The Audit Regulatory Dilemma – Should Audit Regulatory Authorities Focus on Regulating the Audit Expectation Gap?

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\textbf{Abstract}
\textbf{Purpose}: Audit failures around the world, have contributed to high-profile corporate scandals, severely impeding global economic growth. We investigate the extent to which the public trust, the public interest and the audit expectation gap, impact global financial stability and economic growth, contributing to understanding the purpose of external oversight over audit activities. These critical components of the audit environment, represent the essential elements necessary for regulating the global audit profession.

\textbf{Methodology}: The proportion of revenue derived from audit services and non-audit services of the big four audit firms, is used as a proxy to measure the ‘audit expectation gap’. The resultant ‘audit expectation gap’ for the period 2005 to 2020, is juxtaposed against the global GDP growth for the same period, supporting the conceptual assertion that proper regulation of the audit expectation gap enables a stable financial environment, conducive for promoting economic growth.

\textbf{Findings}: The study finds that the audit expectation gap increases during stable economic conditions, as illustrated by the reduction in the proportion of audit revenue to non-audit revenue, conversely reducing during volatile economic conditions.

\textbf{Originality/Value}: This paper which uses the audit expectation gap as a proxy for the demand of audit services, contributes to understanding the dynamic relationship between the audit expectation gap and global economic growth, as well as the crucial role of external oversight over audit activities.

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Introduction

Large corporate scandals and audit failures worldwide, have prompted national authorities to strictly regulate the audit profession, to regain public trust and increase public interest. For example, the United States of America introduced the Sarbanes-Oxley Act, while the European Union passed Directive 2006/43/EC, later revised by Directive 2014/56/EU and Regulation No. 537, dealing with specific statutory requirements for the audits of public interest entities (PIEs). The purpose was to increase audit quality, especially audits on PIEs, by introducing external quality control reviews over their audit engagements. In the United States of America (USA), the Public Company Accounting Oversight Board (PCAOB) was assigned this task, while each European Union member state was required to designate a competent governmental authority to inspect audit engagements on PIEs.

These regulatory changes introduced two new terms, namely “public trust” and “public interest”. These terms require further consideration by the audit profession, since audit regulatory authorities bear the final responsibility for protecting public trust by monitoring audit quality on PIEs. By increasing public interest, audit regulatory authorities contribute to achieving greater financial stability, which is a precondition for sustainable economic growth. In other words, the audit regulatory authorities are responsible for evaluating public trust and accordingly maintaining public interest, by properly discharging their oversight responsibilities over audit activities (Centre for Financial Reporting Reform, 2016). However, users of financial statements seldom correctly distinguish between the responsibilities of auditors and the responsibilities of management, as well as those charged with governance, relating to the preparation of the financial statements. This results in the emergence of the ubiquitous audit expectation gap, caused by the users of financial statements often not properly understanding the role of the external audit function (Gros & Worret, 2014).

The significant professional and legal changes recently introduced in the audit profession were primarily intended to reduce the impact of the audit expectation gap (Leidner & Lenz, 2017; Tara, 2011; Zemen & Lentner, 2018). Consequently, the
external oversight function over worldwide external audit activities, is not only affected by public interest and public trust, but also by the audit expectation gap. Therefore, the external oversight function over audit activities consists of three main components, namely the public interest, the audit expectation gap, and the public trust, which require further explanation and analysis and represent the components the subject being investigated in this paper.

Within the context of the pervasive regulatory changes to the global auditing profession, we investigate the extent to which the components of the audit environment affect global financial stability and economic growth. In this regard, we explore the nature of the three interrelated components of the public trust, the public interest, and the audit expectation gap. The objective is to understand the relationship between the audit expectation gap and economic growth. The study is undertaken in three phases. The first, involving a review and analysis of the literature, including, but not limited to pertinent audit regulations introduced by the European Union, is used to conceptually argue that collectively, these components impact the audit expectation gap. The second, uses secondary data extracted from public pronouncements by the big four audit firms in their global reports of transparency for the period between 2005 and 2020, to validate the observations emerging from the first phase. To understand the impact of the audit expectation gap on global economic activity, the third phase uses publicly available information relating to global gross domestic product (GDP) growth by the International Monetary Fund (IMF) to investigate the relationship between the audit expectation gap and worldwide economic activity. To understand the relationship between the audit expectation gap and global economic growth, the proportion of the global audit revenue for the big four audit firms from 2005 to 2020, is juxtaposed against global GDP growth for the same period. As one of the first papers to use the audit expectation gap as a proxy for the demand for audit services, our paper contributes to the evolving critical discourse on the global audit profession.

This primarily conceptual paper, which explores the relationship between the audit expectation gap and economic growth proceeds with the customary literature review
to provide an overview of the prevailing scholarly discourse on the audit profession, with specific reference to the identified factors affecting the audit expectation gap. The paper continues by briefly describing the research methodology, before describing, analysing and interpreting the key findings.

**Literature Review**

The international standards of auditing (ISAs) do not precisely define the phenomenon referred to as the audit expectation gap. Porter (1993) describes the audit expectation gap as the difference between the performance of auditors and society’s expectations, which may be attributed to divergent views on what society expects and what auditors perceive to be their actual role. The audit expectation gap consists of two components: the reasonableness gap, which describes the expectations of society regarding the auditors’ performance; and the performance gap, which describes the reasonableness of the auditors’ performance (Porter, 1993).

As Maroun and Atkins (2014) explain, the general public does not correctly distinguish between the responsibilities of the auditors, and the responsibilities of those charged with governance who are actually responsible for the preparation of the financial statements, which will be subjected to audit. For example, trust in the global audit profession was lost due to debilitating corporate scandals such as Enron, Worldcom, Sunbeam, Societe Generale Bank and Steinhoff, caused by auditors failing to design and implement appropriate audit procedures to gather sufficient and relevant audit evidence to detect material misstatements in the presented financial statements (Centre for Financial Reporting Reform, 2016; Leidner & Lenz, 2017; Tara, 2011; Zemen & Lentner, 2018). These banks, listed entities and investment funds, all constitute PIEs.

Similarly, Kusaila (2017) found that different perspectives of the audit and its objectives, mean that the public may have different expectations of the work that auditors perform, contributing to the audit expectation gap (Gros & Worret, 2014). The audit expectation gap may be decreased, when the users of financial statements and the auditors, are educated about the auditors’ tasks and responsibilities, as well as through competent national authorities prescribing additional reporting and
professional requirements for auditors (Mansur & Tangl, 2018). National authorities should prescribe a legal basis for appropriate action by the audit profession when the expectations of users of the financial statements, in relation to the auditors’ duties, deviate from the auditors’ real duties (Koh & Woo, 1998).

Velte and Freidank (2015) explain that the volume of the economic transactions and events amongst the different types of entities, are strongly affected by the issued audit opinion, particularly since the fundamental purpose of the audit is to add credibility to the presented financial statements, and not simply to create financial data and information. Although the issued audit opinions on the financial statements of listed entities may not necessarily impact the price of the securities (Danescu & Spatacean, 2018; Karkacier & Ertas, 2017), investment decisions are often affected by the information contained in the financial statements that are prepared by the audit clients (Mustikarini & Samudera, 2017). However, the extent of investment activity on stock exchanges tends to be greater, when auditors issue a modified audit opinion on the financial statements (Shahzad, Rubbaniy & El-Temtamy, 2017). Shahzad et al. (2017) attribute this to investors factoring in risks when making investments, with the larger the risk, the larger the potential return of the investment. Despite the auditors’ significant role in enhancing investor confidence in financial markets, the global financial crisis between 2008 through to 2012, shocked investor confidence, which may be attributed to auditees being less likely to receive unmodified audit opinions under stable economic conditions, than in turbulent times (Mareque, Lopez, Villanueva-Villar & Lago- Peñas, 2019). Mareque et al. (2019) found that auditors increased their propensity to issue reports with modified audit opinions at the beginning of the global crisis in 2008, due to increased regulatory scrutiny, increased risk of audit error, and a potential increase in reputational damage, as well as the increased risk of litigation.

Audit as a commercial profession represents a labour-intensive activity (Simunic, 1980). Therefore, when determining the fee for a particular audit engagement, auditors must consider the real cost of conducting the particular audit, the expected loss caused by the quality of the client’s financial reporting, as well as the potential
liability issues (Simunic, 1980). Later, Beatty (1993) stated that auditors’ liability issues result in three main consequences: delisting, bankruptcy, and lawsuits. Eu-Jin and Houghton (2000) noted that the pricing of audit services is negatively affected by audit litigation, explaining that the decrease in audit fees will be greater when auditors are being sued over an audit. Bell, Landsman and Shackelford (2001) found that the level of the audit risk is an integral component of the audit fee charged when auditors offer their assurance services.

According to Elliott, Ghosh and Peltier (2013) the cost of audit engagements reflects the level of the business risks of auditors’ clients. As these authors state, the higher the business risk of the client, the larger the cost that auditors will charge for that particular audit engagement, because risker clients cause auditors to conduct more audit procedures to reduce the audit risk to an acceptably low level. However, the application of modern digital technology reduces the costs of conducting audit engagements. Picconi and Reynolds (2013) found that the elasticity of audit fees with respect to the assets in the financial statements were not constant over their range, while de Lima Castro, Peleias and da Silva (2015) stated that audit fees were positively related to size, client complexity, the quality of corporate governance practices, and when the auditor works in a large firm. In this regard, Lemonakis, Ballas, Balla and Garefalakis (2018) found that the earnings of clients negatively affect the cost of the audit during economic crises, i.e. the bigger the client’s earnings, the lower the cost of the audit. In addition, Lemonakis et al. (2018) assert that the book value on the financial statements positively affects the cost of the audit in stable times.

Audits on the financial statements of PIEs provide greater transparency of their business activities and increase their credibility (Cohen & Wright, 2010). However, the credibility of the financial statements of PIEs depends on the audit procedures performed (Bedard & Johnstone, 2010), ensuring that the auditors gather sufficient and relevant audit evidence (Jones, 2018), to inform the opinion that they express in the independent auditor’s report (Antipova, 2016). Recent changes to the European audit regulations aim to strengthen audit quality and sets requirements for (Centre
for Financial Reporting Reform, 2016):

- Public oversight;
- Quality assurance;
- Ethical principles and auditor independence;
- Appointment and removal of auditors;
- Internal organisation of the audit firm;
- Education and training;
- Approval and registration of auditors and audit firms;
- Audit standards; and
- Audit committees for PIEs.

As suggested by Sang Ho (2012), public interest represents the interest of an imaginary person who may have forgotten his/her identity, believing that he/she could have an equal chance of being anyone in the general society. However, we assert that the public interest depends on the business performance of PIEs (Mill, 1972) – the better the PIE's business performance, the greater the impact on the general public's welfare. When the public loses interest, the users of the financial statements of PIEs also tend not to be interested in their business performance. This is attributed to the general public expecting “to receive a reasonable return” from the business activities of the PIEs, whose assets represent their main source of funds (Gibson, 2018).

The Code of Ethics of the International Federation of Accountants (IFAC) (2013), reveals that the primary reason that the audit profession applies ethical guidelines in public practice, is the preservation of the public interest. The fundamental characteristic of the audit profession is its acceptance of the responsibility to act in accordance with the public interest (Zager, Malis & Novak, 2016). In providing audit services to PIEs, auditors should therefore not only satisfy the needs of particular individuals or organisations, but are also reasonably expected to respond to the legitimate expectations of the general public, regarding the fair presentation of the financial performance (Zager et al., 2016).

Douglas and Wodak (2015) assert that the audit regulatory authorities worldwide,
should focus on protecting the public interest, by increasing the level of public trust by achieving a high level of audit quality on PIEs. Public trust is therefore associated with the public availability of the audit opinion expressed in the independent auditor’s reports for the presented financial statements. It is therefore pertinent that PIEs are required to ensure that the independent auditor’s report is published with their audited financial statements, which should be publicly available (Iliev, 2018).

For example, banks, insurance and reinsurance companies must publish their audited financial statements as well as the independent auditor’s report on their websites, while listed entities must publish their audited financial statements and the independent auditor’s report on the website of the stock exchange on which their securities are officially listed (Gibson, 2018). It may therefore be deduced that public trust is associated with audits on PIEs, due to the requirement for their audited financial statements and independent auditor’s reports to be publicly available. By comparison, other non-PIEs are not compelled to ensure that their independent auditor’s report of the audited financial statements is publicly available (Gibson, 2018). Moreover, non-PIEs are usually only required to submit their audited financial statements and independent auditor’s report to an appropriate governmental agency, such as the national registrar, further reducing the public availability of those audit reports (Iliev, 2018). Although Gibson (2018) and Iliev (2018) concur that the audited financial statements and independent auditor’s reports of non-PIEs, may be obtained in a legally prescribed manner from the relevant national authority, these reports remain largely unavailable in the public domain. It is however, asserted that the public availability of the PIEs’ audited financial statements and independent auditor’s reports, significantly influence public perceptions regarding the national financial stability and economic growth (Karkacier & Ertas, 2017). This is attributed to “competent” public having greater access to reliable PIE data and information, allowing them to confidently analyse independently audited financial statements (Mustikarini & Samudera, 2017). The public availability of an audit opinion, issued by a competent independent auditor, enhances the public confidence about the veracity, in all material respects, of the underlying financial statements (Mustikarini &
Samudera, 2017). Therefore, the failure of the global audit profession to detect and report materially irregularities, such as misstated financial statements (Sirucek, 2012; Mill, 1972), to the general public, directly contributed to the collapse of these PIEs (Gibson, 2018; Iliev, 2018).

Since the financial statements represent the financial performance of the economic activities of every client, including PIEs, the collapse of PIEs impacts the audit profession, since auditors are expected to participate in the financial reporting process, by adding credibility to the data and information prepared by their clients, and presented in the financial statements (Maroun & Atkins, 2014; Velte & Freidank, 2015). The impact is compounded by the general public failing to properly differentiate between the responsibilities of the auditors and that of their clients, resulting in a loss of public interest, triggering global financial instability and economic recession, thereby contributing to a global financial crisis.

On the one hand, the public interest is associated with the economic decisions of the users of the PIEs’ financial statements. Consequently, poor business performance by PIEs results in investors being unwilling to invest, in turn causing a low level of financial stability and accordingly, poor investment returns. On the other hand, since the financial effects of the business activities of PIEs are presented in their financial statements, it is incumbent on auditors to convince the general public that the business activities of PIEs are sufficiently stable to ameliorate their concerns. Therefore, when auditors do not adequately respond to the general public’s expectations regarding their interest in the PIEs’ business activities, audit services negatively affect financial stability. However, the public interest may be expressed in many forms, depending on the particular needs of the users of the financial statements of PIEs. For example, the public interest may be expressed in the form of the birth rates, the number of newly opened start-ups, or bank interest rates. While some individuals may expect low-interest rates on loans to start businesses, others may expect high-interest rates for their savings and deposits.

To conclude, public interest represents the level of return that the general public expects for its economic activities with the PIEs, to earn profits which can reasonably
be distributed to them. Since the financial consequences of the PIEs’ business activities are reflected in their financial statements, the audit of the PIEs’ financial statements adds value by enhancing the credibility of the financial statements, enabling analysis by the general public, facilitating important economic decision-making through the provision of competent data and information. The public interest should therefore be differentiated by the public trust, with public trust being affected by audit quality, which impacts the level of confidence that the auditors provide over the financial statements of PIEs. However, since the public interest is affected by the expectations of the general public regarding the stability of the PIEs’ business activities, which depend on the level of confidence provided by the auditors regarding the fair and objective presentation of the financial statements of the PIEs (public trust), and their understanding of the reasonableness of the level of return for their economic decisions (the audit expectation gap).

**Research Methodology**

The thesis advanced by this paper is that the core function of audit regulatory authorities is to protect public trust and increase public interest, in order to achieve a more stable financial environment, conducive for promoting economic growth. The paper applies interpretive phenomenology as a research philosophy to collect and evaluate the data obtained from various secondary resources, which allow researchers to apply their subjective knowledge to investigate the research problem. Extant literature, including relevant legislation and regulations, professional auditing literature, as well as pertinent scholarly literature, is used to identify and explain the nature and characteristics of components of the audit environment. Particular focus is placed on the audit as a tool to add credibility to the presented financial statements. However, since public trust is associated with the extent to which the independent auditor’s reports on PIEs are publicly available (Iliev, 2018; Gibson, 2018), the professional audit literature is used to identify factors affecting audit quality on audits of PIEs. The study analyses the most recent addendums to the European audit regulations, with particular reference to the legal changes adopted by the European Union aimed at narrowing the audit expectation gap. Within that
context, the explanatory method is used to explore the areas relating to the external oversight function over the audit profession. Simultaneously, the explanatory method is applied to analyse European Union audit market reforms, in relation to the discussions and the conclusions referring to the impact and influence of these reforms on the audit profession in Europe and beyond.

With reference to the statutory audit regulations in the European Union, the study considers the specific legal and professional requirements applicable to auditors in the European Union. However, the study's findings are not used to assess or compare the performance of European leaders, audit firms or auditor practitioners. Instead, it identifies the specific statutory audit regulations relating to the role and function of external auditors in the European Union.

Since this study explores the relationship between the audit profession, and financial stability and economic growth, it seeks to understand how the audit profession should perceive public interest as a concept. Whereas the public trust is affected by the audit quality, the public interest is affected by the scope of the PIEs business activities.

Despite not focusing on the regulation of PIEs, it is important to emphasise that PIEs usually undertake their business activities in strictly regulated markets. They must therefore comply with the prescripts of the central banks for banks, insurance supervision agencies for insurance and reinsurance companies, security exchange agencies/commissions for listed entities, as well as other independent market regulators. The study examines the professional audit literature to determine the respective roles of the various financial sector regulators, in relation to the impact of PIEs on the financial environment. The study examines the components of the audit environment and its alignment with the aim of the audit, within the context of adding credibility to the underlying financial statements, by focusing on the disclosures in the financial statements of PIEs.

To validate the research results, the publicly available data and information provided by the big four audit firms in their global transparency reports for the period between 2005 and 2020, is juxtaposed with the IMF’s data and information on
worldwide economic activity, for the comparable period. To confirm the relationship between the audit and worldwide economic activity, the trends in the audit profession are linked to the global gross domestic product growth. The study therefore investigates the audit expectation gap under both stable and volatile economic conditions.

**Discussion and Analysis of Results**

The relationship between the components of the audit environment is identified and described in this section. In particular, emphasis is placed on the extent to which audit services impact global economic activity, and vice versa, based on the nature and characteristics of the public interest, the audit expectation gap, and the public trust.

Since the credibility of the financial statements depends on the audit quality (Aqel, 2013; Duréndez, 2003), the public trust reflects the extent to which auditors have correctly applied the ISAs while conducting the audit engagements on PIEs, influenced by the public availability of their audited financial statements (Gibson, 2018; Iliev, 2018). It may therefore be argued that audit regulatory authorities worldwide, cannot implement measures to increase public trust, since they do not adopt the ISAs, nor are they authorised to adopt professional frameworks for auditors to follow while conducting the audits. The audit regulatory authorities may accordingly only assess the public trust by applying a comprehensive inspection regime to monitor audit quality on PIEs. Audit regulatory authorities should implement external quality control review procedures to inspect the audit files on PIEs. Public trust therefore represents the demand for credible and reliable data and information relating to the operations of PIEs. An increase in the level of public trust, results in a concomitant increase in the demand for credible and reliable data and information relating to the operations of PIEs. Therefore, the larger the public trust, the greater the demand for competent financial statements of PIEs, i.e. the greater the extent of audit services, the better the general public’s access to competent financial statements. Since the greater demand for audit services negatively affects their cost (Atsushi, 2015), it is suggested that this relationship between the public trust, and
the demand for competent financial statements of PIEs, inversely influences the cost of audit engagements, i.e. the greater the demand for competent financial statements of PIEs, the lower the cost of audit services. Therefore, higher audit quality on PIEs decreases the cost of audit services, and vice versa. However, the purpose of the audit regulatory authorities worldwide, does not include protecting the cost of audit services, but rather optimising confidence in the audited financial statements of PIEs, in order to protect the public trust. It is submitted that applying external quality control reviews over the audits on PIEs which are too rigorous, would lead to a total reduction in the cost of audit services, creating a monopoly in the audit market, by eliminating small and medium-sized (local) audit firms (Sundgren & Svanstrom, 2013). However, onerous external quality control reviews, may create disproportionate burdens for small and medium-sized audit firms, which if too rigorous, could lead to the collapse of the audit profession (Sundgren & Svanstrom, 2013). By comparison, big four and international audit firms have numerous clients, as well as more technical and human resources (Mickhail, 2012), enabling a better response to onerous external quality control review requirements. It is submitted that overly rigorous application of the external quality control reviews over auditors, may monopolise the audit market, which in turn will similarly increase the cost of audit services in the longer term. This is because when there is only one available provider for credible data and information regarding the operations of PIEs, then the cost of audits will increase, which may again cause the demise of the audit profession. As depicted in figure 1, the public trust may be expressed as a function of the conducted audit engagements on PIEs and the cost of audit services:

$$PT = f(ae, ap),$$

where

- “PT” is the public trust;
- “ae” is the conducted audit engagements on PIEs; and
- “ap” is the cost of audit services.
**Figure 1** - The function of public trust

It is postulated that low audit quality on PIEs is likely to result in a decrease in public trust. Since lower public trust tends to be accompanied by economic instability, recession, or even depression, a further consequence arising from the existing relationship between the cost of audit services and the confidence in the financial statements of PIEs is that under volatile economic conditions, the cost of audit services will increase (Lemonakis et al., 2018). It is submitted that under volatile economic conditions, the external quality control reviews on audits of PIEs are not properly, or even not applied at all, consequently increasing the cost of audit services. It is further submitted that under stable economic conditions, the opposite applies – external quality control reviews on audits on PIEs are applied rigorously, decreasing the cost of audit services. In other words, under stable economic conditions, PIEs may decide to change their auditors, believing they could get the same audit quality at a lower cost from other auditors. Under stable economic conditions, the audit risk is expected to be lower, and accordingly the cost of the audit should be lower (Bell et al., 2001; Elliott et al., 2013).

The audit expectation gap is impacted by the general public’s need to obtain credible data and information relating to the operations of PIEs (Kusaila, 2017). On the
assumption that the public’s need for information increases the offer of financial reporting services, the audit expectation gap represents the supply of data and information regarding the operations of PIEs. Therefore, the greater this supply, the more expensive the cost of obtaining the data and information and vice versa (Inoua & Smith, 2020). However, not all data and information disclosed by PIEs to the general public are subject to audit – usually only those presented in their financial statements. For example, PIEs may publicly disclose a change in management (Iliev, 2018), or other non-financial information (Ackers & Eccles, 2016), and despite the significance of this information, it may not be subject to audit. It is accordingly submitted that the audited financial statements of PIEs, are presently the only source of credible and reliable data and information relating to the PIEs’ business activities. Failure to correctly understand the function of external audit, may result in the general public incorrectly perceiving all data and information publicly disclosed by PIEs, as being competent (Maroun & Atkins, 2014).

Therefore, the larger the audit expectation gap, the greater the need for non-audit services, concomitantly decreasing the need for audit services. The larger audit expectation gap will increase the cost of non-audit services provided by the auditors. This may be attributed to the greater supply for data and information relating to the operations of PIEs, which the general public may perceive as being competent. On the other hand, the larger audit expectation gap will reduce the cost of audit services, which may be attributed to the general public perceiving audit services as being a normal component of the PIEs’ reporting process (Velte & Freidank, 2015). For example, the audited financial statements of PIEs are expected to be publicly available on their websites along with the independent auditor’s report, which increases the demand for audit services.

Based on the above analysis, the audit expectation gap may be expressed as a function of conducted non-audit engagements on PIEs and the change in the cost of non-audit versus audit services, as illustrated in figure 2:

\[
AEG = f(nae, \Delta p) = f(aPIE, nap-ap)
\]

\[
\Delta p = nap - ap, \text{ where}
\]
• “AEG” is the audit expectation gap;
• “nae” is the conducted non-audit engagements on PIEs;
• “Δp” is the change in the cost of non-audit versus audit services;
• “nap” is the cost of non-audit services; and
• “ap” is the cost of audit services.

Figure 2 - The function of the audit expectation gap

To conclude, the audit expectation gap increases when auditors provide more non-audit services to their clients. At the same time, this decreases the cost of audit services, and accordingly increases public trust that is supported by higher audit quality.

Another consequence of the relationship between the change in the cost of non-audit services which auditors provide, compared to the audits on PIEs, is that under stable economic conditions, the audit expectation gap increases due to the increased need for non-audit services. For example, the clients of auditors may require investment plans, financial due diligence, accounting services, etc., which are not categorised as assurance services. Therefore, the cost of audit services under stable economic conditions decreases due to the audit expectation gap, since PIEs perceive the audit as an “obligatory” reporting requirement under stable economic conditions.

Since the reporting requirements of PIEs are subject to regulation by specific sector regulators, the supply of non-competent data and information relating to the
operations of PIEs should similarly be regulated. Consequently, the audit expectation gap could be controlled when the regulatory audit authorities discharge their oversight responsibilities effectively, by monitoring audit quality. For example, the audit expectation gap may reduce when the audit regulatory authorities incorporate the newest trends applicable to the sectors in which PIEs operate, into the competency exams for auditing. This approach would assist in ensuring that future auditors are sufficiently competent to effectively respond to the general public’s increased requirements for credible and reliable data and information relating to the operations of PIEs, in turn reducing the audit expectation gap (Mansur & Tangl, 2018). Similarly, when the regulatory audit authorities increase the reporting requirements for auditors, the audit expectation gap decreases, since the general public receives more competent data and information, and vice versa (Mansur & Tangl, 2018). We accordingly postulate that the audit regulatory authorities worldwide, contribute to regulating the audit expectation gap. In other words, the audit regulatory authorities can effectively protect the public trust and increase the public interest by regulating the extent of the audit expectation gap.

The implementation of the European Union regulations for statutory audits is intended to provide stakeholders with confidence that the quality of audits should contribute to a stable financial environment. Irrespective of the size of an audit firm, application of the European Union regulations require: (1) stronger education requirements to be applied for the auditors; (2) more comprehensive reporting requirements for PIEs and auditors; (3) increased authority of audit committees of PIEs; and (4) more comprehensive disclosures in the independent auditor’s reports for PIEs (Centre for Financial Reporting Reform, 2016).

Public interest incorporates the public trust and audit expectation gap. In other words, the greater the public trust, the more the public interest, and vice versa. The same applies to the audit expectation gap – the larger the audit expectation gap, the greater the public interest, and vice versa. On the one hand, public interest depends on the general public’s need to obtain data and information about the operations of PIEs (Mustikarini & Samudera, 2017), but on the other, public interest depends on
the level of confidence in the audited financial statements of PIEs (Shahzad et al., 2017). Consequently, both components of the audit environment affect the public interest, with the general public often making various decisions based on publicly available data and information relating to the business performance of PIEs. Public interest therefore represents the convergence between the demand for competent financial reporting and the supply of data and information relating to the operations of PIEs.

Public trust represents the demand for competent financial reporting by PIEs, while the audit expectation gap represents the disparity between the veracity of data supplied and what the public expects, in relation to the operations of PIEs. Public interest may therefore be expressed as the point at which the public trust function intersects with the audit expectation gap function. Although the level of confidence in the audited financial statements of PIEs depends on the audit quality of PIEs (Gibson, 2018; Iliev; 2018), the greater the level of confidence, the lower the cost of audit services. Rigorous application of the external quality control reviews on audits on PIEs, in turn, increases public interest, with the higher audit quality increasing the level of confidence in the audited financial statements of PIEs. However, the greater need for data and information relating to the operations of PIEs increases their reporting requirements, causing the cost of non-audit services to increase. This is attributed to PIEs being willing to respond to the general public's increased need for more comprehensive data and information relating to their business performance. The public interest may therefore be expressed as a function of audit engagements conducted on PIEs, juxtaposed against the variation in the cost of non-audit versus audit services provided by auditors, as reflected in figure 3:
PI = f(ae, Δp) = f(ae, nap – ap)  
Δp = nap – ap, where

- “PI” is the public interest;
- “ae” is the conducted audit engagements on PIEs;
- “Δp” is the change in the cost of non-audit versus audit services;
- “nap” is the cost of non-audit services; and
- “ap” is the cost of audit services.

**Figure 3 - The function of public interest**

In conclusion, public interest depends on the level of public trust and the extent of the audit expectation gap. Public interest is greater when the audit expectation gap is larger, and vice versa, caused by an increased need for credible and reliable data and information relating to the operations of PIEs, which may be required for effective decision-making. Decision-making by the users of the audited financial statements of PIEs tends to be more credible, when based on competent financial reporting, which in turn, increases the level of public interest. It is accordingly postulated that the public interest is greater under stable economic conditions, but lower under volatile economic conditions. The relationship between public interest and economic stability is used to explain the reason that the cost of audit services decreases under
stable economic conditions – because under stable economic conditions the general public tends to arrange their business activities with PIEs, based on the available data and information relating to their operations and their expectation to obtain a reasonable return. Under stable economic conditions, the quality of financial reporting by PIEs is crucial, because the general public perceives the veracity of the PIE financial statements as an integral component of all publicly available data and information relating to their operations. It is accordingly submitted that under stable economic conditions, the cost of audit services would decrease, since PIEs expect to obtain the same level of audit quality from other auditors, but at a lower cost. By comparison, the cost of audit services tends to increase under volatile economic conditions, because the PIEs would be more willing to regain the trust of the general public about the veracity of their presented financial statements and would therefore be prepared to pay more for better audit quality. This is because under volatile economic conditions, the audit risk is higher (Elliott et al., 2013) and the book value reflected in the financial statements positively affects the cost of the audit during economic crises (Lemonakis et al., 2018). However, under volatile economic conditions, the cost of non-audit services tends to decrease, because during volatile economic periods, the general public tend not to be interested in engaging in business activities with PIEs. This, in turn, decreases the supply of credible and reliable data and information for the operations of PIEs, which consequently decreases the cost of the non-audit services provided by auditors.

To validate the aforementioned assertions, the study analyses the global revenue of the big four audit firms between 2005 and 2020, juxtaposed against the prevailing economic conditions provided by the IMF, for the comparable periods. Table 1 below presents the revenue of the big four audit firms (in USD billion), differentiated between revenue from audit services, and revenue from other non-audit services.
Table 1 – Global revenue of the big four audit firms in billion US dollars between 2005 through 2020

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<tbody>
<tr>
<td>Audit revenue</td>
<td></td>
<td>32.01</td>
<td>34.46</td>
<td>41.43</td>
<td>44.27</td>
<td>45.90</td>
<td>48.88</td>
<td>47.23</td>
<td>40.37</td>
<td>40.84</td>
<td>49.99</td>
<td>51.89</td>
<td>56.00</td>
<td>56.71</td>
<td>57.39</td>
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<tr>
<td>Non-audit revenue</td>
<td></td>
<td>38.78</td>
<td>41.67</td>
<td>47.31</td>
<td>50.12</td>
<td>57.46</td>
<td>61.37</td>
<td>62.68</td>
<td>65.02</td>
<td>72.54</td>
<td>77.24</td>
<td>82.49</td>
<td>91.64</td>
<td>98.39</td>
<td>99.70</td>
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<tr>
<td>Total</td>
<td></td>
<td>70.79</td>
<td>76.13</td>
<td>88.74</td>
<td>92.58</td>
<td>98.56</td>
<td>111.85</td>
<td>115.91</td>
<td>120.39</td>
<td>122.38</td>
<td>124.38</td>
<td>131.44</td>
<td>135.39</td>
<td>154.90</td>
<td>157.09</td>
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Source: Adapted from the disclosed annual global revenues of the big four audit firms from 2005 to 2020.

Since the nature of the revenue depends on the scope of the services provided and their associated cost, the objectivity of the sources of revenue is improved in table 2, which proportionally reflects the global revenue of the big four audit firms in terms of the sources from 2005 through 2020.

Table 2 – Proportion of the global revenue of the big four audit firms between 2005 through 2020

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<tbody>
<tr>
<td>Audit revenue</td>
<td></td>
<td>0.45</td>
<td>0.45</td>
<td>0.47</td>
<td>0.43</td>
<td>0.40</td>
<td>0.44</td>
<td>0.44</td>
<td>0.43</td>
<td>0.42</td>
<td>0.40</td>
<td>0.39</td>
<td>0.38</td>
<td>0.37</td>
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<tr>
<td>Non-audit revenue</td>
<td></td>
<td>0.55</td>
<td>0.55</td>
<td>0.53</td>
<td>0.52</td>
<td>0.53</td>
<td>0.56</td>
<td>0.56</td>
<td>0.57</td>
<td>0.50</td>
<td>0.60</td>
<td>0.61</td>
<td>0.61</td>
<td>0.62</td>
<td>0.62</td>
<td>0.63</td>
<td>0.63</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
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Source: Adapted from the disclosed annual global revenues of the big four audit firms from 2005 to 2020.

To understand the relationship between audit activity (expressed in terms of revenue from audit versus non-audit services) and global economic cycles, the global annual GDP growth from 2005 to 2020 (based on official IMF data) illustrating the prevailing global economic conditions is reflected in table 3 and graphically illustrated in figure 4. These data provide the basis for classifying global economic conditions as being stable or volatile.

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1 Adapted from the annual reports issued by Deloitte, E&Y, KPMG and PwC for the period 2005 to 2020.
Table 3 - Annual global GDP growth between 2005 and 2020

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<tr>
<td>GDP growth</td>
<td>4.9%</td>
<td>5.5%</td>
<td>5.6%</td>
<td>3.0%</td>
<td>(0.1)%</td>
<td>5.4%</td>
<td>4.3%</td>
<td>3.5%</td>
<td>3.5%</td>
<td>3.6%</td>
<td>3.4%</td>
<td>3.5%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>(3.3)%</td>
</tr>
<tr>
<td>Economic conditions</td>
<td>Stable economic times</td>
<td>Financial crisis</td>
<td>Stable economic times</td>
<td>Covid-19</td>
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</table>

**Source:** IMF (2021)<sup>2</sup>

Figure 4 – Movement of the annual GDP growth between 2005 and 2020 in % (<em>Source: IMF, 2021</em>).

Figure 5 represents the change in the sources of revenue of the big four audit firms, both under volatile and stable economic conditions, as disclosed in their annual global revenues between 2005 and 2020, juxtaposed against the prevailing economic conditions provided by the IMF, for the comparable periods.

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<sup>2</sup>International Monetary Fund. 2021. *Real GDP Growth - Annual Percent Change*. Available at: https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD. [accessed 16 October 2021]
Figure 5 – Big four audit global revenue sources juxtaposed against global economic conditions (2005 to 2020)

With reference to the sources of revenue of the big four audit firms as a proxy for the audit expectation gap, figure 5 clearly illustrates the relationship between the audit expectation gap and the prevailing global economic conditions for the comparable periods from 2005 to 2020. From 2005 until 2007 the global audit expectations gap remained relatively stable, as represented by the relatively unchanged proportion of the global audit versus non-audit revenues of the big four audit firms. However, around 2007, which precedes the global economic crisis, the global audit expectation gap reduced, as reflected by the increased proportion of the global audit revenue and the decrease in the proportion of non-audit revenue of the big four audit firms, before again increasing by the end of 2008. In the period between 2008 and 2009, which correlates with the global economic crisis, the proportion of the global audit revenue of the big four audit firms rapidly increased, consequently reducing the proportion of their global non-audit revenue. The reduction in the extent of the audit expectation gap is attributed to the increased demand for audit services, signalling a need for increased confidence in the financial statements, following the onset of the global financial crisis. The extent of the audit expectation gap remained fairly stable, but gradually began reducing as the market slowly started regaining confidence until
2012, when the global economic crisis ended. Between 2012 and 2020, representing a period of relative global economic stability, the audit expectation gap continually increased reflecting a reduction in the proportion of global audit revenue and a consequent increase in the proportion of non-audit revenue. However, the audit expectation gap remained the same in 2020, following the massive global economic decline caused by the global onset of the COVID-19 global pandemic. The juxtaposition in figure 5 appears to confirm the assertion that the audit expectation gap expands under stable economic conditions, as illustrated by the decrease in the proportion of audit revenue and a concomitant increase in non-audit revenue. It is accordingly submitted that under stable economic conditions, public trust tends to be greater, supported by higher audit quality, and improved quality of financial reporting by PIEs, in turn increasing the audit expectation gap. By comparison, under volatile economic conditions, the audit expectation gap reduces due to a decrease in the cost of non-audit services and an increase in the cost of audit services. Consequently, when the total cost of global audit services exceeds the cost of non-audit services, the audit expectation gap may negatively impact public interest, as illustrated by the change in the proportion of revenue received from non-audit and audit services provided by auditors. It is therefore asserted that the audit expectation gap is negatively influenced during periods of economic instability, recession, or even depression, which may be attributed to the need for PIEs to regain the trust of the general public in their financial performance and standing, as disclosed in the financial statements. This increases the need for improved audit quality under volatile economic conditions, accordingly resulting in an increase in the cost of audit services.

Conclusion

The contemporary audit environment consists of three interrelated components, collectively impacting financial stability and economic growth – the public trust, the audit expectation gap, and the public interest. It is postulated that poor financial reporting quality results in a loss of the public interest, since the general public typically do not clearly differentiate between the functions and responsibilities of the
external auditors from those responsible for financial reporting. Similarly, the majority of users of financial statements also fail to distinguish between the independent auditor’s reports and the audited financial statements. However, low audit quality on PIEs does not necessarily result in a loss of the public interest, since the users of the audited financial statements are not a contractual party to the agreement for audit services, and therefore do not have insights into the audit files, or to the audit work performed. For example, the financial statements of a PIE may still fairly represent its financial position, cash flows, and results, in all material respects, under the accepted financial reporting principles, despite the quality of the external audit possibly being questionable.

To effectively protect the public trust and increase the public interest, we postulate that audit regulatory authorities must determine an appropriate level of confidence that the audits should provide to audited financial statements of PIEs. In other words, an instrument to determine and measure the level of public trust should be developed. Additionally, to assess the extent of the audit expectation gap, an instrument should be developed to determine and measure the degree to which the general public requires credible and reliable data and information relating to the operations of PIEs. Once the levels of public trust and the audit expectations gap have been assessed, the audit regulatory authorities will be in a position to assess the level of public interest, allowing them to decide on the necessary actions that may be required to protect the public trust and increase the public interest, in an effort to achieve greater financial stability and to promote economic growth worldwide.

Scholarly research has inherent limitations. The primarily conceptual nature of this paper is its first limitation. The second, is that the assertions made were based on secondary data relating to the revenue sources of the big four global audit firms juxtaposed against global GDP data for the comparable periods, to the exclusion of other audit firms. Therefore, any observations made, or conclusions drawn, are illustrative and not representative of the global audit profession.
References


