. During this period, the growth in total expenditure in absolute term was on the average about 29.1%. However, much of the growth in government expenditure was in the area of recurrent expenditure. On the average, the recurrent expenditure accounted for a larger proportion of total expenditure during the reference period. Recurrent expenditure, in nominal term, accounted for about 70% of total expenditures while capital expenditures accounted for about 30%. As a percentage of GDP, total federal government expenditure over the period of this study ranged between the lowest level of 10.2 % in 1996 and the highest level of 29.4% in 1981, averaging 19.6% for the period between 1981 and 2017 (NBS, 2018; Ebi & Nyong, 2021; Ebi, 2018; Ebi & Imoke, 2017;and Ebi & Ayodele, 2017).

Again linking this important component of aggregate income (consumption) to spending policies of government has created intense debate in both theory and empirics. On the theoretical ground, there are three major contending schools in this debate namely: The Keynesian school (the crowding-in hypothesis), the neoclassical school (the crowding-out hypothesis) and the Ricardian equivalence school. According to the Keynesian school, expansionary fiscal policy through expansion on government spending increases (crowds-in) both private investment and private consumption. On the other hand, the neoclassical school (the crowding-out hypothesis) contends that financing through an increase in government expenditure will reduce (crowds-out) private consumption. While the Ricardian equivalence school holds that, government spending, regardless the way of financing, does not affect household

consumption as household internalize government's budget constraint into their own life time budget constraints (Mahumd & Ahmed, 2012; Bouakez & Rebei, 2007; and Linnemann, 2006).

On the empirical ground, there is no clear evidence on the impact of government spending on private consumption. A number of empirical studies found a positive impact of government spending on private consumption (Akpan & Udofia, 2016; Arab & Haghighat, 2014; Onodje, 2009; Schclarek, 2004). On the opposite side, other studies found support for the substitutability between government spending and private consumption (Keho, 2019; Mahmud & Ahmed, 2012; and Coenen & Straub,2005).

These literature points towards the importance of the relationship between government spending and private consumption, however, this area of research is relatively understudied for African countries like Nigeria. Again, the few studies in the context of Nigeria like Akpan & Udofia (2016) and Onodje (2009) used expenditure from only federal government. Their results may be misleading especially when one considers the huge spending from state level in Nigeria.

This paper presents two main contributions with respect to literature: firstly, it disaggregated the effect of government spending on private consumption in Nigeria into two levels: federal government spending and aggregate state government spending. The paper also disaggregated aggregate government expenditure into productive (capital) and unproductive (recurrent) government spending in order to identify the one with a greater impact on private consumption. The pertinent question of concern here is how does private consumption respond to capital and recurrent government expenditures and to different levels of government spending in Nigeria.

2. LITERATURE REVIEW

While significant amount of studies exists investigating the impact of aggregate government expenditure on private consumption spending, very few exit on how different level of government expenditures affect aggregate consumption as well as how productive and unproductive government spending affects aggregate consumption. Accordingly, the empirical literature here is divided into three subsections namely: empirical literature on aggregate government expenditure and consumption spending, empirical literature on levels of government

expenditure and consumption spending, and empirical literature on capital and recurrent government expenditure and consumption.

2.1. Empirical literature on impact of Aggregate Government Expenditure on Consumption

Notwithstanding the fact of increased interest of researchers in the influence of government spending on private consumption and its effectiveness as tool to economy stabilization, both theory and empirical evidence does do not speak with one voice and, depending on the methodology used, provides different results. While most of reviewed studies find positive response of private consumption to increase in government spending (Akpan & Udofia, 2016; Arab & Haghighat , 2014; Onodje, 2009; Schclarek, 2004; Perotti, 1999; Giavazzi and Pagano,1996; etc). In contrast (Keho, 2019; Mahmud & Ahmed, 2012; Coenen & Straub,2005; etc) showed negative response of private consumption to government spending expansion.

Specifically, Akpan & Udofia (2016) examined the effect of economic policies on private consumption expenditure in Nigeria from 1981 to 2014. The study employed the fiscal and monetary policy variables (government expenditure and broad money supply) in order to establish this relationship and adopted the Ordinary Least Square (OLS) method of estimation. The result indicated a positive and significant relationship between government expenditure and private consumption expenditure in Nigeria.

Khan, et al, (2015) investigated the impact of government spending on private consumption in China using annual data from 1985 to 2013. The study used the Autoregressive Distributed Lag (ARDL) approach to estimate the long and short run estimates of the model. The results of study revealed that government spending has positive relationship with private consumption in China. Moreover, government spending has almost the same impact on private consumption in both long and short run, but the coefficient of government spending is statistically insignificant in the short run.

Arab & Haghighat (2014) employed annual data of 22 OECD countries spanning 1998 to 2012 to investigate the relationship between government spending and private sector consumption. The results of the model estimation using fixed effects method, indicated a positive effect of government spending on private

consumption. Hence, keynesian hypothesis of positive relationship and complementary (Crowding-in) between these two variables for the OECD economies was accepted.

Ezeabasili & Egbunike (2014) examined the effect of fiscal deficit on private consumption in Nigeria, utilizing data from 1970 to 2006. The study employed the ordinary least squares (OLS) estimation method based on the error correction model. Empirical result showed that government consumption and fiscal deficits have depressive effect on private consumption in Nigeria. Specifically, a one percent increase in fiscal deficit and government expenditure reduce private consumption by approximately 0.3 percent and 0.7 percent, respectively.

Alwagdani (2014) examined the asymmetric effects of exogenous fiscal policy shocks on the level and grow rate of private consumption in Saudi Arabia for the period spanning from 1973 to 2011. The Structural Vector Autoregression (SVAR) estimation technique was used as the estimation method. The result showed that private consumption increases in the face of both expansionary and contractionary shocks. Overall, the evidence from this study supports the existence of crowding-in effect of public spending on private consumption, which supported the Keynesian crowding-in hypothesis.

Onodje (2009) examines whether government expenditure shocks and tax revenue shocks have Keynesian effects in Nigeria. Data spanning the period 1980 to 2004 were used to estimate a Vector Error Correction Model. The estimation results showed that both government consumption and tax revenue shocks had Keynesian effects in Nigeria.

Schclarek (2004) used yearly data between 1970 and 2000 for thirty-eight countries, of which half were industrialized and half developing countries and indicated that government consumption shocks had Keynesian effects for both industrial and developing countries. But in the case of tax shocks, the evidence suggested that they do not have any effect on private consumption.

Perotti (1999) Used methodology that involves a panel of Euler-type consumption functions for 19 OECD countries over the period 1965-1994. He found that government expenditure shocks had Keynesian effects on private consumption under a fiscal regime of low debt; but a fiscal regime of high debt

led to non-Keynesian effect on private consumption expenditure.

Giavazzi & Pagano (1996) Using an Error Correction Consumption Model and Panel Regression for 19 OECD countries over the period 1970 -1992, found that government spending, taxes and transfers had clear impact on private consumption expenditure. They found that a dollar rise in taxes increases private consumption by fifteen to twenty cents.

All the above literature reviewed favoured Keynesian theory/framework. On the contrary, Keho (2019) examines the impact of government spending on household consumption for the Economic Community of West African States (ECOWAS), using the Common Correlated Effect Mean Group (CCEMG) estimator that accounts for both parameter heterogeneity and cross-sectional dependence. The study provides various pieces of evidence through whole-panel and country-level analyses. The panel estimates indicated that government consumption had, on average, a negative effect on private consumption, implying that government and private consumption are substitutes. Country-level results reveal, however, considerable heterogeneity in the degree of substitutability across countries. They show crowding out effects in six countries, crowding in effects in one country and no significant effect in five countries. Keho (2019) concluded that government consumption is not a good instrument in stimulating aggregate demand and economic growth in ECOWAS countries.

Mahmud & Ahmed (2012) examines public-private consumption relationship for Bangladesh economy through the lens of economic theories using the Cointegration and Error Correction modeling strategies to tackle the problem of non-stationary data. Two different variant of cointegration technique were employed and in either case a valid long run positive relationship was found. However, the Error Correction Model indicated an inverse relationship between public and private consumption in the short run. The test for Granger causality showed no long run causal relationship between government spending and household consumption. In general, their finding goes with the Barro-Ricardian equivalence hypothesis of government spending that household consumption is unrelated with government consumption decision in the long-run.

Kwan (2006) empirically investigated the relationship between government spending and private consumption for East Asia countries using panel co-

integrating regression. The results of panel regression show that on average government spending and private consumption are substitute in East Asia, however, the cross-section analysis revealed that the value of elasticity of substitute is moderate for China, Hong Kong, Japan, and Korea, while high for Malaysia and Thailand and zero for Philippines. However, in case of Indonesia and Singapore it was complementary.

Coenen & Sraub (2005) examined effects of government spending shocks on private consumption within an estimated New-Keynesian model of the euro area featuring non-Ricardian households. Employing Bayesian inference methods, they showed that there was only a fairly small chance that government spending shocks crowd in consumption, mainly because the estimated share of non-Ricardian households is relatively low, but also due to the large negative wealth effect induced by the highly persistent nature of government spending shocks.

2.2. Empirical literature on impact of levels of government expenditure and consumption

Agibaeva (2015) examined the response of private consumption to increase in government spending in Norway using both VAR and ARDL estimation techniques and quarterly data from 1995 to 2014. In addition, the paper considers government spending on three scale levels: general, central and local government expenditures. The results of the paper prove the presence of crowding in effect in scale of general government for long-run period, having small decrease in the short run, which is consistent with theory and model. The results of VAR estimation for general government spending completely match the estimated results of ARDL model. For central government spending, the response of private consumption was positive, small for short-run and strong for long run. While VAR estimation for central government spending predicts small decline in the first quarter, but sufficient increase after second quarter. However, the response of private consumption to increase in local government spending was estimated to be negative both for short-run and long run periods. The author pointed that, the negative results may be due to inappropriate method of estimating local government spending expansion. The author concluded that fiscal policy stimulation through expansion in government spending turns to be effective and generate crowding in effect only for country level, while for lower tiers of government it may cause drastic decrease in private consumption causing crowding out effect.

Guo-ping, et al, (2007) conducted panel cointegration analysis among different regions in China and estimated intertemporal and intratemporal substitution between government spending and private consumption. As the result, they found prevailing degree of complementarity in 20 out of 29 regions and very weak degree of substitution in 4 regions of China.

The present study intends to follow Agibaeva (2015) approach but applied to Nigeria. The problem of inappropriate method of estimating local government spending expansion would be avoided since this work intend to use federal and state government expenditure data which are really available. In addition, aggregate expenditure will be divided into capital and recurrent expenditures.

2.3. Impact of capital and recurrent government expenditures on private consumption

Asimakopoulos & Lorusso (2016), examined the effect of capital and recurrent public spending on private consumption using US quarterly data for the sample period 1963 to 2013 and a new Keynesian model incorporating price and wage rigidities, monetary policy and various fiscal rules. They found that price and wage rigidities along with a positive shock to the part of public spending that is productive were sufficient to boost private consumption. Moreover, they showed that the initial positive reaction of private consumption was adequate to create a positive present value consumption multiplier for more than five years.

Samadi & Seyadi (2013) divided government spending into two groups based on Barrow and showed that in the first group, government spending (spending affecting utility) and private consumption are complementary in the short run and independent in the long run. The second group spending (spending and services as inputs in the process of the private sector productions) in the short and long runs, has a direct relationship with private consumption (complementary).

Leeper, et al, (2010) used a real business cycle model with productive government spending to assess the effects of various delays on the implementation of pre-announced public spending in the U.S. economy. Their findings suggest that the introduction of non-Ricardian agents is not a necessary condition causing a positive response in private consumption. On the contrary, the assumption of a sufficiently productive government capital may lead to the crowding-in effect on private consumption.

Kraipornsak (2010) categorized government spending is into recurrent spending and capital spending in Thailand. using the Vector Error Correction Mechanism, he found no effect of government capital spending on private consumption while the government recurrent spending had negative effect on consumption.

Linnemann (2006) employed a new Keynesian model to the US economy between 1960 2003 and shows that, under a specific non-separable utility function with a sufficiently strong link between marginal utility of consumption and labour, it is possibile to find a crowding-in effect on private consumption from an increase in government spending, even if the latter is not productive. The strong assumption made by this author is that a lump-sum tax is residually determined via the government budget constrain, thus moving away from any use of debt and distortionary taxation or even any kind of fiscal rules.

Following the empirical work of by Leeper et al. (2010); and Asimakopoulos & Lorusso (2016) this study also split the overall government spending to productive (capital) and unproductive (recurrent) expenditures in the context of Nigeria.

The summary of the review of previous empirical studies in the preceding section showed that, while significant amount of studies exists investigating the impact of aggregate government expenditure on private consumption spending globally, very few exit on how different level of government expenditures affect aggregate consumption as well as how capital and recurrent government spending affects aggregate private consumption.

In the context of Nigeria very, few studies have been conducted in Nigeria on the impact of government expenditure on private consumption. The few studies in the context of Nigeria used expenditure from only federal government. As earlier stated, the results may be misleading in the light of huge spending from states in Nigeria. By considering government spending from both federal and state governments, the study identified which tiers of government spending is more effective in stimulating aggregate private consumption in Nigeria, as well as identifying the relative effectiveness of capital and recurrent government spending in influencing aggregate private consumption in Nigeria.

3. MODEL AND METHOD

3.1. Model

The empirical model for this study is anchored on eclectic theoretical approach. The model encompassed three main theories namely the Keynesian theory of absolute income (the crowding-in hypothesis), the neoclassical theory (crowding-out hypothesis) and the New Keynesian live cycle hypothesis. From Keynesian theory of absolute income, consumption depends on current income

$$Ct = a + bYt \tag{1}$$

Where:

C_t = current consumption expenditure

a = autonomous consumption

b = marginal propensity to consume.

Y_t = income.

From Keynesian Income determination model,

$$Y_t = Ct + It + Gt + NX \tag{2}$$

Thus,

$$Ct = Y_t - It - Gt - NX \tag{3}$$

That is:

$$C_t = f(Y_t, I_t\ G_t, NX_t) \tag{4}$$

Where:

C_t = Aggregate private consumption now (APC)

Y_t = Aggregate income proxy by GDP.

I_t = Aggregate investment proxy by Gross Fixed Capital Formation now (AGFC)

NX_t = Net export.

G_t = Total Government Expenditure which is firstly divided into federal government expenditure (FGEX) and aggregate state governments expenditure (ASGEX). This is to enable us analyze the response of private consumption on increase in government spending shocks in two different levels: federal government and aggregate state governments spending. This will allow us to decide whether expansionary fiscal policy in terms of increase in government spending is effective in stimulating aggregate household`s consumption and which of them is more effective.

Secondly Aggregate expenditure from both federal and state governments are divided into aggregate capital expenditure (ACAPEX) and aggregate recurrent expenditure (ARECEX).

Accordingly, equation (4) becomes

$$APC = f(FGEX, ASGEX, ACAPEX, ARECEX, GDP, AGFC, NX, U) \qquad (5)$$

Equations 5 in its econometric linear form can be specified as follows.

$$APC = \alpha_0 + \alpha_1 FGEX + \alpha_2 ASGEX + \alpha_3 ACAPEX + \alpha_4 ARECEX +$$
$$\alpha_5 GDP + \alpha_6 AGFC + \alpha_7 NX + u \qquad (6)$$

Where:

APC = Aggregate private consumption (in million #)

FGEX = federal government expenditure (in billion #)

ASGEX = Aggregate state governments expenditure (in billion #)

ACAPEX = Aggregate capital expenditure (in billion #)

ARECEX = Aggregate recurrent expenditure (in billion #)

GDP = proxy for Aggregate National income (in billion #)

AGFC = Gross Fixed Capital Formation as a proxy for aggregate investment (in million #)

NX_t = Net export (in billion #)

α_0 is the constant term.

α_1 to α_7 are the coefficients of the respective variables in the equation to be estimated; and U is the random error term.

The a priori expectations concerning the signs of the coefficients of variables in the model is that $\alpha_0 > 0$; α_1, to α_4 may be $><0$ depending on Keynesian or Neoclassical theory. , α_5 to $\alpha_7 > 0$.

3.2. Data sources and collection

The dataset are secondary time series data sourced from the Secondary sources mainly from Central Bank of Nigeria statistical bulletin (Various years). The Data spanned 1981 to 2017.

3.3. Model estimation procedures

This study employed several estimation techniques and procedures in estimating and testing the specified equations. The first procedure in the estimation of the equations is the determination of the stationarity properties and the integrating order of the variables. The unit root tests are conducted to

determine the integrating order of the variables in the specified models. These tests are necessary given the time series nature of the variables captured in this study. The unit root was tested using the Augmented Dickey-Fuller (ADF) test and the Phillips-Perron (PP) test.

The study employed Autoregressive Distributed Lag (ARDL) techniques. ARDL have been used for decades, but it gained wide acceptance relatively recently. Pesaran and Shin (1998), Pesaran (2001) popularized ARDL by showing its usefulness as very valuable tool for testing long-run relationship between economics variables. According to Pesaran and Shin (1998) and Pesaran (2001), there are several advantages of ARDL model. First of all, it is suitable regardless of interaction order, which of I(0) and I(1), however we have to be sure that none of our variables are in I(2). Second, ARDL employs a very simple set-up of single equation that makes the process of implementation and interpretation very straightforward and smooth. Third, variables can contain different lag-length that is not necessarily equal. In addition, considering small sample estimations, ARDL gives more robust results.

4. RESULTS AND DISCUSSION OF FINDINGS

4.1. Results of the Descriptive Statistics

The result of the descriptive statistics tests conducted to check the performance of the variables using measures of central tendencies and some measures of dispersion is summarized in Table 1. From table 1, the mean value of aggregate private consumption (APC) was   #212455.1 million over the period 1981 to 2016. During the same period, the average expenditure by federal government (FGEX) was #1431.198 billion, while average aggregate expenditures by state governments (ASEXP) stood at # 1118.422 billion. the mean aggregate capital expenditure (ACAPEX) and mean aggregate recurrent expenditure (ARECEX) s from both federal and state governments stood at # 856.8409 billion and # 1676.027 billion respectively. This results points to the fact that, on average, federal government of Nigeria spent more than the 36 states and the FCT, while the mean aggregate capital expenditure (ACAPEX) from both federal government and states was less than the mean aggregate recurrent expenditures.

A further examination of the descriptive statistics revealed that aggregate private consumption (APC) had a minimum amount of #35323.7 million, while its

maximum value was #436267.8 million. In the same manner, the minimum value of federal government expenditure (FGEX) was #9.636500 billion while its maximum value was #4813.383 billion. In the same period of evaluation, the minimum value of aggregate state government expenditures (ASEXP) was #5.774700 billion, while its maximum value was #4046.800 billion. Aggregate capital expenditure had a minimum value of # 6.498700 billion and a maximum value of #2998.796 billion, while aggregate recurrent expenditure (ARECEX) was minimum at #9.457700 billion and maximum at # 6577.833 billion.

The analysis of the deviation of the variables from their true values showed that the standard deviation of the variables during the period were as follows: #109505.1 billion for aggregate private consumption; #1687.540 billion for federal government expenditure; # 1442.027 billion for aggregate state government expenditures; # 997.3164 billion for aggregate capital expenditure and #2147.490 billion for aggregate recurrent expenditure.

Examination of skewness showed that the distributions of the variables were all positively skewed. Analysis of kurtosis reveals that the distributions for gross domestic product was leptokurtic, while the rest of the variables were platykurtic. The high values of Jarque-Bera statistics and their low probability values (except for aggregate private consumption (APC) variable) indicate that the residuals in the model estimated were normally distributed.

Table 1: Descriptive statistics

	APC	FGEX	ASEXP	ACAPEX	ARECEX	GDP	AGFC	NX
Mean	212455.1	1431.19	1118.4	856.84	1676.02	22393.3	13.24	1.20E+10
Median	206615.2	594.082	249.41	387.99	402.787	4948.17	6.600	4.53E+09
Maximum	436267.8	4813.38	4046.8	2998.7	6577.83	101489.5	41.21	4.59E+10
Minimum	35323.70	9.63650	5.7747	6.4987	9.45770	144.831	2.100	-6.58E+09
Std. Dev.	109505.1	1687.54	1442.0	997.31	2147.49	31287.3	12.607	1.49E+10
Skewness	0.147881	0.88737	0.9620	0.8849	1.03140	1.32721	1.0061	0.982032
Kurtosis	2.613563	2.20265	2.3047	2.2850	2.56114	3.38578	2.601	2.521072
Jarque-Bera	0.35521	5.678302	6.278326	5.465661	6.671673	10.79226	6.3121	6.130383
Probability	0.83727	0.058475	0.043319	0.065035	0.035585	0.004534	0.0425	0.046645
Sum	7648384.	51523.14	40263.18	30846.27	60336.98	806161.8	476.7100	4.31E+11
Sum Sq. Dev.	4.20E+11	99672706	72780420	34812400	1.61E+08	3.43E+10	5563.467	7.76E+21
Observations	36	36	36	36	36	36	36	36

Source: Author's computation, 2019

4.2. Econometrics results

4.2.1. Unit root tests results

The Augmented Dickey-Fuller (ADF)) tests was employed in testing for unit root or stationarity of the data. For the data or series to be stationary, then its calculated t-statistics value must be negative and greater than the critical value at least 10% level of significance. The test results as shown in table 2 revealed that the variables were not stationary at level except GDP. When the variables underwent first difference operation, they were all found to be stationary after first difference and are integrated of order one 1(1) except GDP with 1(0). Hence, apart from GDP, all other variables were not stationary at level. This informed our choice of ARDL for estimation of the model, since ARDL approach is applicable irrespective of the order of integration i.e. I(0) and I(1) except when 2(1) is present in the series.

TABLE 2: Augmented Dickey-Fuller (ADF) Unit Root Test Result

Variables	Level	1st Difference	Order of Integration
APC	-0.877623	-2.763513*	I(1)
FGEX	-2.253661	-13.11417***	I(1)
ASGEX	-0.457509	-4.680668***	I(1)
ACAPEX	-0.929382	-4.930729***	I(1)
ARECEX	3.381927	-4.024387***	I(1)
GDP	-2.962746**	-	I(0)
AGFC	-0.411759	-2.651599*	I(1)
NX	-1.642978	-4.763604***	I(1)

Source: Author's computation, 2019

Test critical values at level: 1% = -3.632900, 5% = -2.948404, 10% = -2.612874

Test critical values at 1st difference: 1% = -3.639407, 5% = -2.951125, 10% = -2.614300

***, **, and * significant at 1%, 5%, and 10% respectively.

4.2.2. Bounds Test for Co-Integration in the Model

The bound test results in table 3 below reveals that the calculated F- statistic value of 11.80626 is above the lower bound value of 2.73 and the upper bound value of 3.9 at the 1-percent significance level; indicating the presence of co integration or long run relationship among the variables.

TABLE 3: Bounds Test for Co-Integration

Critical Value Bounds		
Significance	I(0)	I(1)
10%	1.92	2.89
5%	2.17	3.21
2.5%	2.43	3.51
1%	2.73	3.9
K=7	Lag=2	F-statistic = 11.80626

Source: Author's computation, 2019

4.2.3. Estimated Long Run Model

Since there is evidence of existence of long run relationship among variables as shown in the Bounds Test for Co-Integration in table 3, we proceed to estimate the long and short run parameters of the variables through ARDL approach. Table 4 below contains the long run results of the model using ARDL approach. In the long run, both coefficients of federal government expenditure (FGEX) and aggregate state government expenditures (ASEXP) are statistically significant as indicated by their p-values of 0.0003 and 0.0013 respectively. The coefficients of federal government expenditure (FGEX) and aggregate state government expenditures (ASEXP) were positive signed in line with Keynesian crowding-in hypothesis of government spending on private consumption. Specifically, the coefficient of federal government expenditure (FGEX) was 14.66925 which is greater than that of aggregate state government expenditures (ASEXP) with a coefficient of 13.76339. This implies that a one unit increases in federal government expenditure (FGEX) will leads to amplify the aggregate private consumption (APC) by 14.66925%. Similarly, a one unit change in aggregate state government expenditures (ASEXP) will augment private consumption by 13.76339% on average.

Table 4 also shows that the coefficients of Aggregate capital expenditure (ACAPEX) and aggregate recurrent expenditure (ARECEX) are statistically significant with p-values of 0.0014 and 0.0008 respectively. While the coefficient of aggregate capital expenditure (ACAPEX) negative in line with the crowding-out effect of the Neoclassical theory, the coefficient of aggregate recurrent expenditure (ARECEX) is positive in agreement with Keynesian crowding-in hypothesis of government spending on private consumption. Specifically, the coefficient of aggregate capital expenditure (-12.38657) is less than that of aggregate recurrent expenditure (17.63082) in absolute term. This implies that aggregate recurrent expenditure is more potent in stimulating aggregate private

consumption than aggregate capital expenditure. Thus, Certeris Paribus, while a 1% increase in aggregate capital expenditure will reduce aggregate private consumption by 12.38657%, a 1% increase in aggregate recurrent expenditure will increase aggregate private consumption by 17.63082%.

The results also show GDP and net export (NX) with positive signs. However, GDP is significant, NX is insignificant as indicated by their p-values of 0.0006 and 0.4761 respectively. Coefficient of investment proxy by AGFC has negative but significant value of -8.012456 and p-value of 0.0243.

TABLE 4: Estimated Long Run Coefficients (Dependent variable D(APC)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FGEX	14.66925	3.103248	4.72706	0.0003
ASEXP	13.76339	3.476507	3.958969	0.0013
ACAPEX	-12.38657	3.178704	-3.896734	0.0014
ARECEX	17.63082	420.4973	4.192850	0.0008
GDP	24.49806	5.612994	4.364526	0.0006
AGFC	-8.012456	3.198332	-2.505198	0.0243
NX	7.52E-07	1.03E-06	0.730855	0.4761
C	22228.19	7650.030	2.905634	0.0109

Source: Author's computation, 2019

4.2.4. Short run (Error Correction Mechanism) results

The short run results of ARDL are reported in table 5. The coefficients of federal government expenditure (FGEX), aggregate capital expenditure (ACAPEX), aggregate recurrent expenditure (ARECEX), GDP and AGFC are all statistically significant and positive except the coefficient of AGFC. The Error Correction Term (CointEq(-1)) which shows the speed of adjustment from disequilibrium to equilibrium in next period has a negative and statistically significant value of -0.991846. This indicates that private consumption will adjust to equilibrium with a speed of -0.991846 (about 99%) from disequilibrium to equilibrium in a year.

Table 5: Estimated short run coefficient (Dependent variable D(APC)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FGEX, 2)	14.41439	1.057757	-13.62731	0.0000
D(FGEX(-1), 2)	8.748627	2.947099	2.968555	0.0096
D(ACAPEX, 2)	13.52020	1.047136	12.91159	0.0000
D(ARECEX, 2)	14.05646	1.110989	12.65221	0.0000
D(ARECEX(-1), 2)	32.79366	2.561020	12.80492	0.0000
D(GDP, 2)	30.21192	3.320363	9.098978	0.0000
D(GDP(-1), 2)	11.13701	3.261422	3.414772	0.0038
D(AGFC, 2)	5.662566	1.659777	3.411643	0.0039
D(AGFC(-1), 2)	-7.389196	1.623817	-4.550510	0.0004
CointEq(-1)*	-0.991846	0.077705	-12.76426	0.0000

R-squared	0.952938	Mean dependent var		949.3918
Adjusted R-squared	0.934523	S.D. dependent var		71283.02
S.E. of regression	18240.27	Akaike info criterion		22.70570
Sum squared resid	7.65E+09	Schwarz criterion		23.15919
Log likelihood	-364.6440	Hannan-Quinn criter.		22.85828
Durbin-Watson stat	1.998089			

Source: Author's computation, 2019

4.2.5. Diagnostic Test of the model

The conventional test for serial auto-correlation is the Durbin-Watson (DW) statistic. But in the case of an auto-regressive model, the DW statistic is said to be inadequate in determining whether there is serial correlation in a regression model. Hence, the alternative serial correlation test for an auto-regressive model is the Q-statistic test or the LM test for serial correlation. The LM test for serial correlation is employed in this study since the models are autoregressive. The results of test are presented in table 6. The results of diagnostic tests using Breusch-Godfrey Serial Correlation LM Test suggest that our results are free from serial auto-correlation since the F-statistics value was insignificant.

Table 6: Breusch-Godfrey Serial Correlation LM Test

F-statistic	0.032684	Prob. F(2,13)	0.9679
Obs*R-squared	0.165102	Prob. Chi-Square(2)	0.9208

*Source: Author's compilation, 2019**7***

4.2.6. Short-run Residual Stability Test

For the test of stability of the model, CUSUM and CUCUMsq were employed. it

can be seen from figure 1 and 2 that the plot of CUSUM and CUSUMsq falls

within critical bound of 5% and confirmed the long run association among variables as well as stability of the coefficients in the model.
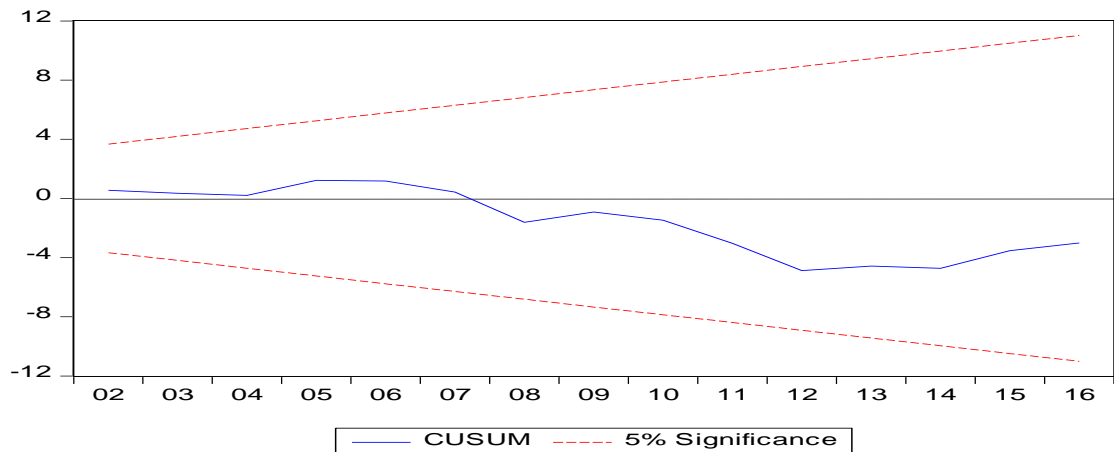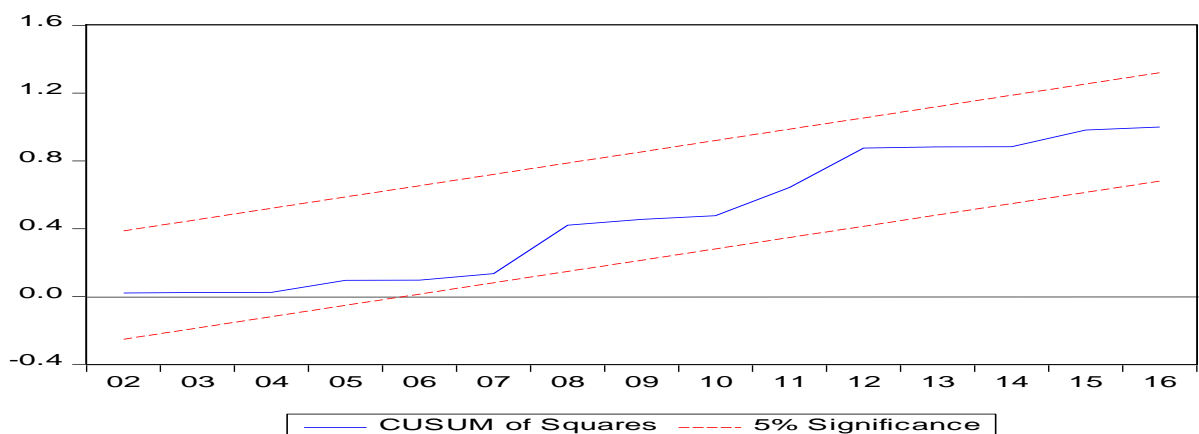
Figure 1: CUSUM

Figure 2: CUSUMsq

4.3. Discussion of findings

The impact of the level of government spending vis-a-vis: the relative impact of federal government expenditure and aggregate state government expenditures on private consumption in Nigeria was analyzed. The relative impact of aggregate capital expenditure and aggregate recurrent expenditure was also examined. Findings reveals that both federal government expenditure and aggregate state government expenditures impacted positively and significantly on private consumption in Nigeria. The finding is in agreement with Akpan and Udofia, 2016; and Onodje, 2009) that government expenditure shocks had Keynesian effects in Nigeria. This implies a positive relationship and

complementary (Crowding-in) between government expenditures and private

consumption in Nigeria. That is increase in government expenditure leads to increase in aggregate private consumption. On the contrary, the finding disagreed with Ezeabasili and Egbunike (2014) that government expenditure expansion has depressive effect on private consumption in Nigeria.

The results also provided a strong evidence that, though both federal government expenditure and aggregate state government expenditures impacted positively and significantly on aggregate private consumption in Nigeria, the impact of federal government expenditure on private consumption was stronger than that of the states. This result is in partial agreement with Agibaeva (2015) that expansion in government spending turns to be effective and generate crowding in effect only for country level, while for lower tiers of government it may cause drastic decrease in private consumption causing crowding out effect.

The results of the impact of capital expenditure and recurrent expenditure on aggregate private consumption expenditure in Nigeria showed that aggregate recurrent expenditure crowd-in aggregate private consumption while aggregate capital expenditure crowd-out aggregate private consumption. The findings conformed with Linnemann (2006) that it is possible to find a crowding-in effect on private consumption from an increase in government spending, even if the latter is not productive and Kraipornsak (2010) who found no effect of government capital spending on private consumption. On the other hand, the results disagreed with Leeper, et al, (2010) and Samadi & Seyadi (2013) who found that capital expenditure has a direct relationship with private consumption (complementary).

5. CONCLUSION

The focus of this paper was to estimate the impact of government expenditure on private consumption in Nigeria. A significant contribution of the work is the separation of government expenditure into federal government expenditures and the state governments expenditure as well as capital and recurrent expenditure. The results of study revealed that both federal government expenditure and aggregate state government expenditures impacted positively and significantly on private consumption in Nigeria with federal government expenditure exerting greater impact than aggregate state government expenditures. Thus, the estimated positive results are consistent with Keynesian

theoretical framework. Hence, fiscal policy stimulation through expansion in

government spending turns to be effective and generate crowding in effect more at country level than state level. Recurrent expenditure also crowd-in aggregate private consumption in line with Keynesian theory while aggregate capital expenditure may cause drastic decrease in private consumption causing crowding out effect as theorized by Neoclassical theory. The result seems to reflect the heterogeneous nature of states in Nigeria in terms of production and consumption patterns and the skewed nature of government spending in favour of recurrent expenditure.

DISCLOSURE OF CONFLICT
The authors declare that they have no conflicts of interest.

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THE NEXUS BETWEEN PUBLIC ADMINISTRATION, KNOWLEDGE MANAGEMENT AND SERVICE DELIVERY: A LITERATURE ANALYSIS

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THE NEXUS BETWEEN PUBLIC ADMINISTRATION, KNOWLEDGE MANAGEMENT AND SERVICE DELIVERY: A LITERATURE ANALYSIS

Lance Barbier* & Robertson K. Tengeh

ABSTRACT

This paper analyses the relationship between Public Administration, Knowledge Management and Service Delivery and to understand if improved Knowledge Management in the South African Government can improve public sector service delivery. This paper is a systematic analysis of 150 secondary literature sources. Even though not all the secondary literature sources analysed are used or cited in the paper, they nonetheless contributed to the identification of several key issues. The main finding of this paper is that improved Knowledge Management in the South African Government would ultimately result in improved public sector service delivery. There is a dearth of empirical research on Knowledge Management in the South African Government, including whether the public sector's adoption of private-sector methods to better itself is effective. From a Public Administration standpoint, none of the literature analysed explains how to successfully integrate Knowledge Management in the "South African Government to improve service delivery." More research on this subject is necessary. Especially, to determine the impact of Knowledge Management on investor confidence, and the inflow of Foreign Direct Investment. The research will benefit governments of developing countries, particularly South Africa, Public Administration scholars, and Knowledge Management professionals.

KEY WORDS: *Financial development, Income inequality, ARDL, BRICS*

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1. INTRODUCTION AND BACKGROUND TO THE STUDY

Despite having the most developed and sophisticated economy in Africa, South Africa, a mixed country with a mostly black population of around 60 million people, has suffered from inadequate development and extreme social inequality for many years. This means that if you're black and you live in South Africa, you're more likely to live in poverty, be unemployed, and have less access to public services than white people (Cook, South Africa: Current Issues, Economy, and U.S. Relations, 2020). As a result, such relative deprivation frequently results in violent and angry outbursts expressed through service delivery protests, validating Breakfast and Normarwayi's (2019) assertion that unmet expectations and service delivery protests are associated.

Cyril Ramaphosa is the President of South Africa. When he took office as President on February 15, 2018, he inherited an administration riddled with corruption and mismanagement allegations, stemming from his predecessor, Jacob Zuma's term in office (Cook, South Africa: Current Issues, Economy, and U.S. Relations, 2020; Dassah, 2018). President Ramaphosa promised South Africans that his administration will work relentlessly to address the triple challenge of poverty, inequality, and unemployment, including the issues, discussed further below on corruption, state capture, political instability, etc. that are impeding South Africa's path to a unified and thriving country (PwC, 2018). President Ramaphosa said significant financial backing, notably from foreign investors, i.e., Foreign Direct Investment (FDI), is necessary for success (OECD, 2002; PwC, 2018). Because South Africa has a relatively low savings rate, FDI is crucial, and whatever money South Africa has will never be enough. That is why regular inflows of foreign money are crucial, and why FDI will always be an important component of South Africa's economic policy (Sunday Times, 2018; South African Institute of International Affairs, 2020; PwC, 2018).

At the start of his five-year term in 2018, President Cyril Ramaphosa set a high goal of $100 billion in new investments (Daily Maverick, 2021), and has received promises totalling more than $55 billion since taking office (Cook, South Africa: Current Issues, Economy, and U.S. Relations, 2020). However, the upward trend was short-lived in 2020, when FDI inflows into South Africa fell by 15% or half of what they were in 2019. The inflow of FDI dropped from $4.6 billion in 2019 to $2.5 billion in 2020 (UNCTAD, 2022; Daily Maverick, 2021). According to the United Nations Conference on Trade and Development (UNCTAD) report

(2022), the significant reduction can be attributed to the Covid-19 outbreak. In 2021, South Africa had around 2.5 million confirmed coronavirus cases and over 70,000 deaths, making it the African country with the highest number of coronavirus infections (Daily Maverick, 2021). However, investor confidence in South Africa was already shaky due to the following governance factors, and Covid-19, according to the researcher, was just the icing on the cake:

- *Corruption Allegations: Corruption allegations stemming from President Jacob Zuma's term in office e.g., allegations of the illegal awarding of contracts and tenders (Cook, South Africa: Current Issues, Economy, and U.S. Relations, 2020; PwC, 2018);*

- *State Capture: State capture became a heated topic in South Africa when the then-Minister of Finance, Nhlanhla Nene, was dismissed on 9 December 2015 (Dassah, 2018);*

- *Political instability: South African Presidents, since 1994, have not been able to serve more than two terms in office. For example, President Mandela served only one term in office, from 1994 to 1999. The ruling party, the African National Congress (ANC) recalled Presidents Mbeki and Zuma to resign after just one term, and President Mothlanthe had to step in and take charge as head of state from September 2008 until September 2009 (The Presidency, 2018). While the peaceful nature of the transfers may be taken as a sign of growing democracy, it is interpreted as an indication that people have lost trust in elected Presidents over time. These changes had an impact on South Africa's financial strength (The Presidency, 2018);*

- *Energy crises: Eskom, South Africa's electricity utility, is one of the world's largest power companies, but due to poor governance, it is unable to keep the lights on in the country (Daily Maverick, 2021). For instance, the demand for power supply has grown, but Eskom's capacity to deliver a steady supply to fulfil household and industrial demands has deteriorated. This consequently led to the implementation of energy and demand control measures, termed load shedding (Fortuin, 2022). South Africa had the worst year of load shedding on record in 2019 (Trace, 2020);*

- ***Service delivery unrest****: South Africa has one of the world's highest rates of public protest. Because of this South Africa is known globally as "the world's riotous protest capital" (Breakfast & Nomarwayi, 2019; PSA, 2015; South African Institute of International Affairs, 2020; Lodge & Mottiar, 2015; Daily Maverick, 2021). Citizens know that the only way to get a quick response from the government is to protest, often violently. According to Susan Booysen in Lodge and Mottiar (2015), South Africans frequently turn to riotous tactics to obtain prompt responses from the government. She adds that riotous protests are more common in places with a very poor track record of public sector service delivery (Breakfast & Nomarwayi, 2019; PSA, 2015; Lodge & Mottiar, 2015).*

According to President Ramaphosa, most of South Africa's issues stem from the government's inability to provide excellent services, which is a result of weak governance. He says that if you address this, you would be able to solve not only the triple challenge but a lot of South Africa's problems, including those listed above (Daily Maverick, 2021; SABC News, 2022; PwC, 2018). Good governance is a critical component of this process. The South African Institute of International Affairs (2020) endorses this assertion, stating that the government must prioritise strengthening its capacity first and foremost, especially since poor service delivery reflects adversely on international investors. Investors are paying close attention to the way this country is governed. Their yardstick is service delivery. (Sunday Times, 2018; South African Institute of International Affairs, 2020; PwC, 2018; Cook, South Africa: Current Issues, Economy, and U.S. Relations, 2020). Hence if the president wants to attract large sums of money from foreign investors, he must take decisive steps to rebuild investor confidence by prioritising service delivery (PwC, 2018). Consequently, the researcher feels that to accelerate the government's capabilities and increase the government's potential to provide exceptional service delivery is to leverage Knowledge Management. Especially when financial resources are limited. Over the years, Knowledge Management has gained significant momentum as a critical component of private-sector success (Jayasingam, Ansari, Ramayah, & Jantan, 2020; Zack, McKeen, & Singh, 2009; Rowland & Syed-Ikhsan, 2004; Ming Yu, 2002; Davenport & Prusak, Working Knowledge, 2000).

In a speech, World Bank President, Jim Yong Kim said that the foundation of success in service delivery is the unspoken knowledge of implementers,

referring to Knowledge Management as the bold action that will address the magnitude of current global service delivery challenges (World Bank, 2012). According to various scholars, Knowledge Management will:

- o *Speed up an organisation's ability to make them work smarter (Wiig K. M., 2002);*
- o *Enable organisations to "do more with less" (Wiig K. M., 2002);*
- o *Address the skills gap (Sawe & Rotich, 2016);*
- o *Empower employees to grow and innovate (Sawe & Rotich, 2016);*
- o *Facilitate organisations to be faster and more efficient (Theriou, Maditinos, & Theriou, 2011);*
- o *Reduce duplication of effort (Department of Public Service and Administration, 2019);*
- o *Prevent mistakes or malpractice (Department of Public Service and Administration, 2019);*
- o *Improve processes and work methods (Department of Public Service and Administration, 2019); and*
- o *Reduce dependency on consultants (Department of Public Service and Administration, 2019).*

The following is how Knowledge Management made its way into the public sector. All governments will face pressure from their citizens to implement reforms to enhance the way how services are delivered. As society progresses and individuals' expectations change, such pressures are more likely to emerge. That's why, as society changes, so too must the way services be delivered. Hence, it would be misleading to assume that public sector service delivery must stay stagnant as society evolves. Government deals with these pressures through the instrument of Public Administration (Boyle & MacCarthaigh, 2011). "*The machinery and integral processes through which the government performs its functions*" is how public administration is defined (Lamidi, 2015). Thus, as the world evolves, so must Public Administration (Robinson, 2015; Fatemi & Behmanesh, 2012; Stefanescu, 2012; Lamidi, 2015). Between 1890 and 1980, Public Administration evolved from "*Traditional Public Administration to New Public Management*". An additional Public Administration model that appeared in the year 2000 is called New Public Governance (Boyle & MacCarthaigh, 2011). Governments worldwide either embrace New Public Management or Public Governance as their standard for modernisation and reform (Hope, 2001; Lapuente & Van de Walle, 2020). Although these models introduced new

concepts to Public Administration, they share certain features with the previous model. An example is the adoption of private-sector practices, like Knowledge Management, which was initially implemented during the New Public Management era and has since remained (Boyle & MacCarthaigh, 2011).

Consequently, the purpose of this paper is to analyse the relationship between Public Administration, Knowledge Management and Service Delivery and to understand if improved Knowledge Management in the South African Government can improve public sector service delivery. To achieve this objective, a systematic review was performed. The theoretical context, which is the framework that supports the theory of this paper, was developed using De Wet Schutte's Dendrogram Technique as a guide (Schutte, 2020). The question "is reflected in ......?" was asked after the key research question of this paper, "Can improve Knowledge Management in the South African Government improve public sector service delivery?" Of this, the theoretical context of this paper was identified and is underpinned by Public Administration, Knowledge Management, and Service Delivery, which are also the keywords of the paper.

2. PUBLIC ADMINISTRATION

According to Leonina-Emilia and Ioan (2010), as well as Olla and Aderibigbe (2014), Public Administration is so vast and contentious that it is much easier to describe than to define it. The authors' reason is that the boundaries of Public Administration were never precisely demarcated. This resulted in several definitions being proposed, to try and explain its meaning. However, most scholars of Public Administration agree Public Administration is predominantly governmental in nature (Olla & Aderibigbe, 2014). This means Public Administration cannot function in isolation from its political context and it is because of this context that it is public, as opposed to private. Also, another way to understand Public Administration is to look at the words Public and Administration separately. The word "*Public refers to government activities and actions. Administration is derived from the Latin word administrare, which is to serve, to lead, to govern, to care for, or to look after. The management of public or private affairs is what the word Administration means. As a result, Public Administration refers to the management of public affairs*" (Thapa, 2020).

For this study, Public Administration defined by Lamidi (2015) is used: "*Public Administration is the machinery and integral processes by which the government*

conducts its functions." Machinery in this context implies "instrument" and integral processes imply the key activities of government known as POSDCORB i.e., "*Planning, Organising, Staffing, Directing, Coordinating, Reporting, and Budgeting*" (Osborne, 2010). POSDCORB are common government activities to turn policies and plans into action (Uchem & Erunke, 2013; Page, 2020; Osborne, 2010; Thapa, Public Administration: Meaning, Scope and Its Nature, 2020; Shafritz, Russell, Borick, & Hyde, 2017). Even if a definition of Public Administration is selected, fully comprehending it can be challenging (Uchem & Erunke, 2013).

1.1. Public administration reform

Public Administration reform is defined as "the tool government uses to improve its efficiencies or to amend what it deems substandard" (Merriam-Webster, 2014). Whereas according to Pollitt and Bouckaert (2011) in Ingrams, Piotrowski and Berliner (2020), it is defined as "deliberate changes to the structures and processes of public sector organizations to get them (in some sense) to run better". Hence, Public Administration reform is a powerful concept that attempts to both relieve citizen pressure and ensure good governance (Ingrams, Piotrowski, & Berliner, 2020; UNDP, 2015). Citizens, for instance, use protests to lobby governments to correct inefficiencies and services of poor quality. Apart from corruption, political manipulation, lack of accountability and transparency, inefficiencies and poor services occur, because governments fail to keep up with the rest of the world, by remaining relevant and competitive (Boyle & MacCarthaigh, 2011; Robinson, 2015; Fatemi & Behmanesh, 2012).To remain relevant and competitive, Public Administration reform must happen to meet new expectations. That is, the government must go through changes to keep up with the latest technology, comply with ever-changing laws and regulatory prescripts and regulations, protect against fraud and corruption, etcetera. As a result, Public Administration must evolve in tandem with the changing world (Stefanescu, 2012).

Public Administration reform generally amends and updates four elements: "human capital, policy-making process (Hallsworth & Rutter, 2011), government machinery, as well as revenue and expense management systems" (UNDP, 2015). An explanation of each is as follows.

- *Human capital*: People's knowledge, skills, and qualifications are referred to as human capital. These are regarded as economic assets. Nothing is more vital to organisations than intelligence, according to Peter H. Diamandis. It is the fundamental key to problem solving and wealth generation, and it serves as the foundation for the human capital that propels every business and nation ahead (Merriam-Webster, 2014). Hence, the ability of the government to carry out its mission is a key component of Public Administration. With shrinking budgets, Public Administration reform is motivated by the need to find creative ways to lower the cost of human capital and at the same time ensure a government workforce with the right balance of scale and capability (UNDP, 2015; Page, 2020).

- *Policy-making process*: When the government starts talking about Public Administration reform, one of the first topics that come up is the improvement of the policy-making process. The reason for this is that the primary goal of making policy in the first place is to better the lives of citizens, and if citizens are complaining about poor and substandard services, it is apparent that their lives are not improving. The policy-making process, also known as policy formulation, involves various stages, from inception to conclusion. This is assessed during the Public Administration reform process (UNDP, 2015; Hallsworth & Rutter, 2011).

- *Government machinery*: The allocation and reallocation of duties between government departments are referred to as "machinery of government" also known as MOG. This entails modifications to departmental internal structures, work assignments within offices, and role assignments to entities other than government departments (UNDP, 2015; Government of South Australia, 2019). Government machinery is also referred to as all of the institutional arrangements adopted by national, provincial, or local governments to provide their legally required services and programmes (Johnson, 2015). According to Johnson (2015), when it comes to Public Administration reform, most debates revolve around whether to fine-tune government machinery or to completely reform the whole government.

- *Revenue and expense management systems*: Falling government revenues have put pressure on and stretched government finances across the world. Along with rising budget deficits, total global public debt rose by $9.9 trillion in 2020 (United Nations, 2021). This is the greatest growth in

government borrowing since World War II (United Nations, 2021). Recently, governments across the world borrowed from the future to lessen the impact of the Covid 19 pandemic on the current generation. As a result, it is the responsibility of the present generation to ensure that the borrowed money is wisely invested so that the present generation's well-being does not come at the price of future generations' well-being. The current crisis's urgency and immediacy cannot justify denying future generations of their entitlement to prosperity (United Nations, 2021). As a result, governments are experiencing severe financial difficulties. Therefore, government expenditure has become even more critical. Hence, when it comes to reforming Public Administration, the revenue and expense management system is a critical aspect. Finding ways to tweak this system so that all intended objectives may be met at the lowest feasible cost as governments' budgets shrink even further is a key goal of Public Administration Reform (UNDP, 2015).

As previously said, Public Administration reform is primarily concerned with making the government function better and be responsible for public resources and finances, among other things. The four elements described above are usually the first to be addressed in this respect (UNDP, 2015; Robinson, 2015; Fatemi & Behmanesh, 2012). Consequently, three Public Administration models have emerged as a result. The next section delves more into these models and centres on how the government came to adopt private-sector practices.

2.2. Public administration model

Public Administration has been around for over 130 years. It all started in 1887 when Woodrow Wilson published a paper titled "The Study of Administration". This according to Public Administration scholars marked the beginning of Public Administration (Vignieri, 2020). Several developments have taken place since. That is, Public Administration experienced a paradigm change over the years, according to Cronje (2010) and Stefanescu (2012). Between 1890 and 1980, Public Administration progressed from Traditional Public Administration to New Public Management. New Public Governance is a new Public Administration concept that emerged in the year 2000. This is elaborated below.

2.2.1. Traditional public administration

In several respects, Traditional Public Administration is founded on Max Weber's formulation of bureaucracy's essence. Max Weber, a German sociologist was

considered one of the most influential Public Administration academics of the last century. Max Weber defined and theorized "bureaucracy" throughout the 19th and 20th centuries, and his work is known as Weberian bureaucracy. Weberian bureaucracy is the cornerstone of Traditional Public Administration (Vignieri, 2020; Pfiffner, 2004). It is distinguished by the fact that it is a formal administration ruled by political leaders. It follows a strict hierarchical administration system. According to this system, public officials are permanent, neutral, and anonymous, and their motivation is exclusively for the common good. These officials serve all ruling parties equally, and they do not set policy but rather just administer policy that has been set by political leaders (Denkova, Lazarevski, & Denkova, 2018; Robinson, 2015; Chipkin & Lipietz, 2012). Although many Public Administration scholars contend that Max Weber was the leading thinker of Public Administration of his day, if not all times, according to Chipkin and Lipietz (2012), beginning in the late 1970s, the Weberian Public Administration system, came under increasing criticism for failure to deliver on its promises (Pfiffner, 2004; Xu, Sun, & Si, 2015). Due to the hierarchical and bureaucratic structure, Traditional Public Administration was seen as a rigid model designed to work only in a safe, probable, and systematic manner in a fairly constant environment (Katsamunska, 2012). However, the world was evolving, and this model was having difficulty adapting to the ever-changing, and at times unpredictable environment (Wiig, 2000). Due to its hierarchical, bureaucratic, and rigid structure, outcomes and outputs took an extremely long time to be achieved. This model caused significant delays. Hence, the need existed to transition from a slow, rigid, and overly bureaucratic public service (Denkova, Lazarevski, & Denkova, 2018), to one that was more fast-paced and flexible. Traditional Public Administration was no longer feasible and had to change (El-Ghalayini, 2016). Particularly one that offers fast, innovative, and efficient services (Denkova, Lazarevski, & Denkova, 2018; Robinson, 2015; Chipkin & Lipietz, 2012; PhDessay.com, 2020).

2.2. New public management

In response to the limitations of the Traditional Public Administration model, a modern type of Public Administration known as New Public Management emerged in the 1980s (Falconer, 2010; Promberger & Rauskala, 2003; Vignieri, 2020). New Public Management seeks to address the hierarchical, bureaucratic, and rigid structure of Traditional Public Administration (Strategica, 2018), which, among other things, causes significant delays (Promberger & Rauskala, 2003). While this, along with budgetary constraints on government spending, may be

considered the main objective of New Public Management, Boyle and MacCarthaigh (2011) argue that the model's defining feature is the adoption of private-sector practices. The need to provide fast, innovative and efficient services outweighs all other justifications for this model. Hence, New Public Management is on efficiency (outcomes or outputs) rather than procedures (inputs) (Fatemi & Behmanesh, 2012; Cameron, 2021). Consequently, New Public Management rather than reforming Traditional Public Administration is the strategy to alter the structure and activities of government (Strategica, 2018). This is done to make them economically viable and efficient in terms of resource consumption and service delivery, comparable to the private sector (Promberger & Rauskala, 2003; Lapuente & Van de Walle, 2020). Today, New Public Management is the most widespread Public Administration model (Kalimullah, Alam, & Nour, 2012). Overall, New Public Management is characterised as the approach that adopts private sector practices to be used in the public sector. Cameron (2021) contends that performance management is at the heart of all of this because it is a key component of New Public Management and that while senior public officials are given greater autonomy, as in the private sector, they must also be held to a higher level of accountability. The shift from "Traditional Public Administration to New Public Management," on the other hand, has sparked academic debate and raised some intriguing concerns about whether "New Public Management" is, in fact, a new paradigm (Vyas-Doorgapersad, 2011). Scholars such as Gow and Dufour (2000), argue whether it matters if New Public Management is a new paradigm or not. Nonetheless, an additional model was developed and is discussed next.

2.2.3. New public governance

According to Klijn (2012), New Public Management and New Public Governance have emerged as alternatives to Traditional Public Administration over the last two decades. Although they both learn and adapt to some extent from one another, they can be seen as polar opposites in terms of how governments cope with the increasing complexities of policy processes, implementation, and service delivery (Klijn, 2012). Nevertheless, both New Public Management and New Public Governance reinforce each other, with certain features in each (Klijn, 2012). It was initially anticipated that "New Public Management" would replace Traditional Public Administration as the new form of Public Administration, but recent scholarly literature has raised questions about this approach's intra-organizational orientation and shortcomings (Osborne, 2010). While New Public Management is concerned with establishing the right objectives and then

delegating implementation to various bodies, the New Public Governance is concerned with incorporating different target viewpoints and attempting to improve inter-organisational cooperation (Klijn, 2012; Vignieri, 2020). New Public Governance is defined by Xu, Sun, and Si (2015) as a model of administration in which a pluralistic governance body comprised of the government, private sector, non-profit organizations, and a variety of social groups consults and negotiates to respond to changing social affairs. According to Klijn (2012), the characteristics of New Public Governance are:

- *Strong emphasis on the inter-organisational dimension of policymaking and service delivery, as well as the inter-dependencies of organisations in achieving policy goals and delivering services;*

- *Horizontal forms of steering (network control, meta-governance, and so on) are thought to be more capable of gaining cooperation from social actors. These horizontal forms of steering are intended to ensure that actors use their veto powerless often (enhance support);*

- *Using society actors' expertise to increase the consistency of governance and public services, as well as making greater use of the information disseminated by different actors (enhancing quality and innovative capacity); and*

- *Early intervention of social actors, stakeholders, and community organisations to increase the credibility of decisions (enhancing democratic legitimacy).*

New Public Governance is not meant to be viewed or considered as a substitute or only viable option for either Traditional Public Administration or New Public Management (Osborne, 2010). Also, while all three models introduced new ideas and concepts to Public Administration, certain features of the previous model can be seen in the subsequent one. An example is the adoption of private-sector practices, like Knowledge Management, which was initially implemented during the New Public Management era and has since remained (Boyle & MacCarthaigh, 2011).

3. KNOWLEDGE MANAGEMENT

According to Koenig and Neveroski (2018), Knowledge Management was born when two key variables combined: (i) the start of the Internet and the almost universal recognition of the Internet's value as a resource for sharing information and knowledge, especially for geographically distributed organisations; and (ii) the realisation of the value of an organization's information and knowledge assets. Ever since, Knowledge Management has been defined by several writers and researchers in several ways (Igbinovia & Ikenwe, 2017). In 1994, Tom Davenport coined the phrase "*capturing, distributing, and using knowledge*" to define Knowledge Management (Davenport, Saving IT's Soul: Human Centered Information Management, 1994). Years later, the Gartner Group came up with a new concept of Knowledge Management, which is still the most widely used: "*Knowledge Management is a collection of approaches that involves identifying, capturing, evaluating, retrieving, and sharing all of an enterprise's information assets*" (Koenig, 2018). Information assets are papers, procedures, strategies, databases, and uncaptured experiences and knowledge of employees. In the WCG, particularly the Department of Transport and Public Works, Knowledge Management is defined as the "*explicit and systematic management of vital knowledge and its associated processes of finding, creating, capturing, organising, storing, sharing, and applying knowledge that requires turning personal knowledge into corporate knowledge (intellectual capital) via the inclusion thereof in departmental strategy, policy, and practices*" (Western Cape Government, 2020). Because of its diverse and complex nature, there is no universally accepted definition of Knowledge Management (Theriou, Maditinos, & Theriou, 2011; Koenig, 2018; Igbinovia & Ikenwe, 2017). Nonetheless, the critical aspect of Knowledge Management is getting the correct knowledge to the correct person at the right time. Aside from that, it's crucial to remember that Knowledge Management isn't only about accumulating knowledge to accumulate knowledge. The ultimate purpose of Knowledge Management is to add value to an organisation so that organisational objectives are achieved (Hajric, 2018). Knowledge Management consists of at least three core lifecycle elements: (i) capture knowledge; (ii) store knowledge; and (iii) use knowledge.

3.1. Knowledge management DIKW Pyramid

It is important to understand the term "knowledge," specifically how it differs from "wisdom", "information" and "data". The DIKW Pyramid, depicted in Figure 1

below, has been used for several years to show this difference (Fernanda & Salwa, 2018).

Figure 1. DIKW Pyramid
Source: Adapted from Fernanda and Salwa (2018)

Fernanda and Salwa (2018) explain the meaning of the terms Data, Information, Knowledge, and Wisdom as follows:

- **Data**: *A symbol, signal, or sensation associated with something is known as data. Data is the starting point for achieving a concrete outcome in the end. Logging, documents, measurements, and so on are all types of data;*

- **Information**: *According to Davenport and Prusak (2000) in Hajric (2018), data must be contextualized, classified, computed, and condensed to become information. Also, the conclusion reached because of the data gathered is referred to as information (Fernanda & Salwa, 2018);*

- **Knowledge**: *The sense of information that has been manipulated by humans is known as knowledge. According to Fernanda and Salwa (2018) as well as Igbinovia and Ikenwe (2017) knowledge is divided into two categories: tacit and explicit knowledge. Tacit knowledge is defined as knowledge acquired via direct observation and experience. It is the*

knowledge that is most challenging to record, impart, or portray in a tangible way (Igbinovia & Ikenwe, 2017). Explicit knowledge is the knowledge that can be readily shared because it has been written down, it can be easily learned and transmitted to others, it is codified, and archived for future use (Fernanda & Salwa, 2018); and

- **Wisdom***: The highest level of ability shown by a person's ability to use his or her information efficiently and appropriately is known as wisdom. In this scenario, the individual makes informed and wise decisions.*

Although the DIKW Pyramid provides a basic framework on how data evolves into information, knowledge, and ultimately wisdom respectively, it does not make a distinction between wisdom and knowledge explicitly. That is, having knowledge does not necessarily lead to improved decisions or actions, and more crucially it does not make one wise (Intezari, Pauleen, & Taskin, 2016).

Aside from data, information, and knowledge, wisdom is reliant on a variety of other characteristics. It takes a mixture of experience, judgment, intellect, cognition, values, and beliefs, among other things for an individual to be wise (International Labour Office, 2011). Hence, these characteristics are linked to wisdom (Intezari, Pauleen, & Taskin, 2016). It is therefore fair to assert that to implement Knowledge Management in the South African Government, public employees would require more than mere knowledge of how to do this.

Consequently, getting public officials from "knowing" to "doing" is one of the most difficult challenges in developing countries, particularly those with a history of structured socioeconomic deprivation (Department of Public Service and Administration, 2013; International Labour Office, 2011). Nevertheless, this will be discussed in more detail in the next chapter section.

3.1.1. Knowledge management components

The Knowledge Management components consist of the Knowledge Management Critical Success Factors and the Knowledge Management tools. Implementing Knowledge Management in any organisation is not an easy task (Hai Sin, Gan Goh, & Eze, 2009). It is a complex undertaking and to be successful, requires well-thought-out criteria (Winkler & Mandl, 2007). Over the years, criteria considered important for the successful implementation of

Knowledge Management were identified. They are called Critical Success Factors (see Table 1) (Theriou, Maditinos, & Theriou, 2011).

Table 1. Knowledge Management Critical Success Factors

Author	Year	Knowledge Management Critical Success Factors
"Arthur Andersen and APQC	1996	Leadership, organizational culture, technology, and measurement.
Earl	1997	Information Technology, people, and corporate culture.
Skyme and Amidon	1997	A strong link to business imperative, a compelling vision, and architecture, knowledge leadership, knowledge-creating and sharing culture, continuous learning, well-developed technology infrastructure, and systematic organizational knowledge processes.
Holsapple and Joshi	1997	Managerial influences, Resource influences, and Environment influences.
Davenport et al.	1998	A clear purpose and language, a standard and flexible knowledge structure, multiple channels for knowledge transfer, organizational culture, technical and organizational infrastructure, change in motivational practices, and senior management support.
Liebowitz	1999	Strategy with the support of senior management, CKO or equivalent, and a knowledge management infrastructure, knowledge ontologies and repositories, knowledge management systems and tools, incentives to encourage knowledge-sharing, and supportive culture.
Arthur Anderson Business Consulting	1999	Information Technology, people, and corporate culture.
APQC	1999	Leadership, organizational culture, measurement, and technology.
Stankosky and Baldanza	2000	The organization, technology, leadership, and learning.
Holsapple and Joshi	2000	Culture, leadership, technology, organizational adjustments, employee motivation, and external factors.
Andrew et al.	2001	Information Technology, organizational structure, corporate culture, knowledge obtainers, knowledge, transfer, knowledge application, and knowledge protection.
Chourides et al.	2002	Strategy, human resource management (HRM), IT, quality, and marketing.
Hasanli	2002	Leadership, organizational culture, structure, roles and responsibilities, IT infrastructure, and measurement.
Davenport and Probst	2002	Leadership, performance measurement, organizational policy, knowledge sharing and acquisition, information systems structure, benchmarking, and training.
Bixler	2002	Leadership, organization technology, and learning.
Mathi	2004	Culture, knowledge management organization, systems, and IT infrastructure, effective and systematic processes, and measures".

Source: Adapted from Theriou, Maditinos and Theriou (2011)

As already stated, Knowledge Management terms are used interchangeably. In some literature, the Knowledge Management Critical Success Factors are also referred to as Knowledge Management Enablers (UKEssays, 2018). In this study, however, the Knowledge Management Critical Success Factors are three distinct but interrelated components: Knowledge Management Objectives, Knowledge Management Pillars, and Knowledge Management Enablers. Collectively, these three factors collaborate to embed a Knowledge Management Culture in the organisation (see Figure 2 below).
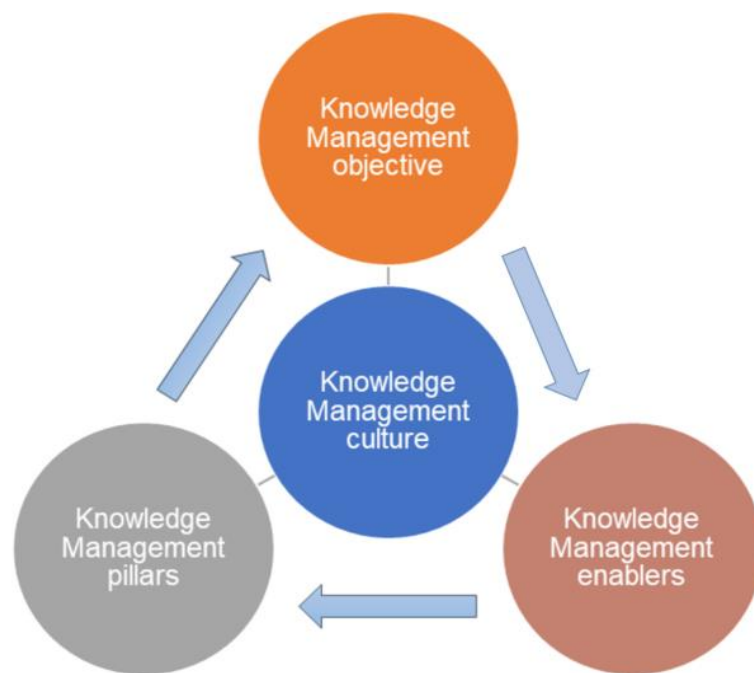

Figure 2. Knowledge Management Critical Success Factors

Source: Researcher's own construct (2021)

The Knowledge Management Critical Success Factors are briefly explained below.

- ***Knowledge Management Objective***: *The strategic goal to be achieved;*
- ***Knowledge Management Pillars***: *Supports the achievement of the Knowledge Management Objective. The three well-known Knowledge Management Pillars are People, Process and Technology (Chan, 2016):*
  - *People at all levels of the organization, from the top to the bottom, are involved in Knowledge Management (Chan & Lau, 2021);*
  - *Organisations utilise the intentional Knowledge Management Process Pillar to capture, store and use knowledge (Chan & Lau, 2021); and*

○ *Technology promotes quick knowledge flow and exchange among employees and organisations. Knowledge Management is more successful in organisations that make technology-related services widely available to their employees (Chan & Lau, 2021).*

- ***Knowledge Management Enablers***: *Knowledge Management Enablers support the Knowledge Management Pillars in achieving the Knowledge Management Objective.*

Ignorance and oversight of the Critical Success Factors can deter an organisation's effort to successfully implement Knowledge Management (UKEssays, 2018). Hence, the crafting of the Critical Success Factors is an extremely important activity not to be taken lightly.

3.2. Knowledge management tools

The instruments that capture, store, and utilise knowledge are known as Knowledge Management tools. According to Koenig (2018), the basic tools are as follows:

- ***Enterprise Content Management (ECM)***: *An ECM system is the most visible and immediate aspect of Knowledge Management and is a document management technology system. These systems aim to help with documents and organisational records publishing, storage, indexing, and retrieval. There are several ECM systems available, each with its own set of advantages and disadvantages. A disadvantage to consider when choosing an ECM system is that the more data, information, and knowledge stored on it, the more difficult it can be to find things quickly and effectively. Hence, an ECM system must produce results fast (Hajric, 2018);*

- ***Expertise Locator System***: *An expertise locator system is used to categorise and identify employees who have expertise in a particular field. Several software solutions allow employees to find and engage with specialists within their organisations, letting them benefit from combined expertise (Wells, 2016);*

- ***Lessons Learned***: *This is the process of collecting personal experience and making it available for others e.g., video logs. The goal is to gather and use*

lessons learned to avoid reinventing the wheel or making the same mistakes again. According to Buttler and Lukosch (2013), lessons learned may be defined as "knowledge obtained through successful or unsuccessful experience for the goal of enhancing future performance";

- *Communities of Practice: This is a platform for professionals to share tips and best practices, ask questions about problems and opportunities, explore best practices, review lessons learned, and offer each other encouragement (Wenger, Communities of practice: Learning, meaning and identity, 1998; Wenger & Snyder, Communities of practice: The organizational frontier, 1999; Hajric, 2018);*

- *Knowledge Retention and Retirees: This entails ways to retain the knowledge of skilled employees and those who are retiring, e.g., Learn from Leavers and brown bag sessions (Lunch and Learn initiative) programme.*

Expertise locator systems and lessons learned are the two most widely discussed types of explicit knowledge sharing tools in the Knowledge Management literature. The type of implicit knowledge sharing tool that has received the most attention is communities of practice (Virkus, 2011). It's worth noting that reliance on primitive Knowledge Management tools has often resulted in unsuccessful Knowledge Management implementations in the past (Hajric, 2018). Additionally, according to Snowden (2002), determining if someone is sharing their knowledge is difficult, but determining whether they are complying with the systems in place is possible. Consequently, Knowledge Management tools collectively can be used as a benchmark to ascertain the extent of the implementation of Knowledge Management in an organisation.

3.3. Knowledge management in the South African government

South Africa aspires to offer a better life for all (Cook, 2020), and in 2012, the South African Government produced the "*National Development Plan (NDP) 2030*" to reach this goal (National Planning Commission, 2011). The NDP is South Africa's guiding document positioned as a blueprint to eliminate poverty and reduce equality. Overall, to address the well-being of its people. According to the NDP: "*South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout*

society" (National Science and Technology Forum, 2018). But, South Africa, a majority-black, multiracial country with a population of more than 60 million people, despite the implementation of the NDP, has not only endured low economic development for several years, but its socioeconomic divide, instead of narrowing, has become even wider (Cook, 2020).

Because Knowledge Management has gained traction over the years as a key to success in the private sector, particularly in the consulting community, and because of the significant benefits Knowledge Management was seen to deliver, the South African Government included it in its NDP. For instance, the NDP demands that all government employees' skills and knowledge be current and future-oriented. Plus, all government departments had to "*institutionalise lifelong learning, provide continued professional advancement, as well as develop knowledge and innovation*" (Department of Public Service and Administration, 2019). However, according to the 2018 OECD Better Life Index, this Knowledge Management activity is either not being implemented properly or has not happened at all. In any case, if current trends continue, South Africa will fall short of meeting its NDP 2030 service delivery targets (Sawe & Rotich, 2016; Jayasingam, Ansari, Ramayah, & Jantan, 2020; Adler, 2019; Department of Public Service and Administration, 2019; Zack, McKeen, & Singh, 2009; Rowland & Syed-Ikhsan, 2004; Ming Yu, 2002; Davenport & Prusak, Working Knowledge, 2000).

3.4. Knowledge management and service delivery in South Africa

According to Reddy (2016), the word "service delivery" is a common term to define the provision of essential public needs, such as housing, water and sanitation, land, energy, and infrastructure, as well as the provision of basic public infrastructure. Hence, service delivery is crucial in the relationship between government and citizens. Citizens believe that because they pay taxes (Regional School of Public Administration, 2018), they have a right to fast, accessible, excellent quality, and affordable services wrapped in friendly treatment from their government (Sawe & Rotich, 2016). As a result, the government strives to live up to this ideal (Ondari-Okemwa & Smith, 2009). But, living up to this ideal, is not always the case. The supply and continuous upkeep of these essential services in South Africa have shown to be inconsistent at times, significantly inconveniencing and threatening people. As a result, there has been an increase in the number of service delivery protests, or rallies calling

for improved service delivery, in recent years (Reddy, 2016).

Wiig (2002), as quoted by Ondari-Okemwa and Smith (2009), believes that Knowledge Management may assist countries, namely South Africa, to provide better service delivery, and points out how Knowledge Management can help:

- o *Enabling informed decision-making within the public service reduces knowledge duplication i.e., it addresses time, money and resource wastage (Ondari-Okemwa & Smith, 2009; Koenig, 2018);*
- o *Assists citizens in successfully participating in public decision-making;*
- o *Increases the competitiveness of society's intellectual powers; and*
- o *Creates a knowledge-based workforce that is competitive.*

Some academics listed below feel that Knowledge Management is the lubricant that will improve service delivery, namely:

- o *Speeds up the ability to make organisations work smarter (Wiig K. M., 2002);*
- o *Enables organisations to "do more with less" (Wiig K. M., 2002);*
- o *Addresses the skills gap (Sawe & Rotich, 2016);*
- o *Empowers employees to grow and innovate (Sawe & Rotich, 2016);*
- o *Facilitates organisations to be faster and more efficient (Theriou, Maditinos, & Theriou, 2011);*
- o *Reduces duplication of effort (Department of Public Service and Administration, 2019);*
- o *Prevents mistakes or malpractice (Department of Public Service and Administration, 2019);*
- o *Improves processes and work methods (Department of Public Service and Administration, 2019); and*
- o *Reduces dependency on consultants (Department of Public Service and Administration, 2019).*

Zamir (2019) and Paprika (2001) also add that service delivery is directly influenced by Knowledge Management in several ways. These include employee learning and agility, job performance, process effectiveness, and process efficiency. Knowledge Management also influences the development of knowledge-based solutions that offer value (Zamir, 2019; Paprika, 2001).

Furthermore, according to Heck and Rogger (2004), Knowledge Management when correctly implemented, in other words, when knowledge is efficiently captured, stored, and used in government, the following medium- and long-term benefits may be achieved (Ondari-Okemwa & Smith, 2009):

- *Significantly improved efficiency, transparency, and quality of service delivery;*
- *Improvements in the transparency and agility of information flow;*
- *An equitable and more equitable division of tasks;*
- *Properly organised government;*
- *Properly organised internal business operations;*
- *Technologically effective internal business operations; and*
- *Optimised workflow-related skills.*

4. SERVICE DELIVERY

The provision of essential public needs and services, such as housing, water and sanitation, land, electricity, and infrastructure, is a term that is frequently used to define public sector service delivery (Reddy, 2016). It covers all aspects of when, how, and where a service is given to a client, as well as whether or not it is fair (Martins & Ledimo, 2015; Nel & Masilela, 2020; Regional School of Public Administration, 2018). Consequently, in this paper service delivery is defined as a product or service provided by a government to its citizens in fulfilment of a promise made (Crous, 2002).

4.1. Private versus public service delivery

According to Gildenhuys (1997) in Crous (2002), services delivery is categorised as either private or public sector services and will be considered as public service delivery if they:

- *Cannot be provided by the private sector due to their social existence;*
- *Are needed to achieve the objectives and goals of a government and are not supplied by the private sector for any reason; and*
- *Group work, rather than individual effort, can result in a more cost-effective and superior product.*

4.2. Service delivery transformation in South Africa

Before 1994, South Africa was run by an apartheid government that tried to separate people of different races. In 1994, there was a general election, and things began to shift dramatically after that (Moloto, Mkhomazi, & Worku, 2020). The *Constitution of the Republic of South Africa, 1996*, which is the highest law of the land, was drafted shortly after the 1994 elections by the newly elected Parliament. The constitution was signed into law by President Nelson Mandela on December 18, 1996, and it came into effect on February 4, 1997 (ConstitutionNet, 2016). The *Constitution of the Republic of South Africa, 1996* sets the rules for how government works (ETU, 2020), and according to the constitution, South Africa is divided into three levels of government, which are national, provincial, and local government (Moloto, Mkhomazi, & Worku, 2020). The *Constitution of the Republic of South Africa, 1996* says the three levels of government are autonomous and should not be seen as hierarchical (ETU, 2020). Section 40 (1) of chapter 3 of the "*Constitution of the Republic of South Africa, 1996* mentions these three interrelated government levels as distinctive, and interdependent, each with its own legislative and executive authority (South African Government, The Constitution of the Republic of South Africa, (Act no. 108 of 1996), 1996; Moloto, Mkhomazi, & Worku, 2020). At the same time, they all operate according to the *South African Constitution, 1996,* and the various laws and policies made by National Parliament (ETU, 2020). In 1994, when the new government of South Africa took office there was a special mandate to provide all citizens of the country with adequate services. However, the public service was not citizen-focused at the time, and its Public Administration needed to be reformed (Chandrashekhar, 2020). In particular, human resources, policy-making processes, government machinery, and revenue and expenditure management structures were the main areas that were distorted and needed to be redressed to appropriately serve all South Africans, not just a select few (UNDP, 2015). Hence, the people of South Africa were assured that they will be served without discrimination, upholding the integrity of everyone and ensuring efficient and successful fulfilment of the bulk of the population's prior overlooked needs (Department of Public Service and Administration, 2013).

4.3. Current state of service delivery in South Africa

The South African government is responsible not just for maintaining law and order, but also for ensuring that people have access to services that meet their needs. However, the current state of service delivery in South Africa, according to Moloto *et al*. (2020) and Gossel and Koelbl (2021), is not good, as not

everyone's basic needs are being met, which is a cause for worry. According to them, the South African government is failing horribly in its efforts to offer the most basic of services to all residents of the country. Here are a few examples:

- o **Water**: *In South Africa, at least 54% of homes do not have access to clean running water* (Amnesty International, 2021)*. By 2030, urban water demand is predicted to exceed supply, posing one of the most critical challenges facing cities in South Africa in the next decade (Prins, Etale, Ablo, & Thatcher, 2022). However, water is carelessly lost because of leakage, unmonitored water usage, urbanisation, insufficient infrastructure management, metering errors, substandard repair and maintenance procedures, budgetary constraints, old infrastructure, and water theft. All because of bad water management and governance (Mathye, Scholz, & Nyende-Byakika, 2021). Consequently, those that need water can't get water due to runoff;*

- o **Housing**: *According to Amnesty International* (2021)*, 14% of South Africa's population live in crowded informal settlements;*

- o **Electricity**: *Demand for power supply has grown, but Eskom's capacity to deliver a steady supply to fulfil household and industrial demands has deteriorated. This consequently led to the implementation of energy and demand control measures, termed load shedding (Fortuin, 2022). South Africa had the worst year of load shedding on record in 2019 (Trace, 2020); and*

- o **Education Infrastructure**: *According to Amnesty International* (2021)*, the South African government was surveyed in 2018 to ascertain the present state of the country's 23,471 public schools' infrastructure. The results were then communicated through the National Education Infrastructure Management System. Of the 23,471 public schools surveyed, 19% were identified as having illegal pit latrines for sanitation, with 37 schools having no sanitation facilities at all. Additionally, 86% lacked a laboratory, 77% lacked a school library, 72% lacked an internet connection, and 42% lacked sports facilities. Additionally, 239 schools lack electricity. Amnesty International* (2021) *asserts that several problems contradict not just the government's international human rights obligations, but also its*

own "basic norms and standards" for educational institutions. Furthermore, when it comes to the Covid-19 epidemic, the schools that suffer the most from deficient infrastructure are also the most likely to have found it difficult to provide continuous education for children in poorer communities who already had little or no access to the internet and computers. Only 22% of families in South Africa have a computer, and 10% have an internet connection. As a result, most children have a limited chance of participating in online learning, and their parents or carers are rarely in a position to home school (Amnesty International, 2021).

In addition to the aforementioned, according to the South African government's Finance Minister Tito Mboweni's 2021 Budget speech, 59% of South Africa's 278 municipalities are in deep financial trouble, 14% are unable to provide basic services, 37% adopted budgets that they cannot repay, and what's more, 57 of these municipalities are unable to account for their 2020 spending (Gossel & Koelble, 2021). These are merely a few examples of the current state of service delivery in South Africa i.e., the numerous critical service delivery challenges that South Africa is currently experiencing. Since the South African government has struggled to deal with the provision of services, the number of service delivery protests demanding more and better services has increased dramatically over the past decade (Campbell, 2014). So much so, that the term "service delivery protest" has become synonymous with South Africa (Breakfast & Nomarwayi, 2019; PSA, 2015; South African Institute of International Affairs, 2020; Lodge & Mottiar, 2015; Daily Maverick, 2021). According to Moloto *et al.* (2020), the police are constantly relied upon to preserve order and enforce the law when protests occur. They contend, however, that the solution to the problem does not rest in policing, but rather in addressing the current state of service delivery in South Africa (Moloto, Mkhomazi, & Worku, 2020).

5. DISCUSSION

According to Fraser, Andrews and Williamson (2021), many governments are good at coming up with plans, policies and strategies, but not many of them are good at putting them into action. Because of this, they say governments waste public funds, fail at service delivery, and most importantly lose investor confidence and decrease their public support (Fraser, Andrews, & Williamson, 2021; PwC, 2018). In South Africa, such outcomes commonly manifest in public protests. Since South Africa has one of the world's highest rates of public protest

and is known globally as "the world's riotous protest capital" it may be asserted that the South African government fall into the category of failing at its job (Breakfast & Nomarwayi, 2019; PSA, 2015; South African Institute of International Affairs, 2020; Lodge & Mottiar, 2015; Daily Maverick, 2021). According to Susan Booysen in Lodge and Mottiar (2015), South Africans frequently turn to riotous tactics to obtain prompt responses from their government. She adds that riotous protests are more common in places with a very poor track record of public sector service delivery (Breakfast & Nomarwayi, 2019; PSA, 2015; Lodge & Mottiar, 2015). Additionally, if voting numbers are any indication of (i) decreased public support; and (ii) the government failing at its job, then it's fair to assert that this is happening. For example, South Africa's two largest political parties, the African National Congress and the Democratic Alliance, which are currently in power, have been on a downward trajectory since 1994 (i.e., votes are decreasing), and if this downward trajectory continues, these two political parties will be voted out of power in the country's next general elections in 2024 (Nhlapo, Anderson, & Wentzel, 2017). Aside from that, the voter turnout in South Africa's Local Government elections in 2021 was the lowest it has been in years (Gounden, 2021).

The South African Institute of International Affairs (2020) states that investor confidence in South Africa is at an all-time low due to its bad image. They argue that if the president intends to attract big amounts of FDI, this must be addressed (South African Institute of International Affairs, 2020). Which explains why President Ramaphosa is on this steadfast drive in taking "decisive steps to address public sector service delivery challenges to strengthen his government's capabilities and in turn rebuild investor confidence" (Daily Maverick, 2021; Kanyane, 2014; PwC, 2018). If this is not achieved, one could argue that President Ramaphosa's political party can say goodbye to being South Africa's ruling party come the next elections. Consequently, according to Eden Getachew in Fraser, Andrews and Williamson (2021), the South African government is under severe pressure to deliver and save a deteriorating public service. On a positive note, one of the most significant achievements to date has been the radical reform of the South African public service that has occurred since the dismantling of the apartheid public service in 1994. Before 1994, the apartheid public service was geared toward serving the needs of the white minority group, and in the process, all black people were marginalised (The Presidency, 2015). Since the apartheid Public Administration model was not developmental in nature, the most pressing challenge for the post-apartheid

government in the years after 1994 was to build a developmental public service. This means the South African public service had to evolve to keep up with society's changing needs, which included changes in the way services were delivered. All to correct the injustices of the past and bring about equality and fairness. Hence, it would be incorrect to suggest that public sector service delivery must remain static in the face of societal change (Lamidi, 2015). In other words, what the researcher is getting at, the new South African Government selected a new Public Administration model (Stefanescu, 2012).

As stated between 1890 and 2000, three distinct Public Administration models emerged, namely "*Traditional Public Administration, New Public Management, and New Public Governance*" (Boyle & MacCarthaigh, 2011). Today, governments worldwide either embrace New Public Management or Public Governance as their standard for modernisation and reform. While all three Public Administration models bring new ideas and concepts to the table, certain characteristics of the preceding model are seen in the subsequent one. A distinguishing feature is notably the adoption of private-sector practices (Hope, 2001; Lapuente & Van de Walle, 2020). A combination of these two models was chosen by the post-apartheid government because they believed that making their Public Service more business-like will result in a wide range of significant improvements, like, as improving the efficiency and quality of existing government functions, decreasing taxes, and limiting the size of the government, among other things. They reasoned this would result in cost savings and increased consumer satisfaction (Hope, 2001; Lapuente & Van de Walle, 2020; Goodman & Loveman, 1991; The Presidency, 2015). Knowledge Management is an example of a private sector practice that was initially implemented during the New Public Management era and has since remained (Boyle & MacCarthaigh, 2011). Over the years, Knowledge Management has gained significant momentum as a critical component of private-sector success (Jayasingam, Ansari, Ramayah, & Jantan, 2020; Zack, McKeen, & Singh, 2009; Rowland & Syed-Ikhsan, 2004; Ming Yu, 2002; Davenport & Prusak, Working Knowledge, 2000). In a speech, World Bank President, Jim Yong Kim said that the foundation of success in service delivery is the unspoken knowledge of implementers, referring to Knowledge Management as the bold action that will address the magnitude of current global service delivery challenges (World Bank, 2012).

Service delivery is crucial in the relationship between government and citizens. Citizens have a right to fast, accessible, excellent quality, and affordable services wrapped in friendly treatment from the government. This is a condition for the good image of the government (Sawe and Rotich, 2016:894), and as stated in the introduction, something President Ramaphosa needs to see happen in terms of boosting investor confidence. So that he may attract FDI. The following authors advocate Knowledge Management is the lubricant that will improve service delivery (Sawe & Rotich, 2016; Theriou, Maditinos, & Theriou, 2011; Wiig K. M., 2002).

Additionally, Sawe and Rotich (2016:889) and Kimani (2013:8) state that Knowledge Management is not new to the government and can deliver huge service delivery benefits, but several government departments are slow in its implementation. About 15 years ago, when Knowledge Management was identified as a key component of growth in the private sector, notably in the consulting community, the post-apartheid government adopted it for implementation in their National and Provincial Government Departments (Department of Public Service and Administration, 2019). Today Knowledge Management is a Core Management Competency (CMC) of the South African Government's Senior Management Staff, as well as a "Key Performance Indicator in their Performance Agreements". Knowledge Management also made its way into their long-term plan, the National Development Plan (NDP) 2030, to institutionalise lifelong learning, provide continued professional advancement, and develop knowledge and innovation in South Africa (Department of Public Service and Administration, 2019). Many would argue that the introduction of Knowledge Management was prompted by the need to improve service delivery in the south African public service (Dikotla, 2014; Mothamaha & Govender, 2011).

However, although Knowledge Management was introduced into the South African Government approximately 15 years ago, and although Knowledge Management is included as a Key Performance Indicator in the Performance Agreements of all Senior Management Staff, the implementation of Knowledge Management remains extremely slow and disjointed (Department of Public Service and Administration, 2019), and it would be correct to argue that it has not translated into improved service delivery in the South African public service. To underscore the stakes, Sawe and Rotich (2016) and Kimani (2013), note that while Knowledge Management is not new to the government and has the

potential to significantly improve service delivery, many national and provincial government departments remain very sluggish to adopt it. Consequently, further research on this is encouraged.

6. CONCLUSION

While one of the most notable achievements has been the dramatic reform of the South African public service after the end of apartheid in 1994, today the South African government now finds itself under great pressure to deliver and salvage a deteriorating public service.

Since public administration is a body of knowledge that turns government policies into action, literature was reviewed to explore how and why it has changed over time and where it is now, especially considering South Africa's public service crisis. As a result, the following was identified: The goal of Public Administration reform is to respond to citizens' ongoing requests for better service delivery, which is dependent on a well-functioning Public Administration. Between 1890 and 2000, Public Administration evolved from Traditional Public Administration to New Public Management and then to New Public Governance. Governments worldwide either embrace New Public Management or New Public Governance as their preferred method of modernising and reforming themselves. South Africa employs a hybrid of these two models because they believe that transforming their public service into a more business-like organisation will result in a slew of significant improvements. Having said that, the fundamental problem that has led to South Africa's present service delivery dilemma is that the government is not evolving quickly enough to meet the continually changing needs of its citizens. Furthermore, most of their problems arise from their failure to deliver excellent services as a result of poor governance.

Given that investors consider service delivery when making investment decisions, government capacity building must be prioritised so that frequent service delivery protests used by South Africans to express their dissatisfaction and seek prompt responses from their government can be avoided in future, potentially attracting significant FDI.

To address these critical issues, accelerate capability development, and increase its capacity to provide exceptional services, the South African

government must leverage Knowledge Management. Knowledge Management is an example of a private sector practice that was initially implemented during the New Public Management era and has since remained. Since Knowledge Management gained traction as a key to success in the private sector, it has been embraced by the South African government. However, despite entering the South African government more than 15 years ago, the implementation of Knowledge Management has been slow and disjointed, and as a result, the benefit of Knowledge Management cannot be fully realised in the South African Government.

Overall, the literature revealed that service delivery is directly influenced by Knowledge Management. Hence, to sum up, the main finding is based on the premise that improved Knowledge Management would ultimately result in improved service delivery.

Furthermore, according to Akuku, et al. (2020) and Chawuke (2018), Knowledge Management has received insufficient attention, and "*there is a dearth of empirical research on Knowledge Management in the South African Government*". There is a dearth of research on whether the public sector's adoption of private-sector methods to better itself is effective. By and large, none of the examined literature specifically examines how to successfully integrate Knowledge Management in the "South African Government to improve service delivery" from a Public Administration perspective. As a result, additional research on this topic is required, particularly on the "*impact of Knowledge Management on investor confidence, and the inflow of Foreign Direct Investment*".

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DISCLOSURE OF CONFLICT

The authors declare that they have no conflicts of interest.

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THE MODERATOR ROLE OF CULTURAL VALUES ON THE RELATIONSHIP BETWEEN PERCEVIED ORGANIZATIONAL JUSTICE AND TURNOVER INTENTION – USA SAMPLE

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THE MODERATOR ROLE OF CULTURAL VALUES ON THE RELATIONSHIP BETWEEN PERCEIVED ORGANIZATIONAL JUSTICE AND TURNOVER INTENTION - USA SAMPLE*

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ABSTRACT

This paper examines the moderating effects of cultural values of allocentrism and idiocentrism on the relationship between organizational distributive/procedural justice and turnover intention. The data gathered from 201 full-time faculty in Pittsburgh, Pennsylvania. The findings revealed that only allocentrism has a moderate moderating effect on the relationship between perceived organizational justice and turnover intention.

KEY WORDS: *Allocentrism, Idiocentrism, Perceived distributive justice, Perceived procedural justice, Turnover intention*

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1. INTRODUCTION

Turnover intention is defined as the deliberate and conscious desire to leave an organization and is considered the final stage of withdrawal behavior (Lambert et al., 2001; Mowday et al., 2013). Due to its positive associations with actual turnover and negative correlations with organizational performance, turnover intention is regarded as critical for both the organization's and individual's performance (Kim and Fernandez, 2017). The employee-organization relationship and an individual's turnover intention can be influenced by a variety

of factors, including perceived organizational justice and the individual's cultural values. Individuals' perceptions of the fairness of the organization's outputs,

practices, and attitudes and behaviors toward them are evaluated through organizational justice (Colquitt et al., 2006; Greenberg, 1987). Related research indicates that an employee's perception of justice has a major impact on his or her attitudes and behaviors. Individuals who do not encounter fair behavior in the organization, or employees who do not perceive the organization's practices and outputs as fair, may develop negative attitudes toward their jobs; this situation may result in an increased proclivity to leave the job. Indeed, some studies have discovered that one's perception of justice, particularly distributive and procedural justice, has a significant effect on one's turnover intention (Ali and Jan, 2012; Parker et al., 2011).

On the other hand, the literature pertaining to perceptions of justice demonstrates that individuals' perceptions of justice are strongly influenced by norms and values. Most of the studies examining the perception of justice and culture are carried out to determine whether there are different perceptions of justice in different cultures (Greenberg, 2011). However, it has been observed that culture has a moderating effect on the relationship between perceived organizational justice and turnover intention (Cohen-Charash and Spector, 2001; Ramamoorthy and Flood, 2002; Ramesh and Gelfand, 2010; Wang and Yi, 2002). Therefore, understanding the cultural values of individuals in the organization is very important in terms of understanding perceived justice (Greenberg, 2001).

The individualism-collectivism dimension is one of the cultural dimensions that emerged as a result of Hofstede's (1980) national culture study. Triandis (1996) stated that the individualism-collectivism dimension is the most prominent cultural dimension and that many studies are conducted on this dimension every year. In many cross-cultural studies on the individualism-collectivism dimension, it is assumed that all individuals in a society have the same cultural values (Triandis, 1996; Wasti and Erdil 2007). However, considering the changing environment and conditions today, it is thought that the individualism-collectivism levels of all individuals in a society will not be the same by showing differences in other areas of life. In other words, individuals living in the same culture are not only one of the individualism-collectivism sub-dimensions; they may contain both dimensions at different levels. Therefore, it is critical to assess an individual's values at the individual level (Dutta-Bergman and Wells, 2002;

Triandis, 1995). When the individualism-collectivism dimensions are examined at the individual level in Triandis's (1995) studies, they are expressed as

allocentrism-idiocentrism (Triandis, 1995). Similarly, when discussing a cultural effect at the national level, the concepts of individualism-collectivism will be used; when discussing an individual-level effect, the concepts of allocentrism-idiocentrism will be used.

The primary purpose of this research is to investigate the moderator effects of allocentrism and idiocentrism on the relationship between procedural and distributive justice perceptions and turnover intentions of employees working in academia. The conceptual framework of the study can be explained by Planned Behavior Theory (Ajzen and Fishbein, 1969) and the Group Value Model (Lind & Tyler, 1988; Tyler & Blader, 2003; Tyler & Lind, 1992). Individuals' allocentrism-idiocentrism levels are assumed to be effective in this regard in the relationship between procedural and distributive justice-turnover intention.

The study makes an important contribution to the literature by revealing the effects of the allocentrism-idiocentrism dimension on the relationship between organizational justice and turnover intention. The research model, on the other hand, was tested with a group of academics in the USA. No study in the relevant literature that examines the relationships between individuals' cultural values, perception of justice, and turnover intention in studies conducted with academic staff in the USA. Following the completion of this research, managers will receive recommendations on how to assist employees who intend to leave their current positions.

1.1. Perceived organizational justice - Turnover intention

Turnover intention is the tendency and wish to leave the organization (Mowday et al., 2013), and it is a process that begins with a voluntary, slow, and planned negative evaluation, continues with withdrawal behavior, and finally ends with the search for another job (Hom and Griffeth, 1991). Many studies in the literature have revealed that turnover intention is the most important predictor of actual turnover (Çiftçioğlu, 2011; Mobley et al., 1979). According to the Planned Behavior Theory developed by Ajzen and Fishbein (1969), the best way to predict an individual's behavior is to know his intention (Ajzen and Fishbein, 1969). Since the intention of the individual plays a mediating role between the behavior and the attitude, the behavior of the individual can be predicted when the intention of the individual is known (Newman, 1974).

On the other hand, while the theory of justice is critical in organizational science, it has been demonstrated that it is associated with a variety of job outcomes and turnover intention (Colquitt et al., 2001, Kim et al., 2017). Organizational justice is the perception of whether or not the employee perceives the behavior towards him/herself as a result of the outputs and practices obtained within the organization (Greenberg, 1987). Organizational justice consists of four dimensions: distributive, procedural, interpersonal, and informational justice (Colquitt, 2001). However, in many studies, distributive and procedural justice dimensions are considered as important sub-dimensions of organizational justice perception and it is stated that they better predict attitudinal and behavioral reactions towards the organization (Wang and Yi, 2012).

Distributive justice is about how fair individuals find their outcomes (Greenberg, 1987) and is generally explained by the equity theory (Adams, 1965; De Coninck and Johnson, 2009; Parker et al., 2011). There is a reciprocal change in the employee-employer relationship in the psychological contract between the employee and the employer (Rousseau and Parks, 1993). The subject of change may be concrete issues such as wages and promotions for employees, or less concrete issues such as trust and rank. While employees make unique contributions to the organization (such as talent, experience, and time); in return, they get output according to their contribution to the organization (such as payment and promotion) (Cropanzano et al., 2001; Greenberg and Cohen, 1982).

Procedural justice is the evaluation of how fair individuals perceive the procedures used in the distribution of outputs and resources and is based on Thibaut and Walker's (1975) theories of control, which include the resolution processes in courts (Greenberg, 1987; Herda and Lavelle, 2012). In other words, employees' perceptions of justice are affected not only by what they get at the end of the process, but also by the decision and methods used by the organization while obtaining these results, and the employees' voice in the process. For this reason, employees who do not perceive the process as fair can develop many negative feelings and attitudes towards their organizations (Barclay, 2005).

The relationship between procedural and distributive justice and turnover intention has been discussed in many studies (Karatepe and Shahriari, 2014;

Kim et al., 2017). The relationship between perceived procedural-distributional

justice and turnover intention was examined and a negative relationship was found in accordance with the literature (Cohen-Charash and Spector, 2001; Colquitt et al., 2001; Gürpınar, 2006). In other words, academic staff who do not perceive the outcomes they have achieved, and the processes applied while achieving these outcomes are more likely to leave their universities.

The relationship between perceived organizational justice and turnover intention can be explained by the theory of social change (Blau, 1964). According to this theory, there is an exchange relationship between employees and their organizations. Researchers have stated that individuals respond according to the outputs they receive and that employees who perceive the procedures applied by their organizations and the outputs they obtain as fair respond to their organizations by staying loyal to the organization and continuing to work there (Blau, 1964; Gouldner, 1960). On the contrary, employees who do not get a fair output interpret this as a behavior contrary to their psychological contracts (Poon, 2012). The violated psychological contract, on the other hand, undermines the exchange relationship between the employee and the organization and may increase the tendency of employees to quit (Cropanzano and Mitchell, 2005; Graeve-Cunningham, 2015; Robinson and Rousseau,1994). Based on the findings in the literature, the following hypotheses have been proposed in this study:

H1: There is a negative association between perceived distributive justice and turnover intention.
H2: There is a negative association between perceived procedural justice and turnover intention.

1.2. Culture's Effect on Perceived Organizational Justice - Turnover Intention Relationship

Researchers found differences in procedural and distributive justice perceptions among members of individualistic and collectivistic societies. In collectivistic cultures, perceived procedural justice predicts the turnover intention better than perceived distributive justice (Hui and Tan, 1996; Lind and Earley, 1992; Tyler et al., 1996). On the other hand, in individualistic cultures, perceived distributive justice predicts the turnover intention better than perceived procedural justice (Folger and Konovsky, 1989; James, 1993; McFarlin and Sweeney, 1992;

Sweeney and McFarlin, 1993; 1997).

It has been observed that culture has a moderating effect on the relationship between perceived organizational justice and turnover intention (Cohen-Charash and Spector, 2001; Leung & Bond, 1984; Leung & Lind, 1986; Ramamoorthy and Flood, 2002; Ramesh and Gelfand, 2010; Wang and Yi, 2002). Therefore, understanding the cultural values of individuals in the organization is very important in terms of understanding perceived justice (Greenberg, 2001). However, it is argued that national cultural dimensions of individualism and collectivism have both direct and moderating effects on individuals' intentions and performances (Hofstede, 1980; Hofstede and Bond, 1988). Accordingly, the moderating effect of allocentrism and idiocentrism on the relationship between perceived justice on turnover intention was examined in the USA, which is an individualistic culture.

The moderating effect of allocentrism-idiocentrism is discussed within the scope of Ajzen and Fishbein's (1980), Planned Behavior Theory and Group Value Model. The majority of studies on how and when attitudes affect behaviors have been influenced by Ajzen's (1991) Planned Behavior Theory. According to the planned behavior theory, an individual's behavior is motivated by a specific reason, and the intention of the individual, rather than the individual's attitude, determines the behavior (Ajzen and Fishbein, 1980).

Ajzen argued that intention is affected by three factors: subjective values, one's attitude towards behavior, and perceived behavioral control (Ajzen, 1991). The individual's attitude towards the behavior is affected by his/her thoughts about the outcome of the behavior and the evaluation of possible outcomes. Idiocentrics' choice of behavior according to whether the consequences of the behavior are in their interests or whether allocentrics act and decide according to the interests of the group can be evaluated in this context. The subjective value factor, on the other hand, will determine the extent to which the individual will comply with the opinion of others about his or her behavior. For example, to understand the motives of allocentric individuals, this step needs to be emphasized. Since the subjective values of allocentric individuals are based on making others happy and thinking about others, their intentions will be affected. Idiocentric people are unconcerned about what others think; instead, they focus on their own desires and expectations. In the third element, perceived behavioral control, the individual's thoughts about control are the most important factor. Because allocentric individuals believe that their external focus is far more

important than their thoughts, their behavior will tend to be more in this direction

than their internal focus is. The influence of these three factors, like the influence of culture, can vary from situation to situation (Kagitcibasi, 1997).

The order of importance of these three factors in the individual was found to be closely related to the self-characteristics. Miller and Grush (1986) define idiocentric individuals as those who are aware of their attitudes and do not care much about what others think, and they are more likely to be influenced by the attitude item of these three items. This characteristic also corresponds to the self-characteristics of idiocentric individuals. The attitudes of these individuals are at the forefront, and they act in accordance with their own interests and expectations. Allocentric individuals with high internal control care about the behaviors and thoughts of individuals. In allocentric individuals, group norms are more important than their expectations. According to Bontempo and Rivero (1992), idiocentrics tend towards attitudes rather than norms; allocentrics, on the other hand, give importance to norms rather than attitudes.

The effect of idiocentrism-allocentrism on perceived distributive justice-turnover intention can also be explained according to the group value model. In the group value model (Lind & Tyler, 1988), it has been stated that individuals have two types of perceptions about whether they feel valued and respected in the group they are a member of, and whether they are proud to be a member of the group (Tyler et al., 1996).

According to the model, individuals care about long-term relationships; because this means meeting their need for belonging and dignity (Bies, 2005; Tyler et al., 1996). Allocentric people do not present themselves as unique individuals apart from their groups; instead, they see themselves as members of the group to which they belong and strive to align their goals and behaviors with the group's norms and expectations. Allocentrics define their identities through their group membership (Earley & Gibson, 1998; Hofstede, 1984; Robert & Wasti, 2002). As shown by Hofstede (1991), allocentrics view the working relationship as a family relationship because of allocentrics value loyalty. Therefore, when allocentrics encounter disrespectful behavior or inequality in resource allocation, they will seek ways to prevent future unjust behavior and continue their relationship with the organization (Leung, Au, Fernandez-Dols, & Iwawaki, 1992). What is important for allocentric individuals is to ensure the continuity of harmony in their groups, and harmony with their groups is at the forefront for

these individuals (Markus & Kitayama, 1991). In this context, they try to maintain

their relationships even if they are not in a personally advantageous position (Markus & Kitayama, 1991). 2010; Noordin and Jusoff, 2010). Individuals who think of group interests will have a low turnover intention and they will be able to tolerate injustice more (Tripp et al., 1995). As a result, allocentric individuals may be willing to sacrifice their interests in order to protect group interests and harmony (Ho & Chiu, 1994; Noordin & Jusoff, 2010; Oyserman et al., 2002; Triandis, 1995) even if they have a low perception of procedural and distributive justice; they can exhibit adaptive behavior (Jex and Beehr, 1991). In consonance with the model, individuals care about long-term relationships; because this means meeting their need for belonging and dignity (Bies, 2005; Tyler et al., 1996). When idiocentrics believe that they are being treated fairly, they are satisfied because they see that their rights are protected, and they respond immediately in accordance with the psychological contract. Therefore, idiocentrics do not want to continue the relationship when their needs are not met. Idiocentrics do not tolerate unfair behavior and see their identity as separate from the group (Earley & Gibson, 1998; Hofstede, 1984; Robert & Wasti, 2002). Idiocentrics do not tolerate unfair behavior and see their identity as separate from the group (Earley & Gibson, 1998; Hofstede, 1984; Robert & Wasti, 2002).

Idiocentric individuals are more impulsive, self-centered, achievement-oriented, and excited (Schwartz, 1990). Since originality and realizing personal goals are priorities in idiocentric individuals, the person's feelings, and thoughts; their needs and preferences determine and direct how they behave in their social environments (Triandis, 1995). In idiocentric individuals, personal goals take precedence over group goals (Schwartz, 1994). The purpose of idiocentric individuals may differ from the group to which they belong; in case of disagreement, the individual's own goals are prioritized, and the individual can behave according to his advantage and disadvantage (Markus & Kitayama, 1991; Triandis, 1995). For this reason, it is thought that when idiocentric individuals have low perceptions of procedural and distributive justice, they may not tolerate unfair behavior with the thought that their psychological contracts are violated, and their turnover intention will increase (Graeve-Cunningham, 2015; Triandis, 1996; Wang & Yi, 2012). For idiocentric individuals, their output is important. If they cannot get the result they want in the short term, they may not want to leave the job if they are getting it in the long term. On the other hand, allocentrics are more patient, self-sufficient, less impulsive, and less excited

than idiocentrics (Hsu, 1949; Liu et al., 2013; Tseng, 1972). It is expected that

these people-oriented individuals (Hofstede, 1980), seeking close and long-term relationships, will have a low turnover intention (Liu et al., 2013; Tuzun & Kalemci, 2012). Allocentrics affect their interaction with other individuals, how they approach decisions and how they solve problems (Hofstede, 1980; House, 2004; Liu et al., 2013; O'Reilly & Chatman, 1996). Hui, Yee, and Eastman (1995) discovered that this tendency ensures that allocentrics have higher job satisfaction levels than idiocentrics, and are more satisfied with their salary, promotion, and managers and co-workers.

Since job satisfaction is lower in individualistic cultures, turnover intention is higher (Nhan, 2014). There will also be environmental pressure on the individual, as there will be an environment in which collectivist values are dominant in the society, they currently live in. In other words, each individual can behave by considering his own or group's interests, but which emotion will be more dominant is affected by the culture (Triandis, 1995). Therefore, since individuals in collectivist cultures have less tendency to change jobs (Dette & Dalbert, 2005), it can be expected that both allocentric and idiocentric individuals in these cultures will have lower turnover intentions. Likewise, since the tendency to change jobs is high in individualistic cultures, it can be expected that both allocentric and idiocentric individuals will have a higher turnover intention.

However, in idiocentrics where the control point is internal, it is very important to achieve individual success and personal goals. On the other hand, in allocentric individuals with external control, group goals are more important than personal goals, so personal success is not an important criterion (Hoftsede, 1984; Triandis & Suh, 2002). Therefore, when injustice is perceived in the organization, it can be expected that individualists will be more likely to show job satisfaction, organizational commitment, or turnover than allocentric individuals.

Further, in studies conducted in Hong Kong, which is a collectivist culture, and in the USA, which is an individualistic culture, it has been observed that the reactions of employees when unfair behaviors are exhibited are less in Hong Kongers than Americans (Bond and Hwang, 1987; Hui and Tan, 1996; James, 1993). As a result, in a collectivist culture, turnover intention is low in the face of injustice. Park and Kim (2009) discovered that Korean nurses from a collectivist culture who worked in a collectivist culture had a low turnover intention, whereas they had a high turnover intention when working in an individualistic culture. This

situation can be interpreted as the cultural value of the society in which the

individual lives, regardless of the level of allocentrism or idiocentrism, which has a greater effect on the individual's turnover intention. In addition, in a study conducted with call center employees from the USA and the Philippines, it was found that the turnover intention of western employees was higher than those of eastern employees (Rothausen, Gonzalez, & Griffin, 2009). The following hypotheses have been put forward within the scope of the literature and theoretical framework examined among the variables:
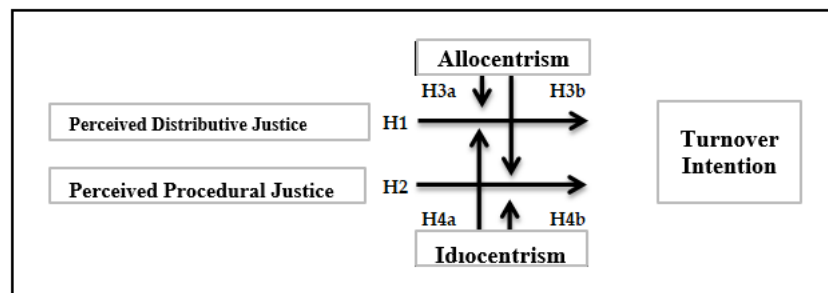
Figure 1: Research Model

H3a: Allocentrism has a moderating effect on the relationship between perceived distributive justice and turnover intention, such that higher allocentrism levels alleviate the negative impact of perceived distributive justice on turnover intentions.

H3b: Allocentrism has a moderating effect on the relationship between perceived procedural justice and turnover intention, such that higher allocentrism levels alleviate the negative impact of perceived procedural justice on turnover intentions.

H4a: Idiocentrism has a moderating effect on the relationship between perceived distributive justice and turnover intention, such that higher idiocentrism levels buffer the negative impact of perceived distributive justice on turnover intentions.

H4b: Idiocentrism has a moderating effect on the relationship between perceived procedural justice and turnover intention, such that higher idiocentrism levels buffer the negative impact of perceived procedural justice on turnover intentions.

2. METHOD

2.1. Procedures and participants

The sample of the research consists of academic staff working in the field of Social Sciences in Pittsburgh, USA. According to the results of the analysis, among the academic staff included in the research in the USA; 50.75% (n=102) were male and 49.25% (n=99) were female. The mean age of the subjects was 34.3 years. The time spent by the participants in academia is less than 1 year for 2% (n=3); 1-3 years for 9% (n=17); 3-5 years for 29% (n=58); For 44% (n=89) it is 5-10 years and for 16% (n=32) it is more than 10 years. Approximately 6% (n=11) of the participants included in the study have been in their current workplace for less than 1 year; 20% (n=41) are 1-3 years; 48% (n=97) are 3-5 years; 22% (n=44) have been working for 5-10 years and 4% (n=8) have been working for more than 10 years. 59.2% (n=119) of the individuals participating in the study were Research Assistants; 33.8% (n=68) Lecturers; 4.5% (n=9) were doctoral faculty members; 1.5% (n=3) were associate professors and 1% (n=2) were professors.

The reason for the sample selection is the individualistic (91/100) culture characteristic of the USA (https://www.hofstede-insights.com/product/compare-countries/). In the index created by Hofstede (1980), the USA ranks first in the individualism dimension with 91 points. In many studies, the USA was evaluated as individualistic (Caldwell-Harris & Ayiceği, 2006; Triandis, Chen & Chan, 1998).

In previous studies, it has been suggested to compare cultural values within the country as well as between countries (Cukur et al., 2004; Kağıtçıbaşı, 1997; Oyserman, et al., 2002). This research aims to fill a knowledge gap in this area. The data collected by the questionnaire method was used a cross-sectional research method.

The collected data were obtained from academic staff working in social sciences departments. Since there is no distinction between private and public universities, this issue will be considered as a limitation. Postgraduate students from the region conducted face-to-face surveys to collect the data. Before proceeding to the survey part, academic staff was asked to approve the voluntary participation form. The return rate of the data is 100%. The sample

includes academic staff working in Social Sciences departments at Carnegie

Mellon, the University of Pittsburgh, Penn State. Academic personnel contain professors, associate professors, and assistant professors.

The number of collected data is 201. n > 8m+50 was used to figure out how many samples were enough (Tabachnick & Fidell, 2007). In order to determine the sufficient number of samples, the n > 8m+50 rule was applied (Tabachnick and Fidell, 2007). m= number of variables, turnover intention, 1 dimension; individualism-collectivism, 2 dimensions and perceived organizational justice consists of a total of 6 dimensions, including 2 dimensions. Since 8×6+ 60= 108, it is considered sufficient to reach a minimum of 124 samples. Furthermore, the sample size must be at least 200 in order to analyze the sample using AMOS and SEM (Kline, 2011). In this direction, the sample size was determined as 201 for the city of Pittsburgh, considering a 5% margin of error within the 95% confidence limits of the population in question. Here, it can be said that enough samples have been taken for the analysis to be done.

2.2. Measures

In this research, the cross-sectional research method was used, and the answers were collected by the questionnaire method. A questionnaire consisting of four parts was distributed to the participants. In the first three sections, there is the perceived organizational justice scale, the turnover intention scale, and the individualism-collectivism scale. In the last section, there are items that include the demographic characteristics of the participants.

Perceived Organizational Justice Scale: Perceived procedural and distributive justice was evaluated with an eleven-item scale developed by Colquitt (2001). The original scale is four-dimensional. However, two dimensions, perceived procedural (7) and distributive justice (4), were included in the measurement. Under the perceived procedural justice dimension, there are items such as "Can you express your ideas and feelings during these processes?". Under the perceived distributive justice dimension, there are items such as "Are these processes implemented consistently?". Participants expressed their answers using a five-point Likert-type scale (1=too little; 5=too much). High scores on the scale mean that the perceived procedural-distributional justice level is high.

Turnover Intention Scale: Turnover intention was evaluated with a three item

and one dimension scale developed by Cammann et al. (1983). Under this

dimension, there are items such as "Sometimes I think about quitting my job". Participants express their answers using a five-point Likert-type scale (1 = strongly disagree; 5 = strongly agree).

Individualism-Collectivism Scale: Allocentrism-idiocentrism level was evaluated with a scale consists of 32 items and two sub-dimensions as collectivism (16) and individualism (16). It was developed by Singelis et al. (1995). Under the collectivism dimension, while there are items such as 'My happiness is very dependent on the happiness of those around me'; under the individualism dimension; There are items such as "Competition is the law of nature". Participants expressed their answers using a five-point Likert-type scale (1=strongly disagree; 5=strongly agree). High scores given to scale items mean that individuals have high levels of individualism and collectivism.

Demographic Variables: Age, gender, position, duration of employment in that university, and total employment were included in the study as control variables.

3. RESULTS

3.1. Preliminary analyses

Before obtaining the tables of descriptive statistics, data cleaning was carried out. During data cleaning processes, following the order suggested by Tabachnick and Fidell (2001), the data were made suitable for analysis with the help of the SPSS program (Tabachnick and Fidell, 2001). No outliers were detected in the data set, and it was observed that the variables provided the assumption of normal distribution. After examining the reliability of the scales, the total scores were calculated, and confirmatory factor analysis tests were performed. Since the model was compatible, hypothesis tests and moderating analysis tests were started. AMOS 23 was used for confirmatory factor analysis and Process Macro (Model 1) was used when examining the moderating effects of allocentrism-idiocentrism on the effect of perceived procedural-distributional justice on turnover intention.

3.2. Confirmatory factor analysis

Since the factor structures of the scales in the study were previously revealed and the scales were developed according to a certain theory, Confirmatory Factor Analyzes were made for the scales used in the study after the findings

obtained from the preliminary analyzes.

Table 1: CFA results for the scales

Scales	$\Delta X^2/sd$	RMSEA	CFI	GFI	AGFI
Procedural justice	2.529	.080	.945	.989	.996
Distributive justice	2.268	.087	.896	.951	.982
Idiocentrism	2.536	.088	.892	.949	.975
Allocentrism	2.842	.096	.962	.949	.885

The CFA results of the scales were examined and presented in Table 1. According to the analyzes, the fit statistics of all the scales were within acceptable limits (GFI, CFI, AGFI >.90; RMSEA < .08; $\Delta X2/sd$ <3; Şimşek, 2007).

3.3. Descriptive statistics and correlations

Correlation analysis was performed to determine the relationships between the variables. The correlation coefficients between the scales were examined and values above .70 were not found (Tabachnick & Fidell, 2001). This indicates that there is no multicollinearity problem. In Table 2, the number of items belonging to the scales, the mean of the variables; standard deviation values, Cronbach's Alpha values of the scales, and correlation coefficients of the variables is given.

Table 2: Descriptive Statistics and Correlations

	Variables	1	2	3	4	5	Item number	α
1	Turnover Intention	1	-.16*	-.26**	-.19**	-.23**	3	.888
2	Perceived Procedural Justice		1	.71**	.50**	.19**	7	.815
3	Perceived Distributive Justice			1	.45**	.27**	4	.843
4	Idiocentrism				1	.32**	8	.817
5	Allocentrism					1	8	.748
	Mean	1.95	3.51	3.37	4.06	3.96		
	Standard Deviation	.96	.59	.74	.51	.49		

*p<.05 (two-tailed), **p<.01 (two-tailed), ***p<.001 (two-tailed), α=Cronbach's alpha coefficient

According to Table 2, the mean of turnover intention is 1.95; the mean of perceived procedural justice is 3.51 and the mean of perceived distributive justice is 3.37. The mean of idiocentrism (4.06) is higher than the mean of allocentrism (3.96). This situation is consistent with the literature (Caldwell-Harris & Ayiceği, 2006; Triandis, Chen & Chan, 1998). Considering the reliability of the scales with the Cronbach's Alpha value; α values at all scales Hair et al. (2000) and over .70 suggested by Nunnally and Bernstein (1994), it can be said that each of the scales is quite reliable.

3.4. Hypotheses tests

Hierarchical regression analysis was performed. Gender, position, employment, and total employment were assigned as control variables; then perceived procedural justice and finally perceived distributive justice were included in the model, and the models were interpreted accordingly.

As a result of the regression analysis, the total R^2 change of the model (ΔR^2 = .09, p<0.01) In the first model, in which perceived procedural justice predicts turnover intention, perceived procedural justice explains the turnover intention by 6% (β = -.11, p> 0.05). If the perceived procedural justice level increases by 1 unit, turnover intention will decrease by .10 units. With the inclusion of perceived distributive justice in the model, the explanatory power of the model increased to 9%. An increase in perceived distributive justice by 1 unit will make people less likely to change jobs by.24 units. Hypothesis 1 and Hypothesis 2 were accepted: an increase in perceived procedural justice and distributive justice reduces turnover intention. The Process macro (Model 1) in SPSS was used to test the moderator effects of allocentrism and idiocentrism on the effect of perceived procedural and distributive justice on turnover intention, and according to the results, H3a hypothesis was accepted. H3b, H4a, and H4b hypotheses were rejected. Analysis results are given in Table 3.

Tablo 3: Moderation Table

	B	SE	0,95 Lower	0,95 Upper
Constant	1.97**	0.05	1.86	2.08
Perceived Procedural Justice	-0.06	0.07	-0.21	0.09
Idiocentrism	-0.12	0.09	-0.31	0.05
Perceived Procedural Justice*Idiocentrism	**0.04**	**0.06**	**-0.08**	**0.16**
Constant	1.97**	0.05	1.86	2.07
Perceived Procedural Justice	-0.08	0.06	-0.21	0.04
Allocentrism	-0.18*	0.06	-0.39	-0.06
Perceived Procedural Justice*Allocentrism	**0.08**	**0.06**	**-0.04**	**0.20**
Constant	1.98**	0.05	1.87	2.09
Perceived Distributive Justice	-0.19*	0.06	-0.33	-0.05
Idiocentrism	-0.09	0.09	-0.28	0.08
Perceived Distributive Justice*Idiocentrism	**-0.01**	**0.06**	**-0.12**	**0.11**
Constant	1.95**	0.05	1.85	2.06
Perceived Distributive Justice	-0.14*	0.06	-0.27	-0.02
Allocentrism	-0.16**	0.06	-0.28	-0.04
Perceived Distributive Justice*Allocentrism	**0.12***	**0.06**	**0.01**	**0.24**

b = Non-standardized regression coefficient, SE = Standard error, 95%CI, n = 201 (5,000 bootstrap samples), *p< 0,05, **p< 0,01, ***p< 0,001

Table 3 revealed that the estimation variables explain approximately 11% of the turnover intention. The additional variance explained by the interactional term is about 2% (.0180). A regression analysis based on the bootstrap method was conducted to test the moderator effect of the individual's allocentrism on the effect of the perceived distributive justice level of the academic staff on the turnover intention (Baron & Kenny, 1986; Hayes, 2018; Preacher et al., 2007). The interaction effects of perceived distributional and allocentric on turnover intention were found to be significant (b =.121; 95% CI [.0017,.2402], t = 2.002, p 0.05).

Figure 2. The Moderator Role of Allocentrism in the Relationship Between
Perceived Distributive Justice and Turnover Intention
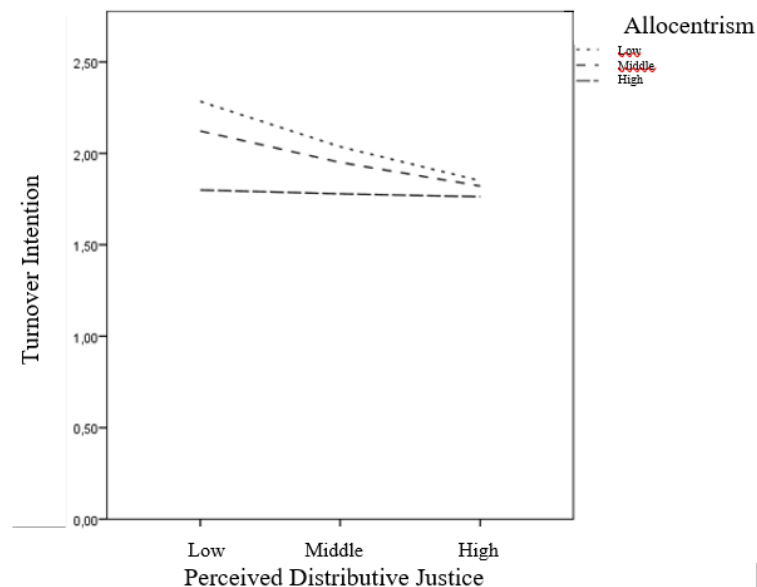
When the graph in Figure 2 is examined, as the level of allocentrism increases, the negative effect of perceived distributive justice on turnover intention weakens. Accordingly, even if the academic staff does not believe that the process is fair, academic staff with high allocentrism levels will have a decrease in their turnover intention.

When allocentrism level is low (-.8109), the relationship between perceived distributive justice and turnover intention is negative and significant (b= -.2474, 95% CI [-.3821, -.1128], t= -3.6249, p< .001). When allocentrism level is moderate (-.1859), the relationship between perceived distributive justice and turnover intention is negative and significant (b= -.1719, 95% CI [-.2942,-.0495], t= -2.7710, p <.05). When allocentrism is high (1.0641), the relationship between perceived distributive justice and turnover intention is negative but insignificant (b= -.0207, 95% CI [-.2255,.1842], t= -.1990, p>.05).).

4. DISCUSSION

The moderating effects of cultural values of allocentrism and idiocentrism on the relationship between organizational distributive/procedural justice and turnover intention relationship were examined within the scope of Planned Behavior

Theory and Group Value Model. The data gathered from 201 full-time faculty in

Pittsburgh, Pennsylvania. AMOS 23 was used for confirmatory factor analysis. The SPSS 23 Process Macro (Model 1) was used when examining the moderating effects.

Cultural values, which are mostly handled at the national level, are handled at the individual level. When the concepts of individualism-collectivism are studied at the individual level, they are called idiocentrism-allocentrism, respectively (Triandis, 1995). In this context, while the effects of the concepts at the cultural level are mentioned in the study, individualism-collectivism; the concepts of idiocentrism-allocentrism were used while mentioning the effects at the individual level.

The moderating effects of cultural values of allocentrism and idiocentrism on the relationship between organizational distributive/procedural justice and turnover intention relationship were examined within the scope of Planned Behavior Theory and Group Value Model. The data gathered from 201 full-time faculty in Pittsburgh, Pennsylvania. AMOS 23 was used for confirmatory factor analysis. The SPSS 23 Process Macro (Model 1) was used when examining the moderating effects.

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The relationship between perceived procedural-distributive justice and turnover intention was examined within the scope of Social Change Theory (Blau, 1964) and in accordance with the literature, an inverse relationship was found (Cohen-Charash and Spector, 2001; Colquitt et al., 2001). In other words, academic staff who do not perceive the outcomes they have achieved, and the processes applied while achieving these outcomes are more likely to leave their universities. H1 and H2 were accepted.

According to the study carried out in the sample, considering that the employee

with a high perceived distributive justice will have a lower turnover intention, it is

necessary to act and be consistent according to the agreement made with the employee about rewards such as wages and promotions because individualists will receive rewards according to their efforts and performances. They enter the organization with expectations (Bond & Hwang, 1987) and expect them to be complied with. Otherwise, it will not be possible for their turnover intention to decrease, and turnover intention may occur.

The moderating effects of allocentrism-idiocentrism of academic staff on the effect of perceived procedural and distributive justice on turnover intention were examined in USA culture within the scope of model 1. The theoretical background of the model was evaluated within the framework of planned behavior theory and the group value model.

When the moderating relations in the sample were examined, it was seen that allocentrism had a moderating role in the effect of perceived distributive justice on turnover intention. Accordingly, as the individual's relative allocentrism level increases, the negative effect of perceived distributive justice on turnover intention weakens. In other words, even if academic staff does not believe that their outcomes are fair, academic staff with high allocentrism levels will have a decrease in their turnover intention. H3a was accepted.

From this point of view, it can be interpreted that allocentric individuals will continue to show allocentric tendencies even if they live in an individualistic culture and will not show quitting behavior. Triandis et al. (1988) suggested that the behavior of allocentrics living in individualistic communities may affect their behavior depending on the importance of the group they will leave for them. From this point of view, it can be argued that allocentrics living in societies with a relatively high level of individualism will continue to show an allocentric tendency and this situation is independent from the dominant individualism culture in the USA, depending on the importance of the group to which allocentrics belong. According to other findings, there was no moderating effect of idiocentrism in the effect of perceived procedural justice on turnover intention and idiocentrism in the effect of perceived procedural justice on turnover intention in the USA sample. Accordingly, whether individuals are allocentric (other than perceived distributive justice) or idiocentric does no effect their turnover intention. H3b, H4a, and H4b were rejected.

5. RECOMMENDATIONS AND LIMITATIONS

There are also some limitations of the study. A limitation of the study is the collection of data using only the survey method. In this direction, the reliability of the study can be increased by using both qualitative and quantitative data collection methods (Vijver & Leung, 1997). Intercultural differences can be better understood by conducting interviews and focus group studies (Celenk et al., 2011). Because people will score themselves based on what their culture says they should do, it has been asserted that the questionnaires aren't very reliable or valid. People will score themselves based on what their culture says they should do.

Since the sample of the study consisted of employees with a high level of education, the results cannot be generalized to society. In addition, data were collected from a single city. It would be more accurate to make cross-cultural comparisons when cultural differences are collected from both rural and urban areas.

It is thought that the study data may cause a common method variance error due to the fact that it consists of individual evaluations, was obtained from a single source at a single time, and dependent and independent variables were measured at the same time. In order to prevent this problem, the identity information of the participants was not taken. In addition, according to the results of the Harman's one-factor test conducted to determine the variance of the common method, no general factor explaining the majority of the variance in the scale items was determined (Podsakoff et al., 2003). In later studies, it is suggested that data are collected from different sector employees at different times or using different methods.

According to Aycan et al. (2000), participants living in collectivist cultures may tend to please the researcher while answering the questions, even if no information about their respondent identity has been obtained. The tendency to constantly agree with the questions asked causes the "prejudice to answer", and this may cause false or artificial differences between countries. To avoid such biases and errors, data standardization methods developed for cross-cultural research should be used (van de Vijver & Leung, 1997). Therefore, it should be repeated with much larger samples and cultures to evaluate the results depending on the culture (Aycan et al., 2000).

Another limitation of the study is that the status of being dependent and independent from the groups of academic staff forming the sample was not examined (Fischer, 2004). Besides, according to Gelfand et al. (2006), more comprehensive and explanatory results can be obtained by adding a new dimension to cultural studies that also question the effect of environment and norm expectations of the environment on behaviors.

In today's world where globalization is increasing rapidly, studies on the differences in cultural values become much more important (Lee and Peterson, 2000). In this direction, some suggestions can be made to the managers with the data obtained from this study. Managers need to see that the cultural characteristics of organizations with employees from different nationalities can be shaped differently not only according to the culture but also at the individual level. However, administrators should review the resource allocation rules and procedures of academic staff and should attach importance to management practices that are in line with the cultural values of individuals (Wang & Yi, 2012). Giving the academic staff voice in the decisions taken within the organization will enable them to respond more positively to the perceptions of procedural justice and distributional justice (Lind et al., 1990). Clarifying the appointment criteria of academic staff, taking the opinions of each unit for the procedures to be applied while determining the criteria, will increase the belief of the staff in the fairness of the staff distribution.

In future studies, power distance as a cultural factor and the effect of individual equality sensitivity can be examined. The fact that individuals find their jobs meaningful is also a moderator between independent and dependent variables. When considered in general, the study shows that studying the cultural values, which are mostly handled at the national level, at the individual level can make a difference. However, it has the feature of being the first study in the literature with related variables.

DISCLOSURE OF CONFLICT
The author declares that she has no conflicts of interest.

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ANALYSIS OF INTRAPRENEURSHIP ACCORDING TO VARIOUS DEMOGRAPHIC VARIABLES IN MATURE ORGANIZATIONS: A RESEARCH IN THE BANKING SECTOR

Bayram Alamur* & Gülten Eren Gümüştekin

ABSTRACT

Unless organizations renew themselves, their life will come ta an end as it is in the life circle of products. On the contrary; innovation prepares the organizations for the future and provide dynamism to them. However; some of the problems of most organizations are synergy at the beginning, failing to spread their wills to next steps and limiting themselves with the forms of bureaucracy. This situation leads to many negative results such as operational blindness and holds members of organizations off innovation. It can be said that there are many criteria of achieving maturity stage of organizations. Some of these criteria are sectoral maturity, the number of employees, age, size, growth rate, sale rates, centralization degree, productivity and cash form of organization. These criteria are able to be increased with different classifications. "Renewing" or "Falling" stages follow the maturity stage of organizations and the intended one is "Renewing" stage with the increase of productivity.

While entrepreneurship shows itself and emerges the presence of organization when there is no organization, intrapreneurship protects and improves the existing. Intrapreneurship and innovation, which is one of the sub-branches of intrapreneurship, are not going to take part in mature organizations in time. This research is done for the detection of intrapreneurship of members in mature organizations.

KEY WORDS: *Intrapreneurship, Mature Organization, Strategic Innovation, Banking Sector*

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1. INTRODUCTION

Today, the effective use of human resources has been accepted by everyone in order to talk about the efficiency and effectiveness for organizations. Channeling the energies and synergies of human resources to the right area and seeing themselves as a part of the organization they are in will secure the future of the organization. The production of innovations through this resource is one of the few important points that organizations will care about in order to survive in a rapidly changing world. At this point, intrapreneurship offers organizations the opportunity to produce innovations through their own resources. In this study, it is aimed to determine the level of intrapreneurship of banking sector employees and to examine their intrapreneurship according to various demographic variables.

2. LIFE OF ORGANIZATIONS AND THE CONCEPT OF MATURE ORGANIZATION

Organizations are social forms that emerge as a result of entrepreneurship to achieve a goal. Although a period of time is not determined for their life at first, a significant part of them have to end their activities in the early stages of their lives. Organizations also go through a similar life cycle stages just like the life stage of a living thing.

Adizes; stating that there are life cycles of people, products, markets and even societies, he emphasized that the existence of stages such as birth, growth, maturity, old age and death and different behavior models will emerge in each life cycle. (Adizes,1979:4). Lester, another researcher on the subject; defines the organizational life cycle as a structure that appeals to intuition and states that organizations gradually pass through a life as predicted by the science of biology. (Lester et al. 2008:37).

According to some authors, the concept of 'maturity' can also be used for certain sectors. What is meant here is that the sector has maturity characteristics due to its unique conditions. (Freitas et al. 2013:446).

For example, it is assumed that the banking sector has turned into a mature sector. Maturity stage as a stage encountered after the establishment and growth stages of the organization.

According to Cameron and Whetten, while effectiveness for each of the departments and units is absolutely critical, effectiveness at all levels is bound to decline as the organization matures(Cameron and Whetten, 1981:266). As an organization matures, the spirit of entrepreneurial discovery transforms into satisfaction, and a slow and gradual transformation over time begins regarding risk adaptation, inward focus. The driving force of the past becomes insufficient to produce alternative futures, basic abilities become fundamental rigidities. (Kuhn and Marsick, 2005:32).

2.1. Intrapreneurship in Mature Organizations

Sometimes 'intra-organizational entrepreneurship '(Meydan,2011:25-40)(Basım and Şeşen,2009:41-60), preneurship in company (Yaşlıoğlu and Aydınlık, 2013:171-180), 'internal entrepreneurship'(Yazıcıoğlu et al. 2011:273-283) tried to be explained with concepts such as and it generally accepted as intrapreneurship.

Intrapreneurship is a popular concept that has gained importance for businesses. In today's world, where global competition is increasingly intensified, the business environment adopts as an important goal to develop the entrepreneurial element and employees within the organization. (Zahra et al. 2000:947-946). Pinchot(1985), one of the authors who first addressed the concept, describes entrepreneurs who realize intrapreneurship as 'key individuals with extraordinary dreams apart from their job descriptions'.

There are many definitions related to the concept of intrapreneurship, most of which are in the foreign literature. Some of these definitions are as follows;

- According to Bosma and others (2010:8) Intrapreneurship refers to 'the presence of a sense of responsibility and initiative by employees in large organisations, usually for new or innovative business and service practices'.
- According to Fry (1993:373), intrapreneurship is 'innovative products and processes developed by creating an entrepreneurial culture within an existing organization'..
- Leslem(1986:10), 'it is a phenomenon that sharpens the functional division between management and investment, and bridges investment and development'.

- Başar (2013:21) defines intrapreneurship as 'entrepreneurship within an existing organization (business)'.
- Stoner and Freeman (1992: 157) also describe intrapreneurship as 'the environment within an existing organization where the need for innovation is identified and encouraged'.

Intrapreneurs, on which the literature on intrapreneurship focuses, are individuals and groups within the organization who use independent initiatives in bottom-up innovation practices(Madu, 2011:42).

Enslin (2010) characterizes intrapreneurs as yet unknown heroes of entrepreneurship and defines these individuals or groups as those who think and act like 'entrepreneurs' within existing organizations.

The intrapreneur is a special type of 'entrepreneur' and draws many key behavioral patterns from the 'entrepreneur'; takes initiative, chases opportunities and seeks innovation (Bosma et al. 2010:8). While Kuratko and Hodgetts (1992) define intrapreneurs as 'individuals who set goals on their own initiative and achieve their goals without needing the help of others', they relatively reduced the responsibility of organizations to identify intrapreneurs and provide opportunities.

According to Pinchot (1985), the characteristics of intrapreneurs are as follows;
- Freedom of authority (authority to use initiative),
- Purpose and reward-oriented motivation,
- Confidence strengthened with organizational support,
- Ability to work with multiple environments,
- Project-oriented, time-limited working skills,
- Innovative, questioning, harmonious, open-minded approach,
- Able to take risks within the boundaries drawn by the organization.

According to Altınay (2004:430), intrapreneurs strive to transform the ideas they want to turn into profitable products and services into opportunities, and this effort provides the opportunity to develop 'innovative' solutions to the problems of the business. According to Özkara et al. (2006:221), an entrepreneur is seen as a brave, agile, innovative person who sees and evaluates opportunities and can take risks.

The intrapreneur is, in most cases, a 'salary' individual working within large organizations and concentrated on overcoming key hurdles in achieving set goals. Special constraints (corporate hierarchy, organizational structure, etc.) that are not applicable to the entrepreneur limit the intrapreneur and the intrapreneur operates within these constraints(Letsie, 2013:98).

2.1.1. Dimensions of Intrapreneurship

Although there are different dimensions in the literature, the most common dimensioning is as follows

2.1.1.1. Innovation

Innovation is to increase existing resources by developing new approaches and methods and/or to make them efficient, to contribute to technology and product knowledge while creating products or services in this direction. In terms of intrapreneurship, innovation is a mandatory choice for organizations, especially when the market for products and services narrows, competitive pressure increases and organizations have to survive in dynamic environments.

Although innovation is grouped by some authors as 'product-related' and 'technology-related production process' innovations(Antoncic and Hisrich:2003:17), Innovativeness, which is accepted throughout the literature as the main dimensions of intrapreneurship, should be defined as a holistic approach accepted as a sustainable process and perception in the intrapreneurship process.

2.1.1.1.1. Strategic Innovation

The concept of strategy was first and widely used in military dispatch and administration. Among the features of the strategy, there are principles such as developing long-term policy for the future, being strong, ensuring the appropriateness of purpose and means, effective use of the power at hand, and being flexible and cautious. In an economically, socially and administratively competitive environment, strategy brings with it connotations of innovation, development, activity and harmony with the environment(Bircan, 2002;13). Strategic renewal means re-creating the existing mission and changing it towards creativity, changing the system and adopting an innovation-oriented structure of the organization. (Bozkurt, 2009;39).

Mature organizations are often on the way to providing incremental improvements to existing offerings, with a focus on new products and services, where the spirit of innovation dwindles. Many famous organizations choose this traditional path of business growth, designing an innovative product or service, growing in global markets, and trying to maintain it for as long as possible. (Kuhn and Marsick, 2005:28).

2.1.1.2. Proactivity

Proactiveness, which Ağca and Kurt (2007:96) define as 'searching for opportunities and using initiative in order to catch the change in the environment', should also be expressed as one of the most important elements that an intrapreneur, who has to exhibit the reflection of its sense of entrepreneurship, by taking initiative.

Proactive behavior, which is one of the most prominent functions of entrepreneurship is in essence an act of speed and progress. If entrepreneurial individuals or organizations prefer and implement proactive approaches, the organization will be better equipped to reach the target in the environment they are in and to develop planned responses to the situations they will encounter on the way.

Proactive behavior, which is one of the most prominent functions of Intrapreneurship, is in essence an act of speed and progress. If entrepreneurial individuals or organizations prefer and implement proactive approaches, the organization will be better equipped to reach the target in the environment they are in and to develop planned responses to the situations they will encounter on the way.

2.1.1.3. Risk taking

One of the most important characteristics that an entrepreneur should have is the courage to take risks. An entrepreneur is an individual who sees and feels the opportunities of the risk in front of the threats it contains. According to Kaya (2001:544), the tendency to take risks is the key element used to distinguish between managers and entrepreneurs. From this point of view, it would not be wrong to state that intrapreneurs will take risks similar to the entrepreneurs, and that the risk incurred will be higher than the manager and lower than the entrepreneur.

The risks that the intrapreneur individual undertakes in the innovation process are those that are likely to turn into efficiency and benefit within the scope of proactivity skills, but also include harm and danger. The fact that the risks taken by the entrepreneur and the intrapreneur are different risks should also be expressed at this point. The risk taken by the entrepreneur is crucial and acute for the continuation of the organization. The risk taken by the intrapreneur carries the possibility for the organization to consume the resources allocated for intrapreneurship activities without adding value. The intrapreneur may cause a certain amount of budget-resource loss with the risk he has taken. The type and intensity of the risk to be taken by the intrapreneur is not allowed to be the risks that will endanger the existence of the business, otherwise the intrapreneur will have started to use the rights and authorities that the entrepreneur should use.

2.1.1.4. Autonomy

When autonomy is considered in an organizational sense, it can be characterized as a concept that expresses acting independently from the suffocating organizational barriers that stifle individuals and groups. (Lumpkin and Dess, 1996:140).

Autonomy is to have a sense of independence and authority on the way to success in many situations such as forming ideas, making decisions, developing new forms of action, working units. Many organizations may prefer to reduce the level of hierarchy within the organization and to assign more authority to their activity units in order to establish autonomy in order to increase intrapreneurship within their bodies(Ağca and Kurt, 2007:96).

3. RESEARCH

3.1. Purpose and importance of the research

The aim of the research is to determine the intrapreneurship of the employees in the mature organizations to be researched and to analyze it according to various demographic variables. At this point, it is important in terms of research results and applied field.

3.2. Research population and sample

Within the scope of this study, field research was conducted to test the hypotheses developed after the literature review. In this study, in which the data were collected by the survey method, the bank enterprise operating in the

service sector was taken as a basis. The universe of the research consists of the employees of the Mediterranean Regional Directorate of a national bank and the branch employees affiliated to this regional directorate.

While determining the number of samples related to the study, Yazıcıoğlu and Erdoğan (2004) acted on the basis of the numbers related to the sample sizes that should be drawn from different sized universes for sampling errors of a = 0.05 and ± 0.05 regarding the number of samples that should be drawn according to the population number. The number of samples to be collected despite the population sizes stated by the researchers is given in the table below.

Table 1: Sample Sizes for a=0,05

	+0.05 Sampling
universe size	**p=0.5 q=0.5**
100	80
500	217
750	254
1000	278
2500	333
5000	357
10000	370
25000	378
50000	381
100000	383
1000000	384
10000000	384

Source: Yazıcıoğlu Y. and Erdoğan, S. (2004).

There are 39 branches and a total of 429 personnel operating in 5 different provinces under the responsibility of the regional directorate, which is the subject of the research. Questionnaires were delivered to bank employees through face-to-face interviews and also online. All of the employees were tried to be reached, 380 people were reached, and 317 survey forms, which were returned and available, form the basis of our research.

3.3. Research limitations
One of the most important limitations of the research is the difficulties encountered in reaching the target audience and collecting data, which are encountered in many survey studies. While the target audience of the survey was determined as the Mediterranean Regional Directorate of a private national

bank, the attitudes of the management and employees regarding allocating time in their busy working schedule and their limitations in sharing information are the most important factors limiting the survey. Another important factor is the time constraint in the process of delivering the questionnaire to the target audience, ensuring that it is answered, and taking it back again. Another important limitation of the research is that it was conducted in only one regional directorate and branches affiliated to it, depending on time and cost criteria, within the framework of a sample that can be considered narrow considering all the employees of the bank.

The fact that the research is carried out in a single sector is a limitation, and it is thought that it is possible to compare the results by including different sectors in the research to be done in other studies.

3.4. Research hypothesis

The research hypothesis is set up as follows.

H1. There is a significant relationship between the intrapreneurship of mature organizational employees and demographic variables.

3.5. Data collection

The questionnaire form used in the research consists of two parts, the information form with demographic questions and the intrapreneurship scale. In the questionnaire form used in the research, a scale consisting of five-interval metric expressions containing different dimensions to measure intrapreneurship was used. In the literature review, it was seen that the scale used for intrapreneurship was mostly developed by Naktiyok (2004), and the scale consisting of 21 expressions and 4 dimensions developed by Durmaz (2011), was used by making use of this scale. 5-point Likert type scale was used in the research, starting from "Strongly Disagree" and continuing to "Strongly Agree".

In the first part, there are questions to determine the socio-demographic characteristics of the participants such as age, marital status, gender, educational status, total working time in the profession, the unit they work and their positions in the workplace; In the second part of the questionnaire, there are 21 statements to measure intrapreneurship.

Statistical package programs were used to evaluate the information obtained through surveys as a result of the research by transferring them to the computer environment and the data were analyzed by statistical package program. In

addition, in order to test the effects on the variables, reliability analysis, explanatory factor analysis, multiple regression analysis, one-way analysis of variance (anova) and T-test analyzes were used in the study.

3.5.1. Internal Consistency Analysis and simplification of the scale

Reliability, which is one of the features that the scale should have, is an indicator of the stability of the measurement values obtained in repeated measurements under the same conditions with a measurement tool (Öncü, 1994). Reliability can be calculated by various methods in statistics and the numerical value obtained is called the reliability coefficient. The most commonly used method for calculating the reliability coefficient is the Cronbach's Alpha coefficient obtained with the SPSS package program. This coefficient varies between 0 and 1 (Avcı, 2005: 164).

In order to talk about the reliability of the scale used in the research, the Alpha coefficient should be 0.65 and above (Kuyumcu, 2011:80). At the same time, it can be said that the closer the Cronbach's Alpha Coefficient is to 1, the higher the reliability of the scale. The following table shows the reliability analysis results for the questions of intrapreneurship in mature organizations.

First of all, internal consistency test was applied in reducing the questions of the scale consisting of intrapreneurship expressions obtained as a result of the literature review. In order to increase the internal homogeneity of the scale, the item-total correlations and statistics showing the internal consistency of the remaining variables (Alpha if item deleted if a variable is deleted) were evaluated. The intrapreneurship scale was included in the questionnaire as 21 questions without any changes as in the literature. By looking at the correlation values of the expressions, 5 expressions with low factor loading were removed and a total of 16 questions were processed for analysis. As a result of the test performed after the reductions were made, the Cronbach's Alpha value for intrapreneurship was determined as α= 0.823.

Table 2: Intrapreneurship Scale Reliability Analysis Results

MAIN FACTORS	CRONBACH'S ALPHA	
Intrapreneurship in Mature Organizations	Number of samples: 317	Number of expressions:21
	CRONBACH'S ALPHA: ,823	

Reliability analysis was performed using the SPSS 22.0 package program. As seen in Table 2, the Alpha values obtained as a result of the reliability analyzes applied for intra-organizational entrepreneurship in mature organizations were found to be sufficient in terms of being higher than the lower limit (0.70) required for the scale accepted in the field of social sciences to be considered reliable. With these results, it is seen that the internal consistency ratio of the scale of intrapreneurship questions in mature organizations is high.

3.5.2. Validity of the scale

Validity is the degree to which a measurement tool can accurately measure the feature it aims to measure without confusing it with any other feature (Tekin, 1977). Validity of the scale means that it is free from systematic and random errors. If the scale is reliable, it means that random errors have been eliminated during the measurement process. A scale is reliable if it does not contain random errors. However, this depends on the scale being free of systematic errors. Therefore, for a scale to be 'valid' it must be 'reliable', but being 'reliable' does not mean that it is 'valid' (Yükselen, 2011:115-116). Even if the reliability of the measurement tool is determined with an appropriate method, since the reliability is related to the stability of the measurement tool, the procedure is "What is wanted to be measured with the measurement tool used?", "Can the items accurately measure what is intended to be measured?" cannot answer the questions (Gümüş, 1977). For this purpose, in the study, firstly, studies were carried out to determine whether the meaning validity was provided or not.

3.6. Research findings

In this section, the findings obtained as a result of the research are mentioned. First of all, the demographic characteristics of the participants were examined, and then analyzes such as explanatory factor analysis, difference analysis and regression analysis were applied.

The demographic characteristics of the participants as a result of the research are summarized in the table below.

3.6.1. Demographic characteristics of participants

	EXPRESSIONS	Frequency	%		EXPRESSIONS	Frequency	%
Employee Age	20-25	71	22,4	**Working Time in the Workplace**	0-5 Years	155	48,9
	26-30	89	28,1		6-10 Years	111	35,1
	31-35	87	27,4		11-15 Years	41	12,9
	36-40	46	14,5		16-20 Years	8	2,5
	41-45	14	4,4		21 Years and Above	2	0,6
	46 years and above	10	3,2				
Education Status	High school	16	5	**Position at Work**	Authorized	123	38,7
	Associate Degree	22	6,9		Director's Assistant	68	21,6
	Licence Degree	243	76,7		Director	81	25,5
	Master Degree	33	10,4		Manager	22	6,95
	Doctorate	3	1		Security	23	7,25
Working Time in Current Position	0-3 Years	147	46,4	**Working Department**	Security	23	7,3
	4-7 Years	117	36,9		Operation	116	36,6
	8-11 Years	42	13,3		Agriculture	16	5
	12-15 Years	9	2,8		Individual services	65	20,5
	16 Years and Above	2	0,6		SME\Business	62	19,6
Gender	Woman	146	46.1		Regional	16	5
	Man	171	53.9		Management	19	6
Marital Status	Married	186	58,7				
	Single	131	41,3				

Table 3: Demographic Characteristics of Participants

In the first part of the questionnaire, a total of 11 questions were directed to determine the demographic characteristics of the research participants. The last two questions of the questionnaire consisting of age, gender, marital status, total working time at the current workplace, position, working time in the current position, education level, department, bank and the region where the bank is located, are the questions of all participants in the same bank. It was not taken into account in the evaluation due to its work in the region. These last two demographic questions can be used in a similar and detailed study.

As can be seen in Table 3, the demographic characteristics of the participants

were tested using frequency and percentage statistics. 53.9% of the research participants are men and 46.1% are women. According to the marital status variable, 186 people and 58.7% of the participants are 'Married', 131 people and 41.3% are 'Single'. When the research participants are examined over the age variable; It is possible to say that the highest number of participants is between the ages of 26-30. The share of this group in the total participant rate is 28.1%, and the total number of participants in this age group is 89. As a result of the examination of the participants over the variable of educational status, it is seen that the group with the highest frequency consists of those who state their education level as undergraduate. The share of those with a bachelor's degree in the total participants is quite high, with 76.7%, and the number of those with a bachelor's degree is 243. When the position variable in the workplace is examined, it is seen that the group with the highest number of participants is those who work in the authorized position with 123 people. This group takes a share of 38.7% from the total. Authorized positions respectively with 81 people and 25.5% share, directors, 68 people and 21.6% share, assistant directors, 23 people and 7.25% share, security employees and finally Managerial positions are followed by 22 people and a share of 6.95%.

When the departments in which the bank employees work are examined, it is seen that the total number of participants is 317, with 116 people, the operation staff has the highest number. The share of this group among all employees is 36.6%. Retail Marketing employees with 65 people and a share of 20.5%, Enterprise-SME employees with a share of 62 people and 19.6%, security employees with 23 people and a share of 7.3%, respectively. There are 19 people, with a 6% share, employees in managerial positions, and lastly, the 16-person cluster and 5% share with the same number and ratio of agricultural unit employees and regional directorate employees.

When the variable of working time of the participants in the workplace is examined; It is seen that the number of those who are in the 0-5 year working range has a high rate of 48.9% with 155 people. When the last one of the demographic variables in our research, 'Time working in the current position', is examined, it is seen that the number of participants in the 0-3 years range is 147 and the ratio of all participants is 46.4%. This ratio is respectively; 117 people with 36.9% in the 4-7 years range, 42 participants in the 8-11 years range with 13.3%, 9 participants with a rate of 2.8% in the 12-15 years range, and the last 2 employees with a current position of 16 years or more follow with a rate of 0.6%.

3.6.2. Explanatory Factor Analysis

Explanatory factor analysis (EFA) was applied to test the construct validity of the scale. Explanatory factor analysis is factor analysis that is used to derive new independent variables (factors) from each other with fewer (k<p) and independent from each other by using the covariance or correlation matrix of the data. With this method, fewer factors explaining the original variability from p number of variables are determined, and the factor loads, factor coefficients, factor scores of these factors are calculated, and scores that are highly correlated with the original variables but not among themselves are derived (Özdamar, 1999).

The scales used in the research are theoretically strong as they have been tested in other studies and their validity and reliability have been proven. In addition, explanatory factor analysis was applied to test which factor did not include the survey variables.

3.6.2.1. Intrapreneurship Scale Explanatory Factor Analysis

As a result of the reliability analysis carried out for the intrapreneurship scale, it was seen that the Cronbach's alpha value of the scale was 0.823. The fact that the result is very close to 1 indicates that the scale has a high percentage of reliability.

Table 4 shows the separated dimensions and the values obtained as a result of the explanatory factor analysis of the intrapreneurship scale.

Variables		Factor Loads				Eigen Values	Explained Variance	Cronbach's Alfa
		1	2	3	4			
Factor 1: Proactivity (P)						2,63	16,43	,743
P14	My organization uses the ideas of its employees in long-term planning.	,796						
P15	My organization uses time, money and human resources effectively to evaluate opportunities.	,772						
P3	My organization leaves free space to its employees in a new project.	,669						
P21	My organization supports its employees in developing new applications and innovations	,614						
Factor 2: Autonomy (A)						2,33	14,60	,717
A16	I can make decisions without consulting my superiors while innovating about my business.		,768					
A9	I prefer to take on a mission alone		,714					
A19	In business life, my own thoughts are more important than the opinions of others.		,700					
A17	I can disable my organization's standard procedures when innovating		,605					
Factor 3: Innovation (I)						2,23	13,97	,698
I12	I strive to innovate about my work			,679				
I6	I am open to new ideas			,657				
I7	My organization encourages its employees to be innovative			,630				
I13	My institution attaches importance to R&D activities, technological developments and innovation.			,589				
I5	My institution reduces bureaucracy for the emergence of new ideas			,510				
Factor 4: Risk Taking(R)						1,89	11,82	,599
R10	Environments of uncertainty also create an opportunity to attack.				,774			
R11	I do not refrain from making drastic changes when I am on an important job.				,683			
R20	I like risky jobs with opportunity.				,613			
Total variance explained : 56,82 KMO sample adequacy measurement : ,794 , Chisquare : 1355,615 P:,000								

Table 4: Factor Analysis Results Regarding the Intrapreneurship Scale

The dimensions of intrapreneurship that emerged as a result of factor analysis are as follows:

1.Factor: Proactivity

When the general variance percentages of the proactivity factor are analyzed, it is seen that this factor constitutes 16.43% of the explained variance. All 4 statements in the proactivity dimension of the scale developed by Durmaz (2011) from Naktiyok were included in the questionnaire, and statement number

2 of the 4 statements 'My institution tries to be ahead instead of following other businesses' and statement no. 8 'My institution follows developments. Although they were excluded from the scale because they did not carry a sufficient factor load, statements 14 and 21 in the original scale were included in the same way under the proactivity dimension, while the expression number 3 under the autonomy dimension 'My institution gives free movement to its employees in a new project' is associated with risk taking. The statement numbered 15 under the dimension 'My institution uses time, money and human resources effectively to seize opportunities' was included under the proactivity dimension as a result of the EFA. The statement 'My institution benefits from the ideas of its employees in long-term planning' had the highest factor load of 0.796.

2.Factor: Autonomy

When the general variance percentages of the autonomy factor are analyzed, it is seen that this factor constitutes 14.60% of the explained variance. All 6 statements in the autonomy dimension of the scale were included in the questionnaire, while 2 statements out of 6 were gathered under the other dimensions, while the statements 9-16-17-19 were gathered under the same dimension. As a result of the EFA, no other expressions were included under this factor other than the other factors. The statement number 16, 'I can take decisions without consulting my superiors while producing innovations about my job' had the highest factor load with 0.796.

3.Factor: Innovation

When the general variance percentages of the innovation factor are analyzed, it is seen that this factor constitutes 13.97% of the explained variance. All 5 items in the innovation dimension of the scale were included in the survey, and 18 out of 5 items 'Empowering subordinates helps to come up with innovative ideas' was removed from the scale because it did not carry sufficient factor load, but no. 5 under the autonomy dimension 'My institution uses bureaucracy for the emergence of new ideas'. The expression 'reduces' was included under the innovation dimension as a result of the EFA. The expression 'I strive to innovate in my work' had the highest factor load of 0.679.

4.Factor: Risk Taking

The risk-taking factor in the study constitutes 11.82% of the explained variance. All 6 statements in the risk-taking dimension of the scale were included in the questionnaire, and statements 10, 11, and 20 out of 6 were gathered under the risk-taking factor by carrying sufficient factor loads. The statement number 1 'I

take any risk for the success of my mission' and the statement number 4 'I am brave when making decisions under uncertainty' were excluded from the evaluation because they did not have sufficient factor load. The one with the highest load is the expression 'Ambiences of uncertainty also create an opportunity to attack'.

3.6.3. Difference Analysis

In this part of the research, for the main purpose of the research, the information about whether there are statistically significant differences between the sub-dimensions of intrapreneurship and demographic variables was tried to be determined by difference analysis ("t" test and ANOVA).

The table below summarizes whether there is a significant difference between the four sub-dimensions of intrapreneurship and the demographic variables such as gender and marital status.

Table 5: "T-Test" Between Intraprenaurship Dimensions and Gender and Marital Status

Factors	"t" Test	
	Gender F and Sig.	Marital Status F and Sig.
Factor 1:Proactivity	4,314/,039	7,141/,008
Factor 2:Autonomy	1,474/,226	,011/,917
Factor 3:Innovation	4,916/,027	14,665/,000
Factor 4:Risk Taking	1,627/,203	1,236/,267

As a result of the 't-test' conducted to determine the differences between the four sub-dimensions of intrapreneurship and the demographic variables 'gender' and 'martial status'; It was determined that there were significant differences between the proactivity dimension and both gender and marital status variables, and between the innovativeness dimension and both gender and marital status variables. Another remarkable point is that there was no difference between the dimensions of autonomy and risk taking and these two demographic variables.

Table 6: "Anova Test" Between Intraprenaurship Dimensions and Demographic Variables

Factors	Anova (F)					
	Age	Working Period	Education	Pozition	Working Period of Current Pozition	Working Departmant
Factor 1: Proactivity	,392/,854	,443/,777	**2,662/,033**	,991/,423	1,344/,253	**2,742/,013**
Factor 2: Autonomy	1,263/,280	**2,507/,042**	,837/,503	,339/,889	,713/,584	,712/,640
Factor 3: Innovation	,863/,506	**2,401/,050**	**3,728/,006**	,438/,822	,490/,743	1,432/,202
Factor 4:Risk Taking	1,346/,245	**3,399/,010**	**2,401/,050**	,720/,609	1,037/,388	1,495/,179

Table 6 summarizes whether there is a significant difference between the four sub-dimensions of intrapreneurship and six demographic variables.

As a result of the difference analysis between the dimensions of intrapreneurship and seven demographic variables; No significant differences were found between age, position and working time in the current position and intrapreneurship dimensions. On the other hand, significant differences were found between the demographic variable of working time and the dimensions of autonomy, innovativeness and risk taking. There are significant differences between education, another demographic variable, and proactivity, innovativeness and risk-taking dimensions. Finally, it is seen that there is a significant difference between proactivity and the department worked.

3.6.4. Review of the research hypothesis

In order to test the developed hypothesis, difference (t test, anova) and regression analyzes were performed. With these analyses, the tables showing the acceptance and rejection of the main hypothesis and its sub-hypotheses are given below.

H1. There is a significant relationship between intrapreneurship and demographic variables

When the relationship between intrapreneurship and demographic variables is examined statistically, it is possible to generate 36 sub-hypotheses from 4 dimensions and 9 demographic variables, but demographic variables that are thought to contribute to the study are included in the subject. Below is the table showing the sub-hypothesis results of the main hypothesis of the relationship between intrapreneurship and demographic variables.

Tablo 7: Sub-Hypotheses of the H1 Hypothesis

Hypothesis Content	Accept/Reject
H1. There is a significant relationship between intrapreneurship and demographic variables	**Accept**
H1a1. There is a significant difference between proactiveness, which is one of the sub-dimensions of intrapreneurship, and the age variable.	Reject
H1a2. There is a significant difference between the sub-dimensions of intrapreneurship, autonomy and age.	Reject
H1a3. There is a significant difference between innovativeness, which is one of the sub-dimensions of intrapreneurship, and the age variable.	Reject
H1a4. There is a significant difference between risk taking, which is one of the sub-dimensions of intrapreneurship, and the age variable.	Reject
H1a5. There is a significant difference between the sub-dimensions of intrapreneurship, proactivity and gender.	Accept
H1a6. There is a significant difference between the sub-dimensions of intrapreneurship, autonomy and gender.	Reject
H1a7. There is a significant difference between the sub-dimensions of intrapreneurship, innovativeness and gender.	Accept
H1a8. There is a significant difference between risk taking and gender variable, which is one of the sub-dimensions of intrapreneurship.	Reject
H1a9. There is a significant difference between proactivity, which is one of the sub-dimensions of intrapreneurship, and the variable of educational status.	Accept
H1a10. There is a significant difference between the sub-dimensions of intrapreneurship, autonomy and educational status.	Reject
H1a11. There is a significant difference between innovativeness, which is one of the sub-dimensions of intrapreneurship, and the variable of educational status.	Accept
H1a12. There is a significant difference between risk taking, which is one of the sub-dimensions of intrapreneurship, and the education level variable.	Accept
H1a13. There is a significant difference between proactivity, which is one of the sub-dimensions of intrapreneurship, and the variable of working time in the workplace.	Reject
H1a14. There is a significant difference between autonomy, which is one of the sub-dimensions of intrapreneurship, and the variable of working time in the workplace.	Accept
H1a15. There is a significant difference between innovativeness, which is one of the sub-dimensions of intrapreneurship, and the variable of working time in the workplace.	Accept
H1a16. There is a significant difference between risk taking, which is one of the sub-dimensions of intrapreneurship, and the variable of working time at the workplace.	Accept

In order to test the H1 hypothesis, demographic variables such as age, gender, educational status and working time at the workplace, which are thought to contribute to the research, were included in the hypotheses.

There was no significant difference between all the dimensions of intrapreneurship and the demographic variable of age. While the expected situation is that there is a difference between age and these sub-dimensions, no significant difference was found between any sub-dimension and the age variable. When the age ranges of the research participants are examined, it is seen that there is an accumulation of 93% in the 20-40 age range. The banking sector is a sector with a high turnover rate and a high density of young workers. It is thought that the concentration of the participants in the specified 20 age

range will result in such a result.

While there is a significant difference between the gender demographic variable and the sub-dimensions of intrapreneurship, innovativeness and proactivity, there is no significant difference between the dimensions of autonomy and risk taking. Although the ratio of women and men among the research participants is almost equal.

While there was no significant difference between the educational status variable and only the autonomy sub-dimension, there were significant differences between the innovativeness, proactiveness and risk-taking dimensions. Considering that 76% of the participants have a bachelor's degree, it can be concluded that those in this education group are prone to innovation, proactivity and risk taking.

While there was no significant relationship between the demographic variables, the variable of working time at the workplace and proactivity, one of the sub-dimensions of intrapreneurship, it was concluded that there were significant differences between the other three dimensions. When the distribution of working time in the workplace is examined, it is seen that the participants in the 0-10 years range are at a very high level, such as 84%. It is expected that the participants, who are in the first years of their professional life, will exhibit a proactive, innovative and risk-taking behavior.

As explained in detail above, it was concluded that there is a significant relationship between demographic variables and intrapreneurship, which is the H1 hypothesis.

4. CONCLUSION AND RECOMMENDATIONS

As organizations grow, their ability to act decreases, decisions are taken late as they cannot overcome bureaucratic walls, and this result brings inertia. Inertia creates great disadvantages for organizations and even shortens the life of the organization. Even though the inertia of organizations seems to be a normal consequence of their life cycles, a solution to delaying this end or getting out of inertia is through internal entrepreneurship.

Being able to produce innovation for the future of a small or large organization, a country or even the world is an indispensable part of the business. Being able

to produce innovation is as important as bringing this innovation to a sustainable point and maintaining it is of vital importance. For organizations, gaining competitive advantage and surviving is likewise being able to produce innovation, and the most effective way of producing innovation is through internal entrepreneurship. Because in organizations that can include intrapreneurship, the members of the organization will be included in the game, and as a result, both themselves and their organizations will win. On the other hand, intrapreneurship includes autonomy, proactivity, risk taking and innovation, and organizations that can keep these dimensions alive will have another important advantage.

As underlined in the previous sections, intrapreneurship finds a place for itself in an existing organization and plays a role in the renewal and transformation of the organization as a result of an initiative. Researchers concluded that intrapreneurship provides 'revitalization' and 'performance improvement' to businesses. According to Duobiene (2013:591), successful regeneration of mature organizations depends on top management's ability to tolerate mistakes and encourage employees to take risks.

Risk taking and innovation are among the dimensions of intrapreneurship, and according to Thornberry (2001:526), intrapreneurship is a function that can bring flexibility and vitality to organizations that face the risk of recession.

Naktiyok and Kök (2006) state that intrapreneurship helps profitability, strategic renewal, innovation, knowledge acquisition and action for international success. If the literature about the results of intrapreneurship is briefly mentioned; It is stated that intrapreneurship positively affects business performance (Augusto & Caldeirinha, 2012), it affects individual and organizational decisions and product characteristics in order to evaluate different opportunities with entrepreneurship (Parker, 2011), organizations with intense intrapreneur character have more growth capacity than others. (Antoncic and Hisrich,2001), it provides effective use of resources and increases firm performance (Zahra, 1991:262), the intense efforts of internal entrepreneurs on innovation have a significant effect on motivating organizational employees (Yaghoubi et al. 2008:15), and internal entrepreneurship increases employee satisfaction. It has been stated by the researchers that it increases the number of qualified employees and prevents them from leaving the organization (Kaya and Arkan, 2005:8).

It is very important for businesses to get the highest possible benefit from their

internal customers. In terms of business, this resource is the cheapest as well as the only resource that can make a difference from other inputs. One of the ways to use this resource effectively is through intrapreneurship. As emphasized in the literature, intrapreneurship not only increases the motivation and productivity of employees, but also eliminates negative consequences such as leaving the job. At this point, business owners should first transform their organizational culture into a structure that encourages intrapreneurship.

DISCLOSURE OF CONFLICT
The authors declare that they have no conflicts of interest.

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