DOI: 10.1111/faam.12299

# RESEARCH ARTICLE

WILEY

# Public sector audit in uncertain times

Carolyn J. Cordery<sup>1</sup> David C. Hay<sup>2</sup>

#### Correspondence

Carolyn J. Cordery, Accounting Department, Aston Business School, Aston University, Aston Triangle, Birmingham B4 7ET, UK. Email: c.cordery@aston.ac.uk

### **Abstract**

In the future, environmental disasters and resource constraints will continue to impact the public sector audit environment. Governments will be held responsible for their responses and the corresponding financial impacts, particularly rising levels of public debt. Supreme Audit Institutions (SAIs) are vital in keeping governments accountable. Yet, they also need legitimacy and they are subject to isomorphic pressures to gain this. Mimetic isomorphism explains SAIs' structures, although they remain diverse, worldwide. Our analysis of extensive data about SAIs together with statistical measures about countries, an international survey and document analysis enables us to make projections about what isomorphic pressures will shape SAIs and enable them to deal with an uncertain future. Examining xpublic debt and the United Nation's Sustainable Development Goals as case studies, we show how isomorphism will shape SAIs' responses to an uncertain future.

#### **KEYWORDS**

auditing, isomorphism, public resource scarcity, public sector, Supreme Audit Institutions

<sup>&</sup>lt;sup>1</sup> Accounting Department, Aston Business School, Aston University, Birmingham, UK

<sup>&</sup>lt;sup>2</sup> Department of Accounting and Finance, University of Auckland Business School, Auckland, New Zealand

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

<sup>© 2021</sup> The Authors. Financial Accountability & Management published by John Wiley & Sons Ltd



#### 1 | INTRODUCTION

"The future of audit is uncertain" (Hay, 2020).

Although the future is unknown, certain structures and strategies enable institutions to respond more favourably than they otherwise would. Foresight, based on current trends, can elucidate general directions for the future. These projections prepare institutions to meet future needs and opportunities (Cuhls, 2003). Public sector organisations are diverse in structure worldwide, and this is particularly the case with their auditors, Supreme Audit Institutions (SAIs). Prior research has questioned whether diversity in SAI structure impacts government effectiveness and productivity (Blume & Voigt, 2011). In this paper, we analyse the forces that influence the structure of SAIs; this aids understanding of how these structures can develop in order to assist SAIs to deal with an uncertain future. To make these projections, we analyse the trends that influence the structure of SAIs using a framework of institutional theory. We apply our models to an extensive set of data.

Audits exist whether or not they are mandatory, as a result of a set of similar influences such as agency costs, governance and confirmation of earlier unaudited information (Hay & Cordery, 2018). This finding suggests that isomorphic forces have driven the growth of audit globally. Nevertheless, how public audit is structured and the variety of ways in which SAIs deliver value varies considerably (Cordery & Hay, 2018, 2020; Hay & Cordery, 2021). Frumkin and Galaskiewicz (2004) argue that public sector entities yield to isomorphism due to a need for legitimacy. SAIs are unique institutions within countries, but are typically independent entities that are responsible for public audit in their own jurisdiction. Is there a common structure that SAIs trend towards? If diversity remains, how might isomorphism shape SAIs' responses to an uncertain future? Understanding the role of isomorphic forces in the nature of SAIs should assist in dealing with uncertain future trends. Isomorphic forces are the influences that cause change, and that are causing SAIs to converge on a standard model (or a small set of models). Although convergence to one or several structures may bring legitimacy, isomorphic forces identified in this study are not necessarily either an advantage or a disadvantage for SAIs. Understanding their convergence as a result of changing professional and political policies is relevant to understanding SAIs' future policies and resources.

Analysis of SAI structures is in a nascent stage, therefore this exploratory research contributes to the literature in three different ways. First, the analysis of current structures creates a 'baseline' to inform understanding of both diversity and possible reasons for it and its impacts. Secondly and importantly, we highlight global structures and examples that enable SAIs to deal with an uncertain future; and thirdly, from our elucidation of structures that aid understanding of SAI change, we suggest fruitful areas for future research within this under-researched area.

The next section of this paper presents institutional theory as our theoretical framework. This framework, applied to our data, enables us to analyse recent trends in SAIs within an increasingly uncertain environment, in order to ascertain how isomorphic pressures will force SAIs to deal with this uncertain future structurally and operationally. The following section outlines our data analysis, international survey, document analysis and two case studies – public debt and the United Nation's (UN's) Sustainable Development Goal (SDGs) – where isomorphic pressures could force SAIs to deal with an uncertain future. Our findings suggest that mimetic isomorphism has been responsible for structural changes in SAIs. Further, despite structural diversity, through the cases of public debt and the UN's SDGs we show how the International Organization of SAIs (INTOSAI) applies normative isomorphic pressure to improve SAIs' operational responses to uncertain times. We also reflect on the likelihood of these pressures to force SAIs to deal with an uncertain future. Our discussion and conclusion also outline limitations and areas for future research.

### 2 | THEORETICAL FRAMEWORK

It is often stated that auditing studies are bereft of theory (Hay & Cordery, 2018; Jacobs & Evans, 2012). Consequently, we seek to find explanations for the identified trends to develop foresight about possible future(s) in public sector auditing. Such an approach assumes a theoretical framework that can explain change. Neo-institutional theory (often just called institutional theory) derives from organisational theory and seeks to explain similarities and differences among organizations, their practices and isomorphic changes to those (DiMaggio & Powell, 1983).

Institutional theory has been used to examine a wide range of business issues, including the adoption of International Accounting Standards by different countries (Judge et al., 2010). Laws/regulations, informal norms and conventions (institutions) influence actions of individuals and organizations. Hence, DiMaggio and Powell (1983) argue that these institutions include three forces that make organizations similar to each other, namely:

"1) coercive isomorphism that stems from political influences and the problem of legitimacy; 2) mimetic isomorphism resulting from standard responses to uncertainty; and 3) normative isomorphism associated with professionalization" (DiMaggio & Powell, 1983).

Empirically, these three forces can intermingle (DiMaggio & Powell, 1983). Although legitimacy is associated with coercive isomorphism, legitimacy also drives mimetic isomorphism (e.g. modelling other legitimate organisations) and normative isomorphism (e.g. submitting to legitimate professions) (DiMaggio & Powell, 1983).

Although initially public sector organisations can be culturally and contextually dissimilar and they may seek innovations which differentiate them, at a later stage, they can be influenced by a drive towards legitimacy, with the three forces of isomorphism making them more similar to each other. Frumkin and Galaskiewicz (2004) suggest that public sector entities are more susceptible to such institutional pressures than for-profit or not-for-profit entities. Because they are public sector entities (and due to mimetic pressures as described below), greater isomorphism might apply to public audit/SAls than occurs in the private sector.

The World Bank suggests that there are almost 200 SAIs with similar structures, and they tend to follow one of three models (although, despite these similarities, we show below that they also have many diverse features). The World Bank models are the:

- Westminster model, emanating from the United Kingdom and comprising an independent statutory body with 'a
  Comptroller and Auditor General who is an officer of the House of Commons' (Pollitt & Summa, 1997, p. 315). These
  SAls' reports are discussed at the Parliament's Public Accounts Committee (or similar). This model is used in many
  Commonwealth countries, as well as, inter alia, Mexico, Chile and Poland (Effective Institutions Platform, 2014).
- Board/Collegial model, similar to the Westminster system, but a panel (or Board) replaces that model's single
  Auditor-General. This is evident, for example, in Argentina, Japan and the Netherlands (Effective Institutions Platform, 2014) as well as Norway and the European Court of Audit (ECA) which is a supra-national institution responsible for auditing European Union institutions.
- Court/Judicial model used in Latin countries within Europe, many French-speaking countries and Latin America, including France, Brazil, Greece and Turkey (Effective Institutions Platform, 2014). It comprises a Court of Audit with judges and legal staff. Their court status makes them highly influential, especially as the magistrates may be appointed for life, can have long civil careers and are highly educated (Morin, 2011).

Some SAIs use another institutional model which can also include being part of the Ministry of Finance. This model is now not widely used but nevertheless applies in some countries, for example in Vietnam (Cordery & Hay, 2020).

<sup>&</sup>lt;sup>1</sup> Pollitt and Summa (1997) note a variant on this model in the Swedish and Finnish SAIs which were at that time part of government, as they were within their respective Ministries of Finance, but operated with independence.

In addition to structural legitimacy from using a particular model, possible parliamentary criticism means that SAIs are likely to follow recommended practice to maintain legitimacy (James & John, 2007; Keerasuntonpong & Cordery, 2018), whether that be the result of coercive, mimetic or normative forces. DiMaggio and Powell (1983) predict that coercive isomorphism will encourage organizations towards greater similarity where there is greater dependence on another organization, or greater centralization of resource supply. Frumkin and Galaskiewicz (2004) found that public sector entities were more likely to morph towards an 'average' due to coercion, and that formalisation of processes would also lead to greater adoption of 'generic' bureaucratic forms. When considering SAIs specifically, levels of government debt and international aid are examples that may have an impact, due to a nation's financial dependence and the power of the lenders/aid providers.

Organizations (such as SAIs) will be more likely to model themselves on other organizations because of mimetic isomorphism when there is more uncertainty in the relationship between means and ends, and when the goals of an organization are uncertain (DiMaggio & Powell, 1983). When there is greater participation of its managers in trade or professional organizations, organizations (such as SAIs) could become more like other organizations in the same field because of normative isomorphism.

Applying the broad outline of DiMaggio and Powell's (1983) model to SAIs, we might expect SAIs to be structured similarly when the forces of isomorphism apply. We suggest that institutional theory should be considered relevant in these circumstances:

- if it is the case that SAIs audit a government that is dependent on external organizations for funding (coercive isomorphism);
- when there is uncertainty about how to achieve the objectives of auditing; when goals are uncertain (mimetic isomorphism):
- when there are few visible alternative models (mimetic isomorphism); and
- when managers are professional and engage with professional organizations (normative isomorphism).

SAIs are likely to experience these circumstances, but to varying degrees; hence, the institutional framework in this paper assists us in explaining SAI structures and how isomorphic pressures can shape SAIs and enable them to deal with an uncertain future. Other literature has used neo-institutional theory in analysing SAIs and the environment in which they work, as we now describe.

Measures of coercive isomorphic influences can include the extent of government debt (Lamoreaux et al., 2015), and foreign aid (Judge et al., 2010; Khan & Hoque, 2016). For example Khan and Hoque (2016) find that the Bangladesh Parliament's public accounts committee was coerced by international donor agencies, a factor that might also affect SAIs. Coercive isomorphism was found in Reichborn-Kjennerud et al.'s (2019) analysis of SAIs anti-corruption work in seven diverse countries in Europe and Africa, due to country-level political systems which can lead to sanctions against a SAI when it fights corruption. Carpenter and Feroz (2001) argued that resource dependency and the need to raise funds from the capital markets meant that certain U.S. States early-adopted Generally Accepted Accounting Principles in order to raise funds from the capital market (i.e. coercive isomorphism, as sanctions would have included that these financially stressed States would not be able to raise funds). In local government, where there is more independence in the United Kingdom, fragmentation of practice is being seen to occur more readily, largely driven by different regulatory spaces (Ferry & Ahrens, 2020).

Further, Reichborn-Kjennerud et al. (2019, p. 4) found mimetic pressures as SAIs follow models from other countries, but the authors are concerned that models that 'make sense in one context are transferred uncritically to another', for example from a country with low levels of corruption to one with high levels. Khan and Hoque (2016) also found mimetic isomorphism where Bangladesh copied the model of Parliaments such as those of Australia, Canada and the United Kingdom. Additionally, Christensen (2003) argues that mimetic isomorphism assisted the adoption of commercial accounting in the Australian public sector, due to the use of consultants who were familiar with private sector models. Although the influence of professional consultants could also be a source of normative isomorphism,

Christensen (2003) argues that countries' uptake of private sector models was due to goal ambiguity, lack of technological understanding and an uncertain environment, all contexts for mimetic pressures. Similarly, Johnsen et al.'s (2001) study compares public institutions in Finland and Norway, arguing that differences in these countries' use of value for money auditing reflect a management consultancy style, and mimetic isomorphism due to the uncertain and ambiguous environment in which the local governments they studied operate. Finally, Chan et al. (2016) find mimetic isomorphism in the structure of the SAIs in Samoa and Tonga, as accountability is influenced by New Public Management (NPM) (introduced by its dependence on foreign aid) and their history, especially Samoa which was colonised by the British and has adopted the Westminster model (Heald, 2018).

In respect of normative isomorphism, Reichborn-Kjennerud et al. (2019, p. 3) observe normative pressures from professional accountants, including that private sector auditors 'define themselves away' from responsibilities involving corruption. In addition, Khan and Hoque (2016) also argue that normative isomorphism caused change in Bangladesh's government through staff taking an international training programme in Australia. Keerasuntonpong and Cordery (2018) in a study of SAIs' influence on local government reporting did not find evidence of normative isomorphism, but little other research exists on the normative impact of SAIs on their auditees.

Prior research, which has mostly been case studies, suggests isomorphism has a role in SAI change, and that succumbing to isomorphic pressures can assist SAIs to gain legitimacy. We now describe our method used to discern recent trends in both the structure and support of SAIs within this increasingly uncertain environment, in order to ascertain what isomorphic pressures will enable SAIs to deal with this uncertain future.

### 3 CONTEXT AND METHOD

Public sector audit is not demanded nor provided in a vacuum. This section briefly introduces the INTOSAI and the global environment in which public audit is projected to be undertaken in the future. Further, the specific data sources that are used in this exploratory research are also described.

INTOSAI is an umbrella membership organisation for the SAI community involved in professional standards, and knowledge and capacity building (see <a href="https://www.intosai.org">www.intosai.org</a>). Since 2004, INTOSAI has instigated a standard-setting board and International Standards for Supreme Audit Institutions (ISSAIs) to develop an 'authoritative framework for public sector auditing'.<sup>2</sup>

INTOSAI and its regional organisations operate a number of committees and working groups to monitor and advance professionalism in public sector external audit. Further, it seeks to develop capacity in SAIs through, inter alia: regional forums, promoting peer reviews and cooperative audits which enable best practice to be shared, through the International Journal of Government Auditing and conferences.<sup>3</sup> A Congress (INCOSAI) is held triennially and, since 2001, has resulted in 'Accords' summarising the findings of the congress. In addition, INTOSAI has convened a Knowledge Sharing Committee (KSC) to generate and disseminate knowledge amongst SAIs through communities of practice, task forces and working groups.

In 1986, INTOSAI established the INTOSAI Development Initiative (IDI) which, from 1999, has operated as a separate legal entity registered in Norway. Its mission is to support SAIs to strengthen their performance and capacities, and one way it does this is through the Performance Measurement Framework (PMF).<sup>4</sup> Using a mix of self-assessment and peer and external assessments, the influence of the PMF is likely to increase. Our information for analysis was drawn mainly from INTOSAI's database which is maintained by the SAI of Mexico, was initially gathered in 2013–14 and to which INTOSAI granted us access. More than 90 SAIs have contributed data but it does not include data from

<sup>&</sup>lt;sup>2</sup> https://www.intosai.org/what-we-do/professional-standards

<sup>&</sup>lt;sup>3</sup> https://www.intosai.org/what-we-do/capacity-development

<sup>4</sup> https://www.idi.no/en/idi-cpd/sai-pmf

all INTOSAI jurisdictions.<sup>5</sup> We also drew on the European Court of Auditors' (2019, p. 3) handbook which provides an overview of the 'mandate, status, organization, work and output of the 29 SAIs of the EU and its Member States and illustrate(s) the differences and similarities between them'. These sets of data formed the basis of the tables and our subsequent analysis.

Public sector audit is demanded for accountability of government and foresight suggests that these demands will grow. Specifically, resources are scarce in the public sector, as citizens demand more services, better infrastructure and joined-up responses to crises (such as the Covid-19 pandemic). Citizens also contribute towards governments' limited revenues. To meet citizens' needs, governments frequently resort to debt instruments, with public debt rising globally.<sup>6</sup> In respect of economic trends, the European Commission (2012) and the Mowat Centre (2014) highlight resource scarcity as an important trend facing future governments.<sup>7</sup> Certain geographic areas may be more resilient, with the National Intelligence Council (2012) noting the economic growth of Asia and its relative resilience to human-made crises, such as the Global Financial Crisis (GFC) (although Asia had its own crises in 1997). Outside Asia, the European Commission (2012) recounts how governments were called upon to support 'institutions too big to fail' following the GFC and how that human-made disaster, along with ageing populations, has impacted public debt, a constraint also noted by the Mowat Centre (2014). The Covid-19 pandemic has also been predicted as likely to result in a recession<sup>8</sup> and increased public debt, making financial resource constraints a major feature in the public sector's future, despite governments' desires to increase economic growth rates, post pandemic. Citizens require accountability with respect to any government support provided to private sector organisations, as well as any increased public debt.

Resource scarcity of a different kind increases the relevance of reporting on sustainability and related issues. Because economic growth encourages resource consumption, and many natural resources are geographically confined, environmental resource scarcity is likely to increase (European Commission, 2012). The National Intelligence Council's (2012, p. ii) 'Global Trends 2030' report agrees that not only will resource demands escalate, but that supply and demand for food, water and energy are interlinked, so that 'tackling problems with one commodity will be linked to supply and demand for others'. The calls to limit the rates of climate change and increase environmental sustainability reflect these resource demands (Mowat Centre, 2014). Governments are therefore challenged to undertake 'a paradigm shift', 'innovation' and 'inclusive strategies' (European Commission, 2012), especially as natural disasters are expected to increase (National Intelligence Council, 2012). The UN's SDGs have been designed to bring about better management and sharing of resources globally and all UN members have promised to work towards achieving them.

There will be a need for nations to report on and audit environmental issues (Hay, 2020) and especially against the UN's SDGs, to ensure global goals are met. This need is likely to require more cooperative audits (i.e. joint, coordinated or parallel audits) (see also ISSAI 5800 Guide for Cooperative Audit Programs between SAIs; Monroe-Ellis, 2018; Siddiqui, 2019). Rajaguguk et al. (2017) note that data for achieving such goals are likely to be held by more than one ministry. They show a case study of how a consolidated audit report was prepared for a poverty reduction programme, utilising the work of 12 teams in the SAI as well as 15 provincial audit teams. Data availability was a challenge. This is similar to that experienced in India, when the SAI audited that government's readiness to fulfil its SDG commitments (Comptroller & Auditor General of India, 2019).

In addition, Monroe-Ellis (2018, p. 1) calls for SAIs to 'be a beacon' in not only auditing governments' reporting, but also to meet SDG16 to 'Promote peaceful and inclusive societies for sustainable development, provide access to justice

<sup>&</sup>lt;sup>5</sup> The database's webpage states that 'The INTOSAI SAI's Information Database is aimed at gathering and making available information such as SAIs' organization, administrative characteristics, mandate, scope, and auditing practices, as well as data on their communication methods and reporting, among other topics'.

 $<sup>^{6}\,\</sup>text{See IMF}\,\text{data}\,\text{at}\,\text{https://www.imf.org/external/datamapper/datasets/GDD.}$ 

<sup>&</sup>lt;sup>7</sup> The European Commission (2012, p. 8) lists these six: Global demographic and societal challenges; Energy and natural resource security and efficiency, environment and climate change; Economy and technology prospects; Geopolitics and governance: EU frontiers, integration and role on the global scale; Territorial and mobility dynamics; and Research, education and innovation, whereas the Mowat Centre (2014, pp. 2–3) lists: Demographics; Rise of the individual; Enabling technology; Economic interconnectedness; Economic power shift; and Climate change, resources stress and urbanization.

<sup>&</sup>lt;sup>8</sup> The National intelligence Council (2012, p. 40) states that recessions from financial crises 'tend to be deeper and require recoveries that take twice as long' (as, say, political or resource crises).

**TABLE 1** Regional distribution of survey responses

Regional organization	Number of responses	%
AFROSAI-E	3	11%
ARABOSAI	1	4%
ASOSAI	4	14%
CAROSAI	1	4%
EUROSAI	10	36%
OLACEFS	3	11%
PASAI	5	18%
None (United States/Canada)	1	4%
Grant total	28	100%

**TABLE 2** Coercive isomorphism: SAI model and mean of coercive influences

SAI model	Number	Aid <sup>a</sup>	GDP per head	Debt, million	Market capitalization millions
Board/Collegial	22	0.961	21,827	338,674	525,056
Board/Collegial and Court/Judicial	6	1.033	19,011	189,485	362,134
Board/Collegial and other institutional model	1	14.811	489	1712	-
Court/Judicial	5	3.622	9011	3880	473,190
Court/Judicial and part of Ministry of Finance and other institutional model	1	1.116	2342	108,096	132,652
Other institutional model	6	9.448	20,397	396,923	587,440
Westminster	50	3.373	16,873	86,794	96,775
Westminster and Court/Judicial model	1	0.026	14,830	186,697	250,739
Westminster and other institutional model	2	0.247	16,640	11,174	-
Grand total/mean	94	3.056	17,628	166,460	264,221

 $Source: Model \ from \ INTOSAI \ database, statistical \ information \ from \ World \ Bank.$ 

for all and build effective, accountable and inclusive institutions at all levels'. The role of international 'players' (like the UN) is a feature of increased globalisation, and this research primarily draws on internationally held data which help to assess how globalisation/isomorphic pressures have occurred and therefore whether these can impact future public sector audit of resource constrained governments.

Our information for this analysis was drawn secondly from publicly available sources including the World Bank (aid, GDP, national debt, market capitalization – see Table 2). Further we used composite measures as developed by researchers and as explained below. These included La Porta et al.'s (2006) legal system classification scheme (see Table 3), Brown et al.'s (2014) measures of auditing and enforcement, alongside up-to-date data on uptake of International Financial Reporting Standards (IFRS) from Deloitte's (2019) website (www.iasplus.com - see Table 4) and

<sup>&</sup>lt;sup>a</sup>Overseas Development Assistance.



TABLE 3 Legal system of countries and SAI model

Legal system	English	French	German	Scandinavian	Grand total
SAI model					
Board/Collegial	2	7	3		12
Board/Collegial and Court/Judicial		6			6
Board/Collegial and other institutional model	1				1
Court/Judicial		5			5
Court/Judicial and part of Ministry of Finance and other institutional model		1			1
Other institutional model	3	1	1		5
Westminster	20	12	1	4	37
Westminster and Court/Judicial model		1			1
Westminster and other institutional model	1	1			2
Not available	37	47		1	85
Grand total	64	81	5	5	155

current data on uptake of International Public Sector Accounting Standards (IPSAS) from the IFAC Public Sector Financial Accountability Index (https://www.ifac.org/what-we-do/global-impact-map/accountability – see Table 5).

Our third main source of information in addition to INTOSAI sources and those from publicly available global databases/prior research was a survey we undertook with the support of INTOSAI. This elicited responses from 28 different SAIs internationally. Each member of INTOSAI was contacted and asked to participate in the survey. A link was sent through the Qualtrics online survey system in mid-2019. Regional INTOSAI organisations were advised of the survey which was made available in English for 3 months. The number and distribution of the responses is provided in Table 1. Of these, 56% used the Westminster model, 15% used the mixed Board/judicial model and 7% used each of the Board and Court models. The model used by 15% was not available from the INTOSAI database. Of the survey respondents, 55% (19/28) use INTOSAI auditing standards (ISSAIs) with the remaining 45% (16/28) using either ISAs or those based in ISAs.

All of our sources have limitations especially that they do not provide complete information. They can also be inconsistent, because different SAIs may have differing interpretations of the terms that are used in different datasets and further, data have been collected at different points of time in the past 15 years. Nevertheless, the sources provide information that is helpful, and are the most comprehensive and up-to-date sources available.

# 4 | FINDINGS

SAIs could be subject to coercive, mimetic and normative influences that can be isomorphic. Isomorphic pressures could lead to the SAIs converging on one structural model, although not necessarily a single model, but rather a small number of categories. From the INTOSAI database, we find that the majority of SAIs follow the Westminster model (50 of the 94 SAIs for which data were available; see Table 1). Nevertheless, as shown in the data below, currently a wider range of 'models' are used than merely four (three World Bank models plus an 'other category'). Many jurisdictions use a mix of the four structural models. In this section, we consider each of the isomorphic pressures in turn, to ascertain the pressures that might lead to future structural change. Following this, we present findings from our survey of future

 TABLE 4
 Normative isomorphism: Accounting and auditing requirements and SAI model

SAI model	No. of obs. for Brown indexes	Mean of Audit index (Brown)	Mean of enforcement (Brown)	No. of obs. for IFRS measures	IFRS not allowed (Deloitte)	IFRS required in some cases (Deloitte)
Board/Collegial	10	18.90	10.80	20	8	13
Board/Collegial and Court/Judicial	5	22.60	13.40	5	0	က
Board/Collegial and other institutional model				1	0	1
Court/Judicial	1	45.00	16.00	8	1	1
Court/Judicial and part of Ministry of Finance and other institutional model				1	1	0
Other institutional model	2	21.00	14.00	2	0	0
Westminster	12	26.33	15.83	37	1	31
Westminster and Court/Judicial model	4	4.00	5.00	1	0	1
Westminster and other institutional model	_			1	0	1
Not available in INTOSAI database	26	20.38	12.04	88	14	49
Grand total	57	21.74	12.75	160	20	100



TABLE 5 IFAC Public Sector Financial Accountability Index

	IFAC Publ	ic Sector Fi	nancial Accountabili	y Index		
SAI model	Accrual	Cash	Cash transitioning to accrual	Missing	Other	Grand total
Board/Collegial	5	5	7	1		18
Board/Collegial and Court/Judicial	3		2	1		6
Board/Collegial and other institutional model			1			1
Court/Judicial	1	1	2			4
Court/Judicial and part of Ministry of Finance and other institutional model			1			1
Other institutional model	2	2	1			5
Westminster	16	12	15	7		50
Westminster and Court/Judicial model			1			1
Westminster and other institutional model			1	1		2
Nat available	11	38	35	37	3	124
Grand total	38	58	66	47	3	212

Note: IFAC Public Sector Financial Accountability Index from https://www.ifac.org/what-we-do/global-impact-map/accountability (obtained 29 January 2020).

responses to global resource constraints. Our two case studies show the extent to which isomorphism is likely to shape SAIs and enable them to deal with an uncertain future.

### 4.1 | Isomorphism

# 4.1.1 | Coercive isomorphism

We have noted that measures of coercive isomorphic influences can include the extent of government debt (Lamoreaux et al., 2015) and foreign aid (Judge et al., 2010; Khan & Hoque, 2016). Measures of aid might be inaccurate, and so GDP per head might also be relevant, because countries with lower GDP are more likely to receive aid. We obtained both aid and GDP measures from the World Bank database. Further, Baker et al. (2014) suggests that capital markets may influence isomorphism for auditing listed companies, and it may be that this influences to public sector audit. This would also link to the argument of Carpenter and Feroz (2001) that coercive isomorphism leads States to early-adopt Generally Accepted Accounting Principles (GAAP). Hence, we used World Bank data of total stock market capitalization in each jurisdiction as a measure of the importance for financial markets to comply with global norms and therefore to incur coercive isomorphism. These are presented in Table 2.

From Table 2, we note that countries receiving the most aid are those using the Court/Judicial model (3.622), but the value they receive is only slightly more than that received by countries using the Westminster model (3.373). The Board/Collegial countries (0.961) include developed countries such as Germany, Japan and the United Arab Emirates, and which have low average levels of foreign aid and high GDP per head. The Court/Judicial countries include low-income and high-aid countries such as Timor-Leste and Togo and Mauritania (which uses a mixed Board/Collegial

and Court/Judicial model). Although the countries using the Westminster model have aid levels almost as high as the Court/Judicial countries, their income (measured by GDP) is higher. The Westminster grouping includes a wide degree of variation, with many high-income countries (e.g. Iceland and New Zealand) which do not receive aid, as well as very low-income countries (Ethiopia and South Sudan) which receive high levels of aid.

If coercive isomorphism is relevant, then more aid, or lower national income (GDP per head); higher debt; or greater share market capitalization will be associated with a particular model. Our results show that is not the case. We are aware that there is some anecdotal evidence that these influences are important, but nevertheless the data do not show this with Table 2 showing that coercive isomorphism does not appear to be a strong influence over the model adopted by SAIs globally. If it is, then controlling for some other factors must also be important.

# 4.1.2 | Mimetic isomorphism

As noted, Heald (2018, p. 1) observes that newly established countries have tended to copy the institutional arrangements of former colonial powers in a form of mimetic isomorphism, although he criticises it as being 'without recognition of context'. Table 3 compares the SAI models and countries' legal systems as a proxy for their colonial histories, using the classification scheme from La Porta et al. (2006) that divides countries into English, French, German and Scandinavian legal systems.

From Table 3, we observe a fairly consistent pattern, because the Scandinavian countries all use a version of the Westminster system, whereas most countries using a German-based legal system use a Board/Collegial system. Although it might be expected that countries with a French legal system would use the Court/Judicial system, there are larger numbers using the Westminster and Board/Collegial system. Most countries using an English-law-based system use a Westminster system, but there are exceptions. Hence, mimetic isomorphism forcing countries to adopt a system based on their former colonising power is not as widely supported as might be expected.

There is evidence, however, that mimetic isomorphism plays a part in the choice of SAI model. The Westminster model appears to be adopted in less-developed countries, which might be subject to greater uncertainty. The data are mixed, although some trends are clear. Countries with less political stability, fewer political rights and fewer civil liberties tend to use the Court model (Cordery & Hay, 2020). The Westminster model exists in a wide range of countries at more extreme ends of the scales of political stability, political rights and civil liberties, consistent with the less stable countries with fewer rights emulating mimetically the more stable countries with more rights (Cordery & Hay, 2020). A similar pattern applies with property rights and securities law enforcement. As noted, colonial history indicated by the legal system (as shown in Table 2) is not as strongly associated with mimetic isomorphism. Further, even when there is a shared history, operational processes can be markedly different (as shown by Ferry & Ahrens [2020] in their study of local government audit).

# 4.1.3 | Normative isomorphism

Normative isomorphism occurs when professionals engage in the activities of professional organizations or, as found by Khan and Hoque (2016), through training in other countries. Data for measures of the professionalization of accounting in a country and its public sector can be drawn from similarities in auditing and use of international standards, especially accrual accounting. Brown et al. (2014) analyse differences between countries in relation to the auditing of financial statements and the enforcement of compliance with each country's accounting standards. They measure (i) auditing: 'the quality of the public company auditors' working environment' and (ii) enforcement: 'the degree

of accounting enforcement activity by independent enforcement bodies' for 51 countries (Brown et al., 2014). Use of accrual accounting, whether through IFRS or IPSAS, is also a way to measure normative isomorphism, when it is taken as a measure of the professionalization of accounting in a country, rather than, as Christensen (2003) argues, brought in by consultants. We draw on Brown et al.'s (2014) measures of auditing and enforcement (updated to 2008) and also data from Deloitte's (2019) website: www.iasplus.com where we extracted information about which countries have not permitted IFRS and for which countries IFRS is required. This measure indicates a country that has an advanced private sector accounting profession, which is likely to be a normative influence on public sector accounting. Although these measures align with private sector auditing, they provide a reliable measure of the quality and professionalism of a country's audit profession in general; however, in countries which operate a Court of Audit and where the legal rather than the accounting profession is dominant in the SAI, this may not be the case, despite the uptake of INTO-SAI's ISSAIs or their equivalent for public audit. Nevertheless, Table 4 provides a measure of potential normative influences from professional auditors.

Table 4 shows the results for auditing and accounting measures from Brown et al.'s (2014) index and from Deloitte (2019). Higher scores in the Brown index represent stronger accounting and auditing requirements or stronger enforcement. Higher averages, where there are more than one or two observations, appear to be associated with the Westminster model countries, and lower scores with the Board/Collegial countries. Similarly, a higher proportion of the Westminster countries have IFRS accounting standards required for at least some entities. There is evidence of normative isomorphism taking place, where countries with a strong accounting and auditing profession are more likely to apply the Westminster system, although the evidence is admittedly mixed.

Another measure of the effectiveness of a SAI is financial accountability within a country. The IFAC public sector financial accountability index is a measure of this, and this measure is reported in Table 5.

The results in Table 5 show no differences among the various SAI models, with each model about equally likely to use cash accrual or cash transitioning to accrual. However, the data include few observations of court model countries.

As a further influence, a SAI seeking guidance on an uncertain future may approach peers in regional INTOSAI bodies (see Table 6). SAIs in a region cooperate, holding conferences and providing opportunities for SAIs to share ideas. Table 6 illustrates the extent to which normative isomorphism takes the form of SAIs converging on the model used by other members of the same regional SAI. Of the SAIs for which data are available, the Westminster model is most common in almost all regions, the only exception being ASOSAI (Asia) which has more entities using the Board/Collegial model. There is evidence that some regions are converging on one model, for example the Westminster model is extensively used in the OLACEFS (Latin American) region. In this case, the jurisdictions for which data are not available are a substantial limitation, especially in the CREFIAF (Francophone African) and CAROSAI (Caribbean) regional groups. The notes below the table provide the full name of each regional organization and its relevant website.

The influence of INTOSAI itself is likely to lead to an increased level of normative isomorphism, especially in SAI practice, through its Congress, Working Groups and committees as well as its standards and journal (as noted in Section 3).

### 4.2 | SAIs' capacity to respond to future challenges

Given the observation of strong normative isomorphic forces on SAIs' structures, how does normative isomorphism assist these SAIs operationally to respond to future challenges and what does it tell us about the future of public sector audit? The intent of this research is to understand how isomorphic pressures will force SAIs to deal with an uncertain future, that is how can they achieve legitimacy in respect of global trends affecting governments in the future, with

<sup>&</sup>lt;sup>9</sup> The auditing index includes measures for licensing, quality assurance, audit fees and litigation risk, collected from the International Federation of Accountants. The enforcement index measures the powers and activities of the body that regulates auditors.

 $<sup>^{10}</sup>$  We thank one of the peer reviewers for pointing this out.

TABLE 6 SAI models in each regional SAI

SAI model	AFROSAI-E	AFROSAI-E ARABOSAI ASOSAI CAROSAI CREFIAF	ASOSAI	CAROSAI	CREFIAF		EUROSAI OLACEFS	PASAI	None	Grand total
Board/Collegial	1	1	80	1		7	2	2		22
Board/Collegial and Court/Judicial		1				4	1			9
Board/Collegial and other institutional model	₽									$\leftarrow$
Court/Judicial			1		1	1	1	1		5
Court/Judicial and part of Ministry of Finance and other institutional model			1							$\leftarrow$
Other institutional model	1		1			1		ဗ		9
Westminster	6	1	5	2		16	12	4	7	90
Westminster and Court/Judicial model							1			1
Westminster and other institutional model			1				1			2
Not available	14	20	31	19	19	19	4	6	9	141
Grand total	26	23	48	22	20	48	22	19	7	235

Abbreviations: AFROSAI-E, African Organisation of English-Speaking Supreme Audit Institutions (https://afrosai-e.org.za/members-contact/); ARABOSAI, Arab Organization for Supreme subject/n1/n120/n1300/n1474/index.jsp); CAROSAI, Caribbean Organization of Supreme Audit Institutions (https://carosai.org/); CREFIAF, Le Conseil Régional de Formation des Institutions Supérieures de Contrôle des Finances Publiques de l'Afrique Francophone sub-Saharienne (http://www.crefiaf.org/#); EUROSAI, European Organisation of Supreme Audit Institution (https://www.eurosai.org/en/about-us/members/); OLACEFS, Organización Latinoamericana y del Caribe de Entidades Fiscalizadoras Superiores (https://www.olacefs.com); PASAI, Pacific Audit Institutions (http://www.arabosai.org/En/sai-s-members. 108. 208); ASOSAI, Asian Organization of Supreme Audit Institutions (http://www.asosai.org/en/saosai.org/asosai.client/web120/ Association of Supreme Audit Institutions (https://www.pasai.org/members-map). the most important being the economy and resource scarcity (European Commission, 2012; Mowat Centre, 2014)? This sub-section draws on documents and our survey of INTOSAI members to assess what isomorphism means for the future of public audit with regard to (1) public debt as an economic and resource scarcity issue and (2) the SDGs as an environmental resource scarcity issue, recognising that achieving the SDG goals also requires economic resources but that the SDGs hope to bring about better management and sharing of resources globally. We further argue that past practices impact the future. In addition, a majority of our survey respondents believed that future developments, particularly resource constraints, will affect audit delivery (with the most affected being performance audits, compliance audits second and financial statement audit the third most affected). For example one respondent noted:

[Our SAI] bases its concerns on areas such as the future challenges [that is]... the sustainability of public finances and new areas of risk, such as climate change, environment, migration, information system, etc.

# 4.2.1 | Resource scarcity and public debt

With the OECD (2020) reporting that 11 of 35 of its member countries have debt of more than 100% of GDP, and the Covid-19 pandemic increasing government expenditure, good management of public debt is essential. Respondents stated, for example:

Future development will affect our delivery of these services to a great extent - speed of changes in technology, global connections and the increasing availability of data... [there will be] considerable changes in the natural environment and cultural diversity... In this more diverse, dynamic, and connected world, how the public sector tells its story and assures the public it is meeting their expectations will be fundamental to maintaining the public's trust and confidence in the public sector (R16).

Normative pressure has been applied to SAIs to force them to deal with resource scarcity, particularly public debt. Since 1989 and the XIII INCOSAI with the theme 'Auditing the Public Debt', in 1995 XV INCOSAI adopted guidelines on public debt reporting, 11 further guidelines on measuring real and contingent debt (XV INCOSAI) and established a Public Debt Committee in 1991 (INTOSAI, 2007). Thus, INTOSAI has been active in highlighting to SAIs and their stakeholders public debt as a resource scarcity issue. In 2007, INCOSAI XIX developed the Mexico Accord which elucidated the two themes of the congress: 'Theme I. "Management, Accountability and Audit of Public Debt" and Theme II: "Performance Assessment Systems Based on Key Indicators" (INTOSAI, 2007). This was further strengthened by the 2013 INCOSAI XXI and the Beijing Accord under which, as well as INTOSAI members committing to national audit and national governance, INTOSAI again committed to strengthen 'the role of SAIs in safeguarding long-term sustainability of finance policies' (INTOSAI, 2013, p. 4). Highlighting the growing issue of public debt recognises that 'this is an intergenerational equity issue' (INTOSAI, 2007). The focus has been on assisting SAIs to develop the professional capacities to monitor, review and audit public debt management, and to shape the social and economic environment for future generations. For example the Mexico Accord recommendations encourage, inter alia, a proactive and holistic approach, urging SAIs without the mandate to audit state debt to request a law change so that they can do so (INTO-SAI, 2007). Further, the Beijing Accord recommends that INTOSAI should 'use its influence to continue to promote the development of harmonized financial reporting frameworks within the public sector to provide greater transparency in respect of government operations, particularly in relation to government debt' (INTOSAI, 2013). It also recommends, inter alia, better public finance performance audits, strong financial statement audits and evaluation of public financial policies (INTOSAI, 2013).

External organizations, for example the UN, also recognise the key role of SAIs with the UN Resolution A/66/209 (INTOSAI, 2013). In addition to Committees and Task Forces on public debt, <sup>11</sup> INTOSAI developed ISSAIs (5410–5450) to assist audit practice and consistently state that experienced and well-trained auditors should be involved in public debt audits (INTOSAI, 2007, 2013). The need for SAIs to be independent and to draw on regional and international networks (i.e. INTOSAI and its regional organisations) underpins the advice provided to SAIs (INTOSAI, 2013), as well as the work of the KSC and IDI. <sup>12</sup> This was commented on by one of our survey respondents:

[SAIs in developing countries] face unique challenges due to their geographical location and size. [INTO-SAI's] Regional organisations ... and development partners such as ... IDI have greatly contributed to the development of these SAIs and should continue with the good work (R23).

Our survey respondents not only pointed to the need for SAIs to draw on best practice, but also argued that this would have a future impact on the type of audits provided. For example respondents stated:

Future development in auditing and public sector management will give a greater effect on Performance Audit as citizens demand that resources are used efficiently, effectively and economically for a developing country... better oversight and transparency related to Good Governance... can also lead to a better international rating (R26).

[Recent reforms] provide a method to help [our country] to achieve fiscal responsibility and access to the capital markets... to be more efficient with the resources and cautious with its expenditures... This may also make us shift from mostly compliance audits to make more performance audits (R22).

Hence, INTOSAI has developed policies and processes which will provide normative isomorphic pressure to help SAIs (no matter their structural type) to develop the expertise needed to assist governments to manage intergenerational equity. The future of audit is likely to include more performance auditing covering a broader remit to ensure that debt and financial resource scarcity is kept in check.

# 4.2.2 | Resource scarcity and the SDGs

Normative pressure has also forced SAIs to deal with environmental resource scarcity, with the SDGs being an emerging area. All UN members adopted the 2030 Agenda for Sustainable Development in 2015 with the aim to ensure economic, social and environmental sustainability (United Nations General Assembly, 2015). The Millennium Development Goals (MDGs) were a forerunner of this response to unequal sharing of resources. As SDGs are a national commitment, this suggests auditors will need to monitor and to report on each nation's progress towards achieving their SDGs.

Since the XV INCOSAI in 1995 and the establishment of the Working Group on Environmental Auditing (WGEA), INTOSAI has been committed to developing professional guidance, and encouraging knowledge-sharing and cooperative audits in the area of environmental issues (INTOSAI, 2010). In 2010, INCOSAI XX developed the Johannesburg Accord which encouraged implementation of the ISSAIs and pushed the value and benefits of SAIs, but also committed to developing answers to 'environmental auditing and sustainable development' (INTOSAI, 2010). It noted that

<sup>&</sup>lt;sup>11</sup> Specifically, the Working Group on Public Debt (INTOSAI, 2007) and the Working Group on Financial Modernization and Regulatory Reform, which in 2012 replaced the Task Force on the Global Financial Crisis established by INTOSAI in 2008 in the wake of the Global Financial Crisis (INTOSAI, 2013).

<sup>&</sup>lt;sup>12</sup> See https://www.intosai.org/what-we-do/knowledge-sharing.

regional working groups assisted SAIs and pushed SAIs to ensure they also had practices that are consistent with environmental protection (INTOSAI, 2010; Monroe-Ellis, 2018).

The INTOSAI Working Group undertook a number of surveys to determine the state of environmental audits amongst SAIs, with Van Leeuwen (2004, p. 163) noting that 'environmental auditing is a substantial and regular part of the audit work of more than half of the SAIs'. Indeed, one of our survey respondents noted:

[Our SAI] has set as one of its strategic goals ... to become a leader in selected fields of public sector audit (such as environmental auditing) and to be acknowledged as a centre of excellence and expertise within [our country's] public administration (R17).

This respondent is not alone, and the field of environmental auditing has grown as governments establish environmental policies. It requires SAIs to work with the numerous actors involved, undertake ex post (and often performance) audits and provide advice not only to their own nation, but often to cooperate with other SAIs on transboundary environmental audits (Van Leeuwen, 2004).

INTOSAI's commitments and recommendations were further strengthened by the 2016 INCOSAI XXII and the Abu Dhabi Accord which had four aims, two of which are pertinent here: <sup>13</sup> (1) 'endorse the UN's 17 SDGs and the need and demand for effective public audit and scrutiny of the implementation of the SDGs and (2) establish by KSC, the Community Portal to facilitate knowledge sharing' (INTOSAI, 2015). The Abu Dhabi Accord (INTOSAI, 2015) noted that INTOSAI wanted to 'make a meaningful independent audit contribution' to the SDG agenda.

In addition, UN Resolutions A/66/209 and A/69/228 provide further evidence of the UN recognising INTOSAI and SAIs' roles in ensuring sustainable development, as does a joint UN–INTOSAI symposium in 2015 on the role of SAIs in sustainable development (Guillán Montero & Le Blanc, 2019). The close connection between the UN and INTOSAI in respect of the SDGs makes it unsurprising that more than 80<sup>14</sup> SAIs have audited the preparedness of governments for implementing the SDGs to help governments work towards SDG implementation and discharge accountability for their commitments. This has been underpinned by ISSAI 5130, the development of ISSAI 5800 (Rajaguguk et al., 2017) and an IDI capacity development programme on Auditing SDGs<sup>15</sup> (Guillán Montero & Le Blanc, 2019). The move from MDGs which focused on developing countries to SDGs which are more universally based, has meant more SAIs have become involved in environmental/sustainability audits. As noted by Guillán Montero and Le Blanc (2019), reporters must choose appropriate indicators for monitoring and evaluation, but also to attribute responsibilities, long-term planning and budgeting. Our respondents noted other challenges, for example:

How can we monitor the progress of public management for the fulfilment of sustainable development objectives? How can we convert SAIs into facilitating institutions to connect different related parties for the analysis and solution of major public problems? .... How can SAIs contribute to the protection of the planet with regard to climate change? (R7)

Respondent 8 noted that challenges: 'lie in the development of performance due to the increase in sustainable development activities and their consequent burdens', but also specifically mentioned 'the requirements of the sustainable development audit' as a new service being developed for the short/medium-term future. Indeed, despite challenges, the SDG implementation audits have already been seen to improve processes, programmes and structures, both in government and the SAIs themselves (Monroe-Ellis, 2018). And the normative pressures towards standards and practices enable SAIs to claim legitimacy, despite structural differences.

<sup>&</sup>lt;sup>13</sup> The other two were 'to endorse the INTOSAI's 2017–22 strategic plan to increase the contribution SAIs make to improving accountability and transparency in public management around the globe... and adoption of the new framework for professional pronouncements' (INTOSAI, 2015).

<sup>&</sup>lt;sup>14</sup> More than 70 have been completed (Guillán Montero & Le Blanc, 2019).

<sup>&</sup>lt;sup>15</sup> Guillán Montero and Le Blanc (2019) note that over 70 SAIs are participating across all six INTOSAI regional groups (in four languages), that SAIs from the Arabic speaking region are joining from 2019 and that in some regions, auditing of preparedness is a regional effort.

### 5 | DISCUSSION AND CONCLUSION: THE FUTURE OF PUBLIC AUDIT

This exploratory research has analysed the forces that influence the structure of SAIs to ascertain how isomorphic pressures will force SAIs to deal with an uncertain future. We took economic and environmental resource scarcity as strong global trends to provide foresight about possible future(s) in public sector auditing using isomorphism as a theoretical underpinning. SAIs hold a unique role within each country. Best practice suggests that they should be independent of government, report to parliament and remain apolitical. They are also expected to be leaders within the public sector. Yet they work within national settings, beset by resource constraints, and in an environment that is increasingly global and thus are subject to global forces for change. The environment is uncertain, and more so since the onset of the Covid-19 pandemic.

Institutional theory has been used to examine change within and across organisations in respect of a wide range of issues (e.g. DiMaggio & Powell, 1983; Judge et al., 2010). In this paper, we have focused on forces that may bring about structural change in SAIs, suggesting that these forces will also support SAIs to deal with an uncertain future.

The data show that although SAIs have similarities, and there is some evidence of isomorphism (SAIs moving towards a standard model), the extent of similarity should not be overstated. Each country is likely to have some unique features. It is also very clear that there is as yet no single standard model. Neo-institutional theory and isomorphism appear to have limitations in their application to the field of SAIs, based on the available evidence. Nevertheless, similar isomorphic forces could be encouraging SAIs to converge on one of the three major models that exist around the world, with the Westminster model appearing to be becoming the standard model.

There are limitations to our analysis, and these suggest areas for future research. The limitations of our study include that we only examine the SAIs at a point in time – we do not examine case studies of change in any countries. We use the legal system as a proxy for colonial history, without examining national histories more closely. The issue of whether the influence on the SAI derives from colonial history or legal system is a complex one. The legal system is a more likely source, but there exist papers such as Heald (2018) that attribute auditing arrangements to colonial history. The topic is further complicated by the fact that some countries at different times were part of one empire and then another, and also the existence of an 'informal empire' (Darwin, 2013; Henderson, 2015) where Britain exercised substantial influence over some countries without them being formally brought into the empire. Other colonial powers probably had similar influences. These issues imply that there is potential for research to examine when it was that changes occurred in SAI models, and what were the factors driving those changes.

Reviewing the influences towards isomorphism shows that there are some effects, but not from all of the isomorphic forces. We do not find evidence of coercive isomorphism having an effect through aid, debt or stock markets. There is some evidence of mimetic isomorphism because countries which lack stability or rule of law are more likely to emulate stable countries and adopt the Westminster model. There is consistent evidence that normative isomorphism has an effect on accounting and auditing requirements, a strong profession leading towards adoption of accrual IPSAS and membership of regional SAI groups having an impact. If coercive mechanisms do not seem to have driven structural isomorphism but mimetic and normative pressures have, what does this mean for the future, for SAIs seeking legitimacy and shaping their responses to an uncertain future?

SAIs, working within the public sector, are likely to be driven towards legitimacy (Frumkin & Galaskiewicz, 2004), and although this may mean there are internal (national) forces that drive their legitimacy, as unique institutions, we have considered global (external) forces that could shape change within individual SAIs. Country indicators help us understand whether coercive isomorphism could occur when SAIs audit a government that is dependent on external organizations for funding such as aid or having lower GDP; higher debt; or greater sharemarket capitalization. We found no correlation between these factors and a particular model. However, this could change, and increased resource scarcity might be sufficient to increase the pressure for coercive isomorphism by external agencies such as

lenders or aid agencies, or other countries that provide political support<sup>16</sup> (Lamoreaux et al., 2015). Changes that might lead to increases in the forces towards coercive isomorphism are an example of possible changes to SAIs in the future.

We also considered whether mimetic isomorphism arises due to inherent uncertainty about how to achieve the objectives of auditing, when goals are uncertain or when there are few visible alternative models. We found evidence that mimetic isomorphism plays a part in the SAI model in use by countries, with the Westminster model adopted in less-developed countries, which might be subject to greater uncertainty and which also might be relatively small. However, colonial history appears not to be a very strong mimetic isomorphic pressure and this is an area where more evidence (e.g. regional case studies) could elucidate why prior understandings of colonialism are not shown to be a mimetic force. Resource scarcity issues could well increase the uncertainty faced by SAIs and thus their mimetic need for isomorphism with respect to their structures.

In respect of potential normative influences, there is some evidence that countries with a strong accounting and auditing profession are more likely to apply the Westminster system. There was little evidence of particular pressures coming from the IFAC public sector financial accountability index. However, we did find regional similarities that would suggest the INTOSAI regions work to assist SAIs in choosing structural change. Nevertheless, there are many national differences in SAI structures. One of the influences towards normative isomorphism was the strength of private sector accounting and auditing in a country, although we were unable to link relative strengths of the accounting versus legal profession in ascertaining whether this would result in a Westminster or Court of Audit structure. Nevertheless, where normative isomorphism drives private sector audit, we suggest that resource uncertainty issues will lead to increased private sector influence over public sector accounting and auditing as a practice.

We find that global pressures, both mimetic and normative, force SAIs to deal with an uncertain future. Operationally, INTOSAI has become a key professional body applying normative isomorphism to improve SAIs' capabilities and to strengthen their ability to remain independent, through international and regional support. This occurs despite structural diversity. We examined two resource constraint issues, namely, public debt and the UN's SDGs, as case studies to show how this isomorphism can improve SAIs' operational responses to an uncertain future. Here, we found that the work of INTOSAI, through its Congress, working groups, standard setting and IDI initiative, as well as working in consort with the UN, has enabled SAIs to engage in such audits as the preparedness of governments for implementing the SDGs, to help governments work towards SDG implementation and discharge accountability for their commitments. Within this community, members encourage SAIs to respond to future challenges, such as Pamela Monroe-Ellis' (2018) challenge to work towards meeting SDG15. In addition, SAIs look to the INTOSAI regional organisations for advice from members on performance audits and evaluations, recognising that their unique context may require adaptation. SAIs will actively develop more performance auditing not only to deal with the SDGs but also debt as managing increased indebtedness requires governments to operate effectively and efficiently. The current pandemic has seen huge increases in government spending and debt, and the influences of both the pandemic itself and the increased debt can be expected to increase the mimetic pressure for SAIs to adopt practices used in other countries.

We expect that current pressures will lead to future changes that increase the extent of isomorphism among SAIs. We are able to use our data to make some specific predictions, although we acknowledge that further research is needed.

Specifically, we predict that there will be greater trends towards the three forces of isomorphism, especially the two forces that are currently influential, mimetic and normative isomorphism. That is SAIs will continue to model themselves on each other, especially when their environment is uncertain (mimetic isomorphism), and to adopt techniques learnt from professional auditors through interaction with organisations such as INTOSAI (normative isomorphism). Although we did not find evidence of coercive isomorphism, it is still a plausible force, so that it is likely there will be evidence of SAIs being influenced to copy each other to meet the demands of lenders or aid providers. As a result, SAIs

 $<sup>^{16}</sup>$  Lamoreaux et al. (2015) shows that World Bank appears to overlook some accounting and auditing requirements for countries whose geo-political interests are aligned with those of the United States.

that face more uncertainty, interact more with professional bodies and have more demand from outside bodies will tend to become more similar to leading SAIs. There is likely to be a continuing trend to adopt the Westminster model, but that will be conditional on whether the normative professional influences that an SAI is subject to arise from bodies using this model.

While we accessed SAIs' self-reported data from INTOSAI and a range of publicly available data, as well as responses to our survey of INTOSAI members, we acknowledge that the data are incomplete and have been collected at different points in time, although it is the most current at the time of writing. As an exploratory study, we argue that there is a need to develop better databases for more in-depth research that could enhance our initial findings. This is particularly necessary in regions which we know little about, for example the OLACEFS (Latin American), CREFIAF (Francophone African) and CAROSAI (Caribbean) regional groups.

The data we have been able to access have shown that although structurally mimetic forces drive a move towards the Westminster model, especially in emerging economies, there is wide variety in SAI structures. These will reflect the specific legal and financial situations of each nation. Hence, although the World Bank 'three SAI model' is a convenient categorisation, much more variety exists. INTOSAI, as a strong professional body, enables SAIs to navigate these differences and to assist governments and citizens in reporting and managing resource constraints, particularly in public debt and environmental concerns and thus is a normative pressure forcing SAIs to deal with an uncertain future. As INTOSAI is a body controlled by its members, SAIs also contribute to the forces driving their own change.

#### **ACKNOWLEDGEMENTS**

We appreciate the support of INTOSAI in allowing us to access their database maintained by the SAI of Mexico on SAI characteristics, particularly the Director of the INTOSAI General Secretariat, Dr Monika González-Koss and Mr. Francisco T. Paroral-Pineda, Departmental Chief of the National Anti-Corruption System Division of the Auditoria Superior de la Federacion. Jika Mapila, Chief Auditor of the Malawi National Audit Office, assisted us in data collection. We also appreciate the INTOSAI members who answered our survey. Feedback from a seminar at the University of Portsmouth was also helpful.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the sources quoted in this article. The survey data collected by the authors are available on request from the corresponding author. The survey data are not publicly available due to privacy or ethical restrictions.

# ORCID

Carolyn J. Cordery https://orcid.org/0000-0001-9511-7671

#### REFERENCES

- Baker, C. R., Bédard, J., & Prat dit Hauret, C. (2014) The regulation of statutory auditing: An institutional theory approach. *Managerial Auditing Journal*, 29(5), 371–394. https://doi.org/10.1108/MAJ-09-2013-0931.
- Blume, L., & Voigt, S. (2011). Does organizational design of supreme audit institutions matter? A cross-country assessment. European Journal of Political Economy, 27(2), 215–229. https://doi.org/10.1016/j.ejpoleco.2010.07.001
- Brown, P., Preiato, J., & Tarca, A. (2014). Measuring country differences in enforcement of accounting standards: An audit and enforcement proxy. *Journal of Business Finance and Accounting*, 41(1–2), 1–52. https://doi.org/10.1111/jbfa.12066
- Carpenter, V. L., & Feroz, E. H. (2001). Institutional theory and accounting rule choice: An analysis of four US state governments' decisions to adopt generally accepted accounting principles. *Accounting, Organizations and Society*, 26(7–8), 565–596. https://doi.org/10.1016/S0361-3682(00)00038-6
- Chan, M. X., Cordery, C. J., & van Peursem, K. A. (2016). An institutional lens on Auditor-General roles in two Pacific nations: Samoa and Tonga. Centre for Accounting, Governance & Taxation Research, Victoria University of Wellington (No. 107), 36pp.
- Christensen, M. (2003). Without "reinventing the wheel": Business accounting applied to the public sector. Australian Accounting Review, 13(2), 22–27. https://doi.org/10.2307/j.ctvxkn700.33

Comptroller and Auditor General of India. (2019). Report of the Comptroller and Auditor General of India on Audit of Preparedness for the Implementation of Sustainable Development Goals. Author.

Cordery, C. J., & Hay, D. (2018). Supreme Audit Institutions and public value: Demonstrating relevance. *Financial Accountability & Management*, 35(2), 128–142.

Cordery, C. J., & Hay, D. (2020). Public sector audit. Routledge.

Cuhls, K. (2003). From forecasting to foresight processes—New participative foresight activities in Germany. *Journal of Forecasting*, 22(2–3), 93–111. https://doi.org/10.1002/for.848

Darwin, J. (2013). Unfinished Empire: The Global Expansion of Britain. Bloomsbury Press. ISBN 9781620400395.

Deloitte. (2019). Use of IFRS by jurisdiction. lasplus.Com.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.

Effective Institutions Platform. (2014). Supreme audit institutions and stakeholder engagement practices: A stocktaking report. Author.

European Commission. (2012). Global Europe 2050. Author.

European Court of Auditors. (2019). Public Audit in the European Union: The handbook on Supreme Audit Institutions in the EU and its Members States. Author.

Ferry, L., & Ahrens, T. (2020). The future of the regulatory space in local government audit: A comparative study of the four countries of the United Kingdom. Financial Accountability & Management. https://doi.org/10.1111/faam.12291

Frumkin, P., & Galaskiewicz, J. (2004). Institutional isomorphism and public sector organizations. *Journal of Public Administration Research and Theory*, 14(3), 283–307. https://doi.org/10.1093/jopart/muh028

Guillán Montero, A., & Le Blanc, D. (2019). The role of external audits in enhancing transparency and accountability for the Sustainable Development Goals (157 (ST/ESA/2019/DWP/157)). https://www.un.org/development/desa/CONTENTS

Hay, D. (2020). The future of auditing. Routledge.

Hay, D., & Cordery, C. J. (2018). The value of public sector audit: Literature and history. *Journal of Accounting Literature*, 40(June), 1–15. https://doi.org/10.1016/j.acclit.2017.11.0010737-4607/

Hay, D., & Cordery, C. J. (2021). Evidence about the value of financial statement audit in the public sector. *Public Money & Management*, 41(4), 304–314. https://doi.org/10.1080/09540962.2020.1729532

Heald, D. (2018). Transparency-generated trust: The problematic theorization of public audit. Financial Accountability & Management, June, 1–19. https://doi.org/10.1111/faam.12175

Henderson, J. (2015). The British constitution: A very short introduction. King's Law Journal, 26(2), 328–330. https://doi.org/10.1080/09615768.2015.1072934

International Organization of Supreme Audit Institutions (INTOSAI). (2007). Mexico Accords. Author.

International Organization of Supreme Audit Institutions (INTOSAI). (2010). The Johannesburg Accords. http://search.proquest.com/docview/858673792?accountid=26357

International Organization of Supreme Audit Institutions (INTOSAI). (2013). Beijing declaration on promotion of good governance by Supreme Audit Institutions. Author.

International Organization of Supreme Audit Institutions (INTOSAI). (2015). The Abu Dhabi declaration. Author.

Jacobs, K., & Evans, S. (2012). Constructing accounting in the mirror of popular music. Accounting, Auditing & Accountability Journal, 25(4), 673–702. https://doi.org/10.1108/09513571211225097

James, O., & John, P. (2007). Public management at the ballot box: Performance information and electoral support for incumbent English local governments. *Journal of Public Administration Research and Theory*, 17(4), 567–580. https://doi.org/10.1093/jopart/mul020

Johnsen, Å., Meklin, P., Oulasvirta, L., & Vakkuri, J. (2001). Performance Auditing in Local Government: An exploratory study of perceived efficiency of municipal value for money auditing in Finland and Norway. The European Accounting Review, 10(3), 583–599. https://doi.org/10.1080/09638180120081580

Judge, W., Li, S., & Pinsker, R. (2010). National adoption of international accounting standards: An institutional perspective. Corporate Governance: An International Review, 18(3), 161–174. https://doi.org/10.1111/j.1467-8683.2010.00798.x

Keerasuntonpong, P., & Cordery, C. J. (2018). How might normative and mimetic pressures improve local government service performance reporting? *Accounting and Finance*, 58(4), 1169–1200. https://doi.org/10.1111/acfi.12252)

Khan, S. H., & Hoque, Z. (2016). Changes in the public accounts committee of a less developed democratic country: A field study. Financial Accountability & Management, 32(1), 80–103. https://doi.org/10.1111/faam.12082

La Porta, R., Lopez-De-Silanes, F., & Shleifer, A. (2006). What works in securities laws? *Journal of Finance*, 61(1), 1–32. https://doi.org/10.1111/j.1540-6261.2006.00828.x

Lamoreaux, P. T., Michas, P. N., & Schultz, W. L. (2015). Do accounting and audit quality affect world bank lending? *The Accounting Review*, 90(2), 703–738. https://doi.org/10.2308/accr-50865

Monroe-Ellis, P. (2018). We have to be a beacon: Jamaica's AG reflects on SAI's SDG journey. *International Journal of Government Auditing*, 45(4), 4–5.



Morin, D. (2011). Serving as magistrate at the French Cour des comptes: Navigating between tradition and modernity. Accounting, Auditing & Accountability Journal, 24(6), 718–750. https://doi.org/10.1108/09513571111155528

Mowat Centre. (2014). Future State 2030: The global megatrends shaping governments. Author.

National Intelligence Council. (2012). Global trends 2030: Alternative worlds. Author. ISBN 978-1-929667-21-5

OECD. (2020). General government debt (indicator). https://doi.org/10.1787/a0528cc2-en

Pollitt, C., & Summa, H. (1997). Reflexive watchdogs? How Supreme Audit Institutions account for themselves. *Public Administration*, 75, 313–336. https://doi.org/10.1111/1467-9299.00063

Rajaguguk, B. W., Yatnaputra, I. G. B. T., & Paulus, A. (2017). Preparing supreme audit institutions for sustainable development goals. *International Journal of Government Auditing*, Spring, 44(2), 30–33.

Reichborn-Kjennerud, K., González-Díaz, B., Bracci, E., Carrington, T., Hathaway, J., Jeppesen, K. K., & Steccolini, I. (2019). SAls work against corruption in Scandinavian, South-European and African countries: An institutional analysis. *British Accounting Review*, 51(5). https://doi.org/10.1016/j.bar.2019.100842

Siddiqui, J. (2019). Are four eyes better than two? An examination of recent empirical evidence on the impact of joint audits. Alliance Manchester Business School, University of Manchester, UK.

United Nations General Assembly. (2015). Transforming our world: The 2030 agenda for sustainable development. https://doi.org/10.1891/9780826190123.ap02

Van Leeuwen, S. (2004). Developments in environmental auditing by supreme audit institutions. *Environmental Management*, 33(2), 163–172. https://doi.org/10.1007/s00267-003-0063-9

**How to cite this article:** Cordery, Carolyn J, & Hay, David C (2021). Public sector audit in uncertain times. *Financial Acc & Man*, , 1–20. https://doi.org/10.1111/faam.12299