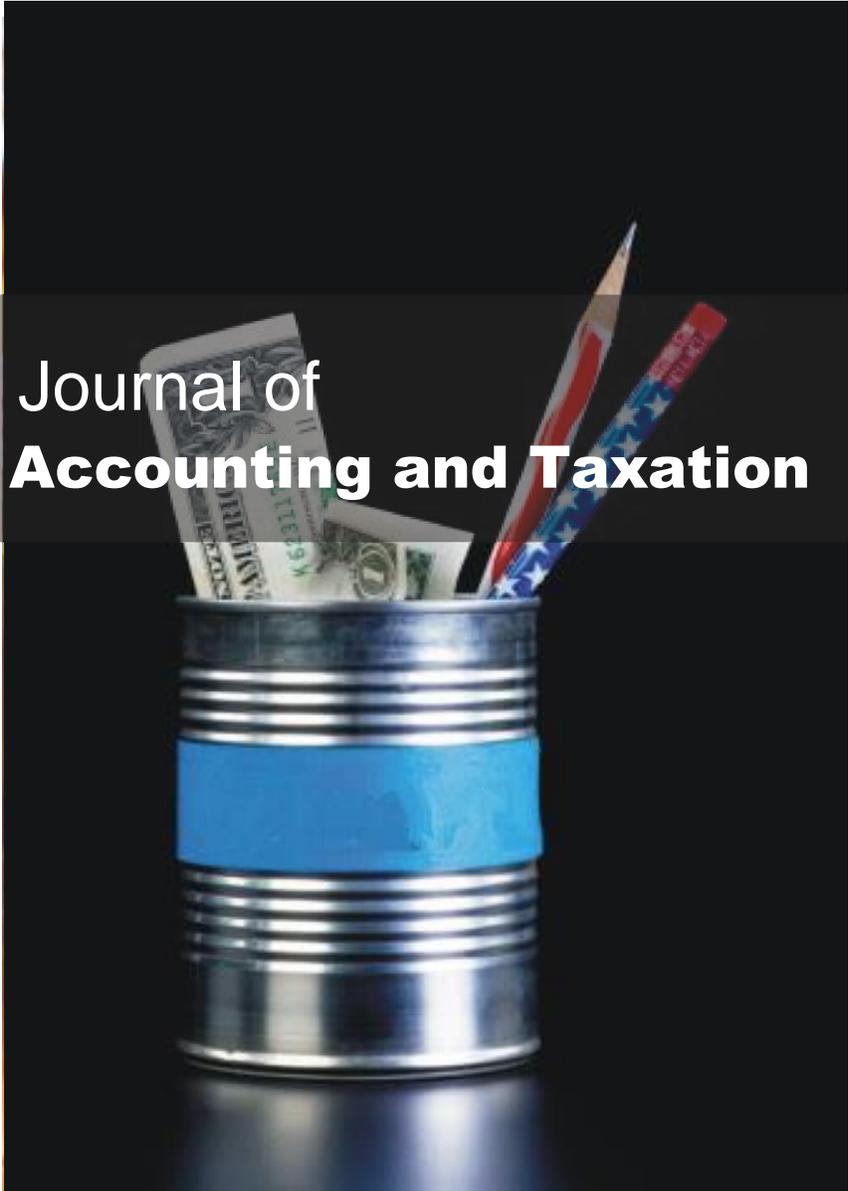


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Full Length Research Paper

IFRS-9 adoption and income smoothing nexus: A comparison of the post-adoption effects between European and Sub-Saharan African Banks

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This paper compares the post-adoption effects of IFRS 9 on the income smoothing behavior of banks in Europe and Sub-Saharan Africa. The researchers extend their analysis to examine the effect of country-level governance on income smoothing. Using a sample of listed commercial banks in Europe and Sub-Saharan Africa, the authors employ varying econometric tests and panel regressions to investigate the hypotheses. The findings show a decrease in income smoothing across the full sample post-IFRS 9. Partitioned into sub-samples to explore potential economic heterogeneity and differing institutional context between the European and Sub-Saharan African settings, the authors report mixed evidence of higher and decreased income smoothing in Europe and Sub-Saharan Africa, respectively. This is consistent with the theoretical arguments that the implementation effects of IFRS 9 are expected to vary across jurisdictions. Also, governance quality mitigates the incidence of income smoothing. This paper is one of the first to empirically compare the income smoothing behavior of commercial banks in Europe and Sub-Saharan Africa following the adoption of IFRS 9. It, therefore, provides original insight into the theoretical argument that the adoption effects of IFRS 9 are expected to vary across jurisdictions depending on several factors like country, firm size, and institutional factors among others. The findings highlight how bank managers in different jurisdictions exercise the inherent discretion under IFRS 9 over their financial reporting choices.

Key words: Income smoothing, IFRS 9 adoption, banks, corporate governance, Europe, Africa.

INTRODUCTION

Sequel to the 2007 financial crisis, safeguarding the stability and resilience of the financial system remains a topical concern in academic literature and corporate discourse. The crisis highlighted deficiencies in accounting for financial instruments under International Accounting Standard (IAS) 39. Succinctly stated, the incurred loan loss (ILL) model previously used under IAS

39 was extensively criticized for being “too little, too late” in the recognition of credit losses leading to excessive loss overhang in the financial system which partly triggered the financial crisis of 2007 (Financial Stability Forum, 2009; BCBS, 2009). Extant literature argues that the incurred loan loss model under IAS 39 was procyclical in nature and detrimental to financial stability

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(BCBS, 2009; Financial Stability Forum, 2009). Alluding to the inherent flaws of IAS 39, Sir David Tweedie, former Chairman of the International Accounting Standards Board (IASB) in his famous words said “If you understand IAS 39, you haven't read it properly – it's incomprehensible”. Therefore, the financial crisis of 2007 elicited the implementation of a more proactive and robust accounting standard on financial instruments that incorporates forward-looking information in the estimation and recognition of credit losses as several parties expressed concerns about IAS 39's inherent flaws (IASB, 2014). The “too little, too late” approach in terms of provisions was extensively criticized, sparking the need for a new standard requiring more forward-looking information in the estimation of credit losses (ECB, 2017).

In response, the International Accounting Standards Board (IASB) developed International Financial Reporting Standard (IFRS) 9 - Financial Instruments which became effective on January 1, 2018 to tackle the adverse effects of untimely recognition of credit losses on the financial positions of banks as revealed by the financial crisis. Argued as being restrictive in nature, the ILL under IAS 39 had the tendency to limit the scope for subjective judgment which may constrain the opportunistic behavior of management. In contrast, a key feature of IFRS 9 is the forward-looking nature of Expected Credit Loss (ECL) model which gives much room for discretion. Jeanjean and Stolowy (2008) argued that much flexibility and subjectivity in accounting standards provide greater scope for discretion which may instigate earnings management in the absence of effective control mechanisms.

The implementation of IFRS 9 on January 1, 2018 was heralded by much theoretical debate on the expected impacts in both academic and corporate literature. Key expected effects and ramifications commonly highlighted are the expected increase in levels of LLP, earnings management in particular income smoothing and financial stability implications (Krüger et al., 2018; Novotny-Farkas, 2016). Greenawalt and Sinkey (1988) suggested that LLP is the ideal tool for earnings manipulation not only because it is the largest accrual item, but more importantly it offers a significant incentive for discretionary behavior. Krüger et al. (2018) and Ozili (2017) suggested that IFRS 9 could have an impact on accrual-based earnings management by financial institutions as the guidelines for LLP change. The authors argue that while IFRS 9 does not change the fundamental reasons for engaging in earnings management, nevertheless its judgmental nature and the wide latitude of discretion is a fertile ground for income smoothing to meet earnings targets.

Notwithstanding the plethora of theoretical literature on IFRS 9 adoption, however, to date, there is a dearth of literature on the empirical impact of IFRS 9 adoption on the income smoothing behavior of banks and thus there is a gap in the accounting literature.

This research primarily aims to extend the understanding of the income smoothing behavior of banks following IFRS 9 adoption consistent with concerns expressed in the theoretical literature. Two main questions are addressed. First, the researchers investigate whether the use of earnings before tax and loan loss provisions for income smoothing is significantly higher under IFRS 9. Second, they examine the effect of the country-level governance quality on the use of earnings before tax and loan loss provision for income smoothing. Using panel data of listed commercial banks in 24 countries across Europe and Africa, spanning 2016 to 2019, the study adopts a modified version of the models employed extensively by Ahmed et al. (1999); Anandarajan et al. (2003, 2007) and Leventis et al. (2011) to test the hypotheses.

The findings show that the post-adoption phase of IFRS 9 is associated with a decline in income smoothing across the full sample. Also, the authors report evidence to support that country-level governance quality restrains the use of earnings before tax and loan loss provision for income smoothing. This suggests that post-IFRS 9, governance and institutional quality will be crucial in leveraging optimal utility from the standard. Deloitte (2016) argues that the implementation effects of IFRS 9 are expected to vary across jurisdictions depending on several factors like country of incorporation, firm size, and institutional factors among others. Consistent with this view, the sample is partitioned into two clusters; the Europe cluster and the Sub-Saharan Africa cluster to explore potential economic heterogeneity and differing institutional setting between the European and Sub-Saharan Africa contexts. The results of the cluster analysis show mixed evidence of higher-income smoothing in Europe and a decline in income smoothing in Africa respectively.

This finding is consistent with theoretical arguments that the effects of IFRS 9 adoption will differ across jurisdictions (Deloitte, 2016). Given the rise in income smoothing in Europe, it suggests that earnings quality has decreased post-IFRS 9 adoption among the sample banks while the decrease in income smoothing in SSA suggests an improvement in the quality of reported earnings among the SSA banks.

Furthermore, the findings suggest that European banks in the sample continue to maintain their opportunistic behavior while the banks in Sub-Saharan Africa are less involved in the opportunistic use of earnings before tax and loan loss provisions for income smoothing post-IFRS 9 adoptions. The findings underscore the fact that while the European banks are under increasing pressure to meet earnings targets, on the other hand, the banks in SSA are under less pressure to meet earnings targets due to the less developed nature of the stock markets, low level of investor sophistication and smaller firm size (Watts and Zimmerman, 1990).

This paper contributes to the accounting literature in

important ways. First, it makes a novel contribution to the IFRS 9 adoption literature as one of the first to empirically compare the income smoothing behavior of commercial banks in Europe and Sub-Saharan Africa following the adoption of IFRS 9. It, therefore, provides original insight into the theoretical argument that the adoption effects of IFRS 9 are expected to vary across jurisdictions depending on several factors like country, firm size, and institutional factors among others (Deloitte, 2016). Second, the study complements the strand of literature on the use of earnings before taxes and loan loss provision for income smoothing. Third, the paper is also the first to examine the income smoothing behavior of banks in Sub-Saharan Africa following IFRS 9 adoption and thereby contributes to the dearth of empirical literature from the SSA perspective. Furthermore, by extending the analysis to examine the effect of country-level governance quality on income smoothing behavior of banks post-IFRS 9 adoption, the paper underscores the fundamental importance of country-level governance and institutional quality on the quality of reported financial information in the context of IFRS adoption (Ball et al., 2003; Leuz et al., 2003). The results are of utmost importance to international regulators, standard setters and stakeholders with keen interest in evaluating the post-adoption effects of IFRS 9.

The rest of the paper is structured as follows. The ensuing sections highlight the literature review and hypothesis development, methodology, results and conclusion.

Institutional background

The transition from IAS 39 to IFRS 9

IFRS 9 adoption is associated with significant changes compared to IAS 39. The key differences between these standards stem from the classification and measurement criteria of the financial instruments, measurement and recognition of expected credit losses and hedge accounting. In the context of IFRS 9, changes to financial instruments accounting were introduced in three phases: (1) Classification and measurement, (2) impairment and (3) hedge accounting (EY, 2017). Table 1 highlights the main differences.

The table clearly reveals that the significant changes which IFRS 9 introduces are visible in classification and subsequent measurement criteria, a shift from multiple models of impairment to a single and unified model of impairment via the introduction of expected credit losses. The ECL model under IFRS 9 approach assumes the notion that a loan will default rather than whether a loss has been incurred (IAS 39). Under the ECL approach, the credit loss allowance or provision is calculated by discounting the cash shortfalls an entity would incur in multiple default scenarios for given future periods and multiplying these shortfalls by the probability of default of

each given scenario. Financial instruments such as loans and receivables, bonds, etc. bear some inherent risk of default; therefore every such asset has an expected loss component attached to it, from the time of its origination or acquisition. As the IFRS 9 expected credit loss model requires the continual recognition of credit losses, it addresses the need to improve the information usefulness about expected losses (EL) in banks' financial statements (IASB, 2014).

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

IFRS 9 was the response of the IASB to the accounting and regulatory lapses that fueled the 2007 global financial crisis. IFRS 9 replaced the ILL model of IAS 39 with the ECL model. The crucial aspect of the ECL model is that it increases accounting judgment and discretion. Ozili (2017) argued that IFRS 9 is very stochastic in nature which raises concern about the potential opportunistic behavior and moral hazard repercussions. Krüger et al. (2018) argued that IFRS 9 could impact earnings management. Therefore, it is imperative to examine the extent to which LLP is employed in earnings management or otherwise sequel to the implementation of IFRS 9.

Agency theory has long emphasized the existence of agency conflicts associated with the separation of ownership and management, which serves as a breeding ground for managerial opportunistic behavior when there are divergent interests between the principal and the agent (Jensen and Meckling, 1976). This opportunistic behavior is more pronounced when accounting standards offer much flexibility and discretion. In such a scenario, management is inclined to engage in earnings management which entails using financial reporting judgment or structuring transactions to achieve a specific reported earnings objective and misleads stakeholders regarding the underlying economic performance of the company (Healy and Wahlen, 1999).

Literature on the influence of IFRS adoption on earnings management is characterized by mixed results. Van Tendeloo and Vanstraelen (2005) studied the influence of IFRS adoption on earnings management among German firms and found no significant difference in earnings management between German firms that adopted IFRS and those that prepared financial statements per German GAAP. Studies by Callao and Jarne (2010) and Jeanjean and Stolowy (2008) documented an increase in earnings management post-IFRS adoption. Conversely, Gebhardt and Novotny-Farkas (2011) examined LLP for sample banks in 12 European countries post-IFRS and concluded that the stringent LLP rules under IAS 39 were associated with less earnings management, corroborating the findings of Barth et al. (2008).

In the context of Africa, Ajekwe et al. (2017) concluded

Table 1. Key differences between IAS 39 and IFRS 9.

Category	IAS 39	IFRS 9
Subsequent measurement	The fair value. The amortized cost value. Costs (for the share-based instruments, which do not have a reliable fair value measurement).	The amortized cost (AC). Fair value through other comprehensive income (FVOCI). Fair value through profit or loss (FVTPL).
Types of classification	Fair value through profit or loss (FVTPL). Held-to-maturity (HTM). Loans and receivables (LAR). Available for sale (ASF).	The amortized cost (AC). Fair value through other comprehensive income (FVOCI). Fair value through profit or loss (FVTPL).
Reclassification	Reclassification shall be prohibited through profit or loss after initial recognition.	Change of business model.
Equity instruments	All equity instruments available for sale, are classified at fair value through other comprehensive income.	The fair value of the instrument for the purpose of trade. The irrevocable choice for the category through other comprehensive income.
Impairment	Several models of impairment. Incurred loss model.	A unified model of impairment, which applies to all financial instruments. The model of Expected Credit Loss (ECL).

Source: Adapted from Huian (2012).

that the adoption of IFRS in Nigeria decreased earnings management via LLP. Similarly, Rao and Warsane (2014) documented a significant decline in earnings management by IFRS adopters in Africa relative to firms using local GAAPs. Sellami and Slimi (2016) concluded that the adoption of IFRS by South African companies is associated with lower earnings management. Also, Amidu and Issahaku (2019) studied African banks and found that financial statements prepared under IFRS are associated with a reduction in earnings manipulation. In contrast, Uwuigbe et al. (2016) found no evidence to support a reduction in earnings management post-IFRS adoption in Nigeria.

Hypothesis development

The ECL model presents management with much discretion. In principle, managers are supposed to utilize this discretion for prudent risk management by providing a supportable forecast of future losses (Leventis et al., 2011). In practice, managers may be inclined to manipulate the LLP. Earlier researchers found that bank managers are culpable of using flexibility and accounting discretion to manipulate earnings (Greenawalt and Sinkey, 1988; Healy and Wahlen, 1999).

The forward-looking and stochastic nature of IFRS 9 offers much discretion which bank managers can unduly utilize for earnings management, precisely income smoothing. Theoretical literature has therefore argued that IFRS 9 is likely to instigate more earnings management (Ozili, 2017; Krüger et al., 2018). However, Bushman (2016) and Bushman and Landsman (2010)

argued that discretion is a double-edged sword. On one hand, it allows managers to incorporate reliable private information about expected future losses leading to prudent risk management. On the other hand, it might be used for opportunistic gains such as earnings management in particular income smoothing and capital gains. Leventis et al. (2011) opined that not only do managers use accounting flexibility and discretion for earnings manipulation; however, prudent managers might also use such discretion for prudent risk management. Given these two opposing ends, a priori, it is difficult to predict whether the inherent flexibility and discretion under IFRS 9 is a subject for earnings manipulation or prudent risk management. Accordingly, it is a matter of empirical investigation.

The banking industry, despite its stringent regulations and supervisory oversight, is more susceptible to earnings manipulation relative to other industries (Greenawalt and Sinkey, 1988). Examining a sample of US commercial banks, Scheiner (1981) established that LLP is one key accrual item for managing earnings. Ma (1988) and Greenawalt and Sinkey (1988) showed that bank managers increase LLP in periods of high earnings to reduce earnings volatility. Healy and Wahlen (1999) found evidence to support these findings. Related studies that focused on non-US banks found evidence to corroborate the above findings (Anandarajan et al., 2003, 2007). If banks in the sample are culpable of engaging in income smoothing to reduce earnings volatility and ultimately meet annual earnings target following the adoption of IFRS 9, then the relationship between loan loss provision and earnings before tax and loan loss provision should be positive (Anandarajan et al., 2003,

2007). Dwelling on this premise, the hypothesis is developed.

H1: The implementation of IFRS 9 in the banking industry is associated with a higher magnitude of income smoothing.

Manifold research on earnings management has proven that not only is opportunistic accounting manipulation influenced by wide latitude and discretion in accounting standards, but also country-level governance and legal framework, as well as institutional factors, can exert significant influence on accounting quality. For instance, Leuz et al. (2003) found evidence to support the impact of country-level governance and legal framework as well as institutional factors on the quality of reported earnings, complementing previous studies by (Ball et al., 2003).

Furthermore, critics of the adoption of International Financial Reporting Standards argue that the one size fits all principle of IFRS as a fundamental predicate for accounting quality and transparency in reported earnings might be a necessary action but not a sufficient condition (Ball et al., 2003). Additional mitigating factors such as a country's institutional setting and firm-specific incentives may be crucial in determining the quality of reported earnings (Ball et al., 2003; Leuz et al., 2003). Consistent with this view, theoretical literature argues that the implementation effects of IFRS 9 are expected to vary across jurisdictions depending on factors such as firm size, country of incorporation, and institutional factors among others (Deloitte, 2016). To test this assertion, the analysis is extended by incorporating the strength of country-level governance and institutional quality. Accordingly, the second hypothesis is formulated.

H2: The strength of country-level governance and institutional quality mitigates the use of earnings before tax and loan loss provisions for income smoothing.

METHODOLOGY

Data

The research utilizes financial data of listed commercial banks drawn from the Factset database. The country-level governance proxy was sourced from the World Governance Indicators (WGIs) and the authors use the mean of the six indicators of governance quality synonymous with the studies of Kaufmann et al. (1999). The world governance indicators measure the quality of governance at the country level on six key thematic pillars of voice and accountability, political stability, absence of violence, government effectiveness, regulatory quality, and rule of law. Data on GDP growth rate were sourced from the World Bank Database to control for the variations in the economic and operational climate of the banks.

Banks with missing observations for the main variables of interest are excluded from the sample. Lastly, to ensure homogeneity in the reporting period, the sample is restricted to banks whose financial year-end falls on 31st December.

The final sample consists of a balanced panel of end-of-year

observations for 104 listed commercial banks in 22 countries across Europe and Africa. The final dataset spans a period of four years, segregated into two distinct periods, the pre-adoption period (2016-2017) and the post-adoption period (2018-2019). Appendix Table 1 reports the sample description.

Model specification

A modified version of the models employed extensively by Ahmed et al. (1999) and Anandarajan et al. (2003, 2007) is adopted for this study. These authors used this model to examine the association of Basel 1 Accord with earnings and capital management behavior. Similarly, Leventis et al. (2011) used a modified version of the model to test the effects of IFRS implementation on earnings and capital management. A dichotomous variable IFRS9 which measures the impact of the different periods (pre and post-IFRS 9) on LLP and the discretionary use of LLP for earnings management is introduced into the model. Two interaction terms $EBT \cdot IFRS9$ and $EBT \cdot CGI$ are included to test for the impact of IFRS 9 on the use of earnings before tax and loan loss provision for income smoothing and the effect of country governance strength and institutional quality on income smoothing respectively. Leventis et al. (2011) argued that the research framework of Anandarajan et al. (2003, 2007) is limited as they used only one explanatory variable (change in loan losses) as a surrogate measure of credit risk. The researchers overcome this limitation by utilizing loan loss allowance, non-performing loans, and change in loans as a measure of the non-discretionary component of credit risk. The researchers estimate the equation below to test the hypotheses.

$$LLP_{it} = \alpha_0 + \alpha_1 EBT_{it} + \alpha_2 LLA_{it} + \alpha_3 NPL_{it} + \alpha_4 CLOANS_{it} + \alpha_5 IFRS9_{it} + \alpha_6 SIZE_{it} + \alpha_7 CFEES_{it} + \alpha_8 GDP_{it} + \alpha_9 CGI_{it} + \alpha_{10} EBT \cdot IFRS9_{it} + \alpha_{11} EBT \cdot CGI_{it} + \mu_{it}$$

Where: LLP = loan loss provisions to total assets; EBT = earnings before taxes and LLPs to total assets; LLA = loan loss allowance to total assets; NPL = non-performing loans to total assets; $CLOANS$ = yearly change in loans; $IFRS 9$ = dummy variable (1 for post-IFRS 9 from 2018-2019, and 0 for pre-IFRS 9 from 2016-2017); $SIZE$ = natural logarithm of total assets; $CFEES$ = commission and fees income to assets; GDP = change in gross domestic product; CGI = country governance index; $EBT \cdot IFRS9$ = interaction of EBT with the type of IFRS 9 regime; $EBT \cdot CGI$ = interaction of EBT with country governance index

RESULTS

Descriptive statistics

Table 2 reports the descriptive statistics. LLP in the full sample represents 0.9885% of total assets on average. EBT shows a mean value of 3.31% indicating that on average, the banks in the full sample earn 3.31% on total assets. NPL represents 5.8% of total assets on average. On a subsample basis, the mean EBT is 1.6 and 5.1% in Europe and Africa respectively, suggesting that on average banks in Africa are more profitable than banks in Europe reflecting the growth potential in Africa. The mean GDP of -3.5% in Africa compared with the mean GDP of -27.18% in Europe further corroborates the growth potential in Africa. SIZE shows a mean of 11.34 and 7.52 in Europe and Africa providing conventional evidence that European banks are larger than African banks.

Table 2. Descriptive statistics.

Variable	Panel A: Full sample					Panel B: Europe sub-sample					Panel C: Africa sub-sample				
	Obs	Mean	Std. Dev	Min	Max	Obs	Mean	Std. Dev	Min	Max	Obs	Mean	Std. Dev	Min	Max
LLP	416	0.0099	0.0187	-0.0098	0.1921	208	0.0069	0.0189	-0.0029	0.1528	208	0.0128	0.0180	-0.0098	0.1921
EBT	416	0.0331	0.0360	-0.0349	0.2482	208	0.0156	0.0268	-0.0129	0.2483	208	0.0507	0.0356	-0.0349	0.1905
LLA	416	0.0344	0.0565	0.0000	0.6578	208	0.0418	0.0752	0.0000	0.6578	208	0.0270	0.0252	0.0001	0.1872
NPL	416	0.0583	0.0990	0.0000	0.7492	208	0.0696	0.1170	0.0000	0.6732	208	0.0469	0.0755	0.0000	0.7492
CLOANS	416	1.0472	9.2790	-0.9423	118.4257	208	0.1120	0.6110	-0.4161	8.3944	208	1.9823	13.0566	-0.9423	118.4257
IFRS 9	416	0.5000	0.5006	0.0000	1.0000	208	0.5000	0.5012	0.0000	1.0000	208	0.5000	0.5012	0.0000	1.0000
SIZE	416	9.4365	2.6451	4.0735	14.8143	208	11.3437	2.0371	5.7803	14.8143	208	7.5294	1.6024	4.0735	12.0064
CFEES	416	0.0211	0.0307	0.0017	0.2541	208	0.0111	0.0122	0.0017	0.0795	208	0.0312	0.0392	0.0030	0.2541
CGI	416	0.3411	0.9845	-1.2176	2.7913	208	1.1666	0.5423	0.1562	2.7913	208	-0.4845	0.5286	-1.2176	0.6522
GDP	416	-0.1533	1.3692	-8.8821	5.2233	208	-0.2718	1.4020	-8.8821	1.2147	208	-0.0349	1.3285	-3.7251	5.2233

LLP: Loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; LLA: loan loss allowance to total assets; NPL: non-performing loans to total assets; CLOANS: yearly change in loans; IFRS9: dummy variable (1: post-adoption era; 0 pre-adoption era); SIZE: natural logarithm of total assets; CFEES: commission and fees income to total assets; CGI: the mean of the six quality of governance indicators from the world development indicators; GDP: yearly change in the growth rate of gross domestic product.

Correlation matrix

Table 3 highlights the correlation matrix. Consistent with Leventis et al. (2011) and Kanagaretnam et al. (2004) also document a significant positive association between LLP and EBT both across the full sample and two sub-samples. LLA shows a negative relationship with LLP though not statistically significant, corroborating Kanagaretnam et al. (2004) as a higher loan loss balance will require a lower LLP in the current year and vice versa. Akin to Kanagaretnam et al. (2004), NPL depicts a significant positive association with LLP both across the full sample and the sub-samples. The relationship between IFRS9 and LLP is negative and statistically significant. Synonymous with Leventis et al. (2011), SIZE is negative and significantly correlated with LLP. In the full sample, CGI is significant and negatively

correlated with LLP. Consistent with Hair et al. (1995), the mean variance inflation factor of 2.12 for the model falls within acceptable levels and hence the model is devoid of multicollinearity.

Table 4 reports the estimation results. The model is estimated with fixed effect with robust standard errors and clustering and is heteroscedastic and autocorrelation consistent (Hoechle, 2007). The F-statistic is significant at 1%, indicating the overall significance of the model. Although EBT is positively correlated with LLP but not significant, corroborating Beatty et al. (1995) and Ahmed et al. (1999). Consistent with Kanagaretnam et al. (2004), the coefficient of NPL is positive and significant at the 5% level depicting that high levels of the deteriorating loan portfolio are associated with high levels of LLP and vice versa. Regarding the main variables of interest (EBT*IFRS9 and EBT*CGI), the researchers observe a negative coefficient of EBT*IFRS9

which is statistically significant at 5%. This signifies a significant decline in the use of earnings before taxes and loan loss provisions for income smoothing post-IFRS 9 adoption across the full sample. Leventis et al. (2011) examined LLP, earnings management, and capital management under IFRS among EU commercial banks and found a significant decline in earnings management post-IFRS regime. They argued that prudent risk management could be an alternative possibility for the reduction in earnings management post-IFRS.

Consistent with prudent risk management, the researchers argue that prudent bank managers are more likely to use managerial discretion under IFRS 9 for prudent risk management. Accordingly, the researchers posit that the decrease in income smoothing across the full sample post-IFRS9 adoption may partly be explained by the prudent risk management on the part of bank managers.

Table 3. Correlation matrix.

Variable	LLP	EBT	LLA	NPL	CLOANS	IFRS 9	SIZE	CFEES	CGI	GDP
Panel A: Full sample										
LLP	1.000									
EBT	0.555***	1.000								
LLA	-0.076	-0.273**	1.000							
NPL	0.305***	0.004	0.202***	1.000						
CLOANS	0.035	0.052	-0.049	-0.061	1.000					
IFRS 9	-0.143***	-0.074	-0.117**	-0.122**	0.104**	1.000				
SIZE	-0.291***	-0.588***	0.554***	-0.018	-0.143***	0.025	1.000			
CFEES	0.185***	0.596***	-0.184***	-0.086*	0.135***	-0.053	-0.451***	1.000		
CGI	-0.179**	-0.423***	0.232***	-0.081*	-0.160***	-0.005	0.593***	-0.411***	1.000	
GDP	-0.066	0.117**	-0.092*	-0.255***	-0.188***	0.071	-0.072	0.206***	0.002	1.000
Panel B: Europe sub-sample										
LLP	1.000									
EBT	0.842***	1.000								
LLA	-0.012	-0.136**	1.000							
NPL	0.355***	0.134*	0.204***	1.000						
CLOANS	0.504***	0.288***	-0.105	-0.033	1.000					
IFRS 9	-0.049	-0.013	-0.185***	-0.109	-0.087	1.000				
SIZE	-0.316***	-0.474***	0.488***	-0.177*	-0.172**	0.021	1.000			
CFEES	0.389***	0.484***	-0.164**	-0.056	0.300***	-0.005	-0.319***	1.000		
CGI	-0.061	0.135*	-0.331***	-0.563***	0.036	-0.008	-0.114	-0.086	1.000	
GDP	-0.070	-0.003	-0.085	-0.382***	0.035	0.116*	0.048	0.086	0.309	1.000
Panel C: Africa sub-sample										
LLP	1.000									
EBT	0.339***	1.000								
LLA	-0.094	-0.211***	1.000							
NPL	0.305***	0.003	-0.027	1.000						
CLOANS	0.003	-0.006	-0.061	-0.091	1.000					
IFRS 9	-0.246***	-0.139**	0.045	-0.152**	0.152**	1.000				
SIZE	-0.183***	-0.337***	0.726***	-0.087	-0.154**	0.057	1.000			
CFEES	0.089	0.578***	-0.136**	-0.072	0.109	-0.082	-0.427***	1.000		
CGI	-0.111	-0.157**	0.168**	0.026	-0.200***	-0.012	0.071	-0.366***	1.000	
GDP	-0.094	0.159**	-0.019	-0.038	-0.291***	0.024	-0.098	0.258	-0.047	1.000

LLP: Loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; LLA: loan loss allowance to total assets; NPL: non-performing loans to total assets; CLOANS: yearly change in loans; IFRS9: dummy variable (1: post-adoption era; 0 pre-adoption era); SIZE: natural logarithm of total assets; CFEES: commission and fees income to total assets; CGI: the mean of the six quality of governance indicators from the world development indicators; GDP: yearly change in the growth rate of gross domestic product. ***, **, *significance at 1, 5 and 10% respectively.

Table 4. Regression results

Variable	
Intercept	0.17269 (1.81)*
EBT	0.12053 (0.89)
LLA	6.89E-08 (1.22)
NPL	0.02842** (2.01)
CLOANS	0.00010 (0.41)
IFRS9	0.00139 (0.81)
SIZE	-0.01749 (-1.66)*
CFEES	-0.21808 (-1.87)*
CGI	0.00148 (0.43)
GDP	-0.00083 (-1.71)*
EBT*IFRS9	-0.09101 (-2.34)**
EBT*CGI	-0.27126 (-1.93)*
R ² -adjusted	6.98%
F-static	4.34***
Observations	416

LLP: loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; LLA: loan loss allowance to total assets; NPL: non-performing loans to total assets; CLOANS: yearly change in loans; IFRS9: dummy variable (1: post-adoption era; 0 pre-adoption era); SIZE: natural logarithm of total assets; CFEES: commission and fees income to total assets; CGI: the mean of the six quality of governance indicators from the world development indicators; GDP: yearly change in the growth rate of the gross domestic product; EBT*IFRS9: interaction of earnings before tax and loan loss provisions with IFRS9 dummy variable; EBT*CGI: interaction of earnings before tax and loan loss provisions with country governance index. T-statistics in parenthesis, ***, **, *significance at 1, 5 and 10% respectively.

The second variable of interest, EBT*CGI shows a negative coefficient and statistical significance at the 10% level. This significant negative coefficient of EBT*CGI supports H2 which predicted that the strength of the country-level governance quality mitigates income smoothing behavior among banks. Thus, country-level governance and institutional quality will be essential in limiting the opportunistic use of earnings before taxes and loan loss provisions for smoothing income. The result is consistent with prior literature (Ball et al., 2003; Leuz et al., 2003) that documents a positive effect of a country's governance and institutional framework on the quality of reported accounting information.

Robustness checks and sensitivity analysis

A battery of sensitivity tests and robustness checks are conducted. First, the model is devoid of multicollinearity problems. Additionally, the model has been estimated with robust standard errors with firm-level clustering and is heteroscedasticity and autocorrelation consistent.

Hasan and Wall (2004) indicated that LLP can be segregated into discretionary and non-discretionary components. Leventis et al. (2011) used the change in loans to control for the non-discretionary portion of LLP. Kanagaretnam et al. (2004) used loan loss allowance and non-performing loans to account for the non-discretionary component of LLP. Consistent with their studies, the authors opine that by using loan loss allowance, non-performing loans, and change in loans, they have explicitly accounted for the non-discretionary component of LLP.

Ahmed et al. (1999) opined that earnings management in particular income smoothing results reported in prior research is dependent on the inclusion of non-performing loans in the model. This assertion was also evaluated by Kanagaretnam et al. (2004). Consistent with their assertion, the researchers evaluate the robustness of the results to the omission of non-performing loans in the model. The test results reported in Panel A of Table 5 did not change. Thus, they conclude that the results are robust to the inclusion of non-performing loans in the model.

Furthermore, Ahmed et al. (1999) and Kanagaretnam et al. (2004) admitted that macroeconomic factors may impact LLP. Nevertheless, they argued that the inclusion of non-performing loans in their models reduces the explanatory power of the macroeconomic variable.

Accordingly, the non-performing loan was included in their models to control for macroeconomic effects such as GDP. Consistent with this analogy, GDP is excluded from the model and the results re-estimated. The findings reported in Panel B of Table 5 are consistent with the earlier estimates.

The authors check the sensitivity of the models to outliers by winsorizing at the extreme higher and lower ends as developed in the study of Leventis et al. (2011). The models are re-estimated and the results reported in Panel C of Table 5 remain consistent.

Comparing Income smoothing in European banks versus Sub-Saharan African banks post-IFRS 9 adoption

The previous analysis above pooled banks in Europe and Sub-Saharan Africa together and controlled for some countries' specific factors such as GDP, and country-level governance quality. Notwithstanding the controls in the previous analysis, there are potential concerns that these two jurisdictions have strikingly disparate characteristics regarding their country-level governance, institutional setting and firm size among others that may impact income smoothing activities differently in these regions which have not been accounted for in the earlier analysis. For instance, data from the World Bank (World Bank, 2016) show that banks in Sub-Saharan Africa lack the necessary breadth and depth and are inefficient relative

Table 5. Robustness checks.

Variable	Panel A (NPL excluded)	Panel B (GDP excluded)	Panel C: Winsorized results
Intercept	0.15465** (2.02)	0.15465** (2.02)	0.15465** (2.22)
EBT	0.12538 (0.85)	0.12538 (0.85)	0.12409 (1.14)
LLA	8.37E-08 (1.37)	8.37E-08 (1.37)	4.16E-08 (0.78)
CLOANS	0.00010 (0.40)	0.00010 (0.40)	0.05009*** (3.0)
IFRS9	0.00036 (0.21)	0.00036 (0.21)	-0.00015 (-0.38)
SIZE	-0.01534* (-1.79)	-0.01534* (-1.79)	0.00087 (0.62)
CFEES	-0.22274* (-1.79)	-0.22274* (-1.79)	-0.00926** (-2.0)
CGI	0.00043 (0.12)	0.00043 (0.12)	-0.27155** (-2.07)
GDP	-0.00086* (-1.70)	-0.00086* (-1.70)	0.00009 (0.03)
EBT*IFRS9	-0.08735* (-1.94)	-0.08735* (-1.94)	-0.00075 (-1.63)
EBT*CGI	-0.28012* (-1.86)	-0.28012* (-1.86)	-0.08273** (-2.28)
R ² -adjusted	5.83%	5.83%	-0.19396* (-2.28)
F-static	2.94***	2.94***	11.08%
Observations	416	416	3.16***
	-	-	416

LLP: Loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; LLA: loan loss allowance to total assets; NPL: non-performing loans to total assets; CLOANS: yearly change in loans; IFRS9: dummy variable (1: post-adoption era; 0 pre-adoption era); SIZE: natural logarithm of total assets; CFEES: commission and fees income to total assets; CGI: the mean of the six quality of governance indicators from the world development indicators; GDP: yearly change in the growth rate of the gross domestic product; EBT*IFRS9: interaction of earnings before tax and loan loss provisions with IFRS9 dummy variable; EBT*CGI: interaction of earnings before tax and loan loss provisions with country governance index. T-statistics in parenthesis, ***, **, * significance at 1, 5 and 10% respectively.

to the global average. The Europe region is characterized by relatively developed stock markets with a high level of investor sophistication. Furthermore, the European banks in the sample are bigger in terms of size. In contrast, the Sub-Saharan African setting is characterized by less developed stock markets with a low level of investor sophistication. Also, the SSA banks in the sample are smaller in size compared to the European banks. The mean bank size reported in Panel B and C of Table 2 is 11.34 and 7.52 in Europe and Africa respectively providing conventional evidence that European banks are larger than African banks. Extant literature (Watts and Zimmerman, 1990) argues that bigger firms have greater incentive to manipulate earnings to meet earnings target as bigger firms are closely monitored by the public relative to smaller firms. These distinguishing features between the European banking system and the Sub-Saharan African banking system present an interesting argument to replicate the analysis on a cluster basis to assess whether these differences between the Europe cluster and SSA cluster have different implications on the income smoothing behavior of banks following the implementation of IFRS 9 in the banking industry on January 1, 2018. Corroborating the above argument, Deloitte (2016) argues that the adoption effects of IFRS 9 are expected to vary across jurisdictions depending on several factors like country, firm size, and institutional factors among others. Accordingly, the researchers postulate that European banks in the sample engage in

more income smoothing than the SSA banks in the sample post-IFRS 9 adoption. To achieve this, they split the initial sample into Europe cluster of banks and SSA cluster of banks.

Univariate analysis

The cluster analysis begins with a univariate analysis by splitting the sample based on regions post-IFRS 9 adoptions to see how the key variables differ between the European region and SSA after the adoption of IFRS 9 in these two regions. The results of the Shapiro-Wilk test indicate that the variables do not follow a normal distribution. Accordingly, the results of two non-parametric tests; the Kruskal-Wallis test and the Wilcoxon test are presented.

Table 6 reports the results of the Kruskal-Wallis test and the Wilcoxon test of differences between the key variables between Europe and Africa post-IFRS 9 regime. In general, there are significant differences in LLP between Europe and Africa post-IFRS9 implementation. LLP is significantly higher in Africa relative to Europe post-IFRS 9 regime. The results of the Kruskal-Wallis test and Wilcoxon test reveal significant differences in EBT between Europe and Africa post-IFRS 9 adoptions. Though there are higher NPLs in Africa than in Europe, the difference is not significant. Change in loans which depicts the incremental addition to the

Table 6. Test of differences.

Europe and Africa Post-IFRS9	Kruskal-Wallis Test	Wilcoxon test
LLP	Chi-squared (tie-adj) 31.217***	Z=5.587***
EBT	Chi-squared (tie-adj) 84.638***	Z=9.20***
NPL	Chi-squared (tie-adj) 2.542	Z=1.594
CLOANS	Chi-squared (tie-adj) 20.310***	Z=4.507***
LLA	Chi-squared (tie-adj) 16.201***	Z=4.025***
Observation	104	104

LLP: loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; NPL: non-performing loans to total assets; CLOANS: yearly change in loans; LLA: loan loss allowance to total assets ***, **, * significance at 1, 5 and 10% respectively.

outstanding loan portfolio is significantly higher in Africa than in Europe. This shows that post-IFRS9, the variation in the loan portfolio is higher in Africa relative to Europe. LLA is significantly higher in Africa compared to Europe following the adoption of IFRS 9.

Income smoothing in European banks versus Sub-Saharan African banks post-IFRS 9 adoption

Finally, Panels B and C of Table 2 show that the mean bank size of 11.34 and 7.53 for Europe and Africa respectively is significantly different. The potential concerns that the findings may be driven by economic heterogeneity across the sample are addressed by partitioning the sample into two sub-clusters; the Europe cluster and the Africa cluster, and re-estimate the results. For the Europe cluster, the interaction term EBT*CGI is dropped due to multicollinearity concerns.

Table 7 presents the results of the sub-sample analysis. For the Europe sub-sample, the variable of interest EBT*IFRS9 is positive and statistically significant. Extant literature shows that a positive and significant coefficient of EBT is evidence of income smoothing using earnings before taxes and loan loss provisions (Anandarajan et al., 2003, 2007). Accordingly, the results of the Europe sub-sample analysis show an increase in income smoothing among the sample banks post-IFRS 9 adoption. This finding also highlights how the European banks in the study utilize the inherent discretion under IFRS 9 for opportunistic income smoothing activity and further demonstrates how firms exercise their discretion over their financial reporting choices. As indicated earlier, the European banks in the sample are larger than the SSA bank. Accordingly, this finding is also consistent with prior literature that shows that larger firms have a greater incentive to manipulate earnings or smooth earnings to reduce earnings volatility and ultimately meet earnings targets (Watts and Zimmerman, 1990). Furthermore, given the rise in income smoothing among the Europe sub-sample, the findings also highlight how too much leeway and discretion in accounting standards may affect

the quality of financial reporting.

However, for the SSA sub-sample, the authors document a negative and significant coefficient for EBT*IFRS9. Thus, they find evidence to suggest a decline in income smoothing among the banks in the SSA sample. The decline in income smoothing among the SSA sub-sample also demonstrates an improvement in financial reporting quality among the sample banks following the adoption of IFRS in SSA. The finding is also consistent with the prudent risk management hypothesis of (Leventis et al., 2011) who argue that not only are managers inclined to utilize the inherent discretion and flexibility offered by accounting standards for opportunistic behavior but, it can be utilized for prudent and efficient risk management. In line with this assertion, they argue that because SSA is characterized by low level of stock market development, low level of investor sophistication coupled with small firm sizes, the SSA banks in the sample are under less pressure to meet earnings targets compared to the European banks.

Accordingly, the SSA banks in the sample are more inclined to utilize the inherent flexibility and discretion under IFRS 9 for efficient risk management rather than engaging in opportunistic behavior. Also, they document a significant negative coefficient for EBT*CGI. Thus, the results of the SSA sub-sample show that country governance and institutional quality mitigates the incidence of income smoothing which corroborates the findings of the full sample. Overall, the sub-sample analysis provides evidence consistent with theoretical literature (Deloitte, 2016) that the implementation effects of IFRS 9 differ across jurisdictions due to factors such as country of incorporation and firm size among others.

Conclusion

The implementation of IFRS 9 on January 1, 2018 was heralded by much theoretical debate on the expected impacts in both academic and corporate literature. Key expected effects and ramifications commonly highlighted are the expected increase in levels of LLP, earnings

Table 7. Sub-sample results.

Variable	Panel A: Europe sub-sample	Panel B: Africa sub-sample
Intercept	0.06027 (1.43)	0.11987 (1.00)
EBT	0.00502 (0.06)	-0.14533 (-0.98)
LLA	4.91e-08 (1.37)	9.43e-07 (0.22)
CLOANS	0.00434** (2.44)	0.00005 (0.17)
IFRS9	-0.00239** (-2.08)	0.00153
SIZE	-0.00534 (-1.41)	-0.01900 (-1.24)
CFEES	0.71271* (1.71)	-0.31718** (-2.11)
CGI	-0.00099 (-0.72)	-0.08043* (-1.89)
GDP	-0.00019 (-0.72)	-0.00232** (-2.34)
EBT*IFRS9	0.11540* (2.00)	-0.14591* (-1.83)
EBT*CGI	-	-0.60069* (-1.67)
R ² -adjusted	29.58%	4.79%
F-static	9.45***	4.28***
Observations	208	208

LLP: Loan loss provisions to total assets; EBT: earnings before tax and loss provision to total assets; LLA: loan loss allowance to total assets; CLOANS: yearly change in loans; IFRS9: dummy variable (1: post-adoption era; 0 pre-adoption era); SIZE: natural logarithm of total assets; CFEES: commission and fees income to total assets; CGI: the mean of the six quality of governance indicators from the world development indicators; GDP: yearly change in the growth rate of the gross domestic product; EBT*IFRS9: interaction of earnings before tax and loan loss provisions with IFRS9 dummy variable; EBT*CGI: interaction of earnings before tax and loan loss provisions with country governance index. T-statistics in parenthesis, ***, **, *significance at 1, 5 and 10% respectively.

management and financial stability implications (Krüger et al., 2018; Novotny-Farkas, 2016).

This paper focused on the empirical aspect of the above research niche investigating the impact of IFRS 9 adoption on earnings management in particular income smoothing behavior of listed banks. As a subsidiary issue, the authors examined the effect of country-level governance quality on income smoothing behavior among banks. To increase the generalizability of the findings, the researchers use data of listed commercial banks in both Europe and Africa for four years spanning the pre and post-IFRS 9.

Across the full sample, the authors find evidence that the post-adoption phase of IFRS 9 is associated with a decline in the use of earnings before taxes and loan loss provisions for income smoothing. Furthermore, they find evidence to support that the country-level governance and institutional quality restrains the use of earnings before taxes and loan loss provisions for income smoothing, suggesting that post-IFRS 9, the quality of governance and regulatory bodies will be crucial in leveraging optimal utility from the standard.

Partitioned into Europe sub-sample and SSA sub-sample to explore potential economic heterogeneity and differing institutional settings, the researchers find evidence of an increase in income smoothing via earnings before taxes and loan loss provision among the Europe sub-sample post-IFRS 9 adoption. In contrast, the findings show a decline in income smoothing via

earnings before tax and loan loss provision post-IFRS 9 adoptions among the SSA sub-sample.

Overall, the sub-sample analysis provides evidence consistent with theoretical literature (Deloitte, 2016) that the implementation effects of IFRS 9 differ across jurisdictions due to factors such as country of incorporation and firm size among others.

This paper contributes to the accounting literature in important ways. First, this paper makes a novel contribution to the IFRS 9 adoption literature as one of the first to empirically compare the income smoothing behavior of commercial banks in Europe and Sub-Saharan Africa following the adoption of IFRS 9. It, therefore, provides original insight into the theoretical argument that the adoption effects of IFRS 9 are expected to vary across jurisdictions depending on several factors like country, firm size, and institutional factors among others (Deloitte, 2016). Second, the study complements the strand of literature on the use of earnings before taxes and loan loss provision for income smoothing. Third, the study is also the first to examine the income smoothing behavior of banks in Sub-Saharan Africa following IFRS 9 adoption and thereby contributes to the dearth of empirical literature from the SSA perspective. Furthermore, by extending the analysis to examine the effect of country-level governance quality on income smoothing behavior of banks post-IFRS 9 adoption, the paper underscores the fundamental importance of country-level governance and institutional

quality on the quality of reported financial information in the context of IFRS adoption (Ball et al., 2003; Leuz et al., 2003). The results are of utmost importance to international regulators, standard setters and stakeholders with keen interest in evaluating the post-adoption effects of IFRS 9.

Notwithstanding the robustness of the results to several sensitivity analyses, akin to any accounting research that examines the effects of accounting standards in the early years of their implementation, the relatively short study window remains a limitation of this research.

To conclude, the researchers provide some avenues for future research. First, the short time horizon for the study presents clear opportunities for future research to be conducted on a longer time horizon if the authors are to reach any firm consensus about earnings management activities by banks under IFRS 9 regime. Consistent with the prudent risk management hypothesis, it would be interesting to examine the determinants of LLP in future research by comparing pre and post-IFRS 9 regimes.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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APPENDIX**Table 1.** Sample description.

Country	Number of banks	Number of observations
Europe		
United Kingdom	9	36
Switzerland	4	16
Belgium	1	4
Sweden	4	16
Spain	8	32
Netherlands	3	12
Italy	8	32
Greece	5	20
Germany	3	12
Ireland	1	4
Austria	2	8
Denmark	4	16
Sub-Total	52	208
Sub-Saharan Africa		
Zimbabwe	5	20
Kenya	8	32
Zambia	1	4
Uganda	3	12
South Africa	3	12
Tanzania	3	12
Ghana	8	32
Rwanda	2	8
Botswana	3	12
Namibia	1	4
Malawi	3	12
Nigeria	12	48
Sub-Total	52	208
Overall total	104	416

Full Length Research Paper

Effects of earnings management on firms' market-adjusted return

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Earnings announcement affects respective firms' share prices based on their performances. Financial markets react to the bottom figure of the financial statements, which the authors believe include earnings management components. Similarly, earnings surprise also affects the market share. Therefore, they believe that there is a need for empirical analysis to understand the effects of earnings management and earnings surprises on firms' market performance. The authors use a shorter 3-day window to measure the market-adjusted returns in contrast to the existing literature because they believe that the markets are efficient and will be able to mitigate the shocks in the longer run. A shorter window excludes the likely effects of other events that could affect the returns. They use the discretionary accrual modified model and real earnings management to proxy for earnings management. Earnings management is the management's discretionary choice to manipulate earnings to achieve the financial targets. Earnings surprise is the difference between firms' reported earnings and the Wall Street estimates, which affects individual firms' stock prices around the earnings announcement and in the long run. We apply multivariate-pooled OLS heteroscedasticity-consistent standard error regressions. The study results suggest that the magnitude of earnings management has a positive and significant relationship with firms' market-adjusted return. Similarly, good news also shows a positive relationship, and a significant negative relationship exists with bad news. This indicates that the earnings announcement does indeed have significant effects on firms' market-adjusted returns.

Key words: Market adjusted returns, earnings management, analysts' forecasts, earnings surprise, earnings announcement, accruals earnings management, real earnings management.

INTRODUCTION

Firms prepare their financial statements to provide the information to their end users including potential investors along with other capital market players. The incentive for firms to produce useful information is to protect those potential investors, who become one of their funds

generating sources. They are also part of the capital market that influences the total market value of individual firms. For that purpose, Othman and Zeghal (2006) discuss the country policies on the investor protection to establish an economy that is sustainable and stable for

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the overall growth of the economy. Knowing these users influence the market value, firms have that added pressure of making up the numbers to present better view of their performance (Levitt, 1998). Schipper (1989) defines earnings management as the use of discretionary powers by firms to manage the earnings and dress up the numbers to show good performance.

Furthermore, Healy and Wahlen (1999) also define it as the use of discretionary choices to hide the actual financial performance and alter the financial reports to achieve the targets. Prior literature has provided the two techniques to used measure the earnings management. Jones (1991) introduces the Accruals Earnings Management (AEM) technique, which Kothari et al. (2005) modifies. Roychowdhury (2006) gives another technique that is, Real Earnings Management (REM). The authors use both techniques in their statistical analyses of this study.

Firms' earnings announcements affect their share price returns. Potential investors require financial information to make any informed investing decision. First source of such information is the financial statements that firms prepare and issue that is, earnings announcement. Lyle et al. (2018) discuss the difference in the market reaction in relation to the timing of the earnings announcement. They believe that the firms, which announce the earnings outside of regular trading hours, give investors enough time to process the financial information before the trading begins again. Therefore, the announcements during the pre-open period have slower market reactions. Beaver et al. (2020) deal with the change in the market response towards the earnings announcement during different periods. They document increased response during 2001-2011 and over time. The authors analyze the effects of earnings quality on the market returns and differentiate the users of financial statements into potential investors and financial analysts.

This study focuses on the study of earnings quality and its effects on investors' decision-making, which further explains the behavior of firms' returns adjusted against the market. Prior literature mostly deals with the earnings surprises. Frankel et al. (2010) investigate the effects of missing forecasting targets on investors' relations. They use analysts' conference calls with managers as the proxy of investor relations and analyze the effects of small negative earnings surprises. A survey study was done to analyze the effects of missing market expectations on the investor relations and they find that the firms that miss expectations generally have longer call lengths. This relationship is the negative effect of missing market expectation on investors' relations. No significant evidence was found to support Graham et al. (2005) that missing earnings benchmark results in severe economic implications.

While Keung et al. (2010) studied market reaction to the positive earnings surprises, and found that investors are skeptical when firms just meet or beat their earnings

expectations and consider the existence of earnings management. Other studies discuss the use of earnings management to meet or beat analysts' forecasts in case of *Buy* (*Sell*) rated firms (Abarbanell and Lehavy, 2003), and use of earnings management to achieve financial targets (Burgstahler and Eames, 2006). Abarbanell and Lehav (2003) explain how firms are motivated to meet or beat their targets when rated as a *Buy* and vice-versa in case of *Sell*. Burgstahler and Eames (2006) find that firms manage their earnings to meet or beat their earnings expectation to have zero or small positive earnings surprises to avoid consequences of earnings shocks.

The study is motivated by the prior literature and talks about the effects of earnings management on firms' returns on the stock market adjusted by the capital market returns. We explain this phenomenon in two stages: the first stage explains how firms are motivated to manage their earnings to meet or beat earnings targets (Abarbanell and Lehavy, 2003) and the second stage talks about the reactions of the market to the quality of the earnings reports and earnings surprises thereof on firms' stock returns adjusted against the market's return. Existing literature mostly focuses on the relationship between small positive (negative) earnings surprises and the share price returns. Therefore, there is a need for an extension to the existing literature and our study contributes to the literature by including the share price returns of the firms adjusted against the markets, which minimizes the unwanted effects of extremely positive (negative) returns.

LITERATURE REVIEW

There is extant literature that deals with the earnings surprises and abnormal share returns (Keung et al., 2010), sales surprises and abnormal share returns (Shih, 2019), and meeting or beating earnings expectations (Abarbanell and Lehavy, 2003; Oler et al., 2018). Burgstahler and Eames (2006) discuss the use of earnings management to achieve zero or small positive earnings shocks or surprises, while Frankel et al. (2010) discuss the reactions of the capital markets to the small negative earnings surprises. There is a large literature, which also deals with the market reaction toward the earnings announcement (Lyle et al., 2018), and achieving the financial thresholds with earnings management (Ebaid, 2012; Mindak et al., 2016). Levitt (1998) says that firms manage their earnings to beat the market expectations to avoid any significant negative effects on their market share. This research focuses on the study of firms' earnings management techniques and their effects on the market-adjusted returns (hereafter MAR) of individual firms. These MARs explain the actual performance of the firm relative to the market. Literature largely focuses on the alpha returns of firms, which

measure the growth rate of firms' market share-price returns. Like Fuller et al. (2002), they measure MAR, using the market-adjusted return model, as the difference between returns of individual firm and market index return over shorter 3-day window instead of 5-days period. The reasons to choose the shorter window are to exclude the likely effects of other events that could affect the returns and to assess the market reaction towards the earnings announcement and the earnings surprises thereof. We assume the markets are efficient and they will be able to mitigate the shocks in the longer run. This study also emphasizes the two techniques firms use to manage their earnings to reach their financial targets. These techniques include accruals earnings management and real earnings management (hereafter AEM and REM, respectively).

Existing literature has put a little emphasis on the shorter window returns instead has focused more on firms achieving their earnings targets or benchmarks (Barua et al., 2006; Mindak et al., 2016). The study is motivated by recent literature that talks about firms' choices to meet or beat the thresholds (Abarbanell and Lehavy, 2003; Levitt, 1998) and whether the stock market or investors are skeptical about the small positive surprises and perceive them as the signal of earnings manipulation (Keung et al., 2010; Shih, 2019). Frankel et al. (2010) discuss the reactions of the capital markets on the small negative earnings surprises and Burgstahler and Eames (2006) discuss the use of earnings management to achieve zero or small positive earnings shocks or surprises. These studies discuss firms' decisions to manage their earnings in order to achieve their targets. These targets include the financial analysts' forecasts by focusing more on the abnormal returns and zero or small positive (negative) earnings surprises. The study emphasizes firms' overall behavior or attitude towards their earnings management decision-making and its effect on the market reaction and firms' MAR. This study investigates the effects of firms' decisions to manage earnings upward (PEM) or downward (NEM) on their MAR.

Contributions of this study include the use of MAR with a 3-day window in days [-1 +1] and two 2-day windows ([0 +1] and [-1 0]) around the earnings announcement, to be discussed later in more detail. We also contribute to the literature by analyzing firms' attitude towards earnings management and its effects on market reaction, that is, returns.

We incorporate earnings surprise (good and bad news) to check the sensitivity analysis and to compare our results with the works of Keung et al. (2010), Burgstahler and Eames (2006) and Graham et al. (2005). They also contribute by using the latest period 2006-2018 to analyze the new trend to observe the results of Keung et al. (2010).

The study results suggest that the magnitude of the earning management positively affects MAR, that is, firms'

return adjusted against the market return. However, their results are still consistent when they split their sample in the two categories: firms with PEM and NEM attitude. The firms with PEM attitude are those, which overstate their earnings to achieve the forecasting targets. While other categories belong to those firms, which understate their earnings. The study result proves that when firms apply the PEM approach to their earnings, their MAR increases; while the firms with NEM approach find their MAR decreasing. The results are robust with the inclusion of earnings surprise in our statistical analysis and provide similar evidence that the good (bad) news in terms of earnings surprises positively (negatively) affects the firms' returns or growth.

The following section extends the review of relevant literature about the reactions from capital markets or potential investors to firms' decision-making choices for financial targets including analysts' forecasts. Section 3 develops the hypotheses of their research study. The data sampling, research methodology and variable definition are part of section 4. Sections 5 and 6 present the empirical data analyses including descriptive statistics, correlation, and multivariate regression results. Section 7 concludes this empirical study with a summary and limitations.

Hypotheses development

This study is motivated by existing literature and its primary focus is to analyze empirically the relationship between earnings management and firms' market-adjusted return (MAR). Following Abarbanell and Lehavy (2003) and Burgstahler and Eames (2006), who discuss the use of earnings management to meet (zero earnings surprise) or beat (positive earnings surprise) the targets, the authors assume that the earnings surprise is the function of earnings management. Hence, they use these two proxies separately to analyze the effects on firms' MAR. They posit that the market reaction is the function of firms' discretionary choices to manage earnings and earnings surprises. They hypothesize that firms' MAR increases when they amplify the earnings managements ($H1$) or when there is a positive earnings surprise that is, good news ($H2$ and $H2_a$). The authors also analyze the effect of firms' attitude that is, PEM and NEM, towards the earnings management on the MAR ($H1_a$ and $H1_b$). They also hypothesize that the negative earnings surprise that is, bad news will affect the MAR negatively ($H2_b$).

$H1$: Magnitude of earnings management is positively associated with firms' MAR.

$H1_a$: PEM affects firms' MAR positively.

$H1_b$: NEM affects firms' MAR negatively.

$H2$: Magnitude of earnings surprises is positively associated with firms' MAR.

Table 1. Sample selection.

Panel A: Firm-Year Observations							
Firms		Firm-year observations					
Total number of firms		(6445 x 13)		83,785			
Less: Firms from financial industry		(1219 x 13)		(15,847)			
Less: Firms from Miscellaneous industries		(774 x 13)		(10,062)			
Less: Unidentified Firms		(70 x 13)		(910)			
Remaining firms		(4383 x 13)		56,966			

Panel B: Industry-wise Sample Distribution – Final Sample							
Industry		Market Adjusted Return (MAR)					
		window -1 +1		window 0 +1		window -1 0	
Name	Code	n	%	n	%	n	%
Commercial Services	3200	309	4.88	296	4.91	127	5.04
Communications	4900	82	1.29	87	1.44	22	0.87
Consumer Durables	1400	210	3.31	216	3.58	52	2.06
Consumer Non-Durables	2400	330	5.21	313	5.19	113	4.49
Consumer Services	3400	400	6.31	361	5.99	150	5.95
Distribution Services	3250	163	2.57	173	2.87	65	2.58
Electronic Technology	1300	932	14.71	896	14.87	355	14.09
Energy Minerals	2100	272	4.29	260	4.31	137	5.44
Health Services	3350	161	2.54	150	2.49	74	2.94
Health Technology	2300	776	12.25	764	12.68	373	14.81
Industrial Services	3100	398	6.28	355	5.89	134	5.32
Non-Energy Minerals	1100	138	2.18	120	1.99	39	1.55
Process Industries	2200	380	6	360	5.97	157	6.23
Producer Manufacturing	1200	703	11.1	625	10.37	252	10
Retail Trade	3500	340	5.37	350	5.81	135	5.36
Technology Services	3300	514	8.11	495	8.21	247	9.81
Transportation	4600	188	2.97	173	2.87	74	2.94
Utilities	4700	40	0.63	32	0.53	13	0.52
Total	18	6336	100%	6026	100%	2519	100%

Source: Authors

H2_a: Positive earnings surprise (that is, good news) has positive effect on firms' MAR.

H2_b: Negative earnings surprise (that is, bad news) has negative effect on firms' MAR.

Data sample selection

The study data include non-AAER (Accounting and Auditing Enforcement Release) US market firms and have 83,785 firm-year observations spread over 13 years (6,445 firms each year) from 2006 to 2018. The authors obtained the data from the Factset Database based on Excel Connect including Factset Fundamentals, Factset Actuals, Factset Estimates, Reuters Global Fundamentals, Thomson Reuters DataStream, I/B/E/S, and Center for Research in Security Prices (CRSP). They extracted the data related to earnings and earnings forecasts from

I/B/E/S/ and market return data from CRSP.

Following Fama and French (1992) and Payne and Robb (2000), they exclude observations from financial firms because they use unique accounting procedures and principles, as well as the difficulty in estimating discretionary accruals.

Since there are insufficient data under unspecified and miscellaneous firms, these observations were excluded from the analysis.

Table 1 shows the final sample (unbalanced panel data) of firm-year observations under three different windows after removing the firms and the application of trimming criteria. They have one 3-day and two 2-day windows.

METHODOLOGY

The method used for the empirical analysis is in two- folds: the

earnings management was measured at the first stage. At the second stage, the earnings management was applied as proxies to empirically test the study hypotheses. Prior studies often only use one measure of earnings management in their analysis. To provide robust results, both measures of the earnings management were used, AEM (Kothari et al., 2005) and REM (Roychowdhury, 2006). Kothari et al. (2005) used the performance-matching approach to estimate the earnings management, that is, equation (1). The discretionary accruals were estimated for each firm *i* in a year *t* (that is, residuals ϵ_{it}) by regressing equation 1, cross-sectionally for the firms within the same 2-digit SIC code each year.

$$TA_{it} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2(\Delta S_{it} - \Delta REC_{it}) + \alpha_3(PPE_{it}) + \alpha_4(ROA_{it}) + \epsilon_{it} \quad (1)$$

Likewise, Roychowdhury (2006) formulated three equations. Firms manipulate actual profits to meet benchmarks and prevent disclosing any annual losses. They measure the abnormalities (that is, residuals ϵ_{it}) in cash flow from operations (CFO), production costs (Prod_Cost) and discretionary expenses (DisExp), cross-

$$|MAR_{it}| = \alpha_0 + \alpha_1[EM_{it}] + \alpha_2[PBValue_{it}] + \alpha_3[LEV_{it}] + \alpha_4[Log_Assets_{it}] + \alpha_5[Log_AF_{it}] + \alpha_6[AQ_{it}] + \epsilon_{it} \quad (5)$$

$$|MAR_{it}| = \beta_0 + \beta_1[ES_{it}] + \beta_2[PBValue_{it}] + \beta_3[LEV_{it}] + \beta_4[Log_Assets_{it}] + \beta_5[Log_AF_{it}] + \beta_6[AQ_{it}] + \epsilon_{it} \quad (6)$$

The earnings surprise is measured as the difference between the reported earnings and I/B/E/S mean earnings forecast 45-days before the firms announce their earnings instead of using the latest I/B/E/S mean earnings forecasts commonly used in literature. The latest earnings forecasts do not provide firms sufficient time to manage earnings to meet or beat their targets. These forecasts might also generate the number closer to reported earnings anyway after incorporating all the recent and private information. Therefore, it is assumed that a 45-day window provides firms with reasonable incentives and motivations to manage their earnings to meet or beat the targets to avoid earnings shocks (or bad news) and untoward market reactions.

The multivariate models explain how firms manage earnings (PEM or NEM) to achieve their financial targets. The financial targets of firms can include meeting or beating forecasts, issuing good news to market players to receive positive market reactions and consequently achieve positive MAR. Similar to Keung et al. (2010), the initial primary MAR period consists of 3-day window from one day prior to one day after the earnings announcement; but a market model was used to measure the cumulative abnormal return based on Fuller et al. (2002) and Rosen (2006) who used Brown and Warner (1985)'s market-adjusted return model. The market-adjusted return model is used to eliminate the data complexity of the market model. Two 2-day windows were used to check for the robustness of the results. One of these two windows consists of the day of earnings announcement and a day after [0 +1], and the second window consists of the day before the earnings announcement and the day of earnings announcement [-1 0].

Given past studies in earnings management and earnings surprises, the models include several control variables. The variables Price-to-Book value and Analysts based on PBValue, Log_Assets and Log_AF, respectively explain varying degrees of the size of firms. Literature does not explicitly employ these variables on share price returns, but these variables have significant effect on earnings management and forecast accuracy (Embong and Hosseini, 2018; Richardson, 2000). PBValue is expected to have a positive sign with returns because it shows there is good news to market players if it is higher. Log_AF has positive relationship because bigger sized firms attract more followers (including all stakeholders), which generates public

informationally for the firms within the same 2-digit SIC code each year using the following equations respectively proposed by Roychowdhury (2006). Subsequently, the residuals are multiplied from equation 4 with -1 and REM is calculated by adding the residuals generated from these equations.

$$CFO_{it} = \gamma_0 + \gamma_1(1/A_{it-1}) + \gamma_1(S_{it}) + \gamma_2(\Delta S_{it}) + \epsilon_{it} \quad (2)$$

$$Prod_Cost_{it} = \mu_0 + \mu_1(1/A_{it-1}) + \mu_1(S_{it}) + \mu_2(\Delta S_{it}) + \mu_3(\Delta S_{it-1}) + \epsilon_{it} \quad (3)$$

$$DisExp_{it} = \varphi_0 + \varphi_1(1/A_{it-1}) + \varphi_2(S_{it-1}) + \epsilon_{it} \quad (4)$$

The study hypotheses not only focus on the magnitude of earnings management but also on firms' attitude towards earnings management (PEM and NEM). The absolute values of AEM and REM are calculated and sign values are used to separate the two attitudes. Therefore, each sample was divided into two subsamples to analyze the effects of PEM and NEM approaches of firms on the variable of interest MAR. A similar approach is followed for the earnings surprise. Equations (5) and (6) are used to test the hypotheses empirically.

information for all analysts to produce a consensus forecast with low dispersion. One of the two incentives used to manage earnings is to avoid debt covenant violation (Richardson, 2000); therefore, Leverage (LEV) is included to control the firms' leverage risk. Firms engage less with earnings management when they are audited by big four auditing firms, and it plays a role in their earnings quality (Clinch et al., 2012). Assuming market players react better when they have confidence in the quality of earnings report and its informational value. Thus we expect Audit Quality (AQ) to have positive sign with MAR. Table 2 describes the variables included in the empirical analyses.

Descriptive statistics and correlation

Descriptive statistics

Table 3 shows the statistical summary of the variables employed in the empirical study. Panel A of Table 3 presents the descriptive statistics of the dependent variables. 3-day window is employed for MAR as the primary variable for the data analysis and the other two windows were used to support the primary results. The means of market-adjusted returns are consistently lower than the median across three windows, indicating the negatively skewed distribution. Panel B of Table 3 reports the statistics for AEM and REM, where the mean and median values in AEM are lower than those of REM. Since the analyses include studying the magnitude of the earnings management and firms' attitude towards these discretionary choices, there were absolute PEM and NEM. These values suggest that managers use REM more than AEM to manage their earnings.

Panel C of Table 3 shows the list of control variables. The majority of PBValue and LEV values is in the fourth quartile and lean towards the positive skewness. With the big four audit firms as their external auditors, AQ represents 80.70% of the sample firms in our report.

Correlation matrix

Table 4 presents the correlation among different variables used in the study. The aim is to assess the correlation between the

Table 2. Variable definition.

Variable code	Definition	Data source	Extraction
Panel A: Accruals models			
TA	Total Accruals calculated by the change in non-cash current assets minus the change in current liabilities excluding the current portion of long-term debt, minus depreciation, and amortization	Derived	$TA = (\Delta CA - \Delta CL - \Delta Cash + \Delta STD - D\&A)$
A	Total Assets	Factset Database	
$\Delta S - \Delta REC$	Change in Sales minus change in Receivables at year T	Derived	$\Delta S - \Delta REC = (Sales(t) - Sales(t-1)) - (Rec(t) - Rec(t-1))$
PPE	Gross value of Property Plant and Equipment	Factset Database	
IBE	Income before Extra Items	Factset Database	
$\Delta REV - \Delta REC$	Change in Revenue minus change in Receivables at year T	Derived	$\Delta REV - \Delta REC = (Rev(t) - Rev(t-1)) - (Rec(t) - Rec(t-1))$
<i>Note: All variables are scaled by lagged total assets except Total Assets "A"</i>			
Panel B: Real Earnings Management Models			
CFO	Cash flow from Operations	Factset Database	
S	Total Sales	Factset Database	
$\Delta S(t)$	Change in Sales at year T	Derived	$\Delta S = Sales(t) - Sales(t-1)$
Prod_Cost	Production Cost calculated by adding change in Inventory to the Cost of Goods Sold	Derived	$Prod_Cost = COGS + \Delta INV$
$\Delta S(t-1)$	Change in Sales at year T-1	Derived	$\Delta S = Sales(t-1) - Sales(t-2)$
DisExp	Discretionary Expenses calculated by adding three expenses: Research and Development, Advertising and Selling, General and Administrative Expenses.	Derived	$DisExp = R\&D + SG\&A + ADV$
All variables are scaled by lagged total assets			
Panel C: Adjusted return models			
MAR	Market Adjusted Return (MAR) is the difference of Market return and individual firms' return within 3-day windows. Window [-1, +1] means the return calculated with one day before and after the earnings announcement. Similarly with other windows [0, +1] and [-1, 0].	Factset Database	$MAR = \log (Market\ return\ R_{m,t} - Firms'\ return\ R_{i,t} / 100)$ Where: Return is calculated as: $R_{m,t} - R_{m,t-1} / R_{m,t-1}$ $R_{i,t} - R_{i,t-1} / R_{i,t-1}$
Abs_AEM	Absolute values of the discretionary accruals from Kothari Model.	Derived	$Abs_Kothari = Residuals $
Abs_REM	Absolute values of the summation of abnormalities from three Roychowdhury models i.e., Cash Flow from Operations, Production Costs and Discretionary Expenses.	Derived	$Abs_REM = \sum Residuals $
P_AEM	Positive accruals earning management by the management to elevate the earnings.	Derived	$P_AEM = Positive\ Accruals\ earnings\ management$

Table 2. Cont'd.

N_AEM	Negative accruals earning management by the management to alleviate the earnings.	Derived	N_AEM = Negative Accruals earnings management
P_REM	Positive real earning management by the management to elevate the earnings.	Derived	P_REM = Positive Real earnings management
N_REM	Negative real earning management by the management to alleviate the earnings.	Derived	N_REM = Negative Real earnings management
ES	Earnings Surprise calculated by the difference between Reported EPS and Ex-Ante Forecast Mean Values (45 days before Reported Earnings).	Derived	ES = EPS - EAMean EAMean = Pre-announcement mean earnings forecast
Abs_ES	Absolute values of the earnings surprise	Derived	Abs_ES = ES
ESpve	Positive earnings surprise or good news. When firms beat the earnings forecasts.	Derived	ESpve = ES where ES > 0
ESnve	Negative earnings surprise or bad news or earnings shock. When firms fail to beat the earnings forecasts.	Derived	ESnve = ES where ES < 0
EM	Earnings Management Component = Discretionary Accruals calculated by Residual Values in Kothari Model and Abnormalities in Rowchowdhury Models of Cash Flow from Operations, Production Costs and Discretionary Expenses.	Derived	EM = Abs_AEM, Abs_REM, Aggr_AEM, Cons_AEM, Aggr_REM, Cons_REM Where: REM is the summation of abnormalities calculated with three Roychowdhury models.
PBVALUE	Price to Book Value	Factset Database	
LEV	Leverage is ratio of Long-Term Debt to Total Assets	Derived	LEV = LTD/Total Assets
Log_Assets	Log of Total Assets	Derived	Log_Assets = log10(Total Assets)
Log_AF	Log of Number of Analysts Following the firms	Factset Database	Log_AF = log10(AF)
AQ	Audit Quality is the dummy variable based on the Big Four Audit Firms	Derived	AQ = 1 for Big Four Firms, AQ = 0 otherwise

Note: 1. Only Earnings Management and Earnings Surprise are scaled with Share Price at the start of the year. 2. All other variables either are ratios or already scaled. All variables are winsorized at the 1st and 99th percentile except dummy variable that is, AQ.
Source: Authors Survey

explanatory variables; a low moderate correlation is anticipated because a strong correlation may imply unreliable and biased results. Since the analyses do not employ AEM and REM simultaneously, the inter-correlation was overlooked.

Statistically, no significant correlation was observed among the explanatory variables, suggesting that the predictors of the models do not have a multicollinearity

problem, leading to the assumption that the regressions can generate reliable results. The authors use the variable inflation factor (VIF) technique for each of the regressions to assess the robustness of the bivariate inter-correlation or multicollinearity. The findings are identical and display no evidence of substantial multicollinearity among the explanatory variables, creating questions about the model's reliability.

RESULTS AND DISCUSSION

The empirical analysis is in two-fold: in the first stage, the earnings management was measured by using equations 1 to 4. In the second stage, the regressions were run on equations 5 and 6. The second stage of the empirical analysis is in

Table 3. Descriptive statistics.

	n	Mean	Std. Dev.	Median	Min	Max	Quartile 1	Quartile 3
Panel A: Market Adjusted Returns (MAR)								
MAR_11	6336	-1.177	0.678	-1.185	-2.932	0.778	-1.603	-0.765
MAR_01	6026	-1.202	0.732	-1.243	-2.994	0.816	-1.697	-0.716
MAR_10	2519	-1.304	0.712	-1.352	-3.045	0.772	-1.785	-0.864
Panel B: Earnings Management (EM) and Earnings Surprise								
Abs_AEM	6336	0.053	0.076	0.028	0.000	0.838	0.012	0.063
P_AEM	2633	0.053	0.078	0.026	0.000	0.568	0.010	0.061
N_AEM	3703	-0.054	0.075	-0.029	-0.838	-0.00	-0.064	-0.013
Abs_REM	6336	0.290	0.404	0.149	0.000	2.636	0.063	0.337
P_REM	3496	0.326	0.441	0.170	0.000	2.636	0.072	0.390
N_REM	2840	-0.246	0.348	-0.126	-2.115	-0.000	-0.282	-0.053
Abs_ES	6336	0.032	0.072	0.010	0.000	0.655	0.003	0.029
ESpve	2341	0.0163	0.035	0.004	0.000	0.199	0.001	0.012
ESnve	3995	-0.042	0.086	-0.015	-0.655	-0.00	-0.037	-0.005
Panel C: Control variables								
PBValue	6336	4.090	6.148	2.506	0.235	52.41	1.569	4.157
LEV	6336	0.198	0.177	0.179	0.000	0.849	0.013	0.316
Log_Assets	6336	3.137	0.816	3.142	0.140	5.606	2.577	3.664
Log_AF	6336	0.711	0.488	0.778	0.000	1.491	0.301	1.114
AQ	6336	0.807	0.395	1.000	0.000	1.000	1.000	1.000

Source: Authors Survey

two-fold, which includes the primary analysis with earnings management, and robustness check with earnings surprises.

Primary analysis

The primary analysis includes regression of the multivariate-pooled OLS heteroscedasticity-consistent standard errors and firm-specified panel regression on equation 5. The earnings management was used as the explanatory variable on the firms' MAR with 3-day window starting from one day before the earnings announcement to one day after [-1, +1].

Table 5 includes the results of the primary analysis. The results are consistent with Burgstahler and Eames (2006), who believe that firms manage their earnings to avoid severe economic consequences. The magnitude of earnings management (AEM and REM) has significant positive relationship with MAR. This means that firms, which involve in these discretionary activities, benefit from the positive market reaction with better stock returns. The results are in line with hypothesis H1 of this study, which states that, the magnitude of the earnings management is positively associated with MAR.

Moreover, as described earlier, the study extends the

literature and divides the firms based on their attitude towards the earnings management. H1_a of the study says that firms with PEM attitude should realize better stock returns and vice versa in case of H1_b for the NEM firms. The results consistently show that firms with PEM (P_AEM or P_REM) have positive relationship with their MAR (that is, 0.380* or 0.058**). While firms with NEM (N_AEM or N_REM) show a negative relationship (that is, -0.167 or -0.051). In cases of N_AEM and N_REM, they do not find significant coefficients, but they show negative signs, as expected and in line with hypothesis H1_b. The control variables, except PBValue, show accurate signs of consistency with the prior literature and significant coefficients except AQ. Table 6 from firm-specified panel regression shows consistently similar results as in Table 5 from pooled OLS heteroscedasticity-consistent standard errors regression.

Robustness check

Similarly, the authors run multivariate-pooled OLS heteroscedasticity-consistent standard errors regression on equation 6. Earnings surprise is used as the explanatory variable on the firms' MAR with all three short interval 3-day and 2-day windows [-1, +1], [0, +1]

Table 4. Correlation matrix.

Pairwise Pearson and Spearman Correlation								
<i>n</i> = 6,336	Abs_AEM	Abs_REM	Abs_ES	PBValue	LEV	Log_Assets	Log_AF	AQ
Abs_AEM		0.2647***	0.2834***	-0.3020***	0.0334***	-0.1005***	-0.0905***	-0.0562***
Abs_REM	0.2819***		0.1632***	-0.2618***	0.0420***	-0.0960***	-0.1386***	-0.0521***
Abs_ES	0.3074***	0.1643***		-0.2239***	0.1270***	-0.0315**	0.0032	-0.0344***
PBValue	-0.0858***	-0.1045***	-0.0706***		0.0905***	0.0961***	0.1962***	0.0845***
LEV	0.0562***	0.0625***	0.1131***	0.1856***		0.4822***	0.2361***	0.2043***
Log_Assets	-0.1027***	-0.0494***	-0.0682***	0.0032	0.3986***		0.5417***	0.4393***
Log_AF	-0.0969***	-0.1085***	-0.0226*	0.0941***	0.2154***	0.5046***		0.2771***
AQ	-0.0633***	-0.0233*	-0.0562***	0.0361***	0.1866***	0.4476***	0.2709***	

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$, this correlation matrix gives the information about the correlation among the independent variables. The correlation below the diagonal line is Pearson; above the diagonal line is Spearman correlation.
 Source: Authors Survey

Table 5. Multivariate pooled OLS regression for earnings management.

Variables	Accrual Earnings Management (AEM)			Real Earnings Management (REM)		
	Market Adjusted Returns (Window -1 +1 days around Earnings Announcement)					
Abs_AEM	0.250**					
P_AEM		0.380*				
N_AEM			-0.167			
Abs_REM				0.061***		
P_REM					0.058**	
N_REM						-0.051
PBValue (+)	-0.004***	-0.003	-0.005***	-0.004***	-0.003	-0.004***
LEV (+)	0.118**	0.092	0.126	0.115**	0.110	0.151*
Log_Assets (?)	-0.143***	-0.143***	-0.141***	-0.144***	-0.145***	-0.143***
Log_AF (+)	0.096***	0.068**	0.114***	0.100***	0.064**	0.144***
AQ (+)	0.019	0.040	0.011	0.018	0.016	0.006
Constant (?)	-0.576***	-0.552***	-1.158***	-0.564***	-0.482***	-1.134***
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Year Control	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,336	2,633	3,703	6,336	3,496	2,840
Adjusted R ²	5.07%	5.00%	4.98%	5.11%	5.79%	4.64%

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.
 Source: Authors Survey

Table 6. Multivariate Panel regression for Earnings Management.

Variables	Accrual Earnings Management (AEM)			Real Earnings Management (REM)		
	Market Adjusted Returns (Window -1 +1 days around earnings announcement)					
Abs_AEM	0.233*					
P_AEM		0.377*				
N_AEM			-0.162			
Abs_REM				0.061***		
P_REM					0.058**	
N_REM						-0.051
PBValue (+)	-0.004***	-0.003	-0.005***	-0.004***	-0.003	-0.004***
LEV (+)	0.118**	0.086	0.125	0.115**	0.105	0.150*
Log_Assets (?)	-0.142***	-0.144***	-0.141***	-0.143***	-0.144***	-0.143***
Log_AF (+)	0.100***	0.069**	0.117***	0.103***	0.068**	0.145***
AQ (+)	0.020	0.043	0.011	0.019	0.018	0.005
Constant (?)	-0.573***	-0.550***	-1.159***	-0.564***	-0.487***	
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes
Year Control	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,336	2,633	3,703	6,336	3,496	2,840
Adjusted R ²	3.57%	3.91%	3.41%	3.61%	4.57%	3.10%

*** p<0.01, ** p<0.05, * p<0.10. Please refer table 2 for variable definitions.

Table 7. Multivariate pooled OLS regression for earnings surprise.

Variables	Market Adjusted Returns (Window in days around Earnings Announcement)								
	Window [-1 +1]			Window [0 +1]			Window [-1 0]		
Abs_ES	0.314**			0.496***			0.366**		
ESpve		0.574			0.300			-0.086	
ESnve			-0.226*			-0.503***			-0.268
PBValue (+)	-0.004***	-0.001	-0.005***	-0.003*	-0.000	-0.004**	-0.004	0.001	-0.008**
LEV (+)	0.109**	0.011	0.150**	0.196***	0.299***	0.151**	0.208**	0.165	0.183
Log_Assets (?)	-0.141***	-0.167***	-0.126***	-0.192***	-0.219***	-0.178***	-0.106***	-0.090**	-0.122***
Log_AF (+)	0.094***	0.147***	0.063**	0.052**	0.146***	-0.004	0.048	0.100	0.032
AQ (+)	0.019	0.024	0.014	0.011	-0.030	0.033	-0.008	-0.109	0.034
Constant (?)	-0.557***	-0.524***	-1.167***	-0.578***	-0.434***	-1.015***	-1.403***	-1.592***	-1.306***
Industry Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,336	2,341	3,995	6,026	2,186	3,840	2,519	894	1,625
Adjusted R ²	5.10%	7.06%	4.27%	5.39%	6.20%	5.20%	5.18%	3.52%	5.76%

*** p<0.01, ** p<0.05, * p<0.10.

Source: Authors Survey

and [-1, 0], respectively.

Table 7 presents the results of hypotheses H2, H2_a and H2_b of this study. Hypothesis H2 states that the magnitude of the earnings surprises has positive relationship with firms' MAR. Since magnitude uses the absolute values, that is, non-negative values, it is expected to have positive linear relationship. The results in Table 7 support hypothesis H2, which shows the

significant positive coefficients of absolute values of earnings surprises (Abs_ES) with MAR across all three windows.

The study results are consistent with the literature and hypothesis H2_a, MAR increases with positive earnings surprises that is, ESpve (Abarbanell and Lehavy, 2003; Burgstahler and Eames, 2006). Positive relationship of ESpve with MAR was seen, except in 2-day window [-1,

0], where the coefficients are insignificant. The authors also observe the symmetric negative relationship of negative earnings surprises that is, ES_{ve} on MAR across all windows. This is in line with hypothesis H2_b and consistent with Graham et al. (2005). These results are partially consistent with Keung et al. (2010). Keung et al. (2010) suggest that investors become skeptical about the zero or small positive earnings surprises over time. The study is divided into 3 periods and only in the last period, that is, 2002-06, investors show skepticism. There was negative association of bad news of earnings surprises (earnings shock) with firms' MAR, which is consistent with Graham et al. (2005). Control variables, except PBValue, consistently show accurate signs in accordance with the prior literature and significant coefficients except AQ.

CONCLUSION AND LIMITATIONS

This study investigates the link between firms' intentions to achieve financial targets and the stock returns. The study contributes to the extensive literature in using the stock returns adjusted against the market. The study also adds to the literature by using the 3 different short interval windows of the market-adjusted return. The researchers place little importance on the use of firms' attitude (PEM and NEM) to analyze the effects on stock market performance. The researchers investigate earnings surprises (good news or bad news) separately. This study covers all these aspects of the literature and provides robust results. The results consistently support the study hypotheses and the existing literature from different empirical tests. They provide empirical evidence, using various analyses including multivariate pooled OLS heteroskedasticity-consistent standard error regression and firm-specific and industry-specific panel regression, that the firms use discretionary powers to manage their earnings to meet or beat the Wall Street Journal earnings expectations or forecasts. They do so to improve their stock market performance, that is, stock returns and avoid any severe consequences in the capital markets. The results are consistent with the earnings surprises, with good news or positive earnings surprises to improve the stock returns and vice versa in case of bad news or negative earnings surprises.

While this study contributes to the literature on a few fronts, there are limitations also. There is more work required on the use of PEM and NEM and earnings surprises. NEM attitude is not synonymous to bad news and this study does not differentiate between the NEM firms with good news and bad news. The other limitation of this study is the use of the US market only, which limits the sample size. This study includes 80.7% of firms audited by big four firms. This represents the number of big-sized firms limiting the wider application. Future research can help to overcome these limitations and expand the reach of the literature.

CONFLICT OF INTERESTS

The authors have not declared any conflicts of interests

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Full Length Research Paper

Effect of individual CEOs' characteristics on firms' performance: Evidence from China

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This paper investigates the effect of individual chief executive officers' (CEOs') characteristics on corporate performance. CEOs across 50 Chinese firms over time were selected and it was discovered that CEOs' specific factors play a significant role in their firms' performance. CEOs' demographic characteristics include their legal background, dual position (that is, as both CEO and chairman of the same firm), shareholding ratio, gender, and tenure. The findings show that CEOs with a legal background have a positive influence on return on assets. Robustness tests support the validity of the main results. Our findings are consistent with the human capital theory and provide support for human-capital explanations in which CEOs' legal expertise enhances their performance and corporate governance.

Key words: Corporate performance, return on assets (ROA), legal expertise, human capital theory.

INTRODUCTION

As firm leaders and promoters of companies' strategic decision-making, top managers play a significant role in corporate production, operation, and performance. Specifically, the individual characteristics of top managers will affect their strategic decisions, which in turn affect the company's behavior. As an important representative of top managers and the core leaders of a company, CEOs have an indispensable impact on corporate governance. Usually, the CEO, as one of a company's board members, has the ultimate power to execute business management decisions in a company, including the financial expenses, and business direction and scope. CEOs have a huge impact on companies' operation. Prior

research has generally focused on the influence of chief financial officers (CFOs), top managers, and specific factors such as the legal environment on corporate financial reporting disclosures. However, the question arises as to what specific impact CEOs have on corporate performance. Prior studies examine the impact of CEOs' characteristics including age, gender, education on firms' performance (Setiawan and Gestanti, 2022; Naseem et al., 2020; Gupta and Mahakud, 2020). Researchers also indicated that CEO's education negatively and significantly affects financing policy, but positively and significantly affects investing policy and performance (Setiawan and Gestanti, 2022). With

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reference to human capital theory (Becker, 2009), prior study found that CFA charter holders issue forecasts that are timelier than those of non-charter holders (De Franco and Zhou, 2009), and their results provide support for a human-capital explanation in which charter holders improve their productivity and performance in the financial market. However, research on the impact of CEOs' legal background on firms' performance is limited, particularly in the context of research in China (Belal et al., 2021; Bogdan et al., 2022). Due to the gap in literature, this provides an opportunity to explore the relationship between CEOs' legal background and corporate performance in China. It has been argued that even though CEOs and CFOs take responsibility for different aspects of companies, they might change companies' direction together, since CEOs may have excessive power over a company and influence CFOs' decision-making. Prior study also found that well experienced CEOs contribute to higher performance (Gupta and Mahakud, 2020). To improve the accuracy and reliability of the paper, the Shanghai Stock Exchange (SSE) Cyclical Industry 50 Index is used to construct the sample.

This index reflects the trend of SSE-traded stocks, which have distinguishing industrial characteristics. Due to the lag in financial statistics disclosure of SSE Cyclical Industry 50 listed companies as well as the update of financial statistics of the databases consulted in our region, CEOs from 50 Chinese listed companies over the period 2010–2017 are tracked which provides a dataset for this study. The timeframe of this study is consistent with prior studies with a period of less than 10 years (Liu and Jiang, 2020; Setiawan and Gestanti, 2022; Gupta and Mahakud, 2020; Belal et al., 2021; Bogdan et al., 2022). The firm-specific fixed effects and year-specific fixed effects are added into the base model, along with the effect of CEOs' demographic characteristics to control for the effect of firm-level characteristics and time effects on corporate performance. The effects of five personal characteristics of CEOs—legal background, dual position (that is, as both CEO and chairman in the same company), shareholding ratio, gender, and tenure—on corporate performance are explored, and control for the firm-specific fixed effect and year-specific fixed effect on the firms' return on assets (ROA). Based on the above results, only one out of five characteristics, CEOs' legal background has a significant impact on individual CEOs' decision making, and thereby on corporate performance. CEOs with a legal background can effectively avoid subjecting their firms to legal risks, and improve the quality of financial reports, which enables better decision-making and improves corporate performance.

These findings for the Chinese context support Krishnan et al. (2011)'s research in the US and those conducted in Romania (Bogdan et al., 2022) and Malaysia (Belal et al., 2021). At present, there is limited research on the relationship between CEOs'

characteristics and Chinese listed firms' performance. This paper provides a basis for Chinese listed firms to effectively appoint CEOs, which will help to improve China's CEO appointment system overall, thus consolidating and accelerating the development of Chinese listed firms. Furthermore, this paper supports findings for the US (Krishnan et al., 2011) that legal expertise can help to promote financial reporting quality, thereby improving corporate governance (Belal et al., 2021). Although China and the US differ culturally, the effects of CEOs' legal background on corporate performance in these two countries are found to align.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Human capital theory

Human capital was defined by Adam Smith as the skills, dexterity (physical, intellectual, and psychological), and judgment of an individual (Smith, 1937). Human capital is acquired through both formal schooling and experience. The concept of human capital entered mainstream academic inquiry in the early 1960s through the work of Becker (2009). In the past decades, it has fueled considerable and sustained debate among researchers. According to human capital theory, education is one of the many investment alternatives that individuals can choose to obtain future benefits. Indeed, the key assumption of the theory is that "education raises earnings and productivity mainly by providing knowledge, skills and a way of analyzing problems" (Becker, 2009). According to Becker (2009), education, vocational training, and skills are forms of capital because they raise earnings and provide individuals with higher returns for their efforts. The literature on human capital often distinguishes between "specific" and "general" human capital (Becker, 2009), where specific human capital refers to skills or knowledge that are useful to a single employer or industry and general human capital (such as literacy) is useful to all employers. Becker (2009) explained that individuals with highly specific skills are less likely to quit their jobs and are more highly paid. Human capital theory thus offers a uniform and generally applicable analytical framework for studying a range of economic and social issues, from the returns on education and on-the-job training to wage differentials and wage profiles over time. For example, earnings and experience levels were highly correlated with teachers' education levels, as suggested by human capital theory (Ismail and Awang, 2017). With reference to the human capital theory, De Franco and Zhou (2009) also find that CFA charterholders issue forecasts that are timelier than those of non-charterholders. In addition, prior literature indicates that human capital theory is supported in state-owned enterprises in China by providing implications for

enhancing productivity (Kong and Kong, 2017). However, scant research has applied the theory to firms' performance, and especially research on the impact of CEOs' legal background on firms' performance is limited which provides a literature gap for conducting this study in China. Based on the literature review below and five main demographic characteristics of CEOs—legal background, dual position, shareholding ratio, gender, and tenure—are included to examine the influence on the corporate performance.

Legal background

Legal executives are those who disclose decisions and behaviors, and supervise financial reporting. In 2002, the legal responsibilities of top managers in the US were clearly defined by the Sarbanes–Oxley Act; this included detailed statements on the professional responsibilities of legal personnel in companies. The American Bar Association also holds that corporate lawyers occupy an important position in corporate supervision, and should be one of the four major management mechanisms of listed companies (Wang, 2013). In particular, since the Enron scandal, many US companies have begun to establish an internal legal department or internal legal counsel position. Although these are not explicit provisions of US law, the measures have been recognized by the stock market, and have become one of the primary methods by which to prevent corporate legal risks, and improve the quality of financial reports and corporate performance. Legal counsel can influence corporate decision-making (Fisher, 2017). Top managers with legal expertise are sensitive to transactions involving legal risks, and are keenly aware of the potential risks in financial reporting; they thus use their power to influence management teams' behavior so as to influence relevant strategies and decisions, thereby reducing loss due to legal risks and improving firm ROA. Research finds that AC chairs with legal expertise are positively and significantly associated with real earnings management and improved corporate governance (Belal, Shaker and Abdulwahid, 2021). Prior research also finds that professional qualification of CEOs in finance stream enhances firms' performance (Gupta and Mahakud, 2020). However, in the Chinese legal system, the executive team is not required to include legal members; indeed, increasing the number of legal executives is one of the requirements of enterprises' resource management model, which indicates that the importance of legal executives in corporate governance has not received sufficient attention to date. Since research on the impact of legal background on firms' performance is limited and based on prior literature, the first hypothesis is developed as follows:

H1: *CEOs with a legal background have a positive influence on their firm's performance (ROA).*

Dual position

Prior research shows that CEO duality has a negative impact on firms' performance (Wijethilake and Ekanayake, 2020) and that a CEO with a dual role is more inclined toward debt financing (Naseem et al., 2020). The power intensity of CEOs can be reflected in two main respects: one is whether the CEO holds a dual role in the same company, such as CEO and chairman, while the other is the shareholding ratio of the CEO. Principal–agent theory holds that the position and power of the chairman and general managers within the same company should be separated, which can reduce the huge agency costs caused by managers' moral hazard and adverse selection. If the general manager has a dual position as chairman in the same company he or she will have both ownership and management rights, and thus excessive power; in other words, the general manager will have greater control over the company and cannot be dismissed easily, thus affecting the independence of the company and adversely impacting corporate performance. The necessity to separate CEO and chairman is based on analysis of the relationship between the structure of listed companies' board of directors, and corporate performance from the potential costs and benefits perspective. Prior research also finds that there is a negative relationship between CEOs' duality and corporate social responsibility disclosure which reduces corporate governance and renders CEOs less liable to their stakeholders (Voinea et al., 2022). Wijethilake and Ekanayake (2020) also find that CEOs' duality exerts a negative effect on firms' performance when the CEO is equipped with additional informal power. Based on prior literature, the second hypothesis is developed as follows:

H2: *CEOs holding a dual role have a negative influence on firms' performance (ROA).*

Shareholding ratio

Since information asymmetry exists between senior executives and shareholders due to the differing levels of information disclosure, top managers have the information advantage, and shareholders are in an informationally inferior position. Top managers are likely to conduct selective information disclosure based on their personal interests and shareholders' interests. This means that top managers will fully disclose good news and cover up bad news to effectively meet both top managers' and shareholders' interests, and encourage top managers to work hard for both their personal interests and those of shareholders, thereby improving corporate performance. Many companies have adopted equity incentives, such as executive ownership. Mei and Wei (2014) conducted an empirical analysis of a sample of listed companies in the growth enterprise market

(GEM) between 2010 and 2011, finding that when the executives' shareholding ratio is less than 20% or higher than 50%, the alignment effect is greater than the entrenchment effect. As executives' shareholding ratio increases they have greater control over their company, such that external forces decrease. This allows executives to pursue their personal interests to a greater extent and reduces corporate performance. When the shareholding ratio is between 20 and 50%, the entrenchment effect is greater than the alignment effect. Prior literature also demonstrates evidence of a significant negative influence of managerial shareholding and CEO's tenure on the debt ratio of listed firms in sub-Saharan Africa (Ehikioya et al., 2021). The result of the study suggests that the outside directors and board size positively influence the debt ratio of listed firms in sub-Saharan African countries. Given the results of this study, it is imperative for stakeholders in the region to continually improve the ownership and board structures of the firm to avoid the negative effect of debt on performance and the value of shareholders' wealth. Top managers with high shareholding ratios may change their companies' business strategies in order to avoid risks that may harm their personal interests. The new business strategies will be more aligned with CEOs' personal interests than those of their companies and other shareholders, thereby negatively influencing the companies' values and performance. Based on prior literature, the third hypothesis is developed as follows:

H3: *CEOs that own shares in their company have an influence on firms' performance (ROA)*

Gender

In recent years, some European countries have begun to implement a quota system for female directors, and legally guarantee the executive team's gender diversity. For example, in Sweden, laws stipulate that female executives should comprise not less than 25% of the total. In Norway, female directors should comprise more than 40%; otherwise the company will be forced to withdrawal risks. Thus, Western countries have noticed the importance of having female executives in corporate management. Among Chinese companies, female executives are not only highly involved in economic activities, but also play a guiding role in the corporate development. For example, Yan Xiaoyan, used to serve as the president of Bank of Beijing, Dong Mingzhu currently serves as the chairman and president of Gree Electric, and Zhu Min currently serves as the chairman and general manager of World Bank. Compared to men, women are risk-averse and tend to take a relatively conservative approach to decision-making in their work in order to act securely. Setiawan and Gestanti (2022) found that female CEOs have a significant positive effect on firm performance and financing policy. Similar finding is

also found for female CEOs that exert significant effects on firms' financial decisions and performance (Naseem et al., 2020). Jalbert et al. (2013) also found that female CEOs have better capabilities compared to men to increase companies' sales growth, asset returns, and market value. Female CEOs also improve their companies' decision quality and competitiveness. Prior study also finds that firms led by female CEOs exhibit a greater probability of being innovators and highlights that female CEOs outperform their male counterparts in innovation activities (Prabowo and Setiawan, 2021). Their results support the argument that because of gender-based discrimination that they receive, female CEOs are greatly motivated to exhibit greater innovation performance (Prabowo and Setiawan, 2021). Based on prior literature, the fourth hypothesis is suggested:

H4: *Female CEOs have a positive influence on firms' performance (ROA).*

Tenure

As CEOs' tenure increases they become more familiar with their enterprises, and have a stronger ability to avoid institutional restraints within and outside of their enterprises. This makes it easier to obtain core resources and pursue their own interests. On the other hand, CEOs with long tenure will accumulate more working experience in their companies, which deepens their recognition of resources and enhances their ability to identify the outside environment. Tanikawa and Jung (2019) have investigated whether the interactive effect of CEO-top management team (TMT) relations on firms' performance differs when past firms' performance is either poor or strong. Using a sample of 115 Japanese firms, results show that the interactive effect of CEO power and TMT tenure diversity on firms' performance is positive in a situation of poor past firms' performance. However, in a situation of strong past firms' performance, the opposite result is found. These findings imply that CEO power might play a significant role in enhancing the effectiveness of TMT diversity on firms' performance when past firms' performance is poor. Nebert et al. (2018) also found that board structure and CEO tenure jointly have a significant effect on performance which uncovered the importance of CEO tenure on firms' performance. It is suggested to formulate managerial policy and practice that can promote better governance practices and improve firms' performance. Based on prior literature, the fifth hypothesis is as follows:

H5: *CEOs' tenure has an influence on firms' performance (ROA).*

RESEARCH DESIGN

This part presents the research design for the tests of H1–H5,

Table 1. Variable definitions.

Variable	Definition
Dependent variable	
ROA	Firm’s net income to total assets in the same year (Setiawan and Gestanti, 2022)
Main variables: CEOs’ demographic characteristics	
LEGAL	= 1 if CEO has a legal background; 0 otherwise (Belal, Shaker and Abdulwahid, 2021)
DUAL	= 1 if CEO has a dual position in their firm; 0 otherwise (Wijethilake and Ekanayake, 2020)
SHARE	Number of shares held by the CEO to the total number of shares of the firm (Ehikioya, Omankhanlen, Inua, Okoye and Okafor, 2021)
TENURE	= (end of current accounting year – beginning date of current post)/365 (Nebert et al., 2018)
GENDER	= 1 if CEO is female; 0 otherwise (Setiawan and Gestanti, 2022)
Control variables: CEOs’ characteristics	
SALARY	Annual salary of CEO in the same year
AGE	Age of CEO in the same year
EXP	CEO’s years of working experience (since the CEO took his/her first job)
ABROAD	= 1 if the CEO has studied abroad; 0 otherwise
CPA	= 1 if the CEO is a certificated public accountant; 0 otherwise
Control variables: Firm characteristics	
SIZE	Common equity of the firm in the same year;
BTM	Book-to-market ratio, which equals to book value of the firm’s common equity to its market value
LEVERAGE	Firm’s long-term debt to (long-term debt plus book value of its common equity)
R&D	Firm’s expenditures on research and development (R&D) in the same year
CAPEX	Change in the property, plant, and equipment (PP&E) from the current year to the prior year, plus the current year’s depreciation expense
VOLATILITY	Return volatility, which equals to standard deviation of the firm’s daily returns for the past year
GROWTH	Business revenue growth, which equals to the percentage change in the firm’s main business revenue
CFOA	Cash flow from the firm’s operation to its total assets

Source: Authors

setting the ROA as the measure. To test the effect of individual CEOs’ characteristics on corporate performance, the model of Bamber et al. (2010) is followed and developed as follows:

$$Y_{it} = \alpha + \beta X_{it} + \lambda + \tau_i + \gamma_t + \epsilon_t \tag{1}$$

In this model, the unit is the firm-year; Y_{it} is the ROA of firm i in year t , which means corporate performance; the vector X is the comprehensive set of CEOs’ information and firms’ characteristics, which are the control variables in this model, as summarized in Table 1; λ are the main variables in the model, from which coefficients are estimated for indicator variables corresponding to each CEO. Thus, λ represents the fixed effect of CEOs on corporate performance. A summary of λ is shown in Table 1, including the individual CEOs’ demographic characteristics. Finally, τ_i is the firm-specific fixed effect on ROA, and γ_t is the year-specific fixed effect on ROA.

To test CEOs’ fixed effect on corporate performance, the following model is used:

$$\lambda = \alpha_0 + \gamma_1 Legal + \gamma_2 Dual + \gamma_3 Share + \gamma_4 Tenure + \gamma_5 Gender + \epsilon_2 \tag{2}$$

where λ is the CEOs’ fixed effect on corporate performance

estimated in Model 1; *Legal* represents the presence of CEO’s legal background; *Dual* indicates that CEOs have a dual position in their firm; and *Share* indicates CEOs’ shareholding ratio in their firm. *Tenure* and *Gender* indicate CEOs’ tenure in their firm and the CEOs’ gender, respectively.

Sample construction

The sample was taken from the SSE Cyclical Industry 50 Index from 2010 to 2017. This index consists of the 50 largest and most liquid A-share stocks listed on the Shanghai Stock Exchange, and is regarded as the blue-chip index of the exchange. The index aims to reflect the overall performance of the most influential Shanghai stocks, and a complete picture of high-quality large companies, using scientific and objective methods. Hence, it was deemed suitable for devising the sample in this paper. Data were taken from these 50 firms’ annual reports, and the CSMAR, RESSET, and Wind databases. Data acquisition and processing mainly preceded using Excel and STATA 15.0. Multivariate Regression Analysis was used to examine the relationship between the dependent variable (return on assets) and the independent variables. Since the mid-term listed companies cannot ensure the long-term nature of their data, four companies with only a mid-term listing were excluded. In

Table 2. Descriptive statistics.

Sample firms					
Dependent variable	Obs	Mean	Std.Dev.	Min	Max
ROA	280	5.22	6.122	-1.569	35.065
Main Variables					
Legal	280	0.043	0.203	0	1
Dual	280	0.1	0.301	0	1
Share	280	0.001	0.005	0	0.039
Tenure	280	4.01	3.024	0.03	14.093
Gender	280	0.007	0.084	0	1
Control Variables: CEOs' Characteristics					
Salary	280	1920000	1970000	60900	1.09E+07
Age	280	52.489	5.442	38	68
Exp	280	28.454	6.275	3	43
Abroad	280	0.104	0.305	0	1
CPA	280	0.025	0.156	0	1
Control Variables: Firm Characteristics					
Size	280	5.03E+10	9.16E+10	5.88E+08	3.56E+11
BTM	280	0.847	0.259	0.092	1.407
CAPEX	280	8270000	1.78E+07	-924000	1.07E+08
Growth	280	14.658	20.635	-53.286	117.719
Leverage	280	0.268	0.191	0	0.707
R & D	280	131000	432000	0	5920000
Volatility	280	5.228	1.855	0	10.053
CFOA	280	0.063	0.08	-0.368	0.332

¹Results from STATA

Source: Authors

addition, one company was listed after 2017 and five had incomplete data; these were also excluded. This left 40 listed companies, which formed the final sample for the study.

RESULTS

First, this section outlines the descriptive statistics of the variables to identify basic information on the sample of 40 firms from the SSE Cyclical Industry 50 Index 2011–2017. The specific statistical results are shown in Table 2. Second, a correlation analysis of the variables is conducted, the results of which are shown in Table 3, and a multivariate regression analysis to further test the effect of individual CEOs' demographic characteristics on corporate performance. Third, additional tests are run to verify the robustness and reliability of the variables and results with two additional main variables: CEOs' professional technical background and political background. The regression results are shown in Tables

4 to 6. Finally, the findings are discussed and implications outlined.

Descriptive statistics of the dependent variable

ROA is selected as the financial measure of corporate performance: the mean ROA of the sample firms is 5.22, the standard deviation is 6.122, and the maximum and minimum are 35.065 and -1.569, respectively. The standard deviation shows that the firms have a high degree of dispersion of ROA; firms with low ROA can learn from firms with high ROA, and pay attention to their innovations.

Descriptive statistics of the main variables

According to the above results, the mean and standard deviation of legal background are 0.043 and 0.203,

Table 3. Correlation analysis of variables.

Variable	ROA	Legal	Dual	Share	Gender	Tenure	Salary	Age	Exp	Abroad	CPA	CAPEX	Growth	Leverage	R&D	Volatility	CFOA	Size	BTM
ROA	1.000																		
Legal	-0.035	1.000																	
Dual	0.024	-0.071	1.000																
Share	0.1667***	-0.031	0.4541***	1.000															
Gender	-0.057	-0.018	-0.028	-0.013	1.000														
Tenure	0.1394**	-0.1162*	0.3038***	0.2956***	0.035	1.000													
Salary	-0.049	0.003	0.5025***	0.3514***	0.014	0.2848***	1.000												
Age	-0.2383***	-0.1294**	-0.008	-0.1957***	0.1251**	0.059	0.056	1.000											
Exp	-0.047	-0.044	0.001	-0.1317**	-0.1619***	-0.042	-0.051	0.6247***	1.000										
Abroad	-0.1916***	-0.014	-0.1133*	-0.054	-0.029	-0.046	-0.079	-0.037	0.033	1.000									
CPA	-0.1106*	-0.034	-0.053	-0.026	-0.014	-0.1048*	-0.1139*	-0.019	-0.1467**	0.2459***	1.000								
CAPEX	-0.1206**	-0.060	-0.1172*	-0.066	-0.038	-0.053	-0.2186***	0.1237**	0.083	0.2779***	-0.014	1.000							
Growth	0.2588***	0.013	0.091	-0.016	0.077	0.070	0.1854***	-0.1182**	-0.1470**	-0.1178**	-0.075	-0.1878***	1.000						
Leverage	-0.4271***	0.1939***	0.007	-0.1660***	0.1866***	-0.1055*	0.1601***	0.049	-0.040	-0.1340**	-0.068	-0.1190**	0.1425**	1.000					
R&D	0.032	0.067	-0.051	-0.043	-0.026	-0.089	-0.1266**	-0.026	0.078	-0.017	-0.049	-0.039	-0.065	0.042	1.000				
Volatility	0.043	0.1849***	0.095	0.047	-0.029	0.003	0.047	-0.1780***	-0.1114*	-0.1383**	-0.057	-0.1757***	0.055	0.1249**	0.106	1.000			
CFOA	0.5368***	-0.1507**	0.034	0.1568***	-0.066	0.1231**	-0.058	-0.025	0.049	0.043	-0.067	0.2361***	0.035	-0.3478***	-0.103	-0.076	1.000		
Size	-0.2789**	-0.093	-0.1420**	-0.080	-0.030	-0.048	-0.2357***	0.2271***	0.1542***	0.2261***	0.2254***	0.2797***	-0.1274*	-0.1249**	-0.113	-0.4119***	-0.1396**	1.000	
BTM	-0.7650***	0.104	-0.1134*	-0.2522***	0.051	-0.1745***	-0.048	0.3416***	0.1803***	0.3183***	0.096	0.3031***	-0.2399***	0.4127***	0.100	-0.1496**	-0.4443***	0.2871***	1.000

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

Source: Authors

respectively, which means that almost none of the CEOs have a legal background. The mean of dual position is 0.1, showing that only 10% have a dual position in their firm. The shareholding ratio of CEOs varies significantly, with many CEOs not owning equity in their firms. This shows that the equity incentive plan has not yet become a trend among Chinese listed companies. The longest tenure of the CEOs is 14.093 years, while the shortest is 0.03 years, and the average is 4.01 years. This shows that these listed firms do not change CEOs very often generally; but there are great differences among different companies. The percentage of female CEOs among these companies also varies, as the mean of gender is

0.007. This indicates that only 0.7% are female CEOs.

Descriptive statistics of control variables

There are marked differences between the CEOs' salaries, showing that different companies have different salary systems. Companies with good salary systems have higher possibilities to attract talent, and if top managers change jobs frequently, companies need to consider whether they have reasonable salary systems in place. The average age of the CEOs is 52.489 years old. The oldest CEO is 68, while the youngest is 38.

Thus, the overall age of the CEOs is old. If companies have some younger top managers in their teams, it would help to provide more diversified information on the companies' strategic decisions. The longest duration of experience is 43 years, while the shortest is three years; the mean is 28.454, which shows that the majority of the CEOs are experienced. However, only a few CEOs have CPA certification and experience of studying abroad. It can be useful to firms for their CEOs to have professional financial knowledge to help formulate financial strategies. In addition, CEOs with a broader horizon will have more efficient leadership and management methods, which can improve corporate performance. The

Table 4. Multivariate regression analysis.

Variable	(1)ROA	(2)ROA	(3)ROA	(4)ROA	(5)ROA
Legal	2.464 ^{**} (0.022)	2.386 ^{**} (0.028)	2.382 ^{**} (0.028)	2.389 ^{**} (0.028)	2.451 ^{**} (0.024)
Dual		-0.668(0.413)	-0.719(0.406)	-0.710(0.412)	-0.825(0.345)
Share			9.128(0.855)	6.821(0.892)	-0.337(0.995)
Gender				1.675(0.534)	1.662(0.537)
Tenure					0.076(0.323)
Salary	-0.000 [*] (0.057)	-0.000(0.211)	-0.000(0.209)	-0.000(0.234)	-0.000(0.197)
Age	-0.042(0.446)	-0.046(0.409)	-0.044(0.431)	-0.056(0.347)	-0.064(0.281)
Exp	0.087 [*] (0.052)	0.090 ^{**} (0.046)	0.090 ^{**} (0.046)	0.099 ^{**} (0.037)	0.104 ^{**} (0.029)
Abroad	-0.294(0.718)	-0.360(0.661)	-0.356(0.665)	-0.401(0.627)	-0.447(0.589)
CPA	0.023(0.987)	0.072(0.960)	0.072(0.961)	0.131(0.929)	0.291(0.843)
CAPEX	0.000(0.386)	0.000(0.380)	0.000(0.382)	0.000(0.377)	0.000(0.372)
Growth	0.045 ^{***} (0.000)				
Leverage	-4.515 ^{***} (0.001)	-4.577 ^{***} (0.001)	-4.552 ^{***} (0.001)	-4.716 ^{***} (0.001)	-4.667 ^{***} (0.001)
R&D	0.000 ^{***} (0.004)	0.000 ^{***} (0.004)	0.000 ^{***} (0.005)	0.000 ^{***} (0.005)	0.000 ^{***} (0.004)
Volatility	-0.287 ^{**} (0.025)	-0.277 ^{**} (0.031)	-0.277 ^{**} (0.031)	-0.273 ^{**} (0.035)	-0.274 ^{**} (0.034)
CFOA	15.493 ^{***} (0.000)	15.604 ^{***} (0.000)	15.547 ^{***} (0.000)	15.644 ^{***} (0.000)	15.558 ^{***} (0.000)
Size	-0.000 ^{***} (0.004)				
BTM	-13.912 ^{***} (0.000)	-13.905 ^{***} (0.000)	-13.886 ^{***} (0.000)	-13.814 ^{***} (0.000)	-13.697 ^{***} (0.000)
_cons	18.289 ^{***} (0.000)	18.317 ^{***} (0.000)	18.222 ^{***} (0.000)	18.491 ^{***} (0.000)	18.454 ^{***} (0.000)
N	280	280	280	280	280
R ²	0.697	0.698	0.698	0.698	0.699
F	43.542	40.633	37.956	35.663	33.734

p-Values are shown in parentheses. ^{*}p< 0.1, ^{**}p< 0.05, ^{***}p< 0.01.
Source: Authors

standard deviations of firm size and CAPEX are very high, showing that they have a very high degree of dispersion, and the largest and smallest companies have a huge difference in their common equity and PP&E. Furthermore, the growth in business revenue among these companies differs, with a maximum of 117.719 and a minimum of -53.286. Companies with higher business revenue growth rates have better prospects in the market, while those with negative growth rates may face problems such as unsatisfactory products or services, products with high prices but low quality, shrinking market share, etc.

Correlation analysis of variables

After identifying the descriptive statistics, a Pearson correlation analysis of the variables was conducted. The results are shown in Table 3. According to the results, among the main variables, CEOs' legal background has a negative correlation with corporate performance. This result is opposite to the expectation posited in H1, and further regression analysis is needed. CEOs' dual position and corporate performance are positively correlated, and CEOs' shareholding ratio and corporate performance have a significant positive correlation at the 1% level. The results of the preliminary verification are

opposite to the expectations of H2 and are consistent with H3, so, again, further regression analysis is required. CEOs' gender and corporate performance are negatively correlated, which goes against H4. However, tenure and corporate performance have a significant positive correlation at the 5% level, consistent with H5. According to the results for the control variables, the companies' R&D and return volatility have positive correlations with corporate performance, and both the companies' business revenue growth and CFOA have significant positive correlations with corporate performance at the 1% level. On the contrary, CEOs' age and experience of studying abroad, and companies' leverage, size, and book-to-market ratio are significantly and negatively correlated with corporate performance at the 1% level. Companies' CAPEX has a significant negative correlation with corporate performance at the 5% level. CEOs' CPA qualification has a significant negative correlation with corporate performance at the 10% level. CEOs' salary and working experience have a negative correlation with corporate performance.

Main results

To further test the above hypotheses, multivariate regression analyses were conducted to include all

variables in the paper. This used the following procedure. First, the main variable legal background was put together with all the control variables into Models (1) and (2). The results are shown in Table 4, column 1. Second, the main variables legal background and dual position with all the control variables were put into Models (1) and (2). The results are shown in Table 4, column 2. Third, three main variables—legal background, dual position, and shareholding ratio—together with all control variables were put into Models (1) and (2). The results are shown in Table 4, column 3. Then four main variables—legal background, dual position, shareholding ratio, and gender—with all control variables were put into Models (1) and (2). The results are shown in Table 4, column 4. Finally, the five main variables legal background, dual position, shareholding ratio, gender, and tenure together with all control variables were put into Models (1) and (2). The results are shown in Table 4, column 5. From Table 4 we can see that in regression (1), the R-square value is 0.697. The R-square value in regressions (2), (3), and (4) is 0.698, and in regression (5) it is 0.699. The R-square rises from 0.697 to 0.699 from regression (1) to regression (5), indicating that the regression equations have good degree of fit, especially the regression equation that includes all main variables, which has a better degree of fit compared to regression equations with one to four main variables. Thus, these five main variables, including CEOs' legal background, dual position, shareholding ratio, tenure, and gender, explain the dependent variable well, and the regression equation can be used to analyze individual CEOs' characteristics and corporate performance. Specific analyses of the effect of the five main variables on corporate performance are shown below.

The effect of CEOs' legal background on corporate performance

From Table 4, we can see that CEOs' legal background and corporate performance have a significant positive relationship at the 5% level, indicating that companies perform better if their CEOs have a legal background. CEOs with a legal background are more familiar with the national legal system. When business decisions may cause legal problems, CEOs can use their knowledge to analyze the current situation and potential results, helping the company to control its legal risks, and make better decisions to maximize profits. Compared with hiring lawyers from outside, top managers can participate in corporate operation and management activities, and better monitor the overall business behavior of their companies. Thus, hiring CEOs with a legal background is a better choice compared to hiring outside lawyers. In this paper, we recognize CEOs who graduated from law or used to work in law as having legal background. Among these sample CEOs with legal background, all of their prior legal positions were in mainland China and

compliance with Chinese legal systems, and the CEOs also graduated from law in mainland China, which can enhance the relationship between CEOs' legal background and these Chinese listed firms' performance. The above analysis shows that CEOs' legal background has a significant positive influence on corporate performance. Thus, H1 is supported.

The effect of CEOs' dual position on corporate performance

Table 4 indicates that CEOs' dual position has an insignificant relationship with corporate performance. When a CEO holds the position of chairman in the same company, he/she will be under heavier pressure from both inside and outside the company, including from political and public opinion perspectives. They will then be likely to earn hidden income, such as job consumption, using their positions. When CEOs have a dual position in the same company, they will have greater power over the control of company management and decision making. It is possible that some other top managers will follow CEOs' strategies and decisions because of CEOs' power. In this case, the supervision effectiveness of external investors over CEOs will decrease, and internal controls will be unable to effectively counterbalance CEOs, such that the CEOs' decision will represent their companies' decisions to some extent. Since CEOs may pursue their self-interests at the expense of the companies, this can negatively influence corporate performance. However, the main results in Table 4 show that dual position and firms' performance have an insignificant relationship, so H2 is rejected.

The effect of CEOs' shareholding ratio on corporate performance

In Table 4, the coefficient of shareholding ratio is negative but not significant, indicating that CEOs' shareholding ratio has an insignificant negative relationship with corporate performance. CEOs with a larger shareholding ratio are more capable of competing with other shareholders and the board of directors in making business decisions. The higher the shareholding ratio of CEOs is, the greater their control over their companies. Since CEOs hold more company information than do other shareholders who are not part of the companies' management team, it is possible that CEOs with a large shareholding ratio will transfer the companies' property using their information advantage and power, thereby reducing the companies' value and damaging other shareholders' profits. However, the main results in Table 4 show that CEOs' shareholding ratio and firms' performance have an insignificant relationship; thus, H3 is rejected.

The effect of CEOs' gender on corporate performance

Table 4 shows that CEOs' gender has an insignificant positive relationship with ROA. Usually, female CEOs have more emotional intelligence, can reduce internal conflict within companies more effectively, and improve the management team's cohesion, thus enhancing firms' development in the future. Furthermore, females are more considerate than males, and notice details that males do not. Thus, female CEOs can make more accurate business strategies compared to male CEOs, improve the creativity of their companies, and broaden the companies' development path. However, in Table 4, the results in this regard are insignificant, though positive as expected; one possible reason for this is that only a few of the sample companies have female CEOs. Since the results show that CEOs' gender and corporate performance have an insignificant relationship, H4 is rejected.

The effect of CEOs' tenure on corporate performance

The results in Table 4 show that CEOs' tenure and firms' ROA have an insignificant positive relationship. For CEOs with long-term tenure and who are close to retirement, in order to maintain corporate performance and consolidate their personal reputation during their last working period, so as to maximize their retirement pension, they will try to avoid making risky business decisions that might have a negative impact on corporate performance, such as high-risk strategic revolution. In addition, CEOs who have longer tenure like to show their rich experience and prove that they can handle unexpected situations, and ensure the maximization of profits for both their companies and shareholders; thus, they tend to choose operational strategies and business models that have been validated. However, the main results in Table 4 show that CEOs' tenure and firms' performance have an insignificant relationship; thus, H5 is rejected.

Additional testing

To further test the robustness of the analytical method and the validity of the main variables, including legal background, dual position, shareholding ratio, gender, and tenure, two additional CEO demographic characteristics—professional technical background and political background are added as main variables to the multivariate regression analysis to assess whether the regression results of the five main variables remain the same. Research has also shown that companies with top managers with a more professional technical background have better corporate performance. Ibrahim et al. (2020) found that board professional qualifications have a significant influence on firms' performance in family CEO firms. Furthermore, senior executives with titles such as

senior engineers have better performance when devising innovation strategies, which help companies obtain better corporate performance. Therefore, CEOs' professional technical background has a positive influence on corporate performance. In addition, research has found that the relationship between senior executives' political background and the sensitivity of corporate performance is significantly negative. Omonona and Oni (2019) find that political affiliation significantly relates to financial performance and non-financial performance. The study therefore recommends that: the negative interference by the political class should be discouraged or minimized. Thus, CEOs' political background has a negative influence on corporate performance. This paper recognizes CEOs with professional titles, such as engineer, as having a professional technical background (assigned the value of 1; and 0 otherwise). In addition, CEOs are considered to have a political background if they had held or currently hold positions as government officials, or if companies hire the National People's Congress (NPC) delegates or the Chinese People's Political Consultative Conference (CPPCC) members to work as CEOs (assigned the value of 1; and 0 otherwise). The results of these regression analyses are shown in Tables 5 and 6. Table 5 shows that CEOs' professional technical background and corporate performance have an insignificant positive relationship. In Table 5, column 5, the regression results of the five main variables—legal background, dual position, shareholding ratio, gender, and tenure—are the same as in Table 5 column 4, with the same effective directions and significance level. The R-square value rises from 0.699 to 0.701, indicating the strong explanatory ability of the five original main variables. Table 6 shows that CEOs' political background and corporate performance have an insignificant negative relationship. Column 6 shows that the regression results of the other six main variables, including legal background, dual position, shareholding ratio, gender, tenure, and professional technical background, are the same as those in Table 6, column 5, with the same effective directions and significance levels. Furthermore, the R-square value in regression (7) is 0.702, which is larger than that in regression (6) at 0.701. The regression results shown in Table 6 confirm the robustness of the regression results in Table 4 with the original five main variables. As confirmed by the above two regression analyses, the original regression results in this paper are reliable and stable, and the analyses with professional technical background and political background added further support the conclusions drawn previously.

DISCUSSION

Limitations

The first limitation of this paper pertains to the time period during which data were collected. Sample data spanned

Table 5. Multivariate regression analysis with professional technical background.

Variable	(1)ROA	(2)ROA	(3)ROA	(4)ROA	(5)ROA	(6)ROA
Legal	2.464** (0.022)	2.386** (0.028)	2.382** (0.028)	2.389** (0.028)	2.451** (0.024)	2.605** (0.017)
Dual		-0.668(0.413)	-0.719(0.406)	-0.710(0.412)	-0.825(0.345)	-0.886(0.310)
Share			9.128(0.855)	6.821(0.892)	-0.337(0.995)	-1.348(0.979)
Gender				1.675(0.534)	1.662(0.537)	1.768(0.511)
Tenure					0.076(0.323)	0.075(0.327)
Tec						0.816(0.188)
Salary	-0.000 ⁺ (0.057)	-0.000(0.211)	-0.000(0.209)	-0.000(0.234)	-0.000(0.197)	-0.000(0.324)
Age	-0.042(0.446)	-0.046(0.409)	-0.044(0.431)	-0.056(0.347)	-0.064(0.281)	-0.058(0.331)
Exp	0.087 ⁺ (0.052)	0.090** (0.046)	0.090** (0.046)	0.099** (0.037)	0.104** (0.029)	0.094 ⁺ (0.052)
Abroad	-0.294(0.718)	-0.360(0.661)	-0.356(0.665)	-0.401(0.627)	-0.447(0.589)	-0.508(0.539)
CPA	0.023(0.987)	0.072(0.960)	0.072(0.961)	0.131(0.929)	0.291(0.843)	0.385(0.793)
CAPEX	0.000(0.386)	0.000(0.380)	0.000(0.382)	0.000(0.377)	0.000(0.372)	0.000(0.867)
Growth	0.045*** (0.000)	0.045*** (0.000)	0.045*** (0.000)	0.045*** (0.000)	0.045*** (0.000)	0.046*** (0.000)
Leverage	-4.515*** (0.001)	-4.577*** (0.001)	-4.552*** (0.001)	-4.716*** (0.001)	-4.667*** (0.001)	-5.200*** (0.001)
R&D	0.000*** (0.004)	0.000*** (0.004)	0.000*** (0.005)	0.000*** (0.005)	0.000*** (0.004)	0.000*** (0.012)
Volatility	-0.287** (0.025)	-0.277** (0.031)	-0.277** (0.031)	-0.273** (0.035)	-0.274** (0.034)	-0.281** (0.029)
CFOA	15.493*** (0.000)	15.604*** (0.000)	15.547*** (0.000)	15.644*** (0.000)	15.558*** (0.000)	15.475*** (0.000)
Size	-0.000*** (0.004)	-0.000*** (0.004)	-0.000*** (0.004)	-0.000*** (0.004)	-0.000*** (0.004)	-0.000*** (0.007)
BTM	-13.912*** (0.000)	-13.905*** (0.000)	-13.886*** (0.000)	-13.814*** (0.000)	-13.697*** (0.000)	-13.590*** (0.000)
_cons	18.289*** (0.000)	18.317*** (0.000)	18.222*** (0.000)	18.491*** (0.000)	18.454*** (0.000)	18.290*** (0.000)
N	280	280	280	280	280	280
R ²	0.697	0.698	0.698	0.698	0.699	0.701
F	43.542	40.633	37.956	35.663	33.734	32.142

p-values in parentheses. ⁺p < 0.1, **p < 0.05, ***p < 0.01.

Source: Authors

the lag in financial statistics disclosure of SSE Cyclical Industry 50 listed companies and in updating of financial statistics in the databases consulted in our region. Future research can be explored to conduct another study to extend the dataset from 2018 to 2022 when the data are made available. The second limitation is that the sample size of CEOs with legal background is not large enough. Though 280 samples were included in the final sample to do the data analyses, the mean of CEOs with legal background is 0.043, showing that only 4.3% of the sample CEOs have legal background. However, our study samples are larger than those of prior studies which include 73 (Bogdan et al., 2022) and 179 samples (Naseem et al., 2020), respectively. Although the paper explores the effects of five individual characteristics of CEOs on corporate performance, several aspects could be explored in future study such as the optimal shareholding ratio of CEOs in balancing CEOs' power and shareholders' interests, and the optimal tenure of CEOs in the same companies to maximize companies' profits.

Implications

The results in this paper show that CEOs with a legal

background can help companies notice legal risks in advance and avoid them in time, thus helping senior executives to make better decisions and devise better business strategies, and thereby improving corporate performance. Our results are consistent with the human capital theory and provide support for human-capital explanations in which CEOs' legal expertise enhance their professional judgment and performance (De Franco and Zhou, 2009). This China's study further provides evidence consistent with "credentialism," a variant of signaling theory in which a professional's education level provides a signal about the professional's quality to his or her clients and enhances corporate governance (De Franco and Zhou, 2009; Belal et al., 2021). Based on the results of this paper, several implications for companies, government, and future researchers can be discussed. First, there is much extant research on the relationship between background characteristics of top management teams of China's listed companies and these firms' corporate performance. However, research on the effect of CEOs' background characteristics on corporate performance is lacking. Future study can examine variables including the optimal tenure of CEOs in the same company to maximize companies' profits; the optimal shareholding ratio of CEOs; the optimal proportion of female senior executives in the management

Table 6. Multivariate regression analysis with political background.

Variable	(1)ROA	(2)ROA	(3)ROA	(4)ROA	(5)ROA	(6)ROA	(7)ROA
Legal	2.464 ^{**} (0.022)	2.386 ^{**} (0.028)	2.382 ^{**} (0.028)	2.389 ^{**} (0.028)	2.451 ^{**} (0.024)	2.605 ^{**} (0.017)	2.571 ^{**} (0.020)
Dual		-0.668(0.413)	-0.719(0.406)	-0.710(0.412)	-0.825(0.345)	-0.886(0.310)	-0.843(0.341)
Share			9.128(0.855)	6.821(0.892)	-0.337(0.995)	-1.348(0.979)	-2.059(0.968)
Gender				1.675(0.534)	1.662(0.537)	1.768(0.511)	1.857(0.493)
Tenure					0.076(0.323)	0.075(0.327)	0.075(0.332)
Tec						0.816(0.188)	0.786(0.211)
Political							-0.168(0.740)
Salary	-0.000 [*] (0.057)	-0.000(0.211)	-0.000(0.209)	-0.000(0.234)	-0.000(0.197)	-0.000(0.324)	-0.000(0.306)
Age	-0.042(0.446)	-0.046(0.409)	-0.044(0.431)	-0.056(0.347)	-0.064(0.281)	-0.058(0.331)	-0.058(0.329)
Exp	0.087 [*] (0.052)	0.090 [*] (0.046)	0.090 [*] (0.046)	0.099 ^{**} (0.037)	0.104 ^{**} (0.029)	0.094 [*] (0.052)	0.095 [*] (0.050)
Abroad	-0.294(0.718)	-0.360(0.661)	-0.356(0.665)	-0.401(0.627)	-0.447(0.589)	-0.508(0.539)	-0.503(0.544)
CPA	0.023(0.987)	0.072(0.960)	0.072(0.961)	0.131(0.929)	0.291(0.843)	0.385(0.793)	0.353(0.810)
CAPEX	0.000(0.386)	0.000(0.380)	0.000(0.382)	0.000(0.377)	0.000(0.372)	0.000(0.867)	0.000(0.838)
Growth	0.045 ^{***} (0.000)	0.046 ^{***} (0.000)	0.046 ^{***} (0.000)				
Leverage	-4.515 ^{***} (0.001)	-4.577 ^{***} (0.001)	-4.552 ^{***} (0.001)	-4.716 ^{***} (0.001)	-4.667 ^{***} (0.001)	-5.200 ^{***} (0.001)	-5.074 ^{***} (0.001)
R&D	0.000 ^{***} (0.004)	0.000 ^{***} (0.004)	0.000 ^{***} (0.005)	0.000 ^{***} (0.005)	0.000 ^{***} (0.004)	0.000 ^{***} (0.012)	0.000 ^{***} (0.012)
Volatility	-0.287 ^{**} (0.025)	-0.277 ^{**} (0.031)	-0.277 ^{**} (0.031)	-0.273 ^{**} (0.035)	-0.274 ^{**} (0.034)	-0.281 ^{**} (0.029)	-0.283 ^{**} (0.029)
CFOA	15.493 ^{***} (0.000)	15.604 ^{***} (0.000)	15.547 ^{***} (0.000)	15.644 ^{***} (0.000)	15.558 ^{***} (0.000)	15.475 ^{***} (0.000)	15.669 ^{***} (0.000)
Size	-0.000 ^{***} (0.004)	-0.000 ^{***} (0.007)	-0.000 ^{***} (0.007)				
BTM	-13.912 ^{***} (0.000)	-13.905 ^{***} (0.000)	-13.886 ^{***} (0.000)	-13.814 ^{***} (0.000)	-13.697 ^{***} (0.000)	-13.590 ^{***} (0.000)	-13.566 ^{***} (0.000)
_cons	18.289 ^{***} (0.000)	18.317 ^{***} (0.000)	18.222 ^{***} (0.000)	18.491 ^{***} (0.000)	18.454 ^{***} (0.000)	18.290 ^{***} (0.000)	18.290 ^{***} (0.000)
N	280	280	280	280	280	280	280
R ²	0.697	0.698	0.698	0.698	0.699	0.701	0.702
F	43.542	40.633	37.956	35.663	33.734	32.142	30.436

Note: p-values are shown in parentheses. ^{*}p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01
Source: Authors

team to increase companies' return on assets; and the optimal years of working experience of CEOs in improving corporate performance. Though only one out of five variables was found to be significant in this paper, further research can be performed to confirm the validity of the results. Second, the results of this paper confirm prior research conducted in the US (Krishnan et al., 2011), Romania (Bogdan et al., 2022) and Malaysia (Belal et al., 2021). Though China has cultural differences from other countries, our results suggest that the legal background of senior executives has a positive influence on financial performance and corporate governance in this China study. For example, the management methods differ in the US versus the China. Companies in the US tend to encourage employees to participate in management activities, thus improving their motivation. In China, companies' management style tends to be highly supervised and arbitrary, and employees need to strictly follow the rules. In addition, the US and China differ in their interpersonal values: those in the US are relatively simple, and incentive methods such as rewards are usually based on employees' performance. In China, because of the presence of strong hierarchy and human sentiment idea, performance management often deviates based on emotional factors, which can affect employees'

motivation. Despite these cultural differences, the present study findings show that cultural differences do not make a difference with regard to the positive effect of CEOs' legal background on corporate performance across the countries. Firms should pay attention to the proportion of top managers with a legal background, and utilize such CEOs' legal knowledge to improve firms' overall legal awareness and the risk awareness of other employees. In addition, organizing legal lectures and curricula may be useful for companies' development. In particular, encouraging CEOs and other top managers to attend such programs would greatly improve firms' personnel allocation structure, and make personnel adjustment decisions and companies' operation and management decisions more effective, thereby improving firms' efficiency and performance. Third, the results contribute to the literature by finding that the variables dual position and shareholding ratios are insignificant, indicating that for China's listed companies, CEOs' dual position and corporate performance do not have a negative relationship. There is no relationship between CEOs' shareholding ratio and corporate performance, though the corporate governance concept suggests that senior executives' dual position and shareholding ratio influence corporate performance. Based on the corporate

governance concept, companies should improve the corporate governance structure, and enhance their internal controls and external supervision, thus strengthening the supervision and restriction of CEOs. They should also seek to optimize the power allocated to CEOs, and curb opportunistic behaviors of CEOs who abuse their official position to pursue personal interests, so as to maintain the companies' interests. This can be achieved via the following two ways. The first is to establish a modern system to separate the CEO and chairman. There are three groups in companies' internal governance mechanisms, including shareholders, the board of directors, and senior executives. Ensuring a reasonable allocation of power between these three groups is helpful to limit the power of senior executives, and improve the effectiveness of internal control. Among them, the board of directors' main governance function is supervision and decision-making, especially supervising senior executives on behalf of shareholders, and taking responsibility for the appointment of CEOs. Establishing such a system of separation between CEO and chairman can help to enhance the consistency of interests between the board of directors and shareholders, strengthen the supervision function of the board of directors, improve the CEO appointment system, and reduce the possibility of CEOs damaging shareholders' interests in the pursuit of their own, thereby improving the corporate performance. The second approach would be to establish a diversified equity structure, increase the shareholding ratio of institutional investors, and limit the shareholding ratio of CEOs, so as to enhance the supervision and management function of external investors, and weaken the power of CEOs. Fourth, results show that the variable CEOs' gender is insignificant, indicating that among China's listed companies, CEOs' gender does not have a positive influence on corporate performance, though the corporate governance concept states that senior executives' gender influences corporate performance, and companies should cultivate female CEOs. It has been found previously that companies should put aside gender discrimination, and give female employees equal working and developing opportunities. Nowadays, women's position in social economic development is becoming increasingly significant. In managing and developing companies, the flexible management function of female CEOs is becoming more and more obvious, and their female characteristics also meet the needs of social development in the future. Finally, the government should establish laws and regulations to help listed companies improve their operation mechanisms so as to better supervise and limit senior executives' behaviors, and prevent them from pursuing personal interests at the expense of the companies.

Conclusion

This paper used 40 companies from the SSE Cyclical

Industry 50 Index, 2010–2017, to research the effect of five individual CEO demographic characteristics on corporate performance, including CEOs' legal background, dual position, shareholding ratio, gender, and tenure. Two additional demographic characteristics of CEOs—technical background and political background—were then added to further test the relationship between CEOs' original five characteristics and corporate performance. The results show that CEOs with a legal background have a positive influence on corporate performance (ROA) at a 5% significance level. This indicates that CEOs with a legal background are more familiar with current national legal systems, and can notice potential legal risk quickly. This helps companies to make good business decisions, and promote firms' performance. The additional testing supports the validity of the main variables and confirms findings of prior research conducted in the US (Krishnan et al., 2011), Romanian (Bogdan et al., 2022) and Malaysia (Belal et al., 2021). Our results are consistent with the human capital theory and provide support for human-capital explanations in which CEOs' legal expertise enhance their performance and corporate governance (De Franco and Zhou, 2009; Belal et al., 2021).

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

Firms' corporate social responsibility behavior to stakeholders and its effect on financial performance indices: A case study of Ctrip

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In recent years, some domestic and foreign scholars have studied the relationship between corporate social responsibility and corporate performance. Some of these studies show that there is a positive relationship; others found a negative correlation while others found no correlation between them. It is of great significance for internet enterprises to undertake corporate social responsibility when private sector operators provide public services. Through case analysis, this study selects Ctrip, a Chinese multinational online travel company with many incidents of social responsibility in recent years, to explore the impact of corporate social responsibility on corporate financial performance by reading its corporate citizenship report from 2014 to 2020 and selecting major social responsibility events for detailed study. This study has done a specific analysis of its social responsibility performance for different stakeholders such as shareholders, consumers, government, society and the environment, and employees. The case study shows that there is an impact of social responsibility performance on the stock price, revenue, or operating income for different stakeholders. Improving corporate performance using social responsibility is suggested in this study.

Key words: Corporate social responsibility, corporate citizenship report, financial performance.

INTRODUCTION

Although the world economy has developed rapidly, some environmental, social, and governance related vicious incidents in recent years have aroused widespread concern about corporate social responsibility. Corporate social responsibility includes the responsibility for shareholders, consumers, employees, the government, and the corporate's social environment. In terms of the environment, for example, Bhopal poisonous gas leakage in 1984, the Indo-U.S. joint company set up factories next to slums and did not properly keep chemical raw

materials. As a result, pesticide leakage directly caused 25,000 deaths and indirectly caused 550,000 deaths, and more than 200,000 people were permanently disabled. In terms of employees, more than a dozen assembly line workers jumped off the building within two years in a manufacturing enterprise, Foxconn. On the consumer side, security incidents have occurred one after another in online car-hailing. In 2008, there was a dairy product contamination incident in China.

With the occurrence of such incidents, the government

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and citizens have tended to demand greater corporate social responsibility, China and other countries have issued laws requiring enterprises to attach importance to fulfilling corporate social responsibility. In 2006, China introduced a revised Company Law requiring company to assume social responsibility. In the same year, State Grid Corporation of China, a Chinese state-owned electric utility corporation, issued the first social responsibility report for domestic-funded enterprises. In 2017, General Secretary of Chinese Communist Party Xi Jinping pointed out the changes in the main social contradictions in the report of the 19th National Congress of the Communist Party of China, as well as the great emphasis on ecological environment construction. The report redefines the development direction of social responsibility for enterprises, including: paying attention to the happiness of all people and the common progress of society, committing them to meeting the needs of the people, solving social problems, fulfilling the responsibilities corresponding to their capabilities and achieving sustainable development.

It is a well-known fact that increasing operating profit is the goal pursued by enterprises and fulfilling corporate social responsibilities will definitely make enterprises incur additional costs. The contradiction between the two has caused many researchers at home and abroad to examine the relationship between the fulfillment of corporate social responsibility and the improvement of corporate financial performance. Some researchers have found a positive correlation between them. For example, Preston and O'bannon (1997), based on a sample of 67 companies, using the reputation rating index in Fortune as the evaluation index of corporate social responsibility, and return on investment, return on net assets and return on total assets as financial Performance indicators, concluded that the two have a positive correlation. However, some scholars have also concluded that the two are negatively correlated. For example, Vance (1975) finds that if the financial performance indicator is set as short-term profit, a negative correlation exists between the two even if the sample is expanded. There are also a small number of researchers who have concluded that the two are not related. For example, Brammer and Millington (2008) found that the level of a company's stock price and financial performance only reflect the effectiveness of the company's business strategy but have no relationship with whether the company performs social responsibility or not. This study indicated that fulfilling social responsibilities will not enable the company to gain excess return.

Although there have been many studies on the relationship between the two, most of them use empirical research methods. This report starts with specific incidents encountered by enterprises and adopts a case study method. From the five aspects of governments, consumers, shareholders, employees and social environment, different events are selected for specific

empirical study, which is more convincing, easier to understand, and can provide a more intuitive reference for companies performing social responsibilities. A Chinese multinational online travel company in the Internet industry, Ctrip, is selected as research object. It is currently the largest online travel agency (OTA) in China and one of the largest travel service providers in the world. The Internet industry is a popular industry in China after more than 20 years' rapid development and has become the industry most closely related to our daily lives. In recent years, the number of Internet companies has increased rapidly, and they have played a key role in promoting economic development and improving people's living standards. The Internet industry is different from traditional industry models due to its instantaneousness, ubiquitousness, and virtuality, so companies should take more social responsibility. However, given the short history and imperfectness in all aspects of corporate social responsibility, many Internet companies in China have a weak awareness of social responsibility. Internet security incidents often occur in China, such as personal information disclosure, and employing cyber actors. Not only has it affected the healthy development of the Internet industry, but also has even caused certain losses in consumers' rights and interests. Therefore, this study selects Ctrip, which has experienced more corporate social responsibility incidents in the Internet industry in recent years, to conduct a case study. A specific study of a series of incidents reveals that there is a positive relationship between corporate social responsibility performance and financial performance. Then the report puts forward feasible suggestions to enable enterprises to better balance the relationship between financial performance and social responsibility fulfillment. This study provides relevant references for Chinese enterprises to fulfill their corporate social responsibilities.

The rest of the paper is organized as follows. Section 2 provides the related prior literature reviews. Section 3 introduces the research methodology adopted in this study and the data collection method. Section 4 discusses the case study of Ctrip. Section 5 concludes the case study and gives some recommendations drawn through the empirical study.

LITERATURE REVIEW

Corporate social responsibility

The effects that corporate operations have on the society have informed changes in society's expectations of corporate behavior. The concept of corporate social responsibility has been continuously expanded and improved in the practice and theoretical research of scholars in China and abroad. The concept of corporate social responsibility first appeared in the 1930s, when British economist Oliver Sheldon first proposed it in 1924. He believes that it is wrong for companies to blindly

pursue economic benefits. In order to meet the social needs of the company, the company should be responsible for its stakeholders and incorporate ethical standards in the daily production and operation process. Bowen (1953) proposed that corporate strategy should be formulated in accordance with social needs. The social responsibility of corporate executives is to make decisions based on social values and require companies to take the initiative to assume social responsibilities. In 1971, the U.S. Economic Development Commission issued the "Corporate Social Responsibility" protocol, so CSR began to receive widespread attention. Carroll (1979) put forward the first unified concept of CSR, that is, the social responsibility of a company is the society's expectations of the company's economy, law, morality, and charity over a period of time. Carroll (1991) believes that these expectations could be regarded as social responsibilities according to the four aspects of economy, ethics, law, and charity, and arranged the importance of these four responsibilities in a pyramid structure. Economic responsibility is the most basic one; from the bottom to the top are economics, law, ethics, and charity. This "Corporate Social Responsibility Pyramid Theory" is currently widely recognized by academia. Liu (1999) believes that the goal of an enterprise should not be limited to pursuing more economic interests, but should also focus on the fulfillment of social responsibilities, and fully consider other social interests in addition to shareholders' rights. In 2000, the establishment of the United Nations Global Compact (UNGC) provided new content for understanding corporate social responsibility, including five aspects: human rights, labor rights, environment, anti-corruption and sustainable development. The Social Responsibility Guidelines for Listed Companies of the Shenzhen Stock Exchange stipulates that listed companies should take responsibility for the overall development of the country and society, the natural environment and resources, shareholders, creditors, employees, customers, suppliers, public relations and public welfare undertakings and other stakeholders. Shen (2005) believes that corporate social responsibility should mean that enterprises pay attention to social welfare while improving their own economic benefits. Carroll (2015) gives an overview of the evolution of CSR and points out that the participation and management of stakeholders, industrial ethics, corporate citizenship, corporate sustainability, and shared value creation have all been incorporated into CSR.

To sum up, although domestic and foreign scholars have different understandings of corporate social responsibility, they all believe that enterprises should take the initiative to assume social responsibility and pay attention to the rights and interests of all stakeholders.

Financial performance

It is the financial goal of the enterprise to maximize

shareholder value. In the process of achieving the goal, a reasonable financial performance evaluation system must be established. The so-called financial performance is the result obtained by the business operation. According to the division of time, financial performance can be divided into broad sense and narrow sense. The broad sense of financial performance is accessed in a long period of time, not only focusing on the recent profits of the company, but also focusing on whether the company has achieved its goals after a long period of time, for example total profit, return on assets. The narrow financial performance reveals the company's recent financial results, such as Tobin's Q value. Friedman (1983) points out that increasing the net profit is the ultimate goal of an enterprise. The better the company's operating conditions are, the higher the net profit is.

Financial performance indicators can be divided into two categories: market indicators and accounting indicators. Cochran and Wood (1984) propose that shareholders are the main stakeholders of an enterprise and maximizing shareholders' value is the way to improve corporates' performance. Stock price per share and earnings per share are market indicators for evaluating financial performance. Qing (2010) proposes that enterprise performance is mainly aimed at the comprehensive evaluation index of enterprise solvency, operating ability, profitability, and ability to resist risks.

To sum up, the evaluation of financial performance should be combined with multiple angles and indicators for a comprehensive analysis.

The impact of CSR on financial performance

There are three views about the impact of fulfilling corporate social responsibility on financial performance: the positive, negative and neutral views.

Fulfilling corporate social responsibility has a positive impact on financial performance

This view believes that active performance of corporate social responsibility can promote corporate image, enhance corporate competitiveness, effectively reduce costs, increase profits, and increase financial performance.

Cornell and Shapiro (1987) believe that companies that actively perform corporate social responsibility have a good corporate image and can attract investors to invest, thereby improve financial performance. Moskowitz (1972) selects some companies that actively fulfill their social responsibilities as the research objects. The study finds that the stock prices of these selected companies have increased rapidly. It is inferred from this that investors prioritized companies with better corporate images during the investment process. Preston and O'bannon (1997) selects 67 companies, choose the

reputation rating index in "Fortune" as the evaluation index of corporate social responsibility, and take return on investment, return on net assets and return on total assets as financial performance indicators; they conclude that there is a positive correlation between the reputation rating and all the financial performance measures. Simpson and Kohers (2002) adopt empirical approach to analyze the fulfillment of social responsibilities of 385 banks selected in the financial industry, and their financial performance. This study shows that there is a positive correlation between the two. Also, Tsoutsoura (2004) selects 422 companies listed in 1996-2002 as a sample, using Kinder Lydenberg and Domini & Co (KLD) Index to measure their corporate social responsibility, ROA and ROE, and financial performance; they found a positive correlation. Chen and Wang (2005) show that a company's focus on fulfilling social responsibilities will enable the company to gain a better reputation, have a better image in the eyes of the public and help improve its financial performance. Zhang et al. (2012) find that corporate social responsibility has a positive relationship with the EBIT margin of total assets, which suggests that companies should not only consider maximizing shareholder wealth, but also actively assume social responsibilities for consumers, governments, and employees in order to achieve corporate viability. Only in this way can enterprises realize sustainable development and improve their performance for a long time. Mishra and Suar (2013) find that companies that pay more attention to environmental protection have better financial performance. Zou et al. (2019) analyze many cases and believe that the fulfillment of corporate social responsibility should take into account factors such as consumers' needs, employees' welfare, environmental protection, and compliance with the law, so as to comprehensively improve corporate financial performance.

CSR has a negative impact on financial performance

Fulfilling corporate social responsibility is thought to increase cost thus reducing corporate performance. CSR and corporate financial performance would then show a negative correlation.

In their study of the relationship between corporate social responsibility and financial performance, Preston and O'bannon (1997) conduct an in-depth study on Vance's research. The financial performance indicator was set as short-term profit. This study finds negative relationship between corporate social responsibility and financial performance.

Companies that fulfill their social responsibility have higher operating cost and lower profit. Hillman et al. (2001) document that compared with companies that do not assume social responsibility, companies that actively invest in social responsibility are at a disadvantage in terms of market competitiveness. Li (2006) uses the data

of companies listed on the Shanghai Stock Exchange as a sample and finds that companies with low corporate value are those that actively perform social responsibilities.

It is pointed out that in order to improve the financial performance of enterprises, costs should be cut in all aspects, and fulfilling of social responsibilities will incur additional expenses. Companies that actively fulfill their social responsibilities have higher investment, lower profit, and worse financial performance.

CSR has no impact on financial performance

It is also believed that there is no correlation between the corporate social responsibility and financial performance. Aupperle et al. (1985) believe that the financial performance of enterprises will not be affected by the performance of social responsibilities. Elsayed and Paton (2005) collect British corporate data for analysis, using corporate environmental behaviors to evaluate the performance of social responsibilities, and taking profitability as a measure of financial performance. They did not find a correlation between the two. Chen and Ma (2005) collect the data of companies listed in the Chinese stock markets, establish an indicator system of corporate social responsibility for various stakeholders, and explore the relationship between the performance of social responsibilities and the companies' stock price. They find no significant correlation between the two. Brammer and Millington (2008) believe that the stock price and financial performance of a company only reflect the effectiveness of the company's business strategy, and have no obvious relationship with whether the company fulfills its social responsibilities or not. Actively fulfilling social responsibilities cannot make a company obtain excessive returns.

RESEARCH METHODOLOGY AND DATA

This study adopts the case study approach, which is particularly useful when there is a need to obtain an in-depth appreciation of an issue or phenomenon of interest. It is an established research design used extensively in a wide variety of disciplines in social sciences. Yin (2009) illustrates that the case studies can be used to explain, describe, or explore events or phenomena in the everyday contexts in which they occur; understand and explain causal links and pathways resulting from the development of incidents. Rather than seeking to test a set of specific hypotheses, case study approach captures information on more explanatory 'how', 'what' and 'why' questions. This study selects Ctrip, a Chinese multinational online travel company, as the case to study. The case is selected not because it is representative of other cases, but because of its uniqueness, which is of genuine interest to the researchers.

This corporation involved some incidents of social responsibility in recent years, 2014-2020. The impact of these social responsibility incidents was explored on the financial performance indices. The social responsibility incidents were identified by reading the corporation's corporate citizenship report. The daily

closing prices of Ctrip were collected from Sina Finance. The financial figures like revenues and operating incomes were collected from the corporation's financial statements.

Case analysis – Ctrip

Basic introduction of Ctrip

Founded by James Liang et al. in June 1999, Ctrip is headquartered in Shanghai, China, and has established branches in 16 cities in China. As a leading comprehensive travel service company in China, Ctrip has successfully combined the Internet industry and traditional tourism. Ctrip provides more than 60 million members with a full range of travel services including hotel reservations, air ticket reservations, travel vacations, business travel management, gourmet reservations and travel consultation. Relying on stable business development and excellent profitability, Ctrip became listed on NASDAQ in December 2003. The stock price increased on the day of listing and set a record for NASDAQ's opening day in three years. In 2010, Ctrip strategically invested in Taiwan ez Travel and Hong Kong Wing on Travel, completing the layout of Greater China. In 2015, Ctrip acquired Qunar.com, eLong.com. Today Ctrip is China's largest online travel platform. In 2018, Ctrip was selected into the Fortune Future 50 list in 2018, ranking fourth. Ctrip's philosophy is "integrity and law-abiding operations, fulfilling social responsibilities, and providing consumers with more high-quality public welfare services". Ctrip was chosen in the case analysis because of its philosophy.

Analysis of Ctrip's major social responsibility events

This section mainly analyzes some social responsibility activities of Ctrip from 2015 to 2020. The responsibility targets are the stakeholders such as consumers, shareholders, social environment, government, and employees. There are some positive events and some negative events. The impact of corporate social responsibility on corporate performance is mainly studied.

RESULTS AND DISCUSSION

Consumer-related events

Bundled sales

On December 5, 2015, New Weekly deputy editor Jiang Fangzhou publicly complained about Ctrip on Weibo. It is understood that she booked a flight from Beijing to Tokyo through Ctrip and paid a total of 3,016 yuan. Unexpectedly, she booked a connecting ticket, which added a voyage that she did not even know about. The total face value of this coupon was 1,645 yuan, which prevents her from being reimbursed. After that, Jiang Fangzhou contacted Ctrip customer service many times, but the customer service passed the responsibility to customers and suppliers. Jiang Fangzhou was angry to announce the matter on Weibo, and soon received replies from many netizens. In a few days, there have been more than 3,000 comments, most of which are dissatisfied with Ctrip's work such as booking air tickets and hotels. Faced with repeated complaints, Ctrip has not resolved them well, which not only lost a large number of users, but also established a bad image of defrauding

customers. This does harm to Ctrip's brand image. In 2016 Ctrip faced merger and acquisition; the rise in stock price cannot clearly reflect the impact of social responsibility since the Internet industry was booming. After the merger, Ctrip did not actively make corrections to improve user experience.

On the evening of October 9, 2017, the well-known actor Han Xue angrily scolded Ctrip and posted on Weibo that he often used Ctrip to book air tickets. With more than 99% of Ctrip users on her trip, it is still sometimes difficult to avoid Ctrip's hidden options under booking information. The screenshot of the order details displayed by Han Xue shows that in addition to the due air ticket costs and airport construction fees, an additional 38-yuan hotel coupon has been added. Ctrip was asked to provide an explanation for multiple bundling events, but only made an apology for it.

There is a provision in the China's Consumer Rights Protection Law: Consumers have the right to independently choose goods or services. Consumers have the right to independently choose the operators who provide goods or services, independently choose the types of goods or service methods, and independently decide to purchase or not to purchase any kind of goods, and to accept or not to accept any kind of service.

According to this provision, Ctrip uses coupons as the default purchase options when providing ticket options, which obviously violates the right of consumers to independently choose goods or services. Consumers have the right to complain about this bundled consumption behavior.

Before the public figure Han Xue raised objections, in fact, many Ctrip consumers experienced similar incidents, and consumers were very dissatisfied. It is precisely because of the greater social impact brought by Han Xue as a public figure that Ctrip made corrections.

Figure 1 presents the graph of stock price movement before and after the incident. Before the incident, October 2017, Ctrip's share price remained above \$50 for most of the time, with a peak of more than \$60. After the bundling incident, the stock price remained basically down, a sharp decline on October 19; the stock price fell below \$50, and continued to decline. The incident caused strong consumers' dissatisfaction, the company's reputation fell, investors complained about the company and investment was weakened.

When selecting the evaluation index that shows the performance of a company's social responsibilities to consumers can be selected as user satisfaction, which mainly refers to the degree of satisfaction of the company's consumers with products and services. The customer satisfaction scores in this article are derived from the full score of 100 points in the questionnaire of China Tourism Academy on tourist satisfaction.

For the selection of evaluation indicators for corporate financial performance, at the consumer level, it is more appropriate to select sales growth rate as an indicator. By



Figure 1. Stock price movement before and after the incident of bundled sales.
Source: Sina Finance.

Table 1. Sales growth rate and consumer evaluation index before and after the incidence of bundled sales.

Time	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Sales growth rate (%)	45.65	45.54	44.06	39.27	11.35	12.36	13.49	12.12
Customer satisfaction (100)	86.90	88.74	85.66	64.23	68.08	74.09	70.24	71.28

Source: Ctrip's Financial Statements.

observing the change trend of a company's sales growth rate with the customer's satisfaction, the impact of fulfilling corporate social responsibility on financial performance can be obtained.

Table 1 summarizes the consumer evaluation index and the sales growth rate before and after the incident of bundled sales. Before Han Xue exposed the bundling sales event, Ctrip's customer satisfaction has been maintained at more than 80 points, and the sales growth rate of each quarter has been maintained at about 40%, which is a relatively rapid growth; the development trend of the company's financial performance is good. However, after the incident was exposed, in the fourth quarter of 2017, customers' satisfaction dropped significantly down to 21.43%, and sales growth rate also dropped to about 10%. It shows that this negative incident has lost the trust of consumers due to Ctrip's failure to fulfill its corporate social responsibility for consumers, and customers have become dissatisfied. Unwilling to spend money on Ctrip's products, the company's financial performance is reduced. It shows that fulfilling corporate social responsibility has a positive

impact on financial performance. Figure 2 displays sales growth rate and customers' satisfaction before and after the incident of bundled sales.

Information leakage incident

On March 22, 2014, the exposure of Ctrip's payment loopholes led to the disclosure of credit card information. It was pointed out that Ctrip's secure payment log can be traversed and downloaded, resulting in the disclosure of a large number of users' bank card information (including the cardholder's name ID, bank card number, card CVV code, and 6-digit card Bin). After the exposure, Ctrip said that it has notified the manufacturer of the details and is waiting for the manufacturer to deal with it. Ctrip stated that it has not discovered any leakage of customers' information and losses due to website security. The company will continue to repair network security. If a user suffers property damage due to the loophole, Ctrip will provide compensation for the loss. But even so, in an era when the Internet is so developed, consumers attach

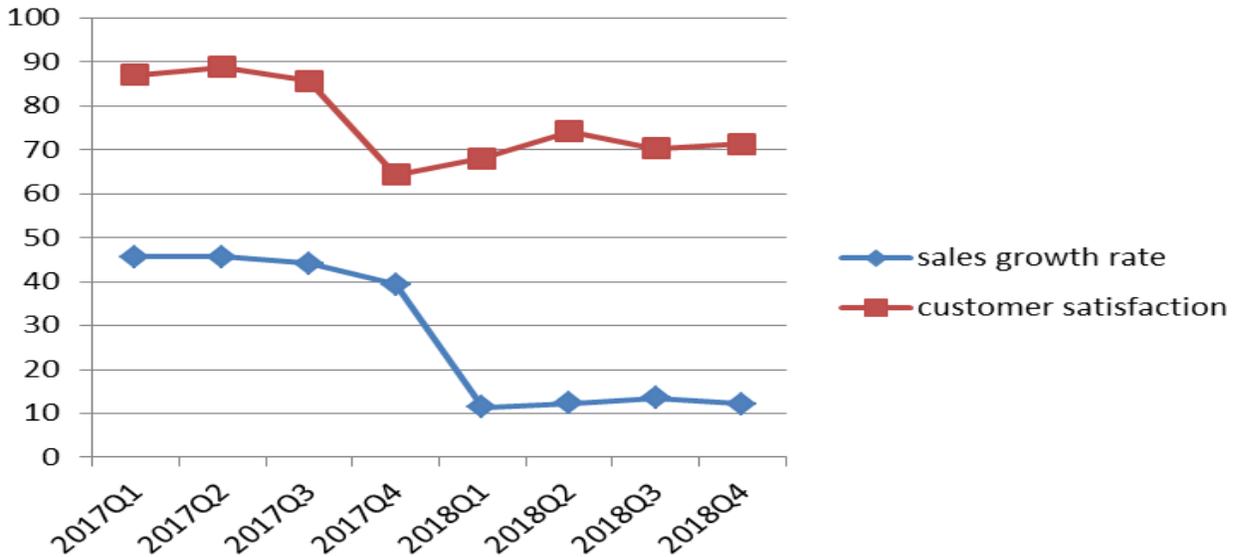


Figure 2. Sales growth rate and customer satisfaction before and after the incident of bundled sales. Source: Ctrip's Financial Statements.



Figure 3. Stock price movement before and after information leakage incident. Source: Sina Finance.

great importance to information security, and Ctrip has undoubtedly lost the trust of consumers in this information leakage incident. In terms of stock price changes, it is also obvious that the stock price has a clear

downward trend after the incident.

Figure 3 presents the graph of stock price movement before and after the information leakage incident. After the information leakage incident, the stock price has a



Figure 4. Stock price movement before and after harming loyal users incident. Source: Sina Finance.

sharp decline on March 24, and continued to decline in the coming two trading days. The information leakage incident has made Ctrip's consumers feel insecure, and the security loopholes generated by Ctrip also reflect the company's lack of attention in fulfilling its social responsibility to consumers. The decline in stock prices can also reflect the positive correlation between the fulfillment of corporate social responsibility and corporate performance.

Using big data to harm the interests of loyal users

Not long ago in 2017, the news about “the more expensive the mobile phone, the more expensive the taxi price” once became one of the topics of heated discussion among netizens. In the recent national Two Sessions (the National People’s Congress and the Chinese People's Political Consultative Conference), some representatives proposed to legislate "resist data abuse" and put an end to such marketing methods of Internet companies. While netizens are still complaining about the Internet companies’ big data killing, Ctrip also pointed out that when booking hotels by a mobile phone, the more expensive the mobile phone is, the more expensive the room is.

Recently, Mr. Zhang from Hebei Province accidentally discovered when he booked a hotel on Ctrip.com that the price displayed by an expensive mobile phone for the same room would be higher than that of a cheaper mobile phone. Some reporters use three mobile phones

for verification. One was an ordinary phone with a price of 1,000 yuan, the other was a mid-range phone with a price of more than 3,000 yuan, and the other was an even more expensive Apple phone. According to the same hotel, room type, check-in time and other same conditions, the price shown in the ordinary mobile phone is 1158 yuan, and the average member price shown in the mid-range mobile phone is 1258 yuan. Ctrip gold members should enjoy a more favorable price according to conditions, but the result price shown in Apple phone is the same as the price shown in mid-range phones, also 1258 yuan.

It should be noted that this is not the first time Ctrip has been exposed for big data killing. Big data killing in Ctrip often occurs. In April 2018, a consumer accidentally discovered that her Ctrip spending points were nearly 60,000 higher than her husband's, but when she used Ctrip to book a hotel, the booking price was more expensive than her husband's. So many media reported it. Articles such as “Consumers are ‘killed’ by technology companies' big data” have also aroused public opinion on the Internet. Ctrip became a hot topic of discussion, and its stock price continued to decline during that period.

Figure 4 presents the graph of stock price movement before and after harming loyal users’ incident. The stock price of Ctrip had a significant decline of 3.24% on 13 April 2018 and continued to decline in 10 of the following 12 trading days. It can be seen that big data killing events will cause companies to lose the trust of users, and it is also a manifestation of companies not fulfilling their social responsibilities for consumers. Through the downward

Table 2. Staff evaluation index.

Time	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3	2018 Q4
Wage growth rate (%)	N/A	7.34	17.63	19.24	0.01	12.36	- 2.81	- 12.55
Return on assets (ROA)	0.1583	0.8095	1.6402	1.4055	2.0075	3.0926	1.5043	0.6390

Source: Ctrip's Financial Statements

trend of stock prices, it can also be seen that failure to fulfill corporate social responsibility will have a negative impact on corporate performance.

Employee-related events

On November 8, 2017, Ctrip's "child abuse" incident was exposed. Ctrip employees angrily exposed videos of Ctrip Parent-Child Park employees' abuse. In the video, some children were pushed to the ground, some were tied to chairs, and others were forcibly fed with mustard. The video quickly spread on various social media. On November 9, Shanghai Changning Public Security Bureau announced that it had detained 3 of the 4 staff in accordance with the law.

Ctrip's establishment of the parent-child park back then was a manifestation of caring for employees' lives and fulfilling their social responsibilities. Shi Qi, vice president of Ctrip, said that Ctrip has more than 10,000 employees at its headquarters in Shanghai, and many mothers are worried about how to better balance the time between work and childcare after the maternity leave is over or during winter and summer vacations. Now the completion of the parent-child park will be a real benefit for Ctrip's mothers. However, the occurrence of child abuse incidents has turned a good thing into a bad thing. Ctrip has lost more than just customers and revenue. In this round of negative incidents, Ctrip lost more of the trust of its employees and the people. And trust needs to be established for a long time, so this incident has a greater impact on Ctrip.

Analyzing the changes in the stock price before and after the incident, the stock price did not change significantly, possibly because the child abuse incident did not have a direct impact on shareholders and consumers. However, due to the significant impact on corporate employees, from the perspective of revenue, Ctrip has suffered a huge impact. In terms of net revenue, Ctrip has 7.9 billion in the third quarter of 2017, and 6.4 billion in the fourth quarter, a decrease in 19.0%; during the same periods of time one year before (2016), the net revenue decreased from 5.61 billion to 5.1 billion yuan, a decrease in 9.0%. The "child abuse" incident aroused public outrage and group boycott of using this online platform in the coming several months since November 2017. The decline in revenue in the fourth quarter of 2017 was not only due to the off-peak season, but the impact of "child abuse" incidents also affected corporate

performance. The fulfillment of corporate social responsibilities in terms of employees will also have an impact on corporate performance, and it is positively correlated. The salary growth rate was selected as the evaluation index that evaluates the company's fulfillment of social responsibilities to employees. In 2017, the child abuse incident at the Ctrip Parent-Child Park occurred, and Ctrip failed to fulfill its corporate social responsibility to its employees. Judging from the increased wage rate in the third and fourth quarters of 2017, Ctrip tried to make up for this incident by raising wages. The salary growth rate reached about 20%. Although it is an afterthought, it has alleviated the lack of social responsibility for employees to a certain extent.

By comparing the change in return on assets (ROA) ratio of the company with wage growth rate, the impact of fulfilling corporate social responsibility on financial performance can be derived. ROA increased in the third and fourth quarters of 2017 and the first and second quarters of 2018. Corporate performance is temporarily stable. However, starting from the second quarter of 2018, for three consecutive quarters, the wages of employees did not increase but declined, and the rate of decrease reached 10%. The reason should be that Ctrip believes that the child abuse crisis has passed for a long time, and there is no need to increase wages to stabilize employees. However, from the perspective of corporate performance, ROA has shown a clear downward trend since the third quarter of 2018. This also shows that the child abuse incident shows that Ctrip has not fulfilled its social responsibility to its employees and has lost the trust of its employees. Trust cannot be established temporarily, and it will have a lasting impact. When the trust of employees is lost, some employees' loyalty to the company will decrease, and they may no longer work hard as before. This will definitely have an impact on corporate performance and reduce corporate performance. Table 2 and Figure 5 summarize the salary growth rate and ROA before and after the "child-abuse" incident. The fulfillment of corporate social responsibilities in terms of employees will also have an impact on corporate performance, and it is a positive correlation.

Government-related events

Tourism revival V plan

Ctrip launched a tourism recovery data platform called

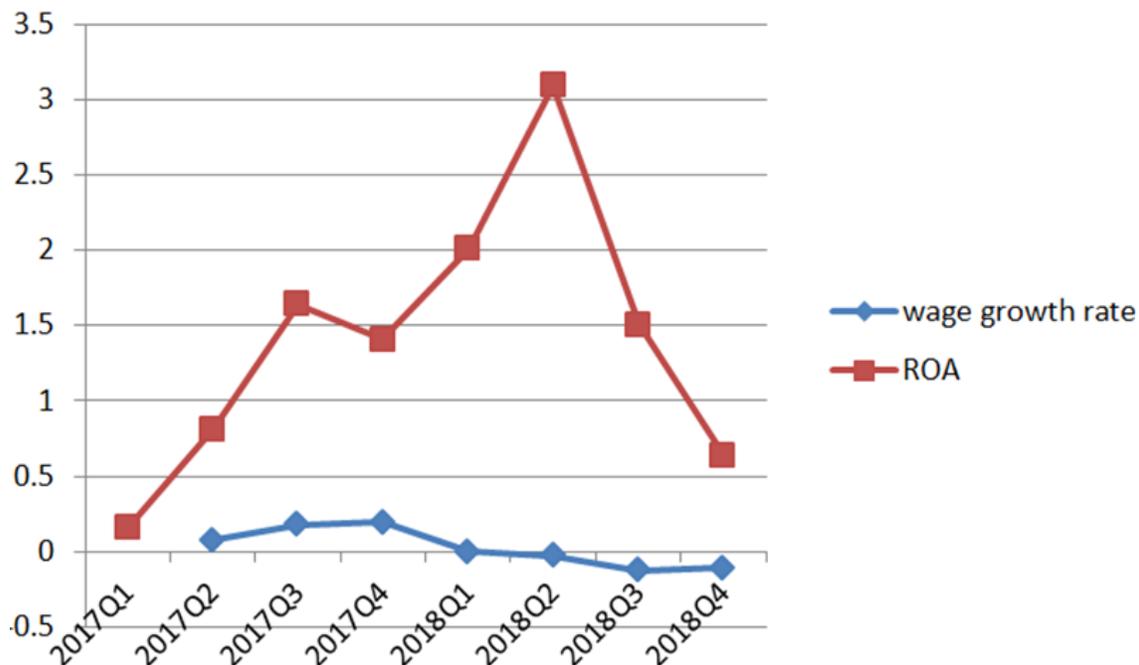


Figure 5. Wage growth rate and ROA before and after “child-abuse” incident.
Source: Ctrip’s Financial Statements

“travel observer” on March 5, 2020, which was opened free of charge to local governments. Ctrip’s “travel observer” data platform is Ctrip comprehensive global public health and safety events platform before and after the recovery of tourism, 2019-2020 tourism industry growth scale, pandemic development judgment, platform users search, browse, order, collection, and other factors. The 2020 industry recovery forecast model was established in the “travel observer” platform to help local government have a projection of tourism industry after the pandemic and a plan called Ctrip’s V plan was also implemented.

According to the analysis of the industry recovery forecast model, after the pandemic, people’s enthusiasm for travel will start to pick up from “tour around”. Among them, consumers in first-tier cities such as Beijing, Shanghai and Guangzhou are looking forward to traveling around; Tianjin, Qinhuangdao, Zhangjiakou, Baoding, Jinan around Beijing, Huzhou, Huangshan, Lishui, Suzhou and Hangzhou around Shanghai, and Macau, Huizhou, and Zhuhai around Guangzhou. Zhanjiang, Guilin and other places are among the top five in the “Surrounding Destination Wish Index” list. In addition, the “Wish Index” of Chengdu and Guizhou, Chongqing, Ganzi Prefecture, Lijiang and Shangri-La has gradually increased. The “Wish Index” of the three dimensions of “Parent-Child”, “Ancient City” and “Food” is showing a strong momentum. Thanks to the data analysis of the Ctrip Travel Renaissance V Plan, the government can better predict the direction of the tourism industry after the epidemic, which is more conducive for the

development of the tourism industry after the epidemic.

According to the results presented by the model, with the gradual control of the pandemic and the easing of the industry, after the industry has gone through a trough, it will start to rise steadily with the control of the epidemic and increase with the arrival of traditional tourism nodes such as May Day Golden Week and summer vacation. The trend throughout the year appears to be obvious V-shape. To stimulate tourism consumption, Ctrip has joined hundreds of destinations around the world to launch a one-billion-yuan recovery fund through smart investment and refined subsidies.

As the leader of China’s tourism industry, Ctrip’s positive attitude in response to the pandemic has undoubtedly made great contributions to the government’s promotion of the economic recovery of the tourism industry after the pandemic. The effect of Ctrip’s implementation of corporate social responsibility on the government side is affirmed.

Cooperating with the National Development and Reform Commission to realize big data travel

On November 21, 2018, Ctrip signed a strategic cooperation agreement with the Comprehensive Transportation Research Institute of the National Development and Reform Commission. The two parties collected traffic and travel big data to provide services for building a smart and efficient modern integrated transportation system, and planning the major



Figure 6. Stock price movement before and after realizing big data travel.
Source: Sina Finance.

transportation infrastructure. According to a China Travel News report on 26 October, 2017, Ctrip as the world's leading online travel company has more than 300 million users generating 50TB of big data every day, which accumulate a wealth of big data resources. The National Development and Reform Commission stated that big data applications are still insufficient in the field of transportation, and there are still problems such as fragmentation and lack of standardization in the "Notice on the Special Project of Innovation Capacity Establishment in the Field of Big Data" published on 26 August 2016. Ctrip has a comprehensive and full chain of massive travel data resources, which can provide data support for building smart transportation and smart travel. The cooperation between the two parties decided on 21 November 2018 was conducive to the implementation of the national comprehensive transportation development strategy and the development of the transportation economy. It is an outstanding performance of Ctrip in fulfilling its corporate social responsibility for the government. In the following trading days in December 2018, the stock price had a clear upward trend.

Figure 6 presents the graph of stock price movement before and after realizing the big data travel. The fulfillment of corporate social responsibilities for the government enhances the corporate image in the hearts of citizens, attracts more investors, and has a positive impact on corporate performance.

Events related to the social environment

Launching the travel charity platform

In October 2019, Ctrip Group held its 20th anniversary

ceremony in Shanghai, and its "STAR" social responsibility strategy was first released at the conference, which includes the protection of travel safety, precise tourism and poverty alleviation, and responsible travel. The first domestic travel charity platform started by Ctrip Group was launched simultaneously.

According to the data released by the Ministry of Civil Affairs, as of 2018, there were more than 6.97 million rural left-behind children under the age of 16, whose parents both went to cities to work, rarely had the opportunity to reunite with their parents. In fact, many groups are eager to travel but have no chance. Ctrip's public welfare platform was launched to improve this situation.

Ctrip's charity platform is positioned as a new funding model of "Internet + charity + travel", through the integration of upstream and downstream partners in the tourism ecological chain and Ctrip users' point-of-care donation channels. Ctrip created the first public welfare platform in China that realizes the travel dreams of disadvantaged groups. According to the plan, Ctrip's charity platform will fund 50 travel charity projects in the first year and provide 10 million for charity fund. In addition to supporting travel dreams, the charity platform will also add two new directions in the future: travel environmental protection and tourism poverty alleviation, with an aggression to become the world's largest and most influential travel charity platform. In recent years, Ctrip has relied on its strong online marketing capabilities and the resource advantages of large members, big data, large platforms, large products, and large traffic to help poverty class in inland provinces to get out of poverty in an all-round way. According to an article published in "China SME" issue number 304, Ctrip has opened stores



Figure 7. Stock price movement before and after launching the travel charity platform. Source: Sina Finance

Key Highlights

- The Company's China domestic business continues to show strong recovery momentum.
 - China domestic air ticketing business achieved positive year-over-year growth for the third quarter of 2020.
 - China domestic hotel reservations achieved positive growth, with mid-to-high end domestic hotel reservations reaching double digit year-over-year growth exiting the third quarter of 2020.
- The Company's results for the third quarter of 2020 showed significant sequential improvement from the previous quarter.
 - Net revenue for the third quarter of 2020 was RMB5.5 billion (US\$805 million), representing a 48% decrease from the same period in 2019 and a 73% increase from the previous quarter.

Figure 8. Key highlights in the financial report for the 4th quarter 2020. Source: Ctrip's Financial Statement.

in more than 450 county-level cities and 16 impoverished counties, creating more employment opportunities for local young people. Ctrip has been working hard on the road of public welfare.

Figure 7 presents the graph of stock price movement before and after launching the travel charity platform. From the fluctuations of stock price, it may be seen that Ctrip's stock price has a clear upward trend after launching its travel charity platform on 29 October 2019 until mid-November 2019. It also shows that citizens recognize Ctrip's public welfare behavior. This charity act is an obvious manifestation of Ctrip's fulfillment of

corporate social responsibility. The significant increase in stock prices is also an indication that fulfilling corporate social responsibility has a positive impact on corporate performance. Figure 8 shows the key highlights in the financial report for the 4th quarter 2020.

Ctrip's public welfare actions in response to the Covid-19

After the outbreak of the Covid-19, Ctrip was one of the first companies in the domestic tourism industry to

Table 3. Summary of events and impact on financial performance.

Stakeholder-related events	Date	Incidents	Impact
Consumer	2017/10/19	Bundled sales	Decline in stock prices
	2014/3/22	Information leakage	Decline in stock prices
	2018/4/13	Loyal users' interest harm	Decline in stock prices
Employee	2018/11/8	Child abuse incidence	Decrease in revenue
Government	2020/3	Tourism revival v plan	Developing tourism industry after pandemic
	2018/11/21	Bag data travel development	Rise in stock prices
Social	2019/10/29	Launching travel charity platform	Rise in stock prices
	2020 Q1	Public welfare actions	Increase in operating income

Source: Author

introduce a series of comprehensive safeguard measures, including free subscription and supplier support policies. Ctrip reported a total of tens of millions of orders have been unsubscribed, and the amount involved exceeded 31 billion yuan in the quarterly statements for the first quarter of 2020. Ctrip also announced the launch of the “Angel Wings Project” in the corporate’s online platform. The project included several public welfare actions to pay tribute to doctors, provided free public welfare accommodation and cars for medical staff and volunteers, and sent health care exclusive version of super members, diamond membership around the country worth 500 million yuan.

According to an article titled “Wish you were here” in the December 2020 issue of *Finance and Development* (Behsudi, 2020), the tourism industry contributes 10% of the world’s GDP and is also the industry most affected by the pandemic. As a leading company in China’s tourism industry, Ctrip has given full play to its platform advantages and actively assumed social responsibilities, which has made great contributions to the recovery of the tourism industry. According to the financial report for the fourth quarter of 2020, Ctrip’s net operating income increased by 73% month-on-month, and its growth rate ranked first in the domestic online travel industry. The improvement in financial performance was not only related to the effective control of the epidemic, but also benefited from Ctrip’s spirit of public welfare demonstrated during the epidemic and its attitude of actively assuming social responsibilities was widely recognized by consumers and investors. Therefore, actively fulfilling social responsibilities has a positive impact on financial performance. Table 3 summarizes the stakeholders involved in, the date of and the impact on the financial performance of the incidents analyzed in this section.

Conclusions

Through a specific analysis of Ctrip's performance of

social responsibilities for shareholders, consumers, government, society and the environment, and employees, the study concludes that stock price fluctuations are closely related to firms’ performance of corporate social responsibilities. When a vicious event shows that Ctrip fails to fulfill its social responsibilities, the stock price (financial performance) drops significantly. When Ctrip actively participates in public welfare and cooperates with government decision-making and other positive events, its stock price and financial performance rise. The results indicate that fulfilling corporate social responsibility has a positive impact on financial performance. The findings are consistent with some previous studies (Tsoutsoura, 2004; Chen and Wang, 2005; Zhang et al., 2013; Mishra and Suar, 2013; Zou et al., 2019) that fulfilling the corporate social responsibility may improve corporation image and derive a better financial performance: short-term rise in stock prices, or intermediate-term improvement in accounting figures. The findings of our study are against the findings of one of the previous studies done issues related to corporate social responsibility. The investors and consumers in China concern the image of the corporations’ social responsibilities in their investment portfolio and daily lives. Future studies may be done on a sample of listed firms to explore whether the corporations in China collectively concern the issue of corporate social responsibility.

Recommendations

Enterprises should establish a correct understanding of social responsibility and put it into practice

For enterprises, especially the Internet industry, the current market economy system is still in the process of construction, and the Internet environment still needs to be improved. To win in market competition and achieve sustainable development, companies should abandon the simple principle of profit maximization, and fully

understand the potential benefits of fulfilling social responsibilities, incorporate corporate social responsibility into development strategies and form corporate culture.

From the company's internal perspective, the company must attach importance to the health and safety of employees, protect their legitimate rights and interests, and establish a good corporate culture. A company needs to abide by the law, be honest and trustworthy, protect its environment, and be enthusiastic about the public welfare.

The government should strengthen the disclosure and supervision of corporate social responsibility performance

The governments should fully understand the importance of corporate social responsibility performance, invest appropriate human and material resources, establish a scientific and complete evaluation system of social responsibility, and improve disclosure mechanism of the corporate social responsibility, to enable all sectors of society to perform supervision functions. In addition, appropriate reward and punishment mechanisms should be established, and measures such as supplementary publicity and education should be taken to encourage enterprises to increase their emphasis on fulfilling their social responsibilities. Finally, it is necessary to conduct thorough investigations into enterprises regularly to ensure the authenticity and transparency of their social responsibility. Strengthening government supervision also needs setting up a professional supervisory department when necessary. Through a series of more standard and complete laws and regulations, Chinese enterprises are guided to actively fulfill their social responsibilities.

Investors should incorporate corporate social responsibility into investment guidelines

For investors, they should fully implement the rational investment philosophy, and comprehensively assess the performance of all aspects of investment goals, including the performance of social responsibilities, to effectively restrain the enterprises from engaging in behaviors that damage social interests, reduce the occurrence of negative social responsibilities and carry out reasonable supervision. Incorporating corporate social responsibility into the investment guidelines can effectively mobilize the public's supervisory power, help the society establish a sound social responsibility system, activate investors' investment enthusiasm, fully protect their rights and interests, and achieve a win-win situation.

CONFLICT OF INTEREST

The author has not declared any conflict of interests.

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Full Length Research Paper

Tax audit of legal entities, assisted by informational technology performed from revenue authorities

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This paper aims to explain how an information system upgrade aids tax authority efficiency in a developed country with significant deficiencies and weaknesses in its tax system and citizens' tax awareness. Simultaneously, this research considers modern tax audit methods and their effect on legal entities. Through literature review, a questionnaire was drafted and sent to state tax auditors responsible for public revenue. As a result, a research tool was created to measure changes in a period of ten years regarding tax audit and the extent informational audit tools help to simplify the audit task. For the purpose of homogeneous empirical research, the sample used relates to Audit Data Analytics (ADA) auditors from a new body of controllers utilizing modern informational technology systems. Regarding offered utility and assistance from a tax system tool; auditors can facilitate and identify a tax offence more effectively in matters of time as well as credibility of each case. Greece as a turbulent sample country through turmoil originating from events such as the 2009 fiscal crisis, a series of tax reforms and political instability can explain the intricacies a state faces in order to formulate consistent tax audit authorities supported by informational systems.

Key words: Tax audit, tax authorities, audit tools, tax legislation, informational systems.

INTRODUCTION

Changes in audit procedures, tax administration, tax legislation and tax policy in general have been the subject of various studies in recent years. In Greece, tax control is a very important mechanism of the state, because it contributes to the compliance of businesses with the law, to the increase of public revenues and to the equality of citizens' participation in tax debts. Most profitable companies are often targets of tax audits,

which are the best sources of government additional taxes (Larina, 2005). Tax audit is currently at a critical stage in its development as there is a growing demand for audit services. Audit of taxpayers has been defined as the activity carried out by the tax authorities in order to detect whether there is a non-fulfillment of tax obligations (Das-Gupta and Gang, 1996). A tax audit is generally defined as the examination of whether a taxpayer has

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properly prepared his financial statements, has correctly assessed and submitted his tax liabilities and has fulfilled all his other obligations in accordance with the tax law system in general (Grampert, 2002). In addition to the above, the concept of 'tax audit' also includes all the actions aimed at gathering the necessary information and evidence to properly evaluate the financial position of a company in order to obtain an accurate and complete picture of the financial activities of the company, its competence and scope of activity. All of the above will ultimately lead to safe conclusions and an accurate assessment of its tax liabilities (Dilip and Swapan, 2002). It is a fact that in an increasingly competitive globalized environment, the objective of the national economy is to create an advanced and dynamic tax system that will provide the necessary public revenue and help improve the country's international competitive position (Bronchi, 2001). However, tax systems are not just a simple fiscal policy process for a country. The legal, political, organizational and socio-economic aspects must also be taken into account when adopting a tax system (Robbins, 2002). The key factors to tackle tax evasion and increase tax audit efficiency were found in matters of flexibility and effectiveness (Guyton et al., 2018). Moreover, the combination of reliable but simple and efficient procedures in a user-friendly system were found significant, similar to that of an auditor's training (general and specialized). The purpose of this investigation is to properly reflect the views of the Independent Authority for Public Revenue auditors on the utility of audit tools, the complexity of the procedures, the legislation and the general difficulty in identifying tax offenses. To achieve the purpose of the work more fully and to better understand the data and data presented, the work consists of five chapters.

LITERATURE REVIEW

The concept of tax audit

del Buey Torres (2004) conducted a tax audit. The purpose of this study is to provide insights on tax audit aspects, both private and public. The conclusions argue that the scope of a financial audit in the tax area should approach all non-compliant energy tax methods. Concerning the similarities of audit at international level, it is stated that external confirmations, computer systems and dynamic analysis are used to prove the financial position of the company. The results also suggest that the auditor is responsible for a financial fraud when he or she deliberately conceals information about it. Chatzipanagiotou (2010)'s research attempted to identify significant problems during the tax audit and to indicate that tax authorities should use simple and directly applicable practices. The proposed interventions focus on four areas that address the most effective use of human resources, the training of workers, the positive change of

public opinion and the use of modern technology. In particular, the proposed practices mentioned in the research focus on:

1. Changing organizational culture to serve the citizen / customer and increase efficiency and speed of operations.
2. Providing citizens with instant access to existing electronic services.
3. Effective and equitable use of human resources resulting from the application of modern practices and methods of personnel management and evaluation
4. Providing education through distance learning and the use of experiences, special skills and skills.
5. Adopt and adapt good practice internationally.
6. Training and orienting citizens on their tax obligations and rights through the creation of online educational sites.
7. Developing tax awareness through the introduction of tax and entrepreneurship lessons at all levels of education.
8. Changing public opinion towards the positive and optimistic side that the state uses for the public interest.

One year later, Panas (2011) conducted a tax evasion survey to examine the behavior and characteristics of taxpayers. The sample consists of 1969 people over 18 years old selected randomly. The results revealed that 25% of respondents will hide part of their income from tax authorities, given the likelihood, and the percentage is higher in groups of low-educated, entrepreneurs and unemployed. Six out of ten responded that in the past they had been given the opportunity to hide some of their income, but they did not. Another study examining the significant problem of tax evasion is conducted by Artavanis et al. (2012). Researchers have used an innovative method to estimate the extent of tax evasion and its distribution across different business sectors. The study was based on the idea that banks are adjusting to the financial environment of Greece and other countries with widespread tax evasion, lending based on estimates of real rather than household income reported. In addition to the above, it is noted that the average freelancer spends 82% of his declared income on loan repayments and in some areas such as financial services, doctors, lawyers, the rate exceeds 100%. In another recent study, Colon and Swagerman (2015) explored the motivations for participating in improved relationships within the tax control framework for multinational corporations in the Netherlands. The first part outlines the key principles for applying the tax audit framework for Dutch multinationals and the second part explores the incentives for enhanced participation by conducting research on the tax managers of these companies. The results of the research revealed that there are two key incentives for Dutch multinationals to engage in enhanced relationships: first, the perceived view of improving the organization's environment and

second, the belief that this will be enforced by law in the coming years. Sinha (2007) studied audit productivity by evaluating the use of the metric "tax inefficiency per audit hour". The researcher has alternatively proposed "total tax scarcity and effort control function" as a measure to measure control productivity and conducted an empirical analysis in 12 business industries, which showed that tax scarcity per hour is not a reliable metric and the proposed model. The study better explains the results of tax audits. From their side tax authorities should also consider ways to increase the indirect trust of taxpayers. Such measures as for example building a long term relationship between a special tax officer and the taxpayer have a significant impact on compliance (Gangl et al., 2019). Nuredo et al. (2019) ascertain that the improvement of the support of the tax system techniques and the consciousness of the taxpayers have a correlation with the effectiveness of the tax audit. Moreover, Chalu and Mzee (2018) punctuate the need to have experienced and adequately trained auditors as well as an explicit institutional framework and concrete audit procedures in the tax audits. In another interesting study, Ho and Lau (1999) discuss changes related to tax control in a very critical economic environment such as that of Hong Kong. In June 1991, a new audit system, known as Field Audit, was introduced by the Hong Kong Department of Internal Revenue to increase the voluntary compliance of businesses with tax legislation. Field Audit staff was authorized to examine the validity of the information released by the companies, comparing their actual returns with those reported in tax documents and conducting on-the-spot checks.

Greek case

Tax legislation system in Greece

The 2009 fiscal depreciation reached the Greek economy around 2011 and lasted for approximately six years. During this period, a gradual increase was observed in the high income inequality of Greece compared to other states of the European Union, which was maintained for the following years and intensified the problem (Mitrakos 2018). During the period of 2017-2018 of the Greek crisis, a series of taxation reforms were made in order to modernize the national tax system (OECD, 2017). The goal was to make the tax system flexible to abrupt changes and adaptable, while at the same time simple it in order to endorse its stability (International Monetary Fund, 2017). The changes in the tax and accounting system in Greece were based on the International Accounting Standards (I.A.S.). The purpose for these reforms originated from a set of quantitative and monetary objectives aiming to maintain positive growth rates and generate surpluses in transactions (Lois et al. 2019). Most of these objectives were determined by the International Monetary Fund in cooperation with the

European Union (Regulatory reform in Greece, 2001). One of the most crucial goals of these reforms was to address and tackle modern economic crime cases and techniques. This direction concentrates on the research of Beasley et al (2020) which gives a comprehensive and documented view as to the contribution of auditing in the fight against tax evasion and fraud. The research focuses on the importance of the existence of controls, as they aim to combat economic crime and specifically to detect, investigate and deal with organized economic crime. Tax audit is classified as an external audit (Carmichael et al., 1996), carried out mainly by tax executives. In Greece, this role is given to the Independent Authority for Public Revenue (IAPR), a separate state tax agency, and audits are performed by specialized tax officials. It has been argued that Greek authorities avoided have radical reforms on the country's tax system for many years (Bronchi, 2001). However, in various cases the Greek parliament approved changes to tax laws or imposed additional regulations to improve the existed tax legislation. According to Ballas (1994), the tax system is "a cloudy system of contradictory laws, judicial and ministerial decisions that clearly conceal special interests". In addition to the above, tax audit procedures' complexity, in combination with the citizen's perception of high tax rates, and the inextricable link between accounting/taxation led to increased tax evasion and "creative accounting" incidents (Baralexis, 2004). This implies that high taxes, increasing business complexity and consecutive changes in tax legislation may play a significant role in Greek businesses non tax compliance. This led to great amounts of revenue loss and distorted the competitiveness rules of the Greek market. In order to address this problem, it is necessary for Greek authorities to design a flexible and effective tax audit system, based on simple, fast and efficient procedures, supported by user-friendly control systems as well as highly trained and qualified auditors.

Greece's tax information system reforms

IAPR, through the development and use of a Greek integrated information system, "ELENXIS", which is part of the "Business Solution and Central Information Infrastructure Development" program for the integrated control system of the General Secretariat of Public Administration Information Systems (Partalis, 2012), implements strategies and hypothetical scenarios. Through a risk analysis and classified factors (Ministry of Finance, 2008) the system selects possible auditees (companies being audited). Once a case is selected, a case-manager digitally sends it to the "central office". The latter's tax officials determine which tax audit agency is responsible for each case, based on turnover, income, geographical or other criteria. The case is then assigned and the respective head of the department entrusts it to

the appropriate auditor. Through "ELENXIS" the case is monitored at every stage, disclosing information to all liable tax officials, ensuring procedural transparency and accountability. The aforementioned information and procedure are classified. Thusly the tax auditor, through this particular informational system's application can be informed about the auditee's tax profile and information (tax statement, previous tax offences etc.) that assist him in the audit procedure. At the same time, "ELENXIS" helps significantly in drafting audit reports, provisional worksheets and final tax liabilities. During the last decade Greek Tax Agencies integrated another electronic tool to "Elenxis" control subsystem. "Sesam Analysis" (Manual of Selected Operating Systems Services Procedures of I.A.P.R., 2018) allows the user to input data and perform a series of analyses with various options and filters depending on each case. The procedure is simplified and quickly extracts results. The integrated information systems surpasses manual (or previous information systems) in terms of time and cost effectiveness. This is especially important for cases of legal entities with vast accounting records and tax information. For example, regarding interest expenses, Article 49 of the Greek Tax Code that apply on sub funding refers to net interest expenses up to three million euro while surplus interest expensed should not exceed 30% earnings before interest, taxes, depreciation, and amortization (EBITDA).

Intra-group transactions and Amandeus database

Between companies belonging to the same group must apply the 'principle of equal distance' (Article Income tax code, 2018). In Greece, intra-group transactions, and transfer of operations are performed according to the general guidelines of OECD, as well as Articles 50 and 51 of the Income Tax Code (ITC). The related parties referred in Article 2 of the ITC are required to keep the Documentation File, consisting of the Basic Documentation File and the Greek Documentation File. Affiliated enterprises should also document their transfer prices through standardized files. If the native company is Greek then it must provide a "Basic Documentation File". This file provides general information about the associated companies, the pricing strategies followed and the OECD documentations method used by the group to transfer pricing transactions. If a Greek company is a subsidiary of a foreign parent company, it must provide the "Greek Documentation File". This file complements the "Basic Documentation File" providing similar information for the group and the Greek subsidiary. These files should be updated of any change, be always available and submitted at fixed intervals (Karagiorgos et al., 2016). The file is drafted according to the submission deadlines of the income tax return accompanied by the "Transfer Pricing Documentation Summary" submitted digitally through the Independent Authority for Public Revenue's (IAPR) platform. For the

purpose of controlling intra-group transactions, ADA has been using the Amandeus database subscription in recent years. The AMADEUS Database is a privately owned pan-European financial data base with data on over twenty-four million companies.

SAMPLE AND METHODOLOGY

Research sample

The purpose of the research is to investigate the role of tax audit tools and procedures and the effectiveness of finding tax offenses. For the purpose of this study, on June 2019, questionnaires were sent (manually and via email) to tax auditors of the Independent Authority for Public Revenue, various other audit tax agencies in Athens and Thessaloniki (the two largest economic centers of Greece). In Greece an approximate number of one thousand auditors are employed in state tax agencies. The sample consisted of 96 state tax auditors which are considered representative of the total population (Table 6). The objectives of the research were to interpret the changes of the last decade in tax audit and more specifically to the extent audit tools (Elenxis, Taxis, etc.) help to simplify procedures. In addition, an effort was made to identify the most frequent tax offences performed by the regulated companies as well as the difficulties of identifying them depending on each industry. For the purpose of homogeneous empirical research, the sample used relates to ADA auditors from the new body of controllers that make the most of the Elenxis system.

Research questionnaire

The questions used were Likert-type multiple-choice and grading scale, where the respondents were asked to state their degree of agreement or disagreement. The questionnaire is divided into five sections. The first section, "Descriptive Statistics" deals with demographics and auditors' characteristics. It consists of seven questions referring to gender, age group and level of education. Then, the last three questions cover years of experience and training. The second section tries to present the auditors' opinion regarding the audit tools and consists of eight questions. The first question concerns the Elenxis system's simplicity and the second is its time saving capabilities. The third question concerns the degree of sufficient training in the use of Elenxis. The fourth and fifth questions investigate speed of information, and whether other tools help in the process. Finally, the last three questions examine the implementation of "Sesam" as an audit tool, in matters of user friendliness for implementation, efficiency, and sufficient training. The third part deals with tax legislation and consists of five questions measuring frequency of changes, degree of complexity, the extent of different interpretations and possible necessary simplifications (Drogalas et al., 2015). The next part continues with nineteen questions that examine the extent of discrepancies in declared gross income and expenditure as well as differences found in aggregate situations and errors in doubtful debts predictions. Two questions investigate the extent to which differences are found in the case of "closed warehouse" auditors and in the valuation of inventories, respectively. Closed warehouse is an audit verification that counts the stock of some main types of business activity which must be in accordance with the quantified quantity, after taking into account any justified breaches or isolations or losses, etc. The next questions investigate the degree of detection of expenses not recognized for gross income deduction, net profits and counterfeit transactions. One question was added to measure the degree of detection of general violations. Five questions investigate VAT outflows and legislation.

Finally, three questions examine tax authorities, data bases and intra-group transactions' assistance in the audit process. The last part deals with general information on audits and procedures and contains nine questions. It investigates the difficulty in finding infringements, the auditors' opinion on tax legislation changes' necessity, simplicity and costly. Two questions concern the auditors' liability and expertise.

Questionnaire statistical analysis methodology

The statistical package SPSS (Statistical Package for Social Sciences) was used for statistical processing and analysis of the questionnaire responses. In particular, the completed questionnaires, which were handwritten, recorded the responses electronically using the Google docs form and were then exported in excel spreadsheet and then the figures were entered into the SPSS statistical package. The data were extracted from both the tables and the charts from the statistical package.

RESEARCH RESULTS

After recording the replied questionnaires, the results are then processed and presented as they arise. This chapter describes descriptive data as formulated through the statistical analysis provided by the SPSS software package.

Descriptive statistics

For a better understanding of the 'tax legislation' parameter, the descriptive data for the five questions in this section are summarized in Table 1. According to the table, the maximum average is question 7 (Q7.), which refers to whether the application of Sesam helps to quickly perform the test. In contrast, question 3(Q3.), which refers to the adequacy of training on the use of Elenxis, has the lowest average. However, the analysis of Table 1 is given in the conclusions. Table 2 shows that the largest average belongs to the first question, namely the changes that have been made in the legislation over the last decade; it shows how difficult these changes make the audit work. The lower average is in the fourth question where it is examined whether auditors spend more time trying to interpret laws than audit findings or not; it is explained that if one considers that an audit and a prioritized case should be completed within a reasonable time space.

Factor analysis

Table 3 gives 10 factors with the corresponding loadings of the variables in these ten factors, after the orthogonal rotation of the 10 factors. The rotation is intended to increase the large loads and respectively to reduce the small ones. From this table the synthesis of the factors is done. The criterion used is the magnitude of the load of

each variable on the factors that is the variable belongs to the factor to which it has a large charge. Thus, questions 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 28 and 30 belong to the first factor. Questions 10, 11 and 38 belong to the second factor. The third factor is questions 12, 13 and 14, while the fourth factor is 37. The fourth factor is questions 27, 29, 34, 35, 36 and 37. Questions 3, 19 and 21 are to the seventh factor while the eighth factor belongs to questions 1, 2, 3, 4, 7, 8 and 9. Finally, the ninth factor has questions 39, 40, 41 and 42, while the tenth questions 5, 6, 31 and 32. At this stage the factors that were created will be named. This is achieved by carefully studying the variables that make up each table. These variables were initially analyzed for their correlations using the Pearson's Correlation coefficient (Taraldsen (2020)). Finally, the empirical analysis is completed by listing the results of the multiple regression analysis. Since the relationship between the variables X and Y is linear, the following multiple linear regression models were used to examine the strength of association between the different independent variables and the dependent variable:

$$y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + e_i$$

Where, Y: is the dependent variable "Tax audit infractions tracking", X1, X2, X3, X4, X5, X6, X7 : are the independent variables; b1, b2, b3, b4, b5, b6, b7 : are the independent variables parameters or coefficient which quantify the relationship with the dependent variable; ei: is the error.

Thus, the first factor will be called "Differences in audit procedures". Therefore, with this factor we determine if there are differences in the declared gross income with those of the books, in the declared expenses, in the realization of a closed warehouse, in the valuation of the inventors that is, in the fake and fictitious data. In addition, it is checked whether there are differences in the provisions for doubtful receivables, in the registration of balances from the General and Detailed Ledger in the General Assembly and A.X., in the net profits between the books and the submitted income tax returns and in other taxes. Finally, it is ascertained whether there are violations of the K.F.A.S.- G.A.S. – I.A.S., displacement of outflows, incorrect transfer of data and whether intra-community deliveries have taken place. The second factor is called the "Differences on Tax Codes". This is where the changes and complexity in the various tax codes come into play, if there are different interpretations in the laws and if the tax legislation can be simplified. The third factor could be called "Tax Differences". Therefore, this factor controls the differences in taxes such as VAT, contributions, VAT, tax procedure code, etc. It is additionally related to tax violations of self-employed and tradesmen so as in industrial and commercial enterprises too. "Expenditure tracking" is the title of the fourth factor,

Table 1. Items measuring the impact of information systems on tax audit.

Statistics		Q1. Elenxis is simple and easy to use	Q2. Elenxis help to run the audit procedures	Q3. Elenxis education is adequate	Q4. Quick provision of information that helps control other services	Q5. Help of other tools - processes (taxis - archive. junction. etc.) in tax audit	Q6. Sesam is simple and easy to use	Q7. Sesam application helps to run the audit procedures	Q8. Sesam education is adequate
N	Valid	96	96	96	96	96	96	96	96
	Missing	0	0	0	0	0	0	0	0
	Mean	2.93	2.75	2.67	2.67	3.48	4.03	4.23	3.10
	Median	3.00	3.00	3.00	3.00	4.00	4.00	4.00	3.00
	Mode	3	2	2	3	4	4	4	3
	Range	4	4	4	4	4	4	4	5
	Minimum	1	1	1	1	1	2	2	1
	Maximum	5	5	5	5	5	6	6	6

Source: Field Survey (2019).

Table 2. Items measuring the impact of tax legislation on tax audit.

Statistics		Q9. Many changes to the various tax codes have been made in the last ten years	Q10. Tax legislation is complicated	Q11. Different interpretations can be given to different laws and circulars	Q12. Difficulty in interpreting laws	Q13. Simplification of tax legislation needed
N	Valid	96	96	96	96	96
	Missing	0	0	0	0	0
	Mean	4.59	4.35	3.93	3.81	4.30
	Median	5.00	4.00	4.00	4.00	4.00
	Mode	5	4	4	4	5
	Range	2	3	3	3	3
	Minimum	3	2	2	2	2
	Maximum	5	5	5	5	5

Source: Field Survey (2019).

while the fifth is called Elenxis application. In other words, we check if this application is simple and

helps to the audit procedure. The sixth factor is called "Auditor Specialization". Therefore, the

auditors should be specialized and the procedures for charging taxes and fines should be simpler.

Table 3. Research factors.

Factor	Factor name
1	Differences in audit procedures
2	Differences on tax codes
3	Differences in taxes
4	Expenditure tracking
5	Elenxis - Sesam application
6	Specialization of auditors
7	Control tools

Source: Field Survey (2019).

Table 4. KMO and Bartlett's test.

KMO and Bartlett's test		
Kaiser-Meyer-Olkin measure of sampling adequacy.		0.585
	Approx. Chi-square	2332.093
Bartlett's test of sphericity	df	1128
	Sig. (Significant $p < 0.001$)	0.000

Source: Field Survey (2019).

Table 5. Correlation Matrix.

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Factor 1	1.000						
Factor 2	0.370*	1.000					
Factor 3	0.217	0.098	1.000				
Factor 4	-0.150	-0.104	0.123*	1.000			
Factor 5	0.151	0.140	0.122*	0.110	1.000		
Factor 6	0.037	0.030	0.132*	0.150**	0.735*	1.000	
Factor 7	-0.045	-0.206	0.289**	0.145**	0.166	0.053	1.000
Mean	2.927	3.480	3.480	2.110	3.100	3.420	4.260
Std. Dev.	0.954	0.846	0.882	0.752	1.000	1.158	0.785

**Correlation is sign. at the 0.01 level; *Correlation is sign. at the 0.05 level.

Source: Field Survey (2019).

Finally the seventh factor can easily be called "Control Tools", which are considered very important for control. Table 4 summarizes the factors with their nomenclature. The KMO and Bartlett's Test is then performed. The results are shown in Table 4. Based on the literature, large values of the Kaiser-Meyer-Olkin index (above 0.50), as an index comparing the observed correlation coefficient with the partial correlation coefficients, indicate that the method of factor analysis of variables is acceptable as a technique for data analysis. As shown in Table 4, the value of the KMO index is quite good, 0.585. At the end of the statistical analysis, the components of the sections are extracted, using factor analysis of the scales on whether the methodology and useful tools

assist tax control in Greece.

Factor analysis correlates a large number of interrelated variables by grouping them into factors. After grouping, the variables of each factor are more correlated with each other than those of other factors (Table 5). In other words, it aggregates many variables by creating few factors. Specifically, we will use Principal Components with the Principle Component Analysis - Varimax Rotation to extract agents. There is a statistically significant correlation between the incorrect transfer of book data to the submitted VAT returns and the differences in net earnings between books and income tax returns. In other words, the incorrect transfer of the data of the books to the submitted VAT returns. It is increasing, so that there

Table 6. Tax auditors' profile.

Tax auditors' profile	F	%
Items		
Gender		
Male	50	52.1
Female	46	47.9
Age category		
26-35	13	13.5
36-45	38	39.6
46-55	21	21.9
56 και άνω	24	25.0
Education		
Second Grade	3	3.1
T.E.I.(Technological Educational institution)	6	6.3
A.E.I. (Higher Educational institution)	29	30.2
Master Degree	51	53.1
PhD	7	7.3
Years of service do you have at AADE / GDR / Ministry of Finance		
1-5	19	19.8
6-15	30	31.3
> 16	47	49.0
Years of tax audit experience (year)		
1-3	12	12.5
4-8	37	38.5
> 9	47	49.0
Tax audit experience gained working at:		
Regional tax office	35	36.5
Financial crime office	2	2.1
General auditing office	57	59.3
Other public services	2	2.1
Number of tax audit seminars attended		
0-3	31	32.3
4-7	38	39.6
> 8	27	28.1

Source: Field Survey (2019).

are differences in net profits between books and income tax returns.

1. There is a statistically significant correlation between the difficulty of detecting tax offenses in freelancers (designated by= Law 2238/94) and in service providers (plumbers, electricians, etc.).

2. A statistically significant correlation between the detection of expenditures above € 294 for simplified and € 881 for duplicate books not recognized for gross income deduction, with differences in the aggregate

statements of article 20 KBS.

3. There is a statistically significant correlation between easy-to-use and simple Elenxis application and whether it helps to perform the test quickly. However, the easier and simpler the application of Elenxis is, the faster the execution of the test.

4. There is a statistically significant correlation between intra-Community deliveries without the relevant tax information and differences in other taxes being legal, with the need for changes in tax legislation (Schweder and Hjort, 2016).

The Descriptive Statistics table is then exported. The results are shown in Table 6. As far as tax auditors' profile is concerned of the 96 people who completed the questionnaire 52% were men and 48% were women. Moreover we can identify that the largest percentage of auditors sample belongs to the age of 36-45 (39.6%) with a pretty small number of young auditors aged 26-35 (13.5%). Regarding the level of education of the auditors more than 90% stated that they have a university degree and above (that is postgraduate or doctoral degree), which demonstrates that the employees have a high level of educational training. Touching the experience of the respondents almost half of the auditors have a lot of previous service in tax audit services and almost half of them have extensive audit experience, as experience of 9 years or more corresponds to 49.0%. Most of the auditors who participated in the survey gained this working experience in K.E.ME.EP (Large Enterprise Control Center). Of course, the purpose of this research was to mainly check the tax audit of legal entity, so more questionnaires were given to those specialized auditors. Question 7 examines the training of the respondents and specifically the number of seminars, related to audit that each has attended showing that the vast majority of auditors (80.6%) have attended several seminars considering the importance of the work they have performed. On confirming whether or not the control tools help the audit procedure the range fluctuates from large to moderate. Auditors find the Elenxis application easy and simple to use and the use of Sesam electronic tool very helpful in carrying out their audit work (Table 7). However, further training in the use of these new tools would be beneficial to auditors and audit procedures in general. Also, information that helps the audit is not provided fast enough by other services and this may occur to delay the completion of the audit and the rapid detection of violations from various intersections as well. As far as the tax legislation is concerned it seems to a very large extent that there are changes and complexity in the laws concerning the codes of various taxes. This complicates the audit procedure and leads to more time being spent in the interpretation of laws and orders than in the audit verifications. Simplification of the tax legislation is required by the majority of auditors. Subsequently, the messages regarding the audit procedures show significant space for improvement, as there are no major differences – omissions in the declared gross income with those of the books of the controlled entities, in the declared expenses, in the valuation of the inventories, in the net profits between the books and the submitted tax statements. From the results of the part of the general information about the audit procedure, it is shown that it is moderately easy to detect tax violations in both commercial and industrial enterprises. Consequently, the tax audit and the detection of infringements is also moderate and perhaps a little more difficult in some categories of tradesmen, such as tradesmen who provide services, since the

provision of services is known to be difficult to identify and evaluate as well. There is a great convergence of views on the issue of simplifying the audit process by making the procedures for imposing taxes and fines simpler and faster, both for the rapid confirmation of revenues and for their faster collection; and also to balance the management costs in time and revenue to carry out the respective tax audit. Finally it is evident from the above table the necessity of the expertise of the auditors, a fact which indicated that there is a wide range in the audit work and this applies to the detriment of the completeness of the audit.

DISCUSSION

It is clear from the answers that the need for auditors' expertise suggests a wide range of audit related operations and reforms to the detriment the completeness of an audit. Going two steps above, correlations analysis of the fifteen factors was performed. Useful inferences were drawn from the statistical analyses, where the most important can be considered:

There is a statistically significant correlation between the incorrect transfer of book data to the submitted VAT returns and the differences in net earnings between books and income tax returns; in other words, the incorrect transfer of the data of the books to the submitted VAT returns (POL 1124/18.06.2015). It is increasing, so that there are differences in net profits between books and income tax returns. There is a statistically significant correlation between the difficulty of detecting tax offenses in freelancers and in service providers (plumbers, electricians, etc.) (POL 1036/2017).

1. There is a statistically significant correlation between the detection of expenditures above € 294 and € 881 for duplicate books not recognized for gross income deduction, with differences in the aggregate statements of article 20 KBS.
2. There is a statistically significant correlation between easy-to-use and simple Elenxis application and whether it helps to perform the test quickly. However, the easier and simpler the application of Elenxis is, the faster the execution of the test.
3. There is a statistically significant correlation between intra-Community deliveries without the relevant tax information and differences in other taxes being legal, with the need for changes in tax legislation.

SWOT analysis of tax audit system in Greece

Taking into account the analysis of the results of this research, a SWOT analysis can be performed for the purpose of evaluating both the current situation and the future formation of the tax audit in Greece. We can

Table 7. Descriptive statistics.

Descriptive statistics	Mean	Std. Deviation
Items		
Q1. Elenxis is simple and easy to use	2.93	0.954
Q2. Elenxis help to run the tax audit quickly	2.75	0.962
Q3. Elenxis education adequacy	2.67	1.083
Q4. Quick provision of information from other services	2.67	0.879
Q5. Other tools - processes (taxis - archive. junction. etc.) help tax audit	3.48	0.846
Q6. Sesam is simple and easy to use	4.03	1.080
Q7. Sesam application help to run the tax audit quickly	4.23	1.041
Q8. Sesam education adequacy	3.10	1.334
Q9. Tax legislation changes in the last 10 years	4.59	0.515
Q10. Tax legislation is complicated	4.35	0.665
Q11. Tax legislation different interpretations given	3.93	0.700
Q12. Different tax legislation interpretation cost waste of time	3.81	0.862
Q13. Tax legislation can be simplified	4.30	0.756
Q14. Tax audit tracks differences in reported gross income with those of books	2.29	0.917
Q15. Tax audit tracks differences in expenditure declared	3.35	0.725
Q16. Tax audit tracks differences if run a closed warehouse	2.41	0.878
Q17. Tax audit tracks differences in the valuation of inventories	2.46	0.807
Q18. Tax audit tracks costs over € 294 for simplified books and over € 881 for duplicate books that are not recognized for gross income deduction	3.48	0.882
Q19. Tax audit tracks fraudulent and fraudulent tax data	2.50	0.871
Q20. Tax audit tracks differences in the aggregated situations in article 20 of the KSS. or Transaction Statements	3.14	0.878
Q21. Tax audit tracks differences - errors in forecasts for bad debts	2.70	0.756
Q22. Tax audit tracks differences in the recording of balances between the General and Analytical Accounts in the General Statement and Income Statement or Income Statement (IFRS)	1.74	0.684
Q23. Tax audit tracks general violations of ELP? -KFD - KFAS	2.79	0.857
Q24. Tax audit tracks differences in net profits between books and income tax returns	2.31	0.998
Q25. Tax audit tracks a shift in output from higher to lower VAT rates	2.04	0.870
Q26. Tax audit tracks, where appropriate, that intra-Community deliveries have taken place without the relevant tax information being issued legally	2.11	0.752
Q27. Tax audit tracks incorrect transfer of the book data to the submitted VAT returns	2.49	0.740
Q28. Tax audit tracks differences in other taxes (tax. contributions etc)	2.43	0.645
Q29. The institution of Tax Certificate helped in conducting business tax audits	3.19	1.108
Q30. The indirect Audit Techniques tool helped the tax authorities	2.86	1.512
Q31. Intra-Group Transaction Audit helped tax audits	3.75	1.036
Q32. The Amandeus database used to control intra-group transactions helped tax audits	4.02	1.056
Q33. Tax audit tracks to identify tax violations in industrial businesses	3.13	0.861
Q34. Tax audit tracks to identify tax violations in commercial businesses	2.67	0.721
Q35. Tax audit tracks to identify tax violations in freelancers (doctors. lawyers. etc.)	3.10	1.000
Q36. Tax audit tracks to detect tax offenses on traders (other than freelancers) who provide services (eg plumbers. electricians. etc.)	3.42	1.158
Q37. Tax audit considers the changes made to the tax legislation necessary	2.81	0.987
Q38. Tax audit thinks that the procedures for charging taxes should be simpler and faster	4.26	0.785
Q39. Tax audit finds that controlling tax liabilities is disproportionate to the cost of managing money and time to do so	3.36	1.189
Q40. Tax audit thinks that the lifting of the criminal responsibilities of the A.A.D.E auditors facilitates the performance of their duties	4.54	0.724
Q41. Tax audit thinks auditors should be specialized	4.18	0.962

Source: Field Survey (2019).

Table 8. Analysis of tax audit system in Greece.

Strengths	Weaknesses
1. Highly educated human resources level and qualifications 2. Development of innovating administrative systems 3. Evolution of advanced information systems	1. Lack of standard procedures 2. Incomplete codification of legislation 3. Need for further interoperability between the information systems of IAPR and with systems of other services 4. Need for human resource training and specialization
Opportunities	Threats
1. Collaborations with European and International Organizations 2. Ability to absorb European Financial Resources 3. Utilization of information in the fight against tax evasion and smuggling	1. Reduced tax capacity of taxpayers 2. Polynomial, continuous changing of institutional framework 3. Delays in funding from community resources

Source: Field Survey (2019).

identify the strengths and weaknesses as internal factors based on the function of tax audit, the opportunities and threats on the external environment that affect the tax audit procedures (Table 8).

Case of tax audit of legal entities in Azerbaijan: compare and contrast analysis

The tax administration in Azerbaijan uses a variety of venture formats to be more productive. Tax audit system uses mobile and cameral controls and they are both regarded to be precious components of the Ministry of Taxes of the country. These types of tax audits are done by pairing tax returns from taxpayers and the real information of their fiscal activity through their financial reports in compliance with the legislation. The difference between these two types of controls is that on cameral audits the financial reports and the tax returns are compromised in the tax control whereas on mobile tax review the financial reports are checked straight in the enterprises (Hajiyev and Sebzaliyev, 2003). Something similar occurs in Greece after the revision of K.B.S. and the introduction of the new K.F.D. (that is from 01/01/2014) with the tax audits to be carried out either as office inspections or as on – site inspections respectively. The Tax Code of the Republic of Azerbaijan was revised in January 2019 to expedite the tax audit and in particular to simplify the exchange of information between taxpayers and tax authorities. Through the new Tax Code the documents are sent to taxpayers electronically and do not require stamping. The new forms of tax audit (that is the mobile tax audits) cover the operations of the last three years of tax payers. As long as the taxpayer gets the results of the tax audit he can file a complaint within 30 calendar days (Stamatopoulos and Karavokyris, 2014) to the superior tax authority for the higher tax authority to make the final decision concerning the tax and the infringements of the taxpayer (Tax Code of the Republic of Azerbaijan). On the other hand, the new Tax Code of

the IPRA has made many similar provisions to the Tax Code of Azerbaijan as electronic notifications are also provided to taxpayers; the tax audits cover the last five years of the activities of taxpayers with emphasis on the last three years of their activities and as long as the taxpayers get the results of the tax audit they can file their complaints within the next 30 calendar days to the superior tax authority which is called Dispute Resolution Address (D.R.A.), for the D.R.A. to make the final decision concerning the tax and the infringements of the taxpayer (Tax Code of Greece).

Over the study of the two tax systems of these two countries, we also detect that both countries have made tax reforms and significant progress in tax administration and in tax control. Efforts are being made to improve inspections for small and medium – sized businesses(SME) with more risk –based inspections for SMEs and more electronic tax audits for SME entities (Pashayeva, 2019). The Former Minister of Taxes and Economy of Azerbaijan in 2019, Mikayil Jabbarov said that the main proposal for their economy was the reduction of taxes from non – oil (that is most of the tax revenue of Azerbaijan comes from the oil) and private sector citizens (Pashayeva, 2019) and the improvement of the partnerships between taxpayers and tax authorities. From the other side the Former Minister of Greece in 2019; Christos Staikouras said that the main proposal for the Greek economy was the reduction of permanent taxes related to the ownership of real estate, to the taxes of the legal entities and the reduction of VAT. In addition to this, George Pitsilis, the manager of the IPRD said in the Delphi Economic Forum on March 2022 that the target for the IPRD and the tax audits is a totally digital Administration and Control.

Outcome of conclusions

Through this research, conclusions can be drawn about the utility and assistance of tax system tools and

procedures to auditors and how they facilitate the identification of tax offenses. Generally, findings from the study demonstrate that modern tax control processes must be constantly expanded and adapted to international practices (Fetters, 2018). Findings from the survey suggest that continuous tax education on the function of the tax audits under the IAPR is vital to ensure taxpayers' assertive perception of the system. Moreover, specialization and vigorous training of the tax auditors are required to improve the qualifications' level of expertise and audit skills. It is also critical for tax auditors to cultivate a climate of trustworthiness between them and the taxpayers. It is noteworthy that the findings of this survey can be applicable to being also reproduced by similar developed or fast emerging economy that is worldwide since it can be generally applauded that the amelioration of tax audit can reduce the problems of tax evasion and other tax irregularities. In addition to this, the scope of the tax audit should be broader in a way that can and will reserve suitable submission of accurate returns for befitting computation. Finally, specialized and qualified tax auditors equipped with the appropriate working materials are needed so they can improve their efficiency as well as the effectiveness of the tax audit.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests

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Full Length Research Paper

Practices for negotiating tax debts successfully: Exploration of offer in compromise judicial tax court case decisions

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Settling tax debts with the U.S. Internal Revenue Service (IRS) as a service to accounting clients is categorized among the high-level negotiations skills widely sought from accounting graduates by employers. Through purposive sampling and analysis of 272 federal tax court cases decided between 2004 and 2021, this paper proposes to elucidate effective tax debt negotiations techniques. Judicially accepted and rejected offers in compromise (OICs) that were appealed to tax court, but not necessarily setting precedent, provide a natural environment for observing pre-court and post-court negotiations and settlements with the IRS. It was found that IRS appeals officers and judges (adjudicators) primarily base OIC case rejections, and thus failed negotiations, on deficiencies in written evidence, procedural failure, and on inapposite reasoning. Deficiencies in written evidence and procedure typically result in the adjudicators granting a “redo’s” and pathways to acceptance, whereas without the requisite case-specific analysis to match each unique set of facts, deficiencies in reasoning result in outright OIC rejections. In analyzing a narrow line of OIC tax court cases for the stated reasons for acceptance and rejection at both the IRS office of appeals and at the tax court level, valuable insights are gleaned into the fundamentals for successful OIC’s.

Key words: Compromise, tax, appeals, US Supreme Court.

INTRODUCTION

Intellectual skills developed to solve problems, together with the interpersonal skills utilized to secure positive outcomes are perceived to add value to nascent accountants’ employability (Tan and Laswad, 2018). The

premise of this paper is to collect a cohesive portfolio of remanded tax compromise case outcomes. The authors thereby provide a valuable collection of tax negotiation fundamentals for teaching and learning the important

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nuances for successfully interpreting and settling tax court and offer-in-compromise cases. Comparative case study analysis as a practical matter should theoretically provide a more valuable and more natural teaching environment to enrich career ready professional accounting skills. As in the professional practice domain, this method of developing analytical and logical reasoning skills by differentiating the fact patterns for distinguishing the rationale for applying pertinent tax law in several cases provides clarity. Thus, this multi-case comparison strategy aids in developing enhanced planning, decision, and outcome prediction skills (Ridder, 2017). Literature was added through consistently experienced insights gleaned as practicing accounting professionals whose successful negotiation best practices utilize the multi-case method rather than merely teaching and learning tax statutes or simply reading one isolated tax case at a time.

Higher order skills' inculcation into accounting curriculum through practical training mechanisms is still a sorely underutilized approach in accounting education (Suleman, 2018). Employers of accounting graduates continue their decades-long reproaches to academia about the need for imparting analytical and critical analysis skills in the classroom (Chaffer and Webb, 2017). Case studies are continuously cited as one of the most suitable methods for advancing students' abilities to learn how to engage clients, and negotiate and act strategically. Curriculum designers, who strategize to embed such skills into professional accounting programs, and practitioners alike, report that accounting graduates who receive such strategic training through case studies exemplify this vital skillset (Keevy, 2016).

Deciphering judicially accepted and rejected OICs through a unique accumulation of appealed tax court cases give valuable perspectives for gleaning the interactive pre-court settlement negotiations phase between the IRS and taxpayers, as well as providing vivid clarification of key tax courtroom administrative procedures for both novices and experienced accountants alike. Focusing strictly on teaching successful negotiation skills, this study narrowly concentrates on remanded, precedential and Supreme Court offer-in-compromise cases.

Utilizing purposive sampling (Campbell et al., 2020) and analysis of 272 federal OIC tax court cases that were adjudicated between 2004 and 2020, this paper proposes to add to their accounting-professional skillset by providing elucidation of the most successful practices for effective tax debt negotiations techniques. Judicially accepted and rejected OICs that were appealed to tax court, including a few cases that set precedent, provide a natural environment for observing pre-court and post-court negotiations and settlements with the IRS.

Since the study seeks to discover the methodological reasons tax court judges discuss when accepting or rejecting an OIC when applying the publicly accessible

Offer in Compromise Form 656 instructions (IRS OIC instructions) to the public¹ and Internal Revenue Manual instructions) to the public², and Internal Revenue Manual (IRM) standards, the following research questions were explored and answered.

Objectives of this study include promoting a prototype for success negotiations with the IRS

RQ1a. What are the methodological reasons judges state for remanding an OIC case back to IRS Appeals for a "redo" when applying the IRC standards?

RQ1b. What are the methodological reasons judges' states for concurring with the IRS' rejection of an OIC when applying the IRC standards?

RQ2. How are those judicially expressed reasons practically and thematically interrelated?

RQ3. In what way do the emerging judicial decisions correspond to the language of the IRC and the IRM and how might they diverge, if indeed they do?

RQ4: What is the frequency of OIC tax court decisions emergence as precedent setting cases?

The business of accounting in practice compared to academic instruction practices

Accounting academic traditionalists occasionally communicate to students that it is ethical sacrilege to challenge tax debts due to the oft-referenced view against the "frivolous tax argument" notion³. In the classroom, professors purveying barebones cautionary tales about the accounting world, and the obligation to retreat from a variety of accounting improprieties may stoke the fears among new accounting professionals as was the case when a tax court judge chastised a lawyer by asserting that "a member of the bar offers tax protester gibberish as a substitute for legal argument"⁴. Accounting graduates who tend to believe that adherence to the tenets of ethics repeatedly communicated in university classrooms means an absence of strategic representation of clients, often miss out on one of the most highly legitimate lessons for assisting taxpayers; which is how to successfully prepare and negotiate an OIC.

¹ Offer in Compromise Form 656 instructions <https://www.irs.gov/payments/offer-in-compromise>

² Offer in Compromise Form 656 instructions <https://www.irs.gov/payments/offer-in-compromise>

³ The Truth About Frivolous Tax Arguments: <https://www.irs.gov/privacy-disclosure/the-truth-about-frivolous-tax-arguments-section-i-d-to-e>

⁴ See *Edwards v. Commissioner*, T.C. Memo. 2002-169, 84 T.C.M. (CCH) 24 (2002) – the court dismissed the argument that the IRS is not an agency of the United States Department of Treasury as "tax protester gibberish" and stated that "[i]t's bad enough when ignorant and gullible or disingenuous taxpayers utter tax protester gibberish. It's much more disturbing when a member of the bar offers tax protester gibberish as a substitute for legal argument."

Offer in compromise (OIC) astuteness, a context specific tax debt negotiation skill, characterizes one such skill most significantly valued by employers of accounting graduates. Expert tax professionals specializing in tax controversies, already on high frequency, rarely have the bandwidth to advise tax novices on the nuances for successful negotiations pre-employment or in the early stages of employment. Accordingly, for decades, countless international writers have suggested that curriculum changes are essential due to the widening gap between theories and practice (Low et al., 2016; Angola and Reed, 2019). In furtherance of business professionals' advocacy of incorporating "employability" skills that support the understanding of business processes, to bridge the widening gap between education and work, accounting and business researchers propose a curriculum that includes early semester utilization of business simulations (Angola and Reed, 2019).

OIC's have increasingly become one of the most prevalent techniques used by tax controversy and settlement specialists according to the IRS taxpayer advocate reports. Accounting practitioners specializing in tax controversies rarely provide instantaneous guidance in the nuances of negotiation strategies to novice accountants. Accounting apprentices often encounter a competitive post-graduation career marketplace which values their self-preparation with such knowledge of practical strategies pre-employment. However, it was reasoned that such educational activity as exploring the particular techniques that operate to logically confer government acceptance for successful IRS tax debt settlements in an OIC case produces beneficial externalities deriving from a well-conceived OIC methodology.

Moreover, since the tax court decrees that "instructions and other IRS publications are not authoritative sources of federal tax law (Casa de La Jolla Park, Inc. v. Commissioner, 94 T.C. 384, 396, 1990; Brombach v. Commissioner, T.C. Memo. 2012-265, Docket No. 7924-07L)" for successful negotiations, it is essential for taxpayer representatives to practice the use of high-level critical thinking skills. In delivering education, these beneficial externalities drive careers in accounting and law advancement through the use of classic examples of such a transformative activity.

There are three primary criteria within the OIC standard that are related to successful negotiations procedures. These successes correspond to (1) deficiencies in written evidence, (2) procedural failures including not submitting a Form 656 (or 656-L) or 433 (Form 433-A, 433-B, 433-D, 433-F, 433-H) and based on (3) unsuitable justification for IRS to accept the offer. The principal standard for tax court to remands back to the agency level for reconsideration is the settlement officer's misconduct, technically known as "abuse of discretion" by the IRS.

Access to the OIC program lessens economic hardships for taxpayers when successful negotiation skills are

applied; especially for financially distressed taxpayers. Moreover, the National Taxpayer Advocate's (NTA) touts to Congress that achieving the recommended improvements to the OIC system would assist the IRS in reducing its cost for collecting the collectable portion of existing tax liabilities while raising United States (US) government revenue. The NTA describes the proposed newer collection model as a win-win for both taxpayers and the IRS. Indeed, three of the fifty-eight (58) NTA recommended changes to the tax collection system includes making changes in the OIC processes, especially such that access to the OIC system is easier for taxpayers⁵.

IRS Rejection of an OIC

When the IRS settlement officer rejects an OIC, the taxpayer can appeal the rejection of an OIC to the Appeals Office.⁶ There is no court review of the IRS's rejection of an OIC, except when the OIC is submitted in the Collection Due Process (CDP) process in which case the OIC offer will be considered in that process. If there is no resolution with the Appeals Office, a taxpayer can file a petition with the tax court. In *Robinette v. Commissioner*, 439 F.3d 455 (8th Cir. 2006, and 123 T.C. 85, 93 (2004), the Eighth Circuit Court of Appeals explained that the tax court is only authorized to decide whether or not the IRS has followed a valid rule. In other words, since the Tax Court review does not allow the Tax Court to substitute the court's own judgment regarding the decision to accept or reject the OIC except in situations where the IRS has "abused discretion" in following "the (Internal Revenue Manual, IRM) guidelines

⁵ National Taxpayer Advocate 2020 Purple Book, Pages 113, 114 and 121: 16 Improve Offer in Compromise Program Accessibility by Repealing the Partial Payment Requirement and Restructuring the User Fee, NTA 2006 Annual Report 507 S. 2689, 115th Cong. § 17 (2018); H.R. 5444, 115th Cong. § 11203 (2018) (low income waiver); S. 3278, 115th Cong. § 504 (2018) (low income waiver); H.R. 2171, 115th Cong. § 206 (2017); H.R. 4912, 114th Cong. § 206 (2015) LR # Tax Administration Legislative Recommendations National Taxpayer Advocate (NTA) Annual Report References Congressional Bill and Committee Report References (Improve Assessment and Collection Procedures)

17 Modify the Requirement That the Office of Chief Counsel Review Certain Offers in Compromise N/A S. 1793, 15th Cong. § 303 (2017); S. 1578, 114th Cong. § 403 (2015); H.R. 1528, 108th Cong. § 304 (2004) (passed by Senate); S. 882, 108th Cong. § 104 (2003), see also S. Rep. No. 108-257, at 8-9 (2003); H.R. 1528, 108th Cong. § 304 (2003) (passed by House), see also H.R. Rep. No. 108-61, at 43-44 (2003) (Improve Assessment and Collection Procedures) 26 Send Change of Address Notices to an Employer's Old and New Addresses and Promote the Use of Offers in Compromise for Victims of Payroll Tax Fraud. NTA 2012 Annual Report, Most Serious Problem #23, 426-444. Pub. L. No. 113-76, Division E, Title I, § 106 (2014) and subsequent appropriations acts. (Improve Assessment and Collection Procedures)

⁶ See e.g., IRS web page titled "Appeal a rejected OFFER IN COMPROMISE (OIC) - Online Self-Help Tool" (Page Last Reviewed or Updated: 08-Jun-2021, and viewed 10/31/2021. <https://www.irs.gov/appeals/appeal-your-rejected-offer-in-compromise-oic>

established by the IRS itself” such that if the IRS denies the OIC, the Tax Court may review the denial for abuse of IRS discretion, meaning that the IRS acted “arbitrarily, capriciously or without sound basis in fact or law.”⁷

The US Government’s Clemency Provision during Catastrophic Times

As publicized in the 2010 directive to “go easy” demonstrated, IRS employees of the US government’s Collection Division (its “accounts receivable” department), in contrast to that of firms, the IRS’ ultimate concern is “fairness.” Hence, among other things, during specific epic disasters, there was a pattern of allowing substantial leniency for offer-resubmissions since IRS leaders advanced the notion that the “vast majority of the nation’s taxpayers do the right thing” while still continuing to pursue tax evaders. Anecdotally, in discussions, practitioners conclude that due to the imbalances in the IRS’s operations,” coupled with IRS’ case overload, tax practitioners are possibly more likely to prevail when presenting a well-crafted OIC. Prior to our case analyses, a short discussion was provided of the economic impact of a previous pandemic, along with institutional and doctrinal lessons learned through the experience.

Moreover, since the IRS invoked its mission of transparency, and to educate the public such that datasets were provided US Department of the Treasury for the public’s inspection in 2010, opportune utilization of the practical results is propitious as accounting education evolves.

“These datasets are considered high value because they accomplish one or more of these criteria: increase agency accountability and responsiveness, improve public knowledge of agency and its operations⁸ “

History of the US Tax Court, negotiations and offers in compromise

Accountants, businessmen and lawyers’ tireless work as far back as the early 1920’s, for eliminating excessive legalism, for conceptualizing the development of fair tax administration, and for improving the tax laws has long been lauded among national leadership, regardless of party politics (May, 1947). Resultantly, as an entity with certain jurisdictional authorizations, the US Tax Court emanated from the changed conditions brought on by the new taxes in 1924, that caused insufficiencies for the fair

adjudication of tax case disputes in an acceptable manner by the then-established administrative and judicial institutions (*Freytag v. Commissioner* (90-762), 501 U.S. 868 (1991)). The Tax Court’s predecessor, the Board of Tax Appeals (“the Board”) provided that attorneys as well as certified public accountants were then eligible to practice before the Board (B.T.A. RULE 2, July, 1924 ed.). Furthermore, self-representation before the Board was permitted for an individual taxpayer, a member-partner was permitted to represent his/her partnership, and a corporate officer could represent his/her corporation⁹.

Early 1920’s practitioners’ unfamiliarity with notion of agency independence relative to the IRS (including the appeals department) contrasted to the Board (now, the tax court) caused confusion¹⁰. That is, many petitioners expected that the tax court had access to the IRS’ files and thus ostensibly familiar with the details of their case. Moreover, this agency disconnectedness, in conjunction with the 1924 procedures’ newness caused “between 30 and 40%” non-adherence to the Board’s rules, especially in causing practitioners’ ineptitude in presenting defective or insufficient petitions along with flawed supportive pleadings and evidence. Rather than blame the practitioners, however, the Board drew criticism for having overly technical procedural rules (of the Board, and now, tax court), notwithstanding attempts by the Board to make its procedural rules as simple as possible. Until taxpayer representatives became familiar with Board rules and pleadings, delays became prevalent.

Due to the substantial need to collect tax revenue, between 1924 and 1998, Congress’ tradition was to enable the IRS to collect taxes without prior court intervention. Some members of Congress, however, expressed concern about the IRS’s “almost unfettered collecting discretion” and thus were incentivized to take action to resolve this grievance (*United States v. Boechler* (2022), 403 U.S. 190 (1971) [“20-1472 Boechler v. Commissioner (04/21/2022)"]¹¹). Hence, to give

⁷ As stated in the Collection Due Process Desk Book “The Tax Court will overturn a determination it reviews for abuse of discretion standard in CDP cases if the determination is “arbitrary, capricious, clearly unlawful, or without sound basis in fact or law.” *Robinette v. Commissioner*, 123 T.C. 85, 93 (2004), rev’d on other grounds, 439 F.3d 455 (8th Cir. 2006). Last accessed 11/07/2021 at <https://www.irs.gov/pub/irs-utl/CDP%20Deskbook.pdf>

⁸ Open Government Plan 2.1: Department of the Treasury, September 2012 https://www.treasury.gov/open/Documents/open.htm#_Toc332177985

⁹*Freytag v. Commissioner* (90-762), 501 U.S. 868 (1991) involved a 14-week long trial in which US Supreme Justice Blackmun, delivered a considerable history lesson along with the Court’s opinion to the taxpayers’ attorneys. Justice Blackmun elucidated that there is a “distinction between the special trial judges’ authority to hear cases and prepare proposed findings and opinions under subsection (b) (4) and their lack of authority actually to decide those cases, which is reserved exclusively for judges of the Tax Court.” *Freytag v. Commissioner* (90-762), 501 U.S. 868 (1991).

¹⁰ <https://www.irs.gov/appeals/appeals-an-independent-organization>

¹¹ Justice Roberts’ asserted to the IRS: “Congress enacted this collection due process regime in order to protect taxpayers from IRS abuses. It would not have included a rare and harsh jurisdictional deadline to close those courthouse doors, let alone through a vague parenthetical reference to “such matter.” And further Justice Roberts declared that “The amicus briefs are replete with examples of individuals who did not get their day in court because the Tax Court deemed this deadline to be jurisdictional and not subject to equitable tolling. Ms. Castillo’s case is currently pending in the Second Circuit. It is a perfect example of why this Congress who passed this statute would not have wanted this to be the rare and harsh jurisdictional deadline.” See In the Supreme Court of the United States <http://www.supremecourt.gov> > Docket and

taxpayers pre-collection rights within certain limits, Congress was prompted to enact the IRS Restructuring and Reform Act of 1998 ("RRA"). In Boechler, Chief Justice Roberts delivered an extensive history as a stark warning of why legislative protections and court permissions were devised to protect taxpayers from IRS's collection due process abuses.

RRA's passage granted numerous tax debt settlements, payment and relief options that are currently available to financially destitute taxpayers suffering or about to suffer a significant hardship. Besides those typically provided by the Internal Revenue Code (IRC), Taxpayer Assistance Orders¹², audit reconsideration, or bankruptcy, there are three additional categories of tax debt settlement and payment options for taxpayers without the resources to remit the full tax debt in one payment. Periodic payments, rather than a one-time payment is the second payment option for taxpayers who are able to pay the full tax liability. The third option is available to taxpayers who can pay part of the liability, but who conceivably will never have the ability to pay the full tax debt without causing the taxpayer to suffer undue hardship. The fourth option is available to taxpayers unable to pay any of their tax debt without suffering undue hardship¹³.

As the US government's accounts receivable department, in contrast to that of firms, the IRS' ultimate concern is "fairness" as demonstrated in the 2010 directive to "go easy". Moreover, the IRS advances the notion that the "vast majority of the nation's taxpayers do the right thing" although it still pursues tax evaders.

Horizontal equity

Horizontal equity is a concept that calls for a fair tax system that treats similarly situated taxpayers similarly. Given the importance of government revenue from tax collection during periods of budget deficits, a fair and effective tax collecting system is essential. The IRS must endeavor to collect from delinquent taxpayers in order to treat everyone equitably in the collection context; otherwise, law-abiding, complying taxpayers would be at a disadvantage. US Supreme Court cases as far back as the 1930's and the 1950's ruled with care in consideration of fairness in *Bull v. United States* (1935) and *Commissioner v. Glenshaw Glass Co.*, 348 U.S. 426 (1955).¹⁴

see 20-1472- Supreme Court of the United States <https://www.supremecourt.gov › oral arguments>

¹² https://www.irs.gov/irm/part13/irm_13-001-020

¹³ Madison, A. D. (2016). The legal consequences of noncompliance with federal tax laws. *The Tax Lawyer*, 70(1), 367-402. Retrieved from <http://ezproxy.uhd.edu/login?url=https://www-proquest-com.ezproxy.uhd.edu/scholarly-journals/legal-consequences-noncompliance-with-federal-tax/docview/1869923483/se-2?accountid=7109>

¹⁴ Fairness regarding statute of limitations is primarily an instrument of fairness *United States Supreme Court Bull v. United States* (1935) No. 649 Argued:

Certificates of assessment, payments and other specified matters

A long line of cases following the US Supreme Court ruling in *Welch v. Helvering* established that IRS's deficiency determination is presumed correct, and, when seeking a reassessment and redetermination, the taxpayer bears the burden of persuasion and the burden of proof to contradict the presumption of IRS' assessment accuracy and validity¹⁵.

The IRS examination (Audit) function

The IRS examination process may operationalize as "[a]n examination [that] may be conducted by mail or through an in-person interview and review of the taxpayer's records (*United States v. Clarke et al*, U.S. Supreme Court, No. 13-301 (2014) citing prior Supreme Court cases *United States v. Stuart*, 489 U. S. 353, 359 (1989) and *United States v. Powell*, 379 U. S. 48, 57–58 (1964) and citing the statute in its ruling in *Reisman v. Caplin*, 375 U. S. 440, 449 (1964)¹⁶. The interview may be at an

April 9, 1935, Decided: April 29, 1935; and see fairness regarding exemplary or punitive damages *Commissioner v. Glenshaw Glass Co.*, 348 U.S. 426 (1955) *Commissioner of Internal Revenue, Petitioner, v. Glenshaw Glass Company and William Goldman Theatres, Inc.* Supreme Court 348 U.S., 426 75 S.Ct. 473, 99 L.Ed. 483 See 2006 Taxpayer Advocate Report, supra note 2, at 6–7 (explaining that compliant taxpayers help support shortcomings of delinquent taxpayers and in part that IRS enforcement against delinquent taxpayers could help collect more tax). For the purposes of this Note, a delinquent taxpayer refers to a taxpayer with a properly assessed tax liability that does not pay the amount owed to the IRS. A compliant taxpayer is a taxpayer who pays their tax liability in full and on time.

¹⁵ *Welch v. Helvering*, 290 U.S. 111, citing *Jones v. Commissioner of Internal Revenue*, US Court of Appeals for the Seventh Circuit - 38 F.2d 550 (7th Cir. 1930) February 27, 1930 stating "The ruling of the Commissioner of Internal Revenue being prima facie correct, the burden of proof is upon the taxpayer to establish his right to the deduction claimed. *United States v. Rindskopf*, 105 U.S. 418, 26 L. Ed. 1131; *Wickwire v. Reinecke*, 275 U.S. 101, 48 S. Ct. 43, 72 L. Ed. 184. *Welch v. Helvering*, 290 U.S. 111. The citing list of cases appears at <https://cite.case.law/citations/?q=3921184>. See also *Barrington v. Commissioner*, T.C. Memo. 2022-68, July 6, 2022, Buch, J., Dkt. No. 1781-14, US v. Kimball, Civil No. 2: 14-CV-521-DBH (D. Me. June 24, 2016) quoting *Stuart v. United States*, 337 F.3d 31, 35 (1st Cir. 2003) (quoting *Geiselman v. United States*, 961 F.2d 1, 6 (1st Cir. 1992); *Lefebvre v. Commissioner of Internal Revenue*, 830 F.2d 417, 419 n.3 (1st Cir. 1987).

¹⁶ Over as many years, the US Supreme Court continuously holds that except when operating in "bad faith" the IRS can conduct unencumbered audit examinations under its broad statutory authority in determining taxability (*United States v. Clarke et al*, U.S. Supreme Court, No. 13-301 (2014) citing prior Supreme Court cases *United States v. Stuart*, 489 U. S. 353, 359 (1989) and *United States v. Powell*, 379 U. S. 48, 57–58 (1964) and citing the statute in its ruling in *Reisman v. Caplin*, 375 U. S. 440, 449 (1964) notes that compliance to the statute is unchallengeable except when the IRS an inappropriate purpose "7602. Examination of books and witnesses. "For the purpose of ascertaining the correctness of any return, making a return where none has been made, determining the liability of any person for any internal revenue tax or the liability at law or in equity of any transferee or fiduciary of any person in respect of any internal revenue tax, or collecting any such liability, the Secretary or his delegate is authorized - "(1) To examine any books, papers, records, or other data which may be relevant or material to such inquiry; "(2) To summon the person liable for tax or required to perform the

IRS office (office audit) or at the taxpayer's home, place of business, or accountant's office (field audit). Taxpayers may make audio recordings of interviews, provided they give the IRS advance notice."¹⁷

The IRS collection function

The IRS collection process starts with a bill from the IRS if a taxpayer does not pay the amount owed for a tax in full when filing a tax return. This collection process continues until the account is satisfied or until the IRS may no longer legally collect the tax; for example, when the time or period for collection expires. The unpaid balance is subject to penalties and interests that compounds daily and a monthly late payment penalty. In its January 8, 1991, decision in *John L. Cheek v. United States*, related to the validity of IRS's collection function the Supreme Court (498 U.S. 192 111 S.Ct. 604, 112 L.Ed.2d 617) refuted the taxpayer's claims to the contrary in ruling that the IRS does indeed retain the constitutional to collect taxes.¹⁸

Appeals Officer Responsibilities (regardless of court / or Pre-Court)

Appeals officers are required to "(A) verify that the requirements of any applicable law [such as confirming that the statute of limitations had not run]¹⁹, or administrative procedure have been met; (B) consider issues validly raised at the hearing under section 6330(c)(2); and (C) determine whether the proposed collection action balances the need for efficient collection of taxes with the taxpayer's legitimate concern that the collection action be no more intrusive than necessary (*Aldo v. Fonticiella v. Commissioner*, 2019 T.C. Memo. 74, United States Tax Court, Filed: June 13th, 2019, citing *Tucker v. Commissioner*, *Tucker v. Commissioner*, 135 T.C. 114 (2010), *aff'd*, 676 F.3d 1129 (D.C. Cir. 2012).²⁰"

act, or any officer or employee of such person, or any person having possession, custody, or care of books of account containing entries relating to the business of the person liable for tax or required to perform the act, or any other person the Secretary or his delegate may deem proper, to appear before the Secretary or his delegate at a time and place named in the summons and to produce such books, papers, records, or other data, and to give such testimony, under oath, as may be relevant or material to such inquiry; and "(3) To take such testimony of the person concerned, under oath, as may be relevant or material to such inquiry."

¹⁷ FS-2006-10, January 2006, last accessed October 10, 2021: <https://www.irs.gov/pub/irs-news/fs-06-10.pdf>

¹⁸ IRS Topic 201, last accessed October 10, 2021: <https://www.irs.gov/taxtopics/tc201>

¹⁹ *Macdonald v. Commissioner*, 2014 T.C. Memo. 42, 107 T.C.M. 1223, Docket No. 26118-08L

²⁰ Collection Due Process Deskbook last accessed on 11/07/2021 at <https://www.irs.gov/pub/irs-utl/CDP%20Deskbook.pdf> See also Treas. Reg. §§ 301.6320-1(e)(3) Q&A-E1, 301.6330-1(e)(3) Q&A-E1.

Issues within US Tax Court Jurisdiction

US Tax court is limited²¹ to instances of abuse of discretion, and therefore cannot make determinations or alter proceedings such as liens that effect property title (clouds), credit ratings (creditworthiness), wrongs committed by IRS's employees, including unauthorized collection actions and only has refund jurisdiction in the context of deficiency proceedings. Issues within the tax court's purview were previously those raised at the administrative hearing, issues relating to the accuracy of Notices of Federal Tax Lien (NFTL) or the proposed levy, reviews as to whether IRS Appeals verified compliance with applicable law even if the taxpayer did not raise the particular issue at the administrative hearing, such as a defective or improper notice of deficiency (*Macdonald v. Commissioner*, 2014 T.C. Memo. 42, 107 T.C.M. 1223).

April 21, 2022 decision by the US Supreme Court

Clarification of differing jurisdiction decisions among Appeals court circuits was recently made on April 21, 2022, by the US Supreme Court. Circuit courts sporadically held that jurisdiction was not tolled unless taxpayers filed a petition seeking review of a notice of determination within 30 calendar days. Hence, prior to the *Boechler* decision by the US Supreme Court, a petition filed beyond the 30-calendar-day period was likely dismissed for lack of jurisdiction.²² However, the US Supreme Court in its April 21, 2022, unanimous decision, reversing the United States Court of Appeals for the 8th Circuit, held that the Internal Revenue Code's 30-day time limit to file a petition for review is subject to equitable tolling. Justice Barrett delivered the opinion of the court writing that:

"Jurisdictional requirements cannot be waived or forfeited, must be raised by courts sua sponte, and, as relevant to this case, do not allow for equitable exceptions. ... To that end, a procedural requirement was treated as jurisdictional only if Congress "clearly states" that it is. ... This case therefore turns on whether Congress has clearly stated that §6330(d)(1)'s deadline to petition for review of a collection due process determination is jurisdictional. ... Section 6330(d)(1) does not expressly prohibit equitable tolling, and its short, 30-day time limit is directed at the taxpayer, not the court. ... None of this is to say that *Boechler* is entitled to equitable tolling on the facts of this case. That should be

²¹ *Macdonald v. Commissioner*, 2014 T.C. Memo. 42, 107 T.C.M. 1223, Docket No. 26118-08L citing *Kluger*: "We are a court of limited jurisdiction, see sec. 7442; *Kluger v. Commissioner*, 83 T.C. 309, 314 (1984), and section 6330(d)"

²² I.R.C. §§ 6320(c), 6330(d)(1); Treas. Reg. §§ 301.6320-1(f)(1), 301.6330-1(f)(1); *Stein v. Commissioner*, T.C. Memo. 2004-124 and see *Guerrier v. Commissioner*, T.C. Memo. 2002-3.

determined on remand. It holds that §6330(d)(1)'s filing deadline, like most others, can be equitably tolled in appropriate cases.²³

In clarifying the valuable expert procedures utilized by professionals engaged in OIC cases that result in better outcomes the skills of both practitioner and academics are enhanced by this study's addition to the literature.

The remainder of the paper is organized as follows. Section 2 provides Materials and Methods including definitions, practical requirements for starting the OIC process, and a historical overview including institutional developments within the OIC program from the 2008 tax years to the 2020 and selection of OIC Tax Court cases, Section 3 provides Results and Discussion, Section 5 provides conclusions.

What is an Offer in Compromise (OIC)?

An Offer in Compromise (an "OIC") is a taxpayer-IRS process which allows distressed taxpayers to negotiate tax-debt terms with the IRS, and possibly ask for settlement of the proposal before falling to complete financial failure (Boechler, 2022).²⁴ Offer in Compromise is an increasingly popular means of collecting tax debts while allowing for reorganization by financially troubled individuals, families and small businesses ("distressed taxpayers"). OIC's are described in the IRS' Data Book (fiscal year 2017 and succeeding fiscal years) as "... a proposal by a taxpayer to the Federal Government that would settle a tax liability for payment of less than the full amount owed."²⁵ Slightly different from the IRS website (Topic 204 Offers in Compromise), the 2017 IRS Data Book states that "An offer in compromise is a proposal by a taxpayer to the Federal Government that would settle a tax liability for payment of less than the full amount owed. Absent special circumstances, an offer will not be accepted if the IRS believes the liability can be paid in full as a lump sum or through a payment agreement."²⁶

²³ [under section 6330(c)(1)]; compare *United States v. Boechler* (2022), 403 U.S. 190 (1971) ["20-1472 *Boechler v. Commissioner* (04/21/2022)"]

²⁴ Boechler explains an offer-in-compromise under § 6330(c)(2)(A)(iii) Under an offer-in-compromise, "the IRS may absolve a portion of a taxpayer's liability if the remaining tax debt is paid in a lump sum or over an agreed upon period of time"; also see IRS Topic No. 204 Offers in Compromise, last viewed May 2, 2021: <https://www.irs.gov/taxtopics/tc204>

²⁵ Compare this to 2013 Data Book page 52, Table 16, footnote 8. "An offer in compromise is an agreement, binding both the taxpayer and the Service, which resolves the taxpayer's tax liability where it has been determined that there is doubt as to the taxpayer's liability, doubt as to the Service's ability to collect the balance due, taxpayer does not have the financial ability to fully pay the liability within the Collection Statute Expiration Date (CSED) plus 5 years, or there is a serious economic hardship or other exceptional circumstance which warrants acceptance of less than full payment of the taxes owed."

²⁶ IRS 2017 Data Book at page 41, note 6. Although the website expresses the meaning of an Offer in Compromise as a settled agreement, the IRS Data Books state that an Offer in Compromise is merely a proposal (not yet settled). This case will not focus on this slight difference in characterization of this conceptual tool.

Although the IRS has provided more consistent steps for applying to compromise the tax debts of a delinquent taxpayer, the provisions for a successful outcome in this process are quite intricate so as to include detailed sections for Forms to Use, Application Fee, Payment Options (Lump Sum Cash Offer and Periodic Payment Offer), Suspension of Collection, Right to Appeal, and the circumstances under which there is a Return of an Offer without consideration of the offer. An instructive booklet and a pre-qualifier tool to assist the taxpayer in determining their eligibility is also included.

IRS guidelines for taxpayer payments were initially adopted in 1996. Rules modifying the measurement of the taxpayer's ability to pay were revised in May 2012. By early October 2019 (superseding August 2015) clarifying legislation had been passed such that directives and explanations were included²⁷. Among these directions in the Internal Revenue Manual, the utilization of discretion through "Effective Tax Administration" in hardship cases was highlighted.²⁸

Absent special circumstances, an offer will not be accepted if the IRS believes that the taxpayer can pay more than what is offered; either in a lump sum or through a payment agreement.²⁹ The IRS provides the following OIC guidance, with explanations for the terms doubt as to liability, doubt as to collectability, effective tax administration:

"Reasons for the Offer

The IRS may accept an OIC based on one of the following reasons:

First, the IRS can accept a compromise if there is doubt as to liability. A compromise meets this criterion only when there's a genuine dispute as to the existence or amount of the correct tax debt under the law.

Second, the IRS can accept a compromise if there is doubt that the amount owed is fully collectible. Doubt as to collectability [sic] exists in any case where the taxpayer's assets and income are less than the full amount of the tax liability.

Third, the IRS can accept a compromise based on effective tax administration. An offer may be accepted based on effective tax administration when there is no doubt that the tax is legally owed and that the full amount owed can be collected, but requiring payment in full would either create an economic hardship or would be unfair and inequitable because of exceptional circumstances."

Although doubt as to liability is available, in their

²⁷Effect on Other Documents "This material supersedes IRM 5.8.11 dated August 5, 2015. Audience SB/SE Compliance employees Effective Date (10-04-2019); Nikki C. Johnson, Director, Collection Policy. https://www.irs.gov/irm/part5/irm_05-008-011

²⁸ See Appendix B, excerpts from the Internal Revenue Manual (IRM), Part 5.

²⁹ IRS 2017 Data Book at page 41, note 6. Although the website expresses the meaning of an Offer in Compromise as a settled agreement, the IRS Data Books state that an Offer in Compromise is merely a proposal (not yet settled).

admonishment, the court in *Baltic* advised taxpayers not to delay. That is, delays are proposing an offer-in-compromise is contrary to the Code's urging to taxpayers to compromise rather than litigation to settle their IRS disputes³⁰.

Contesting the accuracy of putative tax debts – Examination versus collection function

When a taxpayer disagrees with the accuracy of a tax debt, they can simply submit an offer in compromise based upon doubt as to liability (OIC-DATL) on the IRS promulgated Form 656-L17. Since the OIC-DATL is not based upon the taxpayer's financial conditions, IRS does not require the inclusion of a collection information statement, nor does IRS require explanations of a taxpayer's financial information related to capacity to pay, nor is a user fee or deposit required in contrast to OIC's based on a taxpayer's economic circumstances³¹. However, the IRS does require a detailed explanation which included the underlying facts and law supporting the grounds for the taxpayer's assertion of the incorrectness of the assessed debt³² as well as a nominal monetary offer of at least \$1. Moreover, IRS' examination function is activated with an OIC-DATL since the liability doubts focus on legal or factual questions as to correctness alleged tax obligation, rather than on the taxpayer's economic hardship concerns evaluated in IRS' collection functions.

Strategic tax savings decisions by individuals and businesses

OIC's are leading indicators³³ of the importance of tax considerations in individuals' and firms' post-economic crisis, and post-pandemic reorganization decisions. Significant tax savings can result from successfully completing the OIC process, in contrast to such standard reorganization tools as business bankruptcy prepacks, or exchange offers; and/or even the uncomplicated Chapter 13 bankruptcy reorganization plans for individuals.

IRS' AR Collections and Funding Considerations³⁴

Similar to accounts receivable departments that are charged with collecting money owed to an organization,

³⁰ In *Baltic*, referring to IRC Section 6330: Although the Baltics had a chance earlier in the process to contest their liability in court, the Baltics made their offer too late and just as the IRS was preparing to seize the couple's property.

³¹ I.R.M. 5.8.1.13.4. Indeed, the IRS is in fact statutorily prohibited from requesting a financial statement from the taxpayer in an OIC-DATL. IRC § 7122(d)(3)(B)(ii)

³² I.R.M. 5.8.1.13.4.

³³ See Table 1 and Figure 1 that show the increased OIC submissions after the 2010 economic crisis

³⁴ 2019 Internal Revenue Service Data Book, October 1, 2018 to September 30, 2019 Publication 55-B (Rev. 6-2020) <https://www.irs.gov/pub/irs-pdf/p55b.pdf>

the United States (US) Internal Revenue Service (IRS) serves in the unique role of leading the team for the US government's accounts receivable department charged with keeping the US's finances balanced. Because of differing missions in relationship its stakeholders, the objectives and goals of government accounts receivable departments may differ slightly in contrast to the accounts receivable departments of public company and private companies. Taxpayers are limited after a compromise is reached and Form 870 signed such that there is a waiver of their right to challenge liability in Tax Court. Hence, the implications are that OIC settlements reduce the inefficient use government resources.

OIC – past and present

On March 22, 2010, in an eerily similar US economy downturn³⁵, the IRS instructed its auditors to relax the criteria on taxpayers seeking an "offer in compromise" when taxpayers negotiate for a lower tax bill because of financial hardship due to lack of resources. In the two years prior to this 2010 announcement, the US government provided Economic Stimulus Payments, which were special payments associated with the Economic Stimulus Act of 2008 which were generally provided to eligible taxpayers in 2008 and 2009.³⁶ In the years following IRS' 2010 mandate to go easy on taxpayers seeking an OIC³⁷, the acceptance rates of OIC's increasingly grew from twenty percent, then loomed around forty percent until the slightly precipitous 2019 drop to thirty-three percent. In the years following that critical 2010 fiscal year, in total, the IRS received four times the number of Offers in Compromise (reportedly incomplete submissions, and therefore untabulated) applications during that period. In case-advances beyond the initial application stage, the IRS Appeals division alone (to which application-denials are escalated for further consideration) received 11,043, closed 11,149 and had pending 5,182 Offers in Compromise cases (Figure 1 and Table 1).³⁸

Simplification, accessibility, and other pandemic-driven IRS slowdowns – The simplicity and accessibility push

In late 2019, just coincidentally, a few months before the March, 2020 Covid-19 pandemic (hereinafter, the "2020-pandemic"), the National Taxpayer Advocate's (NTA)

³⁵ This was ten years before the most recent March 2020 International and National shutdown and ensuing economic downturn due to the Covid-19 pandemic.

³⁶ 2010 Data Book, page 47; <https://www.irs.gov/pub/irs-soi/10datbk.pdf>

³⁷ IRS relaxes OIC rules, by Jay Hefflin - 03/22/10 04:56 PM EDT 2, Last viewed January 24, 2021: <https://thehill.com/policy/finance/88315-irs-relaxes-oic-rules>

³⁸ Id. IRS Table 21, Page 49.

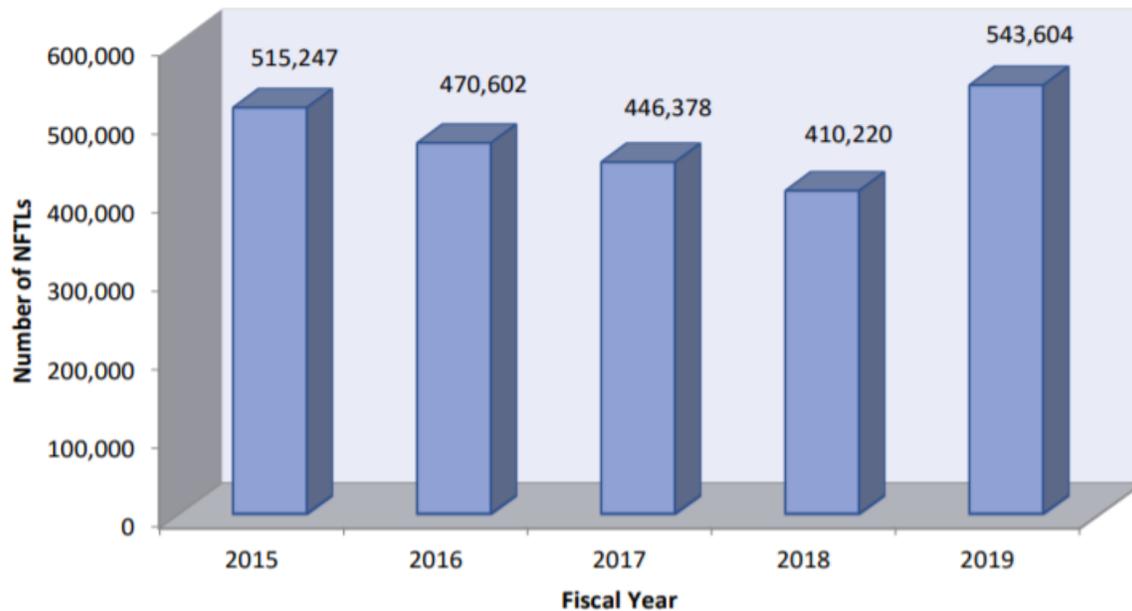


Figure 1. Number of NFTLs for Fys 2015 through 2019
Source: FRS Data book for FYs 2015 through 2019

submitted its annual report of recommendations in which it continuously advocates for taxpayer-favored improvements to Congress. The first of the two NTA's OIC recommendations is to make user fees less onerous for taxpayers already facing hardships. And, the second recommendation is to simplify the submission process by eliminating the step of a "Chief Counsel Review" for certain OIC cases.³⁹

Tax lien notice suspensions⁴⁰

During the ensuing months, following the pandemic's onset, the IRS introduced the People First Initiative⁴¹ which suspended suspending new Notices of Federal Tax Lien (NFTL).

"In response to the economic impacts of the COVID-19 virus on taxpayers, the IRS initiated the People First Initiative, which included suspending new NFTL filings during the period of April 1, 2020 through July 15, 2020, unless exigent circumstances existed. However, the IRS would continue to take steps where necessary to protect

all applicable statutes of limitations that were in jeopardy of expiring."⁴²

Figure 1 shows the annual NFTL filings for the past five fiscal years. NFTL filings reached a peak of 1,096,376 in Fiscal Year (FY) 2010 and declined through FY 2018, reaching a low of 410,220 in that year. This decrease parallels the decline in the number of revenue officers of over 48 percent, from 5,922 at the end of FY 2010 to 3,028 at the end of FY 2018. However, NFTL filings increased by 33% from FY 2018 to FY 2019 (410,220 to 543,604).⁴³

Congressional policy continues to evolve toward yielding authority to the IRS to accept reduced payment amounts in settlement of delinquent tax accounts. Discretionary decisions of the IRS in favor of the requesting taxpayer had been inconsistent, unreliable and unmet over the years since the inception of such provisions. Over time, however, the IRS intermittently developed more reliable, consistent processes and relaxed its policies for accepting reduced delinquent tax payments.

³⁹ 2020 National Taxpayer Advocate Purple Book, report to the US Congress, "Improve Offer in Compromise Program Accessibility by Repealing the Partial Payment Requirement and Restructuring the User Fee" and "Modify the Requirement That the Office of Chief Counsel Review Certain Offers in Compromise"

⁴⁰ Tax Lien Notice, also known as Notice of Federal Tax Lien (NFTL) is disseminated such that "The IRS files a public document, the Notice of Federal Tax Lien, to alert creditors that the government has a legal right to [a taxpayer's] property."

⁴¹ See footnote 4 (below) .

⁴²Treasury Inspector General for Tax Administration, Fiscal Year 2020 Statutory Review of Compliance With Notice of Federal Tax Lien Filing Due Process Procedures, September 17, 2020: Impact on Taxpayers After filing a Form 668(Y)(c), Notice of Federal Tax Lien (NFTL), the IRS must notify the affected taxpayers in writing, at their last known address, within five business days of the NFTL filings. Taxpayers may not be timely advised of their appeal rights if the IRS does not comply with this statutory requirement. <https://www.treasury.gov/tigta/auditreports/2020reports/202030068fr.pdf>

⁴³ Id. Fiscal Year 2020 Statutory Review of Compliance With Notice of Federal Tax Lien Filing Due Process Procedures <https://www.treasury.gov/tigta/auditreports/2020reports/202030068fr.pdf>

Table 1. Offer-in-Compromise (OIC) Data excerpted from Appeals Workload, by Type of Case, Fiscal Year 2001 through 2019 – IRS.

	Level of case	Change	Received cases	% Totalapp received	% Change received	Closed cases	% Totalapp closed	% Change closed	Pending Fiscal Year Ending 9-30	% Totalapp pending	% Change pending
2020	Totalapp FY Cases		57,573			62,997			54,554		
	Totalapp Change		-27,713		-32.50	-10,210		-13.90	-6,060		-10.00
	OICapp Cases		5,011	8.70		5,121	8.10		4,808	8.80	
	OICapp Change		-1,830		-26.80	-1,177		-18.70	-269		-5.30
2019	Totalapp FY Cases		85,286			73,207			60,614		
	Totalapp Change		-7,144		-7.70	-21,625		-22.80	11,047		22.30
	OICapp Cases		6,841	8.00		6,298	8.60		5,077	8.40	
	OICapp Change		-2,023		-22.80	-2,504		-28.40	376		8.00
2018	Totalapp FY Cases		92,430			94,832			49,567		
	Totalapp Change		-11,144		-10.80	-12,282		-11.50	-1,861		-3.60
	OICapp Cases		8,864	9.60		8,802	9.30		4,701	9.50	
	OICapp Change		-700		-7.30	-665		-7.00	-103		-2.10
2017	Totalapp FY Cases		103,574			107,114			51,428		
	Totalapp Change		-10,788		-9.40	-4,231		-3.80	-3,856		-7.00
	OICapp Cases		9,564	9.20		9,467	8.80		4,804	9.30	
	OICapp Change		178		1.90	893		10.40	-49		-1.00
2016	Totalapp FY Cases		114,362			111,345			55,284		
	Totalapp Change		492		0.40	-6,328		-5.40	2,315		4.40
	OICapp Cases		9,386	8.20		8,574	7.70		4,853	8.80	
	OICapp Change		-236		-2.50	-1,306		-13.20	675		16.20
2015	Totalapp FY Cases		113,870			117,673			52,969		
	Totalapp Change		262		0.20	2,201		1.90	-4,404		-7.70
	OICapp Cases		9,622	8.40		9,880	8.40		4,178	7.90	
	OICapp Change		391		4.20	893		9.90	-264		-5.90
2014	Totalapp FY Cases		113,608			115,472			57,373		
	Totalapp Change		-9,505		-7.70	-15,704		-12.00	-1,973		-3.30

Table 1. Cont'd

	OICapp Cases	9,231	8.10		8,987	7.80		4,442	7.70	
	OICapp Change	-464		-4.80	-870		-8.80	214		5.10
2013	Totalapp FY Cases	123,113			131,176			59,346		
	Totalapp Change	-11,948		-8.80	-13,277		-9.20	-6,947		-10.50
	OICapp Cases	9,695	7.90		9,857	7.50		4,228	7.10	
	OICapp Change	199		2.10	-307		-3.00	-183		-4.10
2012	Totalapp FY Cases	135,061			144,453			66,293		
	Totalapp Change	-13,266		-8.90	1,900		1.30	-10,340		-13.50
	OICapp Cases	9,496	7.00		10,164	7.00		4,411	6.70	
	OICapp Change	-806		-7.80	-237		-2.30	-704		-13.80
2011	Totalapp Cases	148,327			142,553			76,633		
	Totalapp Change	12,572		9.30	9,463		7.10	3,854		5.30
	OICapp Cases	10,302	6.90		10,401	7.30		5,115	6.70	
	OICapp Change	-741		-6.70	-748		-6.70	-67		-1.30
2010	Totalapp FY Cases	135,755			133,090			72,779		
	Totalapp Change	10,579		8.50	20,204		17.90	777		1.10
	OICapp Cases	11,043	8.10		11,149	8.40		5,182	7.10	
	OICapp Change	311		2.90	532		5.00	-45		-0.90
2009	Totalapp FY Cases	125,176			112,886			72,002		
	Totalapp Change	9,357		8.10	6,164		5.80	12,103		20.20
	OICapp Cases	10,732	8.60		10,617	9.40		5,227	7.30	
	OICapp Change	174		1.60	306		3.00	362		7.40
2008	Totalapp FY Cases	115,819			106,722			59,899		
	Totalapp Change	13,550		13.20	2,293		2.20	8,397		16.30
	OICapp Cases	10,558	9.10		10,311	9.70		4,865	8.10	
	OICapp Change	-239		-2.20	-978		-8.70	278		6.10
2007	Totalapp FY Cases	102,269			104,429			51,502		

Table 1. Cont'd

	Totalapp Change	5,131		5.30	1,870		1.80	-3,670		-6.70
	OICapp Cases	10,797	10.60		11,289	10.80		4,587	8.90	
	OICapp Change	335		3.20	-1,557		-12.10	-480		-9.50
	Totalapp FY Cases	97,138			102,559			55,172		
2006	Totalapp Change	-2,780		-2.80	-38		-0.04	-5,659		-9.30
	OICapp Cases	10,462	10.80		12,846	12.50		5,067	9.20	
	OICapp Change	-4,468		-29.90	-4,999		-28.00	-2,372		-31.90
	Totalapp FY Cases	99,918			102,597			60,831		
2005	Totalapp Change	1,241		1.30	-1,349		-1.30	-3,956		-6.10
	OICapp Cases	14,930	14.90		17,845	17.40		7,439	12.20	
	OICapp Change	-1,838		-11.00	-39		-0.20	-2,907		-28.10
	Totalapp FY Cases	98,677			103,946			64,787		
2004	Totalapp Change	299	0.30		19,269	22.80		-7,208	14.40	
	OICapp Cases	16,768	17.00		17,884	17.20		10,346	16.00	
	OICapp Change	-90	-0.50		4,423	33		-1,036	-8.10	
	Totalapp FY Cases	98,378			84,677			71,995		
2003	Totalapp Change	21,981		29	16,662		24	12,735		21.50
	OICapp Cases	16,858			13,461			11,382		
	OICapp Change	NA			NA			NA		
	Totalapp FY Cases	76,397			68,015			59,260		
2002	Totalapp Change	8,199	12		13,267	24		6,978	13	
	OICapp Cases	NR			NR			NR		
	OICapp Change	NR			NR			NR		
2001	Totalapp FY Cases	68,198			54,748			52,282		
	Totalapp Change	13,405	24		-238	-0.40		13,557	35	

Source: Appeals Workload, by Type of Case and Fiscal Year. <https://www.irs.gov/statistics/soi-tax-stats-appeals-workload-by-type-of-case-irs-data-book-table-27> (from which the authors manually collected, isolated and analyzed only the applicable "Offers in Compromise cases" appeals data from the linked files [that] are available as Microsoft Excel® files)

Exceptional circumstances

Exceptional circumstances occur when a disadvantaged taxpayer, such as an individual who is disabled, chronically ill or when the taxpayer is unable to enter a typical OIC, that is, when the IRS recognizes that these unplanned events or life circumstances such as serious or chronic illness may reduce assets while incurring major liabilities. Hence, in exceptional circumstances, the IRS will greatly reduce the debt by accepting an OIC in such circumstances which could impair a taxpayer's ability to provide for himself or herself or a family, and it is impossible for the taxpayer to manage the financial arrangements set forth by the IRS even when the taxpayer is obligated to pay the full amount. In such an exceptional circumstances case, if the taxpayer does not have the assets to pay the full amount due after computing an offer amount for the OIC, the first step after this computation in negotiating with the IRS is to submit a narrative that accompanies the OIC explaining the taxpayer's exceptional circumstances. When properly presented, the IRS will usually accept the OIC due to these exceptional circumstances to help taxpayers avoid economic hardship.

Examples of exceptional circumstances were provided by Tax Court Judge Laro in *Gregg Bartl et ux.* T.C. Memo 2010-43 in which the tax court stated "One example that involves a taxpayer who provides fulltime care to a dependent child with a serious long-term illness. A second example involves a retired taxpayer who would lack adequate means to pay his basic living expenses where his only asset, a retirement account, has to be liquidated. A third example involves a disabled taxpayer with a fixed income and a modest home specially equipped to accommodate his disability, who is unable to borrow against his home because of his disability.

Initial screening of OIC

The Doubt as to Liability (DATL) Unit of the IRS is responsible for the initial screening for the processability of an Offer in Compromise. Classification as "processable" or "not processable" is determined when the DATL unit receives an OIC.

The IRS will return the OIC to the taxpayer upon identifying the following factors in an OIC submission, but only with the following specific resolution noted exceptions. That is, the IRS will declare the DATL offer not processable without further action by the IRS when not meeting such exceptions.

MATERIALS AND METHODS

In providing a teaching prototype, this study starts by highlighting and explaining the current policies and procedures that garner success in negotiating with the United States Internal Revenue Service (the "IRS") at the IRS Appeals level and US Tax Court. This

exploration entails aggregating a collection of several cases adopted for the framework of this multi-case study's research design. Substantive coding methods are applied, including open and selective coding measures to the adjudicator's statements to focus on the pivotal issues of 272 tabulated summaries of offer-in-compromise (OIC) cases. Hence, this paper's analyses of cases provide a set of comprehensive strategies for navigating the demanding OIC system.

A case study research design was utilized. With particularity as to the complexity of a single framework of cases (OIC tax court cases), this study was designed for the purpose of coming to understand the IRS' and tax court's adjudicatory activities and decisions that affect significant tax obligations within a given timeframe (Creswell and Poth, 2016).

Qualitative inquiry and research design: Choosing among five approaches (Sage publications) Identifying the collection of cases befitting the framework of this study of OIC tax court decisions is the preliminary step in a case study design. Since the context of this study informs both the boundaries of the selected cases and the various characteristics of each specific case (Ridder, 2017), the selected tax cases were described as to its singularity linked with this study's specific framework such that the association among the cases and the framework of this study do not depict certain specific, isolated judicial decision outcomes. Hence, while using a bounded system for this case study design, the incongruity between or among the common context and the different types of OIC tax court cases studied herein, is not necessarily separate as to (1) the stated methodological reasons for judges rejecting an OIC when applying the IRC standards, (2) the practical and thematic interrelatedness of the judicially expressed reasons for a given decision, (3) the ways the emerging judicial decisions correspond to- or diverge from the language of the IRC and the IRM, or (4) the precedent setting frequency of OIC tax court decisions. Analogous to these inquiries, the (1) accepted offers (successful negotiations) contrasted with rejected offers, or (2) self-representation cases (pro se) compared to professional representation, or (3) precedent setting as opposed to non-precedential cases was mapped.

Population, sample selection and data

Population

Approximately thirty-two current United States Tax Court judges (United States Tax Court, 2021) comprise the judicial population of this study⁴⁴. Within the population of 32 tax court judges, with 1 among the 8 judges designated at the Chief Judge, 20 are senior judges and 4 are Special Trial Judges, with one among the special judges designated as the Chief Special Trial Judge. In that the specialty of the tax court focuses generally on tax cases, while 5 of the judges majored in accounting, 3 are certified public accountants (CPA's), one of which is also Certified in Tax Law by a State Board of Legal Specialization and another two non-CPA's are Certified in Tax Law by a State Board of Legal Specialization and 6 specialized in tax litigation during their years of practice and 4 have worked with pro bono programs for low income taxpayers, 11 worked for the Department of Justice in the tax division, 14 worked as law clerks for federal judges of which 2 clerked for US Supreme Court Justices.

Sample selection and data

The authors manually searched and merged the data from Small

⁴⁴ United States Tax Court, 2021, <https://www.ustaxcourt.gov/judges.html>

Business Taxes and Management⁴⁵, Case Mine⁴⁶, Court Listener⁴⁷, Leagle.com⁴⁸, US Tax Court Judges website, United States Tax Court website case searches through its Tax Week Analytics repository at the US Tax Court Case Management System website⁴⁹, and the IRS Data Book / Taxpayer Advocate's Yearly Purple Book Report database for the OIC years 2004 through 2020. The first sample includes 741 tax court case observations. They exclude all non-OIC tax court cases. The final sample includes 272 tax year OIC-only tax court case observations. Precedential OIC cases starting in the year 2004 to August 3, 2021 were drawn from the Court Listener database since one of the precedential cases was remanded three times over the span of years between 2004 and was finalized in August of 2021. After examining the sources searched, the Court Listener database was utilized for our tabulated cases since each OIC case was available from this source.

Other than visual content analysis, the basic Excel software package was used to generate the frequencies of specific categories of Appeals, OIC's and outcomes included in the cases.

RESULTS AND DISCUSSION

It was found that IRS appeals officers and tax court judges (adjudicators) primarily base OIC case rejections, and thus failed negotiations, on deficiencies in written evidence, procedural failure, and on inapposite reasoning. Deficiencies in written evidence and procedure typically result in the adjudicators granting a "redo's" and pathways to acceptance, whereas without the requisite case-specific analysis to match each unique set of facts, deficiencies in reasoning result in outright OIC rejections. In analyzing the detailed reasons for acceptance and rejections, valuable insights are gleaned into the fundamentals for successful OIC's

Table 1 present's descriptive statistics for all accepted and rejected OIC's received by the IRS between years 2004 and 2020 for both tax court and non-tax court OIC's expressed in absolute value and percentage. Nine of the OIC tax court cases were for taxpayers seeking innocent spouse relief. Since the topic of these cases is pertinent to this research, these cases were not deleted from the sample. We deleted the eighteen cases that were related to a particularly predatory partnership coined the "Hoyt partnership" whose promoter was convicted to a criminal prison sentence.

Table 2 presents the names and applicable statutes of the OIC tax court cases that were cited by other tax court cases as precedent. Precedential OIC tax court cases comprise, as expected, a small, yet significant fraction of the overall tax court cases. The significance of the precedential cases is reflected in the fact that 4 of the 5 precedential cases were cited multiple times. That is, in reviewing the precedential OIC tax court cases were cited

34 times overall. One case was cited 1 time, one was cited 8 times, one was cited 5 times, another case was cited 11 times and another was cited 9 times in other opinions. On the other hand, one OIC tax court case's citations were significant enough to affect the cross-sectional variation among non-OIC tax court cases and OIC tax court cases, and non-tax-court OIC's. These results are consistent with the amalgamation of yearly Data Book results between 2004 and 2020 as to number of filings and changes in rates OIC acceptance and rejection by the IRS. Recent reports of the number along with the percentages of IRS Offers in Compromise received, accepted, and rejected are shown in Table 1. Figure 2 show the Illustrative summary of the IRS' OIC Initial screening for processability.

In untabulated results, OIC tax court case citations comprised a fraction (272 of 741 or 36.71%) of total OIC's to indicate that the lessons learned from applying dicta in the sample's tax court OIC's are significant enough to reflect the differences in successful compared to unsuccessful tax court OIC's and reasonably in the differences among the success rates of OIC's in general. It was found that (21), 7.72% of the OIC tax court cases were remanded by the tax court for further proceedings at the IRS agency level for presumptive "abuse of discretion" by the IRS. The methodological reasons (RQ1a) judges stated for remanding an OIC tax court case back to IRS Appeals for a "redo" when applying the IRC standards when applying the IRC standards was that these cases were primarily remanded due to IRS settlement officers' noncompliant actions, thus eliciting the judge's admonishments to the IRS with an inference of IRS' "abuse of discretion" in these specific instances. Table 3 provides summary analyses and dicta as stated by each of judge in explaining the rationale for the 21 remanded case's decisions. Tables 4 and 5 show the IRS appeals workload by case type Fiscal Year of 2010 and 2019.

The majority (251) of the 272 OIC appeals cases in this sample were rejected by the tax court which stated in its decision dicta that the standard of proof was not met by the taxpayer, and therefore there was no abuse of discretion by the IRS. A summary of each methodological reason (RQ1b) judges stated for concurring with the IRS' rejection of an OIC when applying the IRC standards are provided in Table 3. Table 6 shows the precedential offer-in-compromise cases.

Further un-tabulated results show that during the seventeen years between 2004 and 2020 covered by this study, there were three-hundred, eight levy-related OIC tax court cases, of which 256 occurred before the IRS' tax levy against the taxpayer and 233 of these were collection due process OIC tax court hearings held between this sample's 2004 and 2020 case-hearing years. One-hundred, sixty-one (161) hearings were based on IRS' filing a lien notice. Eleven (11) of these were rejected due to failure to provide the requested

⁴⁵ Small Business Taxes & Management™--Copyright 2020, A/N Group, Inc. open source website, last accessed 11/10/2021 <http://www.smbiz.com/sbtc20.html>

⁴⁶ CaseMine last accessed 11/10/2021 <https://www.casemine.com/>

⁴⁷ the CourtListener Free Law Project database <https://www.courtlistener.com/>

⁴⁸ <https://www.leagle.com/>

⁴⁹ https://www.ustaxcourt.gov/find_a_case.html

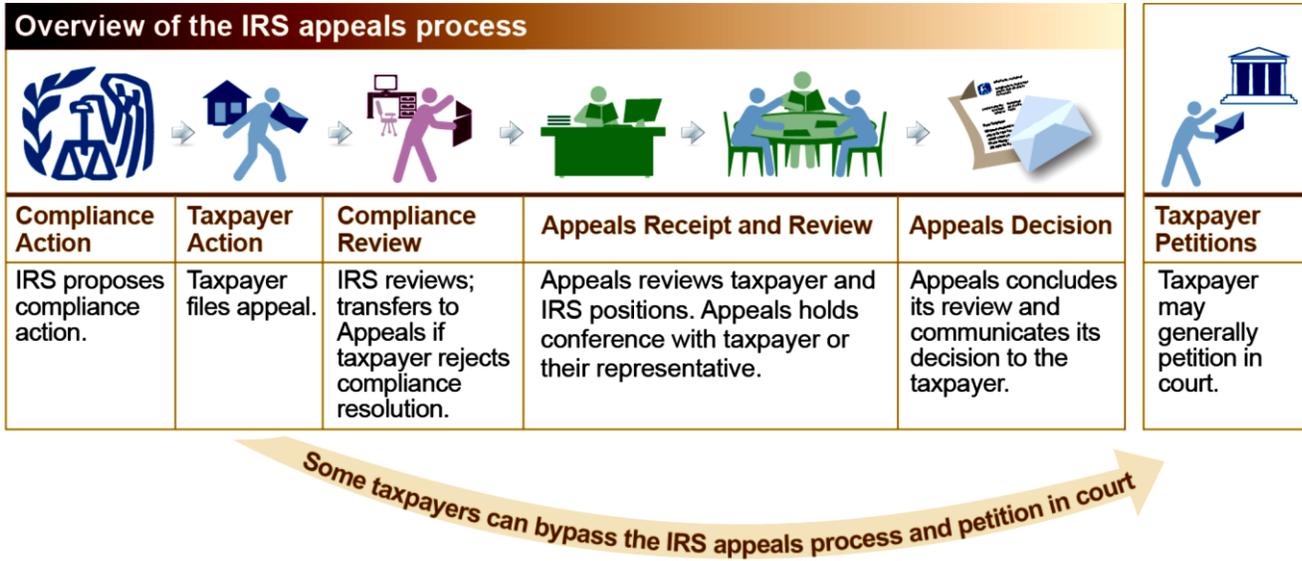


Figure 2. 2018 GAO image analysis of IRS appeals process. Source: GAO analysis of IRS appeals process (GAO-18-659).

evidentiary documents, 121 for failure to follow payment procedures. Eighteen cases were related to a particularly predatory partnership coined the “Hoyt partnership” whose promoter was convicted and sentenced to a criminal prison.

The findings do not indicate any divergence between the IRC and the IRM and the dicta in the emerging judicial tax court decisions. Conversely, the judicial tax court decisions correspond to the language of the IRC and the IRM. The main stated cause of departure from the rules is a noncompliant IRS settlement officer.

It was found that a different group of twenty-one OIC cases amounted to late filings, or extra-jurisdictional (“out-of-jurisdiction”) actions filed to avoid the individual’s noncompliance with trust fund responsibility. That is, these taxpayers who failed to remit employment trust fund taxes attempted to join the separate issues in a single OIC application.

In mapping the frequency of OIC tax court decisions (RQ4) emergence as precedent setting OIC tax court cases, we found six such cases. For further analysis, the 6-precedent-setting OIC cases were isolated and examined for determining each case judge’s stated proposition in that decision’s explanation. We find that the rationale for the precedential decision was not inconsistent with prior tax court decisions. However, in essence, each judge indicated that given the unique set of facts, it was the obligatory and appropriate for the tax court to provide further elucidation. Since abuse of discretion is the standard of review for tax court, several statements in the judicially expressed reasoning indicate that practical and thematic relationships are present, particularly when viewing whether the interaction between

settlement officers and taxpayer is problematic or forthcoming toward reaching the common goal, a negotiated solution.

Conclusions

This research suggests that familiarity with tax settlement adjudicators’ multifaceted reasoning for OIC rejections is mandatory for successful client representation by accountants functioning as tax controversy representatives.

Methodology in practice which is based on observing settlement -rejections revolved around the three central concepts of written evidence deficiencies, procedural failure, and on inapposite reasoning proves valuable. Strengths and weaknesses in rejected-offers due to adjudicators’ penchants for strict adherence to written policies and procedures for each of those concepts were revealed through content analysis pinpointing the detailed structure of those concepts.

Predictably, methodological related rejections mapped to OIC procedural deficiencies (as compared to government administrative changes). This was particularly true for the concepts of evidence and methods when comparing the language of OIC with the language expressed by federal judges. However, deficiencies in the professional representative’s reasoning, which were perceived as being grounds for rejection, are not specifically covered in the language of the IRS’s OIC procedures. That is, for example, OIC does not specifically excluded evidence that is characterized by circular reasoning or is based on faulty reasoning in

Table 3. Summary analyses and dicta (for the 21 Remanded Case's Decisions).

No.	Code	Main Issues causing remand	Remanded offer-in-compromise OIC) cases	Precedential
			Tax court dicta summary	
1	5	Abuse of discretion; the tax court suggested a new settlement officer be assigned to this case. failure to issue letter allowing taxpayer to cure noncompliance of offer in compromise	<i>Moore v. Comm'r, T.C. Memo. 2019-129 (U.S.T.C. Sep. 30, 2019)</i> Abuse of discretion – IRS’ failure to follow administrative procedures; failure to issue letter allowing taxpayer to cure noncompliance of offer in compromise; employment and trust fund taxes. New settlement officer to be assigned to this case. Remanded f	NO
2	37	Abuse of discretion: inadequacy of the administrative record, economic hardship, family medical expenses, special circumstances	<i>Kevin R. Gurule et ux. T.C. Memo. 2015-61 (U.S.T.C. Mar. 31, 2015)</i> Abuse of discretion – inadequacy of the administrative record; economic hardship; family medical expenses; special circumstances are: (1) circumstances demonstrating that the taxpayer would suffer economic hardship if the IRS were to collect from him an amount equal to the reasonable collection potential (RCP) and (2) compelling public policy or equity considerations that provide sufficient basis for compromise. Factors indicating economic hardship include, but are not limited to, (1) the taxpayer's long-term illness, medical condition, or disability that renders him incapable of earning a living, where it is "reasonably foreseeable that taxpayer's financial resources will be exhausted providing for care and support during the course of the condition"; (2) the taxpayer's monthly income is exhausted each month in providing for care of dependents without other means of support; and (3) the taxpayer is unable to borrow against the equity in assets and liquidation of those assets to pay a tax liability would render the taxpayer unable to meet basic living expenses. Settlement officer knew that taxpayer could not work because of her neurological condition , and she also knew that taxpayer had to take several section 401(k) plan account loans to pay their son's medical expenses and other basic living expenses. Even though taxpayer had positive net realizable equity in his section 401(k) plan account at that time, it was quickly being depleted to pay basic expenses. Yet the notice of determination suggests that the Appeals Office rejected taxpayers' OIC pro forma because the offer fell below the calculated RCP. The tax court could not determine whether the Appeals Office gave due regard to potential special circumstances before rejecting the offer and similar to two other cases that (1) remanded when it was unclear whether the settlement officer properly considered the taxpayer's health in rejecting the taxpayer's OIC with special circumstances and (2) remanded when the settlement officer did not meaningfully consider the taxpayer's special circumstances before rejecting her proposed installment agreement. It was an abuse of discretion for IRS settlement officer to determine to proceed with the proposed collection action for taxpayers' 2009 tax liability. Because a remand would be "helpful", "necessary", or "productive". Upon remand the Appeals Office shall consider any additional information or evidence that taxpayers may wish to submit, any new collection alternative that taxpayers may wish to propose, and any asserted change in circumstances.	NO
3	54	Abuse of discretion	<i>Bogart, TC Memo. 2014-46, CCH Dec. 59,854(M) ; TRC IRS: 42,056.15</i> Taxpayers were victim of embezzlement; collection alternative rejected by IRS; abuse of discretion by IRS; effective tax administration on equity grounds. IRS settlement officer failed to adequately consider the ETA OIC on public policy and equity grounds. We conclude that IRS settlement officer has yet to adequately consider the ETA OIC on those grounds. Remand the matter for IRS settlement officer to consider the ETA OIC on public policy and equity grounds.	NO

Table 3. Cont'd

<p>4</p>	<p>64</p>	<p>Taxpayer has not been treated in a fair and rational manner</p>	<p><i>Szekely v. Comm’r, T.C. Memo. 2013-227 (U.S.T.C. Sep. 24, 2013)</i> Collection alternative remand to appeal office for consideration of offer in compromise; taxpayer missed deadline. IRS settlement officer's haste in closing taxpayer's file has prevented us from considering the centerpiece of his case—namely, his request for a collection alternative. The taxpayer is entitled to raise at the CDP hearing "any relevant issue relating to the unpaid tax," including "an offer-in-compromise." Sec. 6330(c)(2)(A)(iii). Taxpayer clearly and timely raised this issue. The SO expected him to submit an OIC; she sent him the required OIC forms; and he submitted his OIC shortly after the March 13 response date. Almost six months later, the IRS considered and rejected his offer because it was accompanied, not by Form 433-A (OIC), but by financial information intended to supplement the Form 433-A that he had previously submitted to the SO. This rationale for rejecting taxpayer's OIC, like other of IRS settlement officer's actions in the case, seems questionable. However, the propriety of this action is not before us because it postdated the notice of determination that is the subject of our review. The court stated that it had a firm sense that taxpayer has not been treated in a fair and rational manner and therefore remanded the case for a supplemental CDP hearing to consider taxpayer's OIC. Also, the court stated that "before the supplemental hearing, taxpayer may submit a revised OIC on Form 656 accompanied by a Form 433-A (OIC) with current financial information. If taxpayer is dissatisfied with the outcome of the supplemental hearing, he may pursue further review in this Court. "</p>	<p>NO</p>
<p>5</p>	<p>65</p>	<p>Two- pronged decision No proof of reasonable cause for failure to timely file a return, Yet, remanded for OIC since Tax Court found that IRS Abused its discretion by failing to respond to petitioner's request</p>	<p><i>Dickes v. Comm’r, T.C. Memo. 2013-210 (U.S.T.C. Sep. 9, 2013)</i> 6330; 6651; 6654; hearing on filing lien notice; hearing before levy; failure to file or pay; failure to pay estimated tax; collection due process; case remanded to Appeals; opportunity to submit offer in compromise. Circumstances constitute reasonable cause for failure to timely file a return outside of the taxpayer's control, including, for example: (1) unavoidable postal delays; (2) the timely filing of a return with the wrong office; (3) the death or serious illness of the taxpayer or a member of the taxpayer's immediate family; (4) a taxpayer's unavoidable absence from the United States; (5) destruction by casualty of a taxpayer's records or place of business; and (6) reliance on the erroneous advice of an IRS officer or employee. Petitioner was incarcerated, business and tax records were stolen from his attorney's car and his tax software did not allow filing, asked an IRS employee for guidance with respect to the filing of his 2005 and 2006 returns, but he did not document the advice that the IRS employee provided. The issue of whether the facts recited above establish reasonable cause for purposes of the section 6651(a)(1) additions to tax for 2005 and 2006 is not before us. The only additions to tax that are at issue are those for 2007-09. Later year's records were not stolen and should have timely filed the 2007-09 returns and later filed amended returns to correct any mistakes. Petitioner has failed to prove that he had reasonable cause for failing to timely and court held that petitioner has not shown that he exercised ordinary business care and prudence with respect to his failure to pay the amounts of tax on or before the payment due dates Whether Appeals Office abused its discretion because Settlement Officer Breazeale (1) did not allow him to submit an OIC during the section 6320/6330 hearing and (2) failed to address his interest abatement request in the notice of determination. By failing to respond to petitioner's request Settlement Officer Breazeale effectively caused petitioner to be under the mistaken impression that he would have an opportunity to submit his OIC—and to become current on his tax reporting obligations—if his penalty abatement request was denied. Court concluded that Settlement Officer Breazeale erred in failing to respond to petitioner's request and that therefore Settlement Officer Breazeale effectively denied petitioner an opportunity to submit an OIC during the section 6320/6330 hearing. Under these circumstances, remand is appropriate. See sec. 6330(c)(2)(A); Lunsford v. Commissioner, 117 T.C. 183, 189 (2001); Churchill v. Commissioner, T.C. Memo. 2011-182, 102 T.C.M. (CCH) 116, 118 (2011).</p>	<p>NO</p>

Table 3. Cont'd

			The administrative record further shows that petitioner requested interest abatement pursuant to section 6404(e) during the section 6320/6330 hearing. The Appeals Office failed to address this issue in the notice of determination. Upon remand , the Appeals Office shall address this issue in a supplemental notice of determination. See <i>Chenery</i> , 318 U.S. at 93-95; <i>Antioco v. Commissioner</i> , at *24-*25; <i>Jones v. Commissioner</i> , at *22-*23.	
6	69	Whether taxpayer would suffer economic hardship	<p><i>Lane v. Comm'r, T.C. Memo. 2013-121 (U.S.T.C. May. 6, 2013)</i></p> <p>Sec. 6320; 6330; 7122; hearing on filing lien notice; hearing before levy; compromises; offer-in-compromise; collection due process; consideration of economic hardship; remand to Appeals.</p> <p>If the taxpayer had to immediately liquidate his equipment to meet his obligations to the Internal Revenue Service this could place an unreasonable burden on him because it would essentially mean he would have to go out of business. Without this equipment he could not secure additional, meaningful work and would have to lay off employees and resort to government support himself. 19</p> <p>The record does not establish that the Appeals Office considered any issues regarding whether taxpayer would suffer economic hardship in determining to reject taxpayer's offer-in-compromise.</p> <p>On the record before us, we are unable to decide whether we should sustain the determinations in the notices of determination. Accordingly, we shall deny IRS settlement officer's motion and remand this case to the Appeals Office for clarification and for further consideration.</p>	NO
7	273	Administrative record was "insufficient	<p><i>Pomeroy v. Comm'r, T.C. Memo. 2013-26 (U.S.T.C. Jan. 22, 2013)</i></p> <p>Sec. 6320; 6330p; 7122; hearing on filing lien notice; hearing before levy; compromises; collection due process; offer-in-compromise; remand to IRS appeals; medical condition and offer-in-compromise.</p> <p>In such cases, we can remand collection due process cases to Appeals to 0 develop the record. See <i>Wadleigh v. Commissioner</i>, 134 T.C. 280, 299 (2010) (remanding "to clarify and supplement the administrative record" when we determined that the administrative record was "insufficient to enable us to properly evaluate whether the Appeals Office abused its discretion"); <i>Hoyle v. Commissioner</i>, 131 T.C. 197, 204-205 (2008) (remanding so that Appeals could clarify the record as to why it determined that all requirements of applicable law were met). Accordingly, we remand these cases to the Appeals Office to allow the parties to clarify and supplement the record as appropriate. We will retain jurisdiction to preserve taxpayers' rights to judicial review of the final administrative determination. See <i>Wadleigh v. Commissioner</i>, 134 T.C. at 299.</p>	NO
8	79	Taxpayer should have opportunity to amend its offer-in-compromise	<p><i>Alessio Azzari Inc. T.C. Memo. 2012-310 (U.S.T.C Nov. 6, 2012)</i></p> <p>Sec. 6320; 6330; hearing on filing lien notice; hearing before levy; unpaid employment taxes; successor corporation; assets to be included in offer in compromise.</p> <p>Cross motions for summary judgement. Issue: whether on remand, the IRS Appeals Office abused its discretion by rejecting Petitioner's offer-in-compromise because the Appeals Office concluded that petitioner failed to include the assets of its successor corporation or by failing to provide petitioner the opportunity to amend its offer-in-compromise.</p> <p>The administrative record reveals no reason why taxpayer should not have been afforded the opportunity to amend its offer-in-compromise. Although, as discussed above, IRS settlement officer contends that taxpayer's transfer of assets to Artex made it impossible to determine taxpayer's reasonable collection potential, such a reason, standing alone, is insufficient. If the Appeals Office had provided taxpayer the opportunity to amend its offer-in-compromise, taxpayer could have included Artex's assets on its Form 433-B. Accordingly, we will again remand the instant case to the Appeals Office so that the Appeals Office may provide taxpayer the opportunity to amend its offer-in-compromise. Taxpayer will need to supplement the record by submitting a new Form 433-B that includes the value of Artex's assets.</p>	NO

Table 3. Cont'd

8	79	Taxpayer should have opportunity to amend its offer-in-compromise	On the basis of the foregoing, we shall partially grant IRS settlement officer's motion for summary judgment insofar as we hold that Artex is a successor corporation to taxpayer and that its assets should be considered in determining taxpayer's reasonable collection potential, and we shall partially deny IRS settlement officer's motion for summary judgment because of the failure to give taxpayer the opportunity to amend its offer-in-compromise. Similarly, we shall deny taxpayer's motion for summary judgment insofar as we hold that Artex was its successor corporation, and we shall deny taxpayer's motion insofar as the Appeals Office failed to provide taxpayer the opportunity to amend its offer-in-compromise since we are remanding the instant case to IRS settlement officer's Appeals Office to give taxpayer the opportunity to do so and have it considered on the remand.	NO
9	80	Appeals must consider additional information, any new collection alternative petitioners propose, and any asserted change in circumstances	<p><i>Jones v. Commissioner</i>, Docket No. 312-10L (U.S.T.C. Sep. 26, 2012)</p> <p>Sec. 6320; 6321; 6330; 7122; hearing on filing lien notice; liens for taxes; hearing before levy; compromises; collection due process; offer-in-compromise; administrative record deficient; opportunity to substantiate valuation of property.</p> <p>((A. <i>DeeWayne Jones et ux.</i> T.C. Memo. 2012-274 IRS settlement officer contends, and we agree, that the U.S. Court of Appeals for the Ninth Circuit, to which an appeal in this case would lie absent a stipulation to the contrary, see sec. 7482(b)(1)(A), has adopted the administrative record rule in section 6320 cases where the underlying liability is not at issue, see <i>Keller</i>, 568 F.3d at 718; <i>Jordan v. Commissioner</i>, 134 T.C. 1, 9 (2010); see also <i>Robinette v. Commissioner</i>, 439 F.3d 455 (8th Cir. 2006), rev'g 123 T.C. 85 (2004). Accordingly, under <i>Golsen v. Commissioner</i>, 54 T.C. 742 (1970), aff'd, 445 F.2d 985 (10th Cir. 1971), we must sustain IRS settlement officer's objections.))</p> <p>Because the administrative record does not adequately disclose the analysis of the Appeals Office in determining that the OIC was not acceptable and that the filing of the NFTL should be sustained and because petitioners were not afforded a meaningful opportunity to substantiate their position with respect to the valuation of the Lake Arrowhead property, remand is appropriate in this case.</p> <p>Upon remand the Appeals Office shall consider any additional information or evidence that petitioners may wish to submit, any new collection alternative that petitioners may wish to propose, and any asserted change in circumstances. See <i>Leago v. Commissioner</i>, T.C. Memo. 2012-39, slip op. at</p>	NO
10	97	Reasonable collection potential; offer-in-compromise rejection; Not an abuse of discretion	<p><i>Johnson v. Commissioner</i>, 136 T.C. 475 (U.S.T.C. 2011)</p> <p>Sec. 6330; hearing before levy; collection due process; reasonable collection potential; offer-in-compromise rejection.</p> <p>The determination of the IRS's Office of Appeals—i.e., not to accept Mr. Johnson's proposed collection alternative, but instead to sustain the filing of the notice of lien and the proposed collection by levy of his outstanding tax liabilities— was not an abuse of discretion. Respondent may proceed with collection. SO Hunt initially proposed to allow this expense in his draft determination, but the Appeals Office ultimately disallowed the expense in the supplemental notice of determination, because Mr. Johnson was not legally obligated to repay the loan and the payments were not a necessary living expense.</p>	Precedential Cited by 11 opinions
11	107	Reported tax due; but did not pay the tax & appeals officer is not an "inferior" Officer	<p><i>Larry E. Tucker</i> T.C. Memo 2011-67; 2011 Tax Ct. Memo LEXIS 65; 101 T.C.M. (CCH) 1307; March 22, 2011, Filed</p> <p><i>Larry E. Tucker</i> T.C. Memo. 2011-67</p> <p>Sec. 6320; 6321; 6323; 6330; 7122; hearing on filing lien notice; liens for taxes; priority of liens; hearing before levy; compromises; collection due process; day trading losses; dissipation of assets; disregard of outstanding Federal income taxes; denial of offer-in-compromise.</p>	NO

Table 3. Cont'd

<p>12</p>	<p>112</p>	<p>Reported tax due; but did not pay the tax & appeals officer is not an "inferior" Officer</p>	<p><i>Tucker v. Comm'r of Internal Revenue</i>, 135 T.C. 114, 135 T.C. 6 (U.S.T.C. 2010) Larry E. Tucker 135 T.C. No. 6 Sec. 6320; 6321; 6323; 6330; 6331; 7122; 7804; hearing on filing lien notice; liens for taxes; priority of liens; hearing before levy; levy and distraint; offers-in-compromise; IRS personnel; collection due process; authority of IRS appeals officer. P filed income tax returns for 2000, 2001, and 2002 that reported tax due; but he did not pay the tax. The Internal Revenue Service (IRS) assessed the tax and issued to P a notice of the filing of a tax lien (NFTL). P timely requested a collection due process (CDP) hearing, which is to be "conducted by an officer or employee" of the IRS Office of Appeals, I.R.C. sec. 6320(b)(3), and which is to conclude with a "determination by an appeals officer", I.R.C. sec. 6330(c)(3). P's CDP hearing was conducted by a settlement officer in the IRS Office of Appeals, and after the CDP hearing a team manager in that office issued to P a notice of determination upholding the NFTL. P filed with the Tax Court a timely appeal pursuant to I.R.C. sec. 6330(d)(1). After initial proceedings, this Court ordered a remand to the Office of Appeals for further consideration. A second CDP hearing was conducted by another settlement officer, and the team manager issued a supplemental notice of determination again upholding the NFTL. The team manager and both settlement officers had been hired by the Commissioner pursuant to I.R.C. sec. 7804(a) and were not appointed by the President or the Secretary of the Treasury. P moved for a second remand so that a CDP hearing could be conducted by, and a notice of determination issued by, an officer appointed by the President or the Secretary of the Treasury, in compliance with the Appointments Clause. See U.S. Const., art. II, sec. 2, cl. 2. Held: An "officer or employee" or an "appeals officer" under I.R.C. sec. 6320 or 6330 is not an "inferior Officer of the United States" for purposes of the Appointments Clause. P's motion to remand will be denied.</p>	<p>Precedential (2010 Tucker) cited by 7 opinions</p>
<p>13</p>	<p>117</p>	<p>Abuse of discretion Since the IRS was unable to locate the forms even for trial; the Court held that the tax assessments were invalid, because the IRS had made them without first issuing notices of deficiency.</p>	<p><i>James E. Marlow et ux. T.C. Memo. 2010-113 (U.S.T.C. May 20, 2010)</i> Sec. 6013; 6213; 6320; 6330; 7122; joint returns; deficiencies and Tax Court petitions; hearing on filing lien notice; hearing before levy; compromises; collection due process; offer-in-compromise; waiver of restrictions on assessment; assessments invalid. Although reliance on a Form 4340 generally is sufficient for verification, if a taxpayer disputes the accuracy of the Form 4340, further verification may be necessary, and in this instance, the IRS could not produce evidence sufficient to establish that the taxpayers signed the waiver forms. The court held that remand was not necessary and would not be productive, because the IRS was unable to locate the forms even for trial. Thus, the Court affirmatively held that the tax assessments were invalid, because the IRS had made them without first issuing notices of deficiency. We conclude that SO Magee abused her discretion in determining that the requirements of applicable law or administrative procedure, as provided in section 6330(c)(1), were met in this case. Although IRS settlement officer contends that the IRS' internal procedures support the presumptive existence of signed valid waivers by taxpayers permitting deficiency assessments of their 2004 and 2005 income taxes and agreeing that they owe such taxes, we find there are some flaws, inconsistencies, and irregularities which lead us to conclude on the basis of this record that the weight of the evidence shows that IRS settlement officer has failed to carry his burden of proof under these particular facts and circumstances. Accordingly, we hold that IRS settlement officer's assessments on April 16, 2007, of taxpayers' additional income taxes for 2004 and 2005 are invalid. Having so held, we do not need to consider whether IRS settlement officer abused his discretion in denying the OIC taxpayers submitted.</p>	<p>NO</p>

Table 3. Cont'd

<p>14</p>	<p>123</p>	<p>Misapplication of the IRM directives; adjustments should be made for a taxpayer who is elderly or in poor health and whose ability to continue working is questionable</p>	<p><i>Fairlamb v. Commissioner, T.C. Memo. 2010-22, slip op.</i> <i>Remington P. Fairlamb T.C. Memo. 2010-22</i> Sec. 6330; 7122; hearing before levy; offer-in-compromise; collection due process; allowance to submit additional offer-in-compromise. <i>Inferring that Age of Taxpayer = compromise based on DATC</i> Applying this standard, the notice concludes that taxpayer did not qualify for an offer-in-compromise based on doubt as to collectibility with special circumstances because "you are able to meet your basic living expenses". This rationale is deficient for at least two reasons. First, the notice misstates IRM pt. 5.8.11.2(2), which states that an offer-in-compromise based on doubt as to collectibility with special circumstances may be accepted where there are "economic hardship or public policy/equity factors that would justify accepting the offer". (Emphasis added.) More fundamentally, according to the IRM an offer-in-compromise is to be evaluated as based on doubt as to collectibility with special circumstances (as opposed to plain-vanilla doubt as to collectibility) only if it is "for an amount less than the reasonable collection potential". <i>Id.</i></p> <p>Taxpayer's third offer was for the exact amount that the settlement officer had initially calculated to be his reasonable collection potential. Addressing this issue obliquely, the notice states (without citation of authority): "For a long term deferred offer, future income is projected over the life of the collection statute." The notice fails to take into account, however, IRM pt. 5.8.5.5(5), which, as previously discussed, directs that in computing a taxpayer's future income, adjustments should be made for a taxpayer who is elderly or in poor health and whose ability to continue working is questionable. Following this directive, the settlement officer initially calculated taxpayer's future income under the assumption that he would work until age 70. There is no indication in the record that any determination was ever made that taxpayer would be able to work beyond age 70. Rather, the record strongly suggests that the determination in the notice was based on a misapplication of the IRM directives.</p> <p>The Commissioner's internal procedures, as reflected in the IRM, do not have the force of law, and deviation from them does not necessarily render the Commissioner's action invalid. <i>Vallone v. Commissioner, 88 T.C. 794, 807-808 (1987)</i>. Nevertheless, the determination in this case, which was based wholly on misapplication of internal procedures, cannot be said to have a sound basis in law or fact.</p> <p>Because taxpayer's various offers were all based on doubt as to collectibility rather than effective tax administration, this regulatory provision is not, by its terms, applicable.⁷ In any event, we do not believe that IRS settlement officer's ultimate determination, as explained in the notice, can fairly be construed as predicated on this rationale. In initially recommending taxpayer's third offer, the settlement officer expressed no concern about this issue, and there is no indication in the record that this consideration played any role in the decision to overturn the settlement officer's initial recommendation.</p> <p>In the light of the inadequacy of the reasons given in the notice for rejecting taxpayer's third offer, which the settlement officer, with seemingly more soundly reasoned analysis, had initially recommended accepting, we are unable to conclude whether it was an abuse of discretion for IRS settlement officer to determine to proceed with the proposed collection action for taxpayer's 2002, 2003, and 2004 tax liabilities. We will remand the case to respondent's Appeals Office for further consideration and clarification and to allow petitioner, if he wishes, to propose a new collection alternative.</p> <p>In <i>Oman v. Commissioner, T.C. Memo. 2006-231</i>, this Court found that IRS directives as contained in IRM pt. 5.8.7.6(5) (Nov. 15, 2004) and policy statement P-5-100 (Jan. 30, 1992) were inconsistent as to whether doubt as to future compliance is a sufficient reason to reject an offer-in compromise. The Court remanded for further consideration and clarification the Commissioner's determination rejecting on this ground the taxpayer's proposed offer-in-compromise based on doubt as to collectibility.</p> <p>The tax court remand the case to IRS settlement officer's Appeals Office for further consideration and clarification and to allow taxpayer, if he wishes, to propose a new collection alternative.</p>	<p>NO</p>
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Table 3. Cont'd

15	133	An offer-in-compromise should not be accepted even in a case of economic hardship if the taxpayer does not offer an acceptable amount	<p><i>Blair 2009 T.C. Memo. 232, 98 T.C.M. 333, 2009 Tax Ct. Memo LEXIS 234 Docket Number: No. 16510-07L</i> <i>Kenneth Everett Blair T.C. Memo. 2009-232</i> Sec. 6330; 7122; hearing before levy; offer in compromise; OIC; collection due process; 48-month factor; hardship evaluation; health care costs. The settlement officer determined taxpayer's RCP to be \$58,998. Therefore, it is undisputed that taxpayer cannot fully pay his \$81,483.52 tax liability. The Commissioner evaluates economic hardship. See Internal Revenue Manual (IRM) pt. 5.8.11.2.1 (Sept. 1, 2005). In accordance with the Commissioner's guidelines, an offer-in-compromise should not be accepted even in a case of economic hardship if the taxpayer does not offer an acceptable amount. See IRM pt. 5.8.11.2.1(11) (Sept. 1, 2005). As we noted in <i>Barnes v. Commissioner</i>, T.C. Memo. 2006-150, n.8, affd. in part and vacated in part sub nom. <i>Keller v. Commissioner</i>, 568 F.3d 710 (9th Cir. 2009), IRM pt. 5.8.5.5 allows the calculation of future income using a 48-month factor where the taxpayer offers to pay the compromise amount in cash within 5 months. It appears that taxpayer's offer met the criteria set forth in the IRM, and it is unclear why the settlement officer used a 109-month factor instead of a 48-month factor. The difference between taxpayer's offer of \$24,000 and the amount called for by applying a 48-month factor (approximately \$27,156) is only a few thousand dollars. It is not clear to the Court from the record that the settlement officer took into account the 48-month factor allowed in the IRM as noted above. Consequently, we will remand this case to IRS settlement officer's Appeals Office for reconsideration of taxpayer's offer in the light of the 48-month factor.</p>	NO
16	141		<p><i>Bradford M. Daniel T.C. Memo. 2009-28</i> Sec. 6320; 6330; hearing on filing lien notice; hearing before levy; collection due process; remand to appeals office; offer-in-compromise; doubt as to collectibility; opportunity to challenge liability. SWIFT, Judge: This matter is before us on IRS settlement officer's motion for remand to IRS settlement officer's Appeals Office and on taxpayer's motion for partial summary judgment. Because taxpayer does not object to IRS settlement officer's motion for remand, IRS settlement officer's motion for remand to IRS settlement officer's Appeals Office (on the issue as to whether taxpayer's offer-in-compromise (OIC) should be accepted on the ground of doubt as to collectibility) will be granted. We are left, however, with the question raised in taxpayer's motion for partial summary judgment to which IRS settlement officer objects (whether on remand to IRS settlement officer's Appeals Office taxpayer's OIC also should be considered on the basis of doubt as to liability). As indicated, taxpayer does not object to IRS settlement officer's motion for remand of this case to IRS settlement officer's Appeals Office for purposes of considering taxpayer's OIC on the ground of doubt as to collectibility. IRS settlement officer's motion for remand will be granted. Taxpayer, however, moves for partial summary judgment, seeking an order that IRS settlement officer's Appeals Office on remand consider taxpayer's OIC on the basis of doubt as to liability.</p>	
17	169	Hardships related to tax lien and medical problems	<p><i>Vincent F. Dailey et ux. T.C. Memo. 2008-148</i> Sec. 6320; 6330; 7122; hearing on filing lien notice; hearing before levy; offer-in-compromise; collection due process; economic hardship; remanded to IRS appeals office. Appeals Office considered (1) the ability of Ms. Dailey and Mr. Dailey, who at the time they submitted taxpayers' Form 433-A were 50 years old and 55 years old, respectively, to earn sufficient income to pay taxpayers' unpaid 2002 liability and taxpayers' unpaid 2003 liability as well as their reasonable basic living expenses; (2) the impact that a tax lien on petitioners' residence might have on Mr. Dailey's ability to obtain a position as a stockbroker or a real estate agent or a similar position and to earn an amount of income that, when added to the amount of income from Ms. Dailey's position, was sufficient to pay those unpaid liabilities as well as those expenses;</p>	NO

Table 3. Cont'd

			<p>(3) the impact that taxpayers' payment of the medical bills attributable to the serious health problems of taxpayers' daughter and taxpayers' older son might have on taxpayers' financial condition, even though those children may not qualify as petitioners' dependents for tax purposes; and (4) the impact that the serious health problems of taxpayers' daughter and taxpayers' older son might have on taxpayers' ability to earn sufficient income to pay taxpayers' unpaid 2002 liability and taxpayers' unpaid 2003 liability as well as their reasonable basic living expenses.²¹</p> <p>If in determining in the notice of determination that taxpayers were not a good candidate for an effective tax administration offer-in-compromise the Appeals Office had considered other factors or circumstances, such as those that we describe above, the record does not establish the other factors or circumstances that it considered and its evaluation of them.</p> <p>Accordingly, we shall remand this case to IRS settlement officer's Appeals Office for clarification and for further consideration.</p>	<p>NO</p>
<p>18</p>	<p>230</p>	<p>Abuse of discretion where current or past income does not provide an ability to accurately estimate future income for an offer, the use of a future income collateral agreement may provide a better means of calculating an acceptable offer amount</p>	<p>Al Sampson T.C. Summary Opinion 2006-75 Sec. 6320; 6330; 7122; hearing on filing lien notice; hearing before levy; compromises; collection due process; offer-in-compromise; collateral income agreement.</p> <p>We conclude the Appeals officer abused his discretion in rejecting taxpayer's OIC on the ground that taxpayer had sufficient future income to pay his 2002 tax liability in full. We therefore shall remand this matter to the Appeals Office for reconsideration of taxpayer's OIC.</p> <p>In some instances, a future income 2006 Tax Ct. Summary collateral agreement may be used in lieu of including the estimated value of future income in reasonable collection potential (RCP). When investigating an offer where current or past income does not provide an ability to accurately estimate future income, the use of a future income collateral agreement may provide a better means of calculating an acceptable offer amount. * * *</p> <p>Example: A taxpayer is currently in medical school and it is anticipated that upon graduation income should increase dramatically.</p> <p>IRM sec. 5.8.5.5(6) (Nov. 15, 2004).</p> <p>Assuming taxpayer secures employment after graduation, he likely will earn significantly more income than he has over the past several years. For the reasons stated above, however, it is difficult to estimate the amount of his future income or when he will receive such income. The facts of taxpayer's case therefore appear to fit squarely within IRM sec. 5.8.5.5(6). Nevertheless, there is -- but chose to forgo, in order to pursue his studies (forgone earnings). The Appeals officer also determined that taxpayer's forgone earnings were sufficient to pay his 2002 tax liability in full.</p> <p>It is true taxpayer could have increased his income had he discontinued his education and found work; however, we can find nothing in the IRM suggesting that a student's forgone earnings are a component of future income. In fact, the example in IRM sec. 5.8.5.5(6) indicates a taxpayer can qualify for an OIC despite choosing to pursue education rather than employment. The example does not include forgone earnings as part of the taxpayer's reasonable collection potential.</p> <p>Even if taxpayer's future income did include forgone earnings, the difficulty of calculating the amount of such earnings is evident. Taxpayer's forgone earnings presumably depend on the type of employment he could obtain, which in turn depends on factors such as his work experience, job skills, and the strength of the labor market. There is no indication the Appeals officer considered these factors or attempted to calculate taxpayer's forgone earnings. 4 Rather, it appears the Appeals officer assumed that taxpayer would earn sufficient income, after allowable expenses, to pay his tax liability in full. Taxpayer's history of intermittent employment and modest wage income raises doubts about the validity of this assumption. Furthermore, it is unclear whether the Appeals officer considered that taxpayer might have increased expenses if he discontinued his studies, such as student loan repayments.</p>	<p>NO</p>

Table 3. Cont'd

			Held: the Appeals officer abused his discretion in rejecting taxpayer's OIC on the ground that taxpayer had sufficient future income to pay his 2002 tax liability in full. We therefore shall remand this matter to the Appeals Office for reconsideration of taxpayer's OIC. Reviewed and adopted as the report of the Small Tax Case Division.	NO
19	234	Abuse of discretion in declining to accept taxpayers' offer dated November 2, 2001, and continuing the lien in effect.	<i>Speltz v. Comm'r</i> , 124 T.C. No. 9 (USTC Filed: March 23rd, 2005; Citations: 124 T.C. No. 9, 124 T.C. 165, 2005 U.S. Tax Ct. LEXIS 9; Docket Number: No. 15382-03L As IRS settlement officer points out, any levy on particular assets of taxpayers that the IRS proposes to pursue in the future will also require notice and an opportunity to be heard under section 6320 or 6330. Taxpayers may submit another offer in compromise. Taxpayers' income and expenses may change. We conclude, however, that there was no abuse of discretion in declining to accept taxpayers' offer dated November 2, 2001, and continuing the lien in effect.	Precedential Status: Precedential Cited By (61)
20	249	Abuse of discretion in determining to proceed with collection	<i>James M. Robinette</i> 123 T.C. No. 5 123 T.C. 85, 2004 WL 1616381 (2004) The issues relating to whether taxpayer defaulted on the offer-in-compromise are relevant issues that taxpayer raised in the Appeals Office hearing and which should have been considered by the Appeals officer in his determination, but were not. The Appeals officer failed to consider those relevant issues in his determination. On that basis, the majority is that "it was an abuse of discretion for IRS settlement officer to determine to proceed with collection of taxpayer's tax liability." Held, further, IRS settlement officer abused his discretion in determining to proceed with collection.	NO
21	274	Relegating taxpayer's liability challenge to the non-CDP context was an abuse of discretion.	<i>Rickey B. Barnhill v. Commissioner</i> , 155 T.C. No. 1 (2020) The Appeals officer may have considered Mr. Barnhill's initial (and only) appeal, but we cannot conclude that her subsequent action involved only harmless error. Harmless error rule does not apply where Appeals commits an abuse of discretion in upholding collection action for a TFRP where such action was not preceded by a final administrative determination of the assessment and may have affected the collection procedure for the penalty). Conclusion [by the Tax Court] Denied the Commissioner's motion for summary judgment. Footnote 13 Similarly, any defect resulting from barring Mr. Barnhill's liability challenge in the CDP hearing is not cured by Appeals' consideration--outside of the CDP hearing--of Mr. Barnhill's offer-in-compromise based on doubt as to liability. By Appeals' lights that was an appropriate manner in which Appeals could consider Mr. Barnhill's liability challenge; but if, as we hold for purposes of denying summary judgment, he was entitled to challenge his liability in the CDP hearing (subject thereafter to judicial review under section 6330(d)), then relegating the liability challenge to the non-CDP context was an abuse of discretion.	Precedential Cited by (0)

Source: Cases collected from the Court Listener Free Law Project database <https://www.courtlistener.com/> selected "Download original" then "Combined opinions from our backup"

rejection and acceptance, including pinpointing a specific settlement officer's distrustful attitude or unreasonable brashness toward the taxpayer. This suggests the OIC written procedure is a general guideline and that professional representatives should pay particular attention to

specific rationale that informs the concepts of evidence, methods, and reasoning. Further, despite the inferences that using the correct technical rules and guidelines result in successful, this study demonstrates soft skills are important such that tax court judges are cognizant of human

behavior differences among settlement officers that may factor into inconsistent negotiation outcomes. Indeed, in most of the remanded cases the tax court cited the settlement officer's unreasonable actions in explicit detail, including stating the settlement officer's surname 95 times

Table 4. IRS appeals workload, by type of case, fiscal year 2019.

Type of case	Cases received	Cases closed [1]	Cases pending September 30, 2019
	(1)	(2)	(3)
Total cases [2]	85,286	73,207	60,614
Collection Due Process cases [3]	37,196	26,655	30,293
Examination cases [4]	24,862	22,626	18,476
Penalty appeals cases [5]	5,757	5,864	2,659
Offers in Compromise cases [6]	6,841	6,298	5,077
Innocent spouse cases [7]	1,575	2,429	1,384
Industry cases [8]	826	773	1,025
Coordinated industry cases [9]	42	89	129
Other cases [10]	8,187	8,473	1,571

Source: Appeals Workload, by Type of Case, Fiscal Year 2019 – IRS; <https://www.irs.gov/pub/irs-soi>

Table 5. IRS appeals workload, by type of case, fiscal year 2010.

Type of case	Cases received	Cases closed	Cases pending September 30, 2010
	(1)	(2)	(3)
Total cases [1]	135,755	133,090	72,779
Collection Due Process [2]	49,049	46,941	25,754
Examination [3]	42,144	41,943	28,057
Penalty Appeals [4]	10,918	11,910	5,028
Offers in Compromise [5]	11,043	11,149	5,182
Innocent Spouse [6]	5,341	4,610	2,988
Industry Cases [7]	2,099	1,698	1,991
Coordinated Industry Cases [8]	330	319	716
Other [9]	14,831	14,520	3,063

Source: Appeals Workload, by Type of Case, Fiscal Year 2010– IRS; <https://www.irs.gov/pub/irs-soi>.

Table 6. Precedential offer-in-compromise cases.

No.	Precedential offer-in-compromise cases main statutes §§ 6320(c) and 6330(d)(1) Tax Court Dicta Summary	# Citations
1	Carlson v. United States 394 F. Supp. 2d 321 (D. Mass. 2005)	2
2	Tucker v. Commissioner, 135 T.C. No. 6 (Tax Ct. 2010)	7
3	Kreit Mech. Assocs. v. Commissioner, 137 T.C. No. 9 (Tax Ct. 2011).	7
4	Johnson v. Commissioner 136 T.C. No. 23 (Tax Ct. 2011)	11
5	Rickey B. Barnhill v. Commissioner 155 T.C. No. 1 (Tax Ct. 2020)	0

Source: Court Listener <https://www.courtlistener.com/> sponsored by the non-profit Free Law Project, a 501(c)(3) non-profit

in dicta and on the record in one of the harshest remanded cases. For example, regarding deficient procedures, professional representatives should pay particular attention to avoiding non-OIC-specialized approaches. IRS guidance refers to the use of specific taxpayer data in a conditional sentence, but does not clarify the limits of specific written evidence; IRS only

specifies that reliable methods used by professional representative in determining the basis of the OIC submitted must also be applied reliably to the facts of each case.

Further, it is imperative that professional representatives actually have a strategic technique to begin with. Simply showing basic calculations is not enough. Tax

professionals should ensure that they are well versed in the settlement procedures that comprise the theoretical model and be prepared to explain why the settlement procedures used are, or are not, relevant to the test of the theory or the application of the theory to the taxpayer's case.

Finally, well-regarded tax practitioners known for successful negotiation and settlement of tax controversies requires diligence such that tax professionals must pay close attention to the important links among written evidence, procedural requirement, and reasoning. This research suggests that written evidence, proper procedure, and consistent reasoning are intertwined such that they do not function in isolation. When judges cited the absence of proper procedures, for example, they often cited lack of written evidence. Moreover, unsupported reasoning, particularly false assumptions (DATL, DATC), was associated with deficient procedures or deficient written evidence. Although the findings in this study apply to U.S.-based tax professionals appearing before adjudicator within the IRS and in U.S. federal tax court, these findings may apply to local adjudicators and non-U.S. government agencies and court as well. Inferences from our findings that show a different group of twenty-one (21) OIC cases were related to failure to remit employment trust fund taxes are that taxpayer will attempt whatever it takes to circumvent the rules.

Tax accounting and law practitioners subscribe to the idea that an OIC is one of the best methods for tax liability challenges while simultaneously complying with taxpayer obligations when administered appropriately (Landreth, 2018; Madison, 2016). Despite the increasing frequency of OIC submissions, and the persistent assertion of the benefits of an OIC in popular and financial press articles, existing evidence on the costs and benefits of OIC's is still anecdotal⁵⁰. Undoubtedly, however, the recent pandemic will heighten the need for successfully-proposed OIC's for years to come.

This study provides a map for navigating the nuances of the OIC program with a view to success in reducing deficiencies in evidence, procedures, and reasoning.

Proficiencies for successful OIC's are important to the IRS, the tax court system, accounting students, and practitioners alike. Hence, we add to the literature since society as a whole stands benefit from honing negotiation skills, thus heightening employable skills through research that informs teaching which activates practical implications.

Future research would add further value to the literature by extending the exploration of additional unanswered, or previously unanswerable questions. Hence, the limitations of this study are embedded in the possibility of inspecting added cases to answer future

research queries. Such likely questions toward building a strong base of skills and knowledge entail asking (1) how important is the tax debt's dollar amount owed by each OIC proposer at each decision level, (2) does political administration effect the IRS actions or judicial outcome, (3) does the impact of such disasters as a pandemics matter; that is, do natural disasters influence or daunt the IRS' collection modality or IRS' clemency decisions, (4) does taxpayer's or the court's location in the nation or in the world impact the facts, including the taxpayer-IRS pre-court interaction or the judicial decision of tax court, (5) is varying judicial temperament, especially toward "abuse of discretion" a factor in the tax court decision, (6) might celebrity or influence in the community sway the OIC outcome either positively or adversely, and (7) do fraudulent misappropriations or negligence such as employment tax irresponsibility leading to trust fund recovery penalties, influence the taxpayer's credibility in IRS' or the tax court's view?

CONFLICT OF INTERESTS

The authors have not declared any conflicts of interests.

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⁵⁰Table "1" (herein derived from the IRS 2016 -2019 Databook)

Full Length Research Paper

Examination of confidence levels of taxpayers transitioning to making tax digital by industry sector in the UK

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The purpose of this study is to utilise social cognitive theory to investigate and establish through empirical study, the confidence levels of taxpayers with 'Making Tax Digital' and further to facilitate an assessment of the readiness of taxpayers to be compliant with making tax digital requirements by industrial sector. This study used a survey instrument to collect data from 202 businesses in the Northwest of the United Kingdom. The data were analysed statistically through descriptive statistics and inferential analysis using SPSS. The result from the study suggests and supports the notion that a transition to Making Tax Digital is industry sensitive and therefore any reform must consider the specific taxpayers in each industry. Consistent with prior research, the authors also find changes to a tax system are sensitive and need to be assessed against a practical criterion to gauge its full impact. Furthermore, this study finds that multi-industry sectors need clearer guidance on compliance. This has to be backed by a strong anti-avoidance business support system for sole proprietary businesses to enable them adapt to new way of reporting and paying taxes. It is further recommended that HMRC develops a strong communication strategy that encourages and helps sole trader overcome challenges of Making Tax Digital. This is one of the few studies aimed to explore the impact on how well different industrial sectors will transition to Making Tax Digital. This study carries out a comparison to ascertain if there is a significant difference in the levels of confidence between industry sectors transitioning to Making Tax Digital.

Key word: Making tax digital, taxation, social cognitive theory, United Kingdom.

INTRODUCTION

Digitalisation is transforming how individuals and corporations around the world conduct their tax affairs. Tax authorities globally are digitising tax systems that originated in the 19th and 20th Centuries; however, this revolutionary change does present challenges (Rachinger et al., 2018). The proposal to introduce making tax digital

(MTD) in the United Kingdom has brought with it some apprehension from key stakeholders. The Federation of Small Businesses (FSB) expressed concerns that taxpayers' workloads would increase if tax reporting moved from annual to quarterly reporting (Smith, 2018).

The MTD Vision as captured by IRIS Software Limited

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(2017) aims to revolutionise the way businesses, landlords, individuals and tax agents interact with Her Majesty's Revenue and Customs (HMRC). MTD is intended to aid the government's tax simplification agenda which commits to making the UK tax system fully digitalised by the year 2020.

The breakthroughs recorded in the spheres of ICT had led to the introduction of an e-tax system. This is credited for an appreciable improvement of the level of tax compliance and at the same time lowering the cost of tax administration (Mustapha and Sheikh, 2014). 'Making Tax Digital' leverages on the gains of E-tax and E-filing systems and though it is still a work-in-progress with many practicalities needing fine-tuning, it seems to have gained traction. The digitalisation of the taxation system in varied forms but centred on an on-line tax assessment and payments have been adopted in many nations notably Canada, Taiwan, Australia, Malaysia, Singapore, Kenya, and South Africa among others (Obid and Bojuwon, 2014). Generally, the argument for tax digitalisation by the foregoing countries as well as the UK cites convenience, timesaving, tax simplification, cost reduction, and the closure of the tax gap (McLure et al., 1990). In the UK, 'Making Tax Digital' for all categories of individual and corporate taxpayers is founded on four core concerns *it aims* to accommodate. These as listed by Sadiq (2021) are: (i) It is aimed at making Tax compliance and monitoring much simpler; (ii) It aims to have unhindered access at all times to Information enabling tax liabilities to be more quickly and efficiently determined; (iii) Information on both individuals and businesses income-generating activities will be stored in one place such that all taxes are bunched up into a single digital Tax Account; and finally, (iv) It is also aimed to make digital communications with Her Majesty's Revenue and Customs (HMRC) available at all times thus providing taxpayers convenience and greatly reduce the necessity for phone or post contact

Expectedly, such a significant and far-reaching overhaul of the taxation system will have its attending challenges, technical glitches, and sometimes out-rightly conflicting provisions. HMRC has made efforts to address several of these areas of concern by outsourcing the review and assessment of the MTD initiative to teams of seasoned experts drawn from the financial, the industry, the academia, and the ICT circles. These consultations have evolved and now form the basis of the MTD transitioning period.

LITERATURE REVIEW

The sweeping reforms in the UK Taxation System under the Making Tax Digital initiative launched in August 2015 have been reviewed several times to ensure it meets its requirements of being easy to adopt and cost-effective for everyone.

Specific interest is changes tailored to 'Make Tax Digital for Businesses' (MTDfb). A most useful effort in this direction is the HMRC commissioned Research titled 'Making Tax Digital for Business: Survey of small businesses and Landlords' which was published in November 2017 as HM Revenue and Customs Research Report 480. The report authored by Tu et al. (2017), a quantitative survey carefully selected 3000 businesses taken as representative of all in its class, provides credible information about the pre-implementation tax practices. Key findings as given by the authors are as follows: (i) Three in four (74%) sought help for their accounts and tax from an external, *paid accountant*. (ii) External tax agents were used mainly in calculating tax payable while about only one out of five (20%) used external paid agents for record-keeping; (iii) A large majority (about 80%) were recording their transactions, invoices, and receipts real-time or at least quarterly; while one in five did all their record-keeping at the end of the tax year; (iv) Use of Spreadsheets or paperwork was more widespread than software; Software users come to as low as 26% (v) One in five were not using software because they lacked confidence with technology; (vi) A significant number of persons who are non-users of software were emotionally attached to their method of record keeping and account filing which they considered accurate and met HMRC requirements. (vii) 68% had digital capability and access but about one in five of these or 14% of all were either upbeat about poor internet services (and so not sure to meet the demand of quarterly report) or were not comfortable using technology for business because they were worried about data security. (viii) All (including those not using tax agents) were most likely to ask an accountant/agent for advice and support.

Changes from the above (especially the (i) to (vii)) seen in the current tax dispensation provide a platform for studying the impacts of 'Making Tax Digital' on taxpayers. It is worth noting that the consultation did not focus specifically on any industry sectors. To further explore these impacts, the contributions of selected four (4) authors will now be reviewed and briefly evaluated. Although everything that used to be done on paper was adapted to computers, it seems that is where it stayed. However, with the introduction of MTD reform, paper bookkeeping is on its way out. Gottschalk's (2017), assessment of the challenges accountants face when adopting new technology such as the one posed by MTD is that they are inevitable, daunting but surmountable. He then dismissed the idea of the reform displacing accountants by stating that 'Technology won't take your job, but it will change the way it is done. 'Administrative accounting will eventually be phased out and replaced with technology that does the job faster and more efficiently'. Furthermore,

Gottschalk reports that published data from 2016 suggests that the unemployment rate of accountants has fallen to 2.2% compared to the National average of 4%.

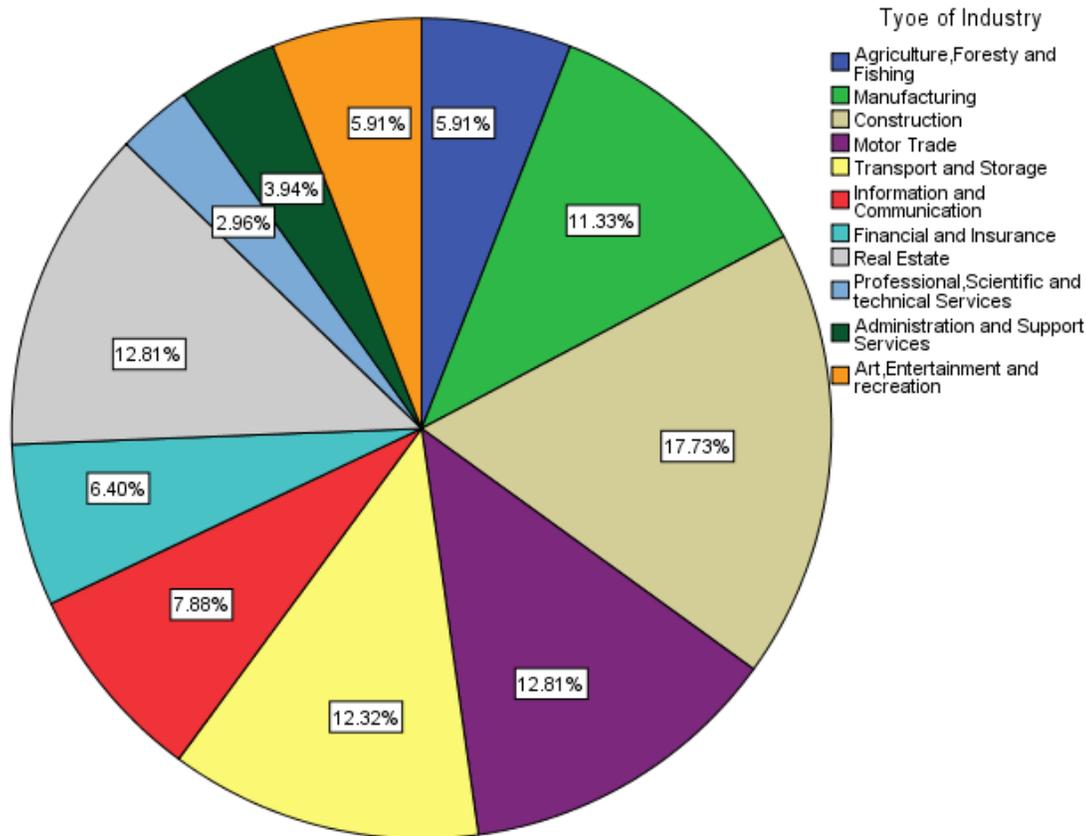


Figure 1. Analysis of industrial sectors in the UK.
Source: Office of National Statistics, 2019.

According to the same publication, the most attractive workers have skills that cannot be replaced with computers. He, however, concludes by emphasising the importance of the younger generation of accountants engaging in further professional training and self-improvement programs.

Sian (2018), in a recent paper canvas on the importance of moving in compliance with the vision of MTD. 'Going digital should be a bonus, not a burden'. He argues that accountants can provide timely tax and other professional advice to businesses that adopt some form of digital record keeping. In his opinion, accountancy practices that lead their clients in the direction of early compliance with the HMRC digital tax initiative would have taken good advantage of MTD and opened their firms to businesses that seek efficient Management Consultancy. He added that Tech-savvy cloud-accounting firms 'are likely to be in high demand as the deadline' for mandatory compliance approaches.

Sain (2018) further asserted that the prosperity of a nation on one hand and its economic decline on the other have always had a bearing on tax policy. The author further opines that whereas taxes are what we pay for civilised society, how we tax and spend determine on

whether we are prosperous or poor.

The present UK taxation system consisting of various shades of direct and indirect tax structures has a very long history to it; spanning at least two centuries. Particularly in the past 100 years, a period that has witnessed two World Wars, it has evolved through changing reforms as the government continues to think and rethink what is both effective and efficient tax administration and what is convenient for taxpayers.

Studies indicate that in the past two decades, "substantial progress has been made by the U.K. Government in developing an effective e-taxation system". As of 2006 through the creation of a "fully automated tax portfolio; tax payments can now be made in 48 h" (Nisar, 2006:113). This level of achievement has stimulated HMRC to invest in further research.

It is important to highlight that SMEs represent a significant part of the UK economy. This part of the study summarises the contributions made by SMEs in data obtained from the Department for Business, Energy and Industrial Strategy, and Business Population Estimates 2017. The research suggests that the dominant industry sectors such as construction (18%) which account for 34% of SME turnover (Figure 1). The basis of the

Table 1. Levels of confidence matrix.

Level of confidence	Non-confident	Slightly confident	Somewhat confident	Fairly confident	Completely confident
Score	1	2	3	4	5
% equivalence	20%	40%	60%	80%	100%

Source: Author.

study focuses on impact of MTD by industrial sectors. Figure 1 depicts spread of industry by sector.

RESEARCH METHODOLOGY

This empirical research employs a pragmatic paradigm. This is in line with the fact that the knowledge and reality of taxation are based on beliefs and habits that are socially constructed. Furthermore, pragmatism is representative of a mixed method; however this study will be quantitative dominant using a research instrument (Appendix 1) and therefore is most suitable for this research. Hence, this research is primarily deemed to be explanatory in nature and thus adopts a deductive strategy. Questionnaires were employed to collect raw data from a sample of 202 taxpayers. The data were analysed statistically through descriptive statistics and inferential analysis using the Statistical Product and Service Solution IBM SPSS software (Hejase and Hejase, 2013). Furthermore, a discussion of the reliability and validity of the primary data discussed the quality of the data. Firstly, the sample unit was defined. To ascertain the confidence levels of taxpayers in the Greater Manchester region, the sample unit would be taxpayers operated a business within that region.

Secondly, a sample framework was obtained listing SMEs in the region. Due care was taken to ensure that the sample frame error was minimised by using the latest information held within the public record.

Thirdly, the sample size was determined. With the confidence level set at 95%, a sample size of 203 was the most convenient size based on the limitations of research.

Fourthly, the sample size was selected using a cross-sectional study design. The 202 taxpayers were selected based on inclusion and exclusion criteria (Setia, 2016).

FINDING AND DISCUSSION

This examination will test the hypothesis that if MTD is introduced, taxpayers in the construction and transport industries will be weaker in terms of levels of readiness for MTD.

The contribution of industry to the United Kingdom's economy can be measured in various ways, such as the number of companies in the sector, contribution to the economic output, and employment rates. This study attempts to ascertain if there is any statistically significant difference between industry sectors with regards to confidence levels transitioning and their readiness for MTD. The pie chart depicted in Figure 1 shows the sector sample sizes in each industry sector.

This diagram illustrates that the spread of industries ranging from the lowest sector Professional, Scientific, and Technical Services (2.96%) to the highest industrial

sector construction (17.73%) and the potential implications on tax revenues of non-compliant behaviour post the implementation of MTD. This examination attempts to ascertain whether there is a statistically significant difference between these sectors with regard to tax compliance and readiness for making tax digital. This will help HMRC implement anti-avoidance and early intervention strategies to support these sectors.

Based on the results presented in Table 2, the results of manufacturing sector suggest respondents who use the services of an agent responded that they were fairly confident (Table 1) with the transition to Making Tax Digital.

These included aspects of preparing, meeting quarterly deadlines and paying taxes quarterly, and tests for readiness for Making Tax Digital. The results demonstrated taxpayers in this industry who did not use the services of an agent indicated that they were slightly confident to somewhat confident. This average confidence level presents an overall test of the readiness of taxpayers for MTD. Furthermore, Motor Trade results suggest that respondents in this sector who used an agent demonstrated they were somewhat confident. Those taxpayers who did not use the services on agent indicated that they were only slightly confident about the transition. Additionally, the Transport and Storage results presented in Table 2 and Figure 2 suggest that respondents who used the services of an agent in the Transport and Storage sectors indicated that they were completely confident and thus were in a good position to transition to Making Tax Digital. Those respondents who did not use an agent indicated that they are confident. The Information and Communication findings suggest that taxpayers who used the services of an agent in the Information and Communication industry indicated a test average of being fairly confident. Those in this sample who did not use the services of an agent indicated that they were somewhat confident of the transition. In other sectors such as the Financial and Insurance, results demonstrate that taxpayers who did not use an agent indicated that they were fairly confident.

No data were available for respondents who used an agent. In addition, professional, scientist, and technical services suggest that taxpayers in this sector who did not use the services of an agent indicated that they were somewhat confident. No data were available in this study for respondents who did not use an agent. The finding for the Construction sector suggests that respondents who used the services of an agent were fairly confident with

Table 2. Industry sector confidence level.

Industry	With an agent		Without an agent	
	Median	Interquartile range	Median	Interquartile range
Manufacturing	4.1743	0.29	2.4737	0.26
Agriculture, Forestry, and Fishing	-	-	2.4737	0.53
Motor Trade	2.6667	1.29	2.500	0.08
Transport and Storage	5.0000	0.00	3.7895	1.50
Information and Communication	4.1286	0.04	3.3421	1.30
Real Estate	Constant	Constant	constant	Constant
Financial and Insurance	-	-	4.0000	0.79
Professional, scientist, and technical services	-	-	2.9474	0.01
Construction	3.7143	0.64	2.0000	0.97
Administration and support services	-	-	2.2632	0.88
Art, Entertainment and recreation	-	-	1.7895	0.79

Source: Author.

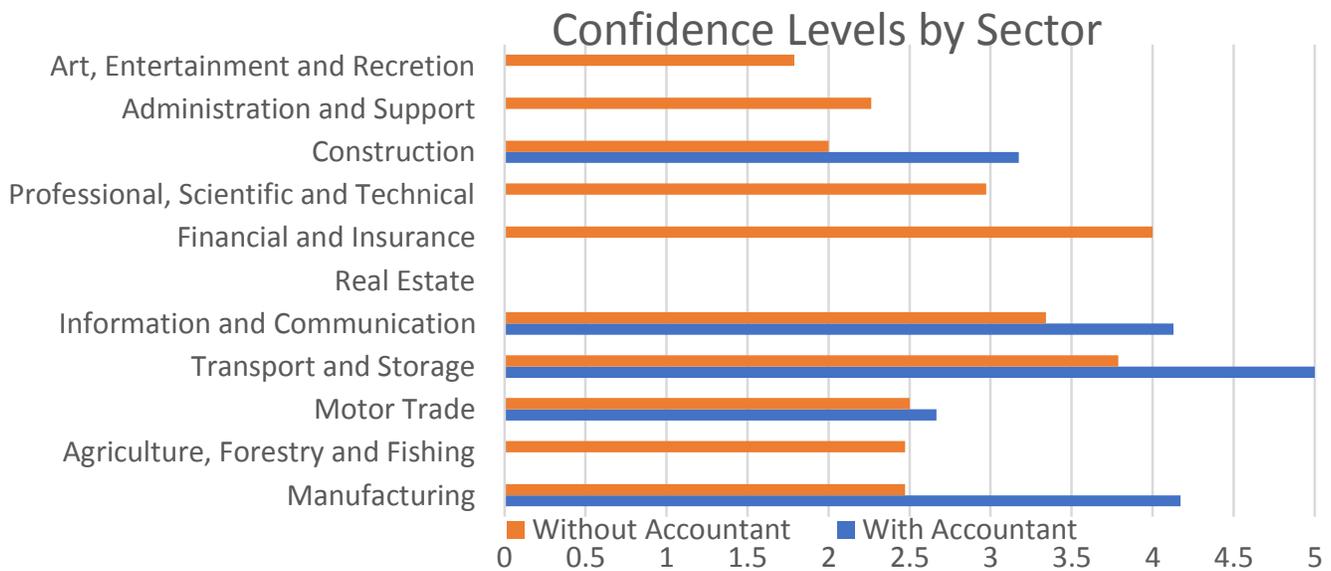


Figure 2. Confidence levels by Sector.
Source: Author.

transitioning to MTD. For those who did not use the services of an agent predictors of non-compliance markers indicated that an average taxpayers slightly confidence in this sector. Furthermore, Administration and Support services suggest that taxpayers demonstrated average confident level indicated that taxpayers who did not use the services of an agent were slightly confident with compliance markers in this sector. No data were available for those that did not use an agent, due to sample sizes. Lastly, Art, Entertainment, and Recreation suggest respondents who did not use the

services of an agent in this sector revealed that taxpayers on average lay between not confident at all and slightly confident. No data were available for those who used accountants in this sector due to sample restrictions. To further test the validity of the above results Kruskal Wallis Hypothesis test was also conducted.

Test of normality for taxpayers with accountants

To assess the type of test most suitable to ascertain the

Table 3. Tests of normality with accountants - mean confidence with accountant.

Type of Industry	Kolmogorov-Simonov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Manufacturing	0.331	12	0.001	0.650	12	0.000
Construction	0.453	8	0.000	0.601	8	0.000
Motor Trade	0.195	20	0.044	0.878	20	0.016
Transport and Storage	0.513	8	0.000	0.418	8	0.000
Information and Communication	0.429	14	0.000	0.472	14	0.000
Real Estate	0.247	19	0.003	0.803	19	0.001

Source: Author.

Table 4. Tests of normality with accountants.

Type of Industry	Kolmogorov-Simonov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Agriculture, Forestry and Fishing	0.331	12	0.001	0.677	12	0.001
Manufacturing	0.382	11	0.000	0.601	11	0.000
Construction	0.209	28	0.003	0.876	28	0.003
Motor Trade	0.183	6	0.200*	0.960	6	0.820
Transport and Storage	0.201	17	0.067	0.886	17	0.039
Information and Communication	0.260	2	.			
Financial and Insurance	0.451	8	0.000	0.606	8	0.000
Professional, Scientific and technical Services	0.492	6	0.000	0.496	6	0.000
Administration and Support Services	0.435	8	0.000	0.634	8	0.000
Art, Entertainment and recreation	0.276	12	0.012	0.769	12	0.004

Source: Author.

differences with respect to their beliefs about MTD's impact on taxpayers categorised by an organisational status a Shapiro-Wilk test of normality was performed for the two groups separately; these both indicated that the data for the two groups differed significantly from normality. For taxpayers who were manufacturers S-W statistic = 0.650, $p < .001$ (df=12). For Construction S-W statistic = 0.601, $p < .001$ (df =8), Motor trade S-W statistic = 0.878, $p < .061$ (df=20), Transport and Storage S-W statistic = 0.418, $p < .000$ (df=8), Information and Communication S-W statistic = 0.472, $p < .000$ (df=14), Real Estate S-W statistic = 0.803, $p < .001$ (df=19) Table 3.

Test of normality for taxpayers without accountants

To assess the type of test most suitable to ascertain the differences with respect to their beliefs about MTD impact on taxpayers categorised by organisational status a Shapiro-Wilk test of normality was performed for the two groups separately, these both indicated that the data for the two groups differed significantly from normality.

For taxpayers who were Agriculture, Forestry and

Fishing manufacturers S-W statistic = 0.677, $p < .001$ (df=12). For Construction S-W statistic = 0.876, $p < .003$ (df =28), Motor trade S-W statistic = 0.960, $p < .0820$ (df=6) , Transport and Storage S-W statistic = 0.886, $p < .039$ (df=17), Financial and Insurance S-W statistic = 0.606, $p < .000$ (df=8), Professional and Scientific S-W statistic = 0.496, $p < .000$ (df=6) Administration and Support Services S-W statistic = 0.634, $p < .000$ (df=8) Art Entertainment and recreation S-W statistic = 0.769, $p < .004$ (df=12) Table 4.

Hypothesis test

The results of the statistical hypothesis test results demonstrate that the Kruskal Wallis test with accountants (Table 5) showed a statistically significant difference in mean overall confidence across types of industry $h = 55.82$, $df = 6$, $p \leq 0.001$ | two-tailed. The results demonstrated that the probability of obtaining a test statistic of 55.815 with 6 degrees of freedom (7-1), the statistical significance level is less than $p = 0.001$. The result of the experiment therefore proves that there is a difference between the groups and therefore the null

Table 5. Independent samples test statistics – Taxpayers with accountants.

Total N	86
Test Statistic	55.815
Degrees of Freedom	6
Asymptotic Sig (2-sided test)	0.000

Source: Author.

Table 6. Independent samples test statistics – Taxpayers without accountants.

Total N	117
Test statistic	73.572
Degrees of freedom	10
Asymptotic Sig (2-sided test)	0.000

Source: Author.

Table 7. Summary Kruskal Wallis_Hypothesis test.

	Null hypothesis	Test	Sig.	Decision
Test sample 1	Mean confidence with accountants	Independent samples – Kruskal- Wallis Test	0.000	Hypothesis unfounded
Test sample 2	Mean confidence without accountants	Independent samples – Kruskal- Wallis Test	0.000	Hypothesis unfounded

Source: Author.

hypothesis is rejected (Table 5).

Additionally, Kruskal Wallis test without accountants (Table 6) showed a statistically significant difference in mean overall confidence across types of industry $h=73.572$, $df = 10$, $p < .001$ two tailed.

The results demonstrated that the probability of obtaining a test statistic of 73.572.815 with 10 degrees of freedom (11-1), the statistical significance level is less than $p=0.001$.

The result of the experiment therefore proves that there is a difference between the groups and therefore the null hypothesis is rejected (Table 7).

Conclusion

These findings support the notion that a transition to MTD is industry sensitive and therefore any reform must consider the circumstances of the industry and its taxpayers. The rollout of MTD will need to be supported by accounting/other practitioners. This study supports that tax payers transitioning to MTD who employ the services of an accountant are confident in the initiative. This resonates well with other research findings conducted by

Paul (2020) that suggests that HMRC review the implementation to date before proceeding with full MTD rollout. A significant factor in confidence in compliance promotion would be that successful tax reform is one in which the aims and objectives of the reforms are achieved by the government. Tax reforms need not seem difficult to achieve. Brooks and Noble (1996) describe an efficient and effective tax system as a system that does not distort economic decision-making and that cost of compliance and administration are kept to a minimum. A tax system should not deter incentives to work, innovate, save, and take risks and should be in line with the macro-economic policy. History has shown us that, for a tax system to survive it must be equitable.

It is interesting to note that the reform of a tax system may appear as a systematically easy process, but the desired results and outcomes have been proven to frequently fail.

From this standpoint therefore a 'good dose of local knowledge' gives any proposed tax reform the level of knowledge that would provide relevant information for tax administration to implement, control, and monitor the transition to Making Tax Digital. The findings of this study

confirm other recent studies such as the Institute of fiscal studies' report 2019: asserts that among those taxpayers who have self-employment income (43% of all self-assessment taxpayers), non-compliance is highest among those in the construction, transport, and hospitality sectors. In these sectors, around 60% of taxpayers were noncompliant. In revenue terms, non-compliant taxpayers in hospitality owe by far the most, at an average of almost £4,500. Across other industries, the amount owed varies between £2,500 and £3,200. Taxpayers in both hospitality and transport under-reported the largest shares of the total tax they owed, at 54% in both cases.

RECOMMENDATION

It is recommended that future study should focus on a study of the real cost of compliance based on the actual hour's taxpayers spend on preparing and filing quarterly self-assessments. Additionally, a study that measures the potential saving of tax losses due to errors because of the new making tax digital framework should be done.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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Appendix 1. Using the scale – Not Confident at all, Slightly Confident, Somewhat Confident, Fairly Confident, and Completely Confident. As an individual or as an organisation, indicate how confident do you feel.

	Not confident at all	Slightly confident	Somewhat confident	Fairly confident	Completely confident
1. Recording business transactions – (day to day book-keeping)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Using Excel to record business records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Keeping records for statutory minimum period of 5 years.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Completing an annual income tax return	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Filing tax returns annually online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Using HMRC free software to submit tax or vat returns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Using accounting software to record transactions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Paying taxes annually	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Preparing 4 quarterly income tax returns – personally or in-house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Paying income taxes Quarterly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Managing your Personal Tax Account with HMRC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Buying specialised accounting software to comply with MTD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Paying an accountant to comply with MTD (Making Tax Digital)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Paying increased accountancy fees to comply with MTD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Using the internet to transmit your accounting records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Using a smartphone to digitally record business records	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Using on-line banking to pay taxes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Meeting tax return submission deadlines – Quarterly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Meeting tax return submission deadlines – Annually	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Using the HMRC website for general tax advice and assistance regarding Making Tax Digital	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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