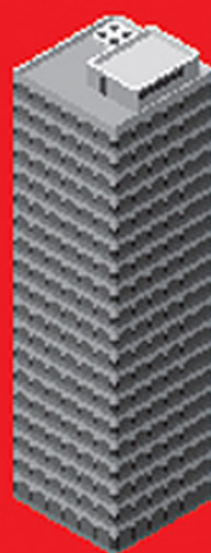


THE BIG FOUR



DELOITTE



PRICEWATERHOUSECOOPERS



ERNST & YOUNG



KPMG

The curious past and perilous future
of the global accounting monopoly

IAN D. GOW
STUART KELLS

Praise for *The Big Four*

“Major international accounting firms play a fundamental role in the governance of the world’s largest public companies. The quality of financial statements is crucial for evaluating executives and valuing firms. *The Big Four* delves into the origin of these firms and the role they play in businesses around the globe. As for many organizations, the future for accounting firms is uncertain. How will this profession adapt to its new environment? *The Big Four* tells the reader what to expect. This is a must-read for executives and directors alike.”

—**David Larcker, James Irvin Miller Professor of Accounting, Stanford Graduate School of Business; Professor of Law (by courtesy), Stanford Law School; and Senior Faculty, Rock Center for Corporate Governance, Stanford University**

“Who would have ever thought that one would find a deep understanding of the issues facing today’s Big Four in the rise and fall of the Medici bank? Gow and Kells provide a riveting analysis of the historical antecedents to today’s Big Four structures and strategies and leave us totally unsettled in considering the industry’s future. A unique approach of historical comparisons results in a must-read volume of an essential industry that is poorly understood. I could not put it down.”

—**Leonard A. Schlesinger, Baker Foundation Professor, Harvard Business School, and President Emeritus, Babson College**

The Big Four offers a provocative lens to consider the evolution and role of the largest global accounting firms. Perhaps its biggest contribution is to help the reader think about fundamental questions like what should we expect from an audit and how can an audit partner manage her “multiplicity of roles,” which includes managing financial and promotion incentives around “business development,” and still maintain credible independence and professional skepticism. It also brings forward a blunt discussion of why there seems to be an “audit expectations gap,” whether it is reasonable to assume that auditors can be expected to detect fraud, and offers some predictions about the potential implications of technology on professional practice. Some might view the narrative as one-sided, perhaps focusing too strongly on problems within the infrastructure, without sufficiently discussing its strengths. Most would likely agree, however, that this book can catalyze a needed discussion about what the accounting profession *should deliver*, what it appears to *currently deliver*, and how it should innovate moving forward.

—**Alan D. Jagolinzer, Professor of Financial Accounting and Director, Centre for Financial Reporting & Accountability, Judge Business School, University of Cambridge**

“A fascinating book . . . I highly recommend it.”

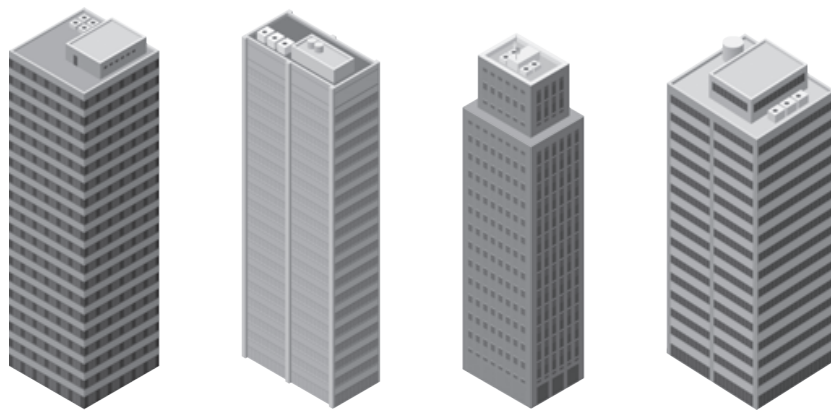
—**Ticky Fullerton, Sky News Business**

“Great fun. I enjoyed it.”

—**Phillip Adams, *Late Night Live*, Australian Broadcasting Corporation**

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THE BIG FOUR



**The Curious Past and Perilous Future
of the Global Accounting Monopoly**

**IAN D. GOW
STUART KELLS**



Berrett-Koehler Publishers, Inc.
a BK Business book

The Big Four

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CONTENTS

	Prelude	<i>Science, Magic and the Prehistory of the Big Four</i>	vii
1		Introduction	1
	PART I	INFANCY	15
2		Glory, Not Infamy	
		The Medici Bank as a precursor to the Big Four	17
3		Transported	
		How the Big Four began in the dangerous world of nineteenth-century accountancy	28
4		A Curious Match	
		The remarkable founders of the Big Four	38
	PART II	MATURITY	51
5		Mere Automata	
		Staking out the Big Four's turf	53
6		An Injudicious Change	
		Adventures and misadventures in Big Four branding	72
7		Porn Star	
		The culture of the Big Four	82
8		The Most Average Guys in the Room	
		Big Four professional values	96

PART III	THE DIFFICULTIES OF ADULTHOOD	111
9	Unqualified	
	Auditing as the foundation of the Big Four brands	113
10	Clean	
	The impairment of Big Four auditing	128
11	Get Ready to Dance	
	Conflicting interests in Big Four taxation services	150
12	One Four Ten	
	The Big Four in China	162
PART IV	THE TWILIGHT YEARS	175
13	Disrupted	
	The obsolescence of Big Four technology	177
14	Conclusion	190
	<i>Epilogue</i>	213
	<i>Acknowledgements</i>	215
	<i>Endnotes</i>	217
	<i>Bibliography</i>	230
	<i>Index</i>	252
	<i>About the Authors</i>	260

Prelude

SCIENCE, MAGIC AND THE PREHISTORY OF THE BIG FOUR

Founded in the nineteenth century as the world's first national accounting body, the Institute of Chartered Accountants in England and Wales quickly established a dining club, sports clubs and a library. Among the library's first acquisitions was a copy of Luca Pacioli's ground-breaking Renaissance book of practical mathematics, *Summa de Arithmetica* (1494).

Summa de Arithmetica explains how to manage ledgers, inventories, liabilities and expense accounts. As well as pioneering the use of Hindu–Arabic numerals in Europe, it helped popularise double-entry accounting. 'For every credit in a ledger,' Pacioli wrote, 'there must also be a debit.' The enlightened author encouraged entrepreneurs to stop consulting astrologers and recluses for advice about this or that venture; all a merchant needed to succeed, Pacioli counselled, was access to cash, a good bookkeeper and an up-to-date system of accounts.

Pacioli belonged to a noble tradition of scholarship. Bookkeeping – along with cartography, perspective and ballistics – was one of the first sciences of the scientific revolution. The German polymath Johann Wolfgang von Goethe considered double-entry bookkeeping 'amongst the finest inventions of the human mind'.

PRELUDE

Curiously, the careful counting of money preceded the careful measurement of lunar movements and accelerating cannonballs. The physical sciences, such as astronomy and physics, drew heavily on fiscal precedents: several pioneer physicists and cosmographers had also learned economics and accounting. Copernicus, for example, wrote on monetary reform as well as on the planets. Galileo taught bookkeeping, and learnt much from the field.¹ In 1696 Sir Isaac Newton was appointed Warden of England's Royal Mint.²

In the early days of science, numbers were put to all manner of purposes, practical and impractical. The first Latin and Italian books on arithmetic also instructed their readers on conjuring, astrology, thaumaturgy, games, jests, curses and black magic. As we look back with modern eyes, the line between early mathematics and magic appears strikingly fine; indeed, the relationship between math and the occult has a long history. Early in the fifth century, St Augustine issued a warning: 'The good Christian should beware of mathematicians and all those who make empty prophecies. The danger already exists that mathematicians have made a covenant with the devil to darken the spirit and confine man in the bonds of Hell.'

When, in the thirteenth century, Roger Bacon advocated the adoption of the Hindu–Arabic numerals, the church accused him of practising magic and condemned him to life in prison. Long after those strange-looking numerals arrived in Europe, they were still seen as exotic, even disreputable. The numerals, though, were a boon for Western culture. Much more practical and versatile than the Roman ones, the Asian numerals opened the way for modern mathematics, and hence modern accounting.

1 He also taught the new mathematics of fortification, such as how to build 'star forts' to withstand artillery.

2 The mathematician Carl Friedrich Gauss is said to have pointed out an error in his father's financial calculations – at the age of three.

PRELUDE

Double-entry bookkeeping rests on a tautology: the value of an organisation's assets must equal the claims of creditors and owners to those assets. This was a new idea. Earlier financial records reflected a very different philosophy. The Domesday Book of 1086, for example, is a set of simple lists that assert King William's property rights, ecclesiastical rights, legal privileges, taxes and commitments. It is not a balanced schedule of debits and credits. Absolute rulers were more interested in counting their gold than in tallying their debts – that is, in reckoning what they owned rather than what they owed. The rise of double-entry among bankers and merchants in the late medieval period reflected the tectonic social, political and economic changes of the age, and the shift of power to the men and women who energised the Renaissance.

The Pacioli volume became one of the most valued possessions of the Institute of Chartered Accountants, both for its ground-breaking content and for its worth on the rare book market. An 'incunabulum' (meaning it was printed before 1501), the book is today appreciated as one of the earliest printed volumes about numbers. Another copy, finely bound in vellum and recently found in an old cupboard, sold at a Milan book auction for 530,000 euros. These volumes are rare survivors: most other copies from the 1494 edition were read to pieces by teachers, students, bookkeepers and merchants.

The institute's other treasures include *Nieuwe Instructie* (Antwerp, 1543), a work whose translation into French and English helped spread double-entry accounting to Western Europe (the author was Jan Ympyn Christoffels, a travelling silk trader), and the only surviving complete copy of *The maner and fourme how to kepe a perfecte reconying* (London, 1553), written by James Peele and adorned with elegant sample ledgers.

The institute's collection would be described in 1966 as the world's most complete library devoted to accounting and allied subjects. It is a monument to a powerful principle: that sound bookkeeping is the foundation of success in statecraft and in commerce. The modern

PRELUDE

accounting profession was built upon this principle. Firms promised to guide their clients through a perilous terrain, and towards a noble goal. The four largest accounting and audit firms have profited spectacularly from widespread confidence in this idea. How well founded is that confidence? How fit are the big firms as trustworthy guides? And how stable is their position as the heirs to Pacioli and Christoffel and Peele?

INTRODUCTION

Stretching back centuries, the history of Deloitte, EY, KPMG and PwC is a fascinating story of wealth, power and luck. In many profound ways, the so-called Big Four accounting and audit firms have influenced how we work, how we manage, how we invest and how we are governed.

The firms have been called many things. High priests of capitalism. More powerful than sovereign states. Protectors of the public interest. The conscience of the free market. Heroes of corporate integrity. Benign watchdogs. Toothless lapdogs. A necessary evil. An institutionalised oligopoly. Corporate sweatshops. Accountants of fortune. Skilled enablers of white-collar fraud. Each of the Big Four is a case study of corporate triumph – and drama. Underneath their polished images are colourful tales of commercial success, but also of ethical compromises, professional angst, botched ventures, debauched parties, scandalous marriages, disreputable interests and arcane rites.

In a field that is seen as somewhat beige and lacking in prestige, the Big Four are the glamour boys, the glowing success stories of their field. In 2011 their total revenue broke emphatically through the US\$100 billion mark. Since then it has kept on rising, surpassing US\$130 billion in 2016. In that year, before a regrettable incident at the

THE BIG FOUR

2017 Oscars, PwC ranked alongside Disney, Nike and Lego as one of the ten most 'powerful' brands in the world.

With almost 1 million staff operating worldwide (not counting subcontractors), the Big Four are collectively one of the world's top employers. They directly employ more staff than there are active personnel in the Russian military. The number of people who have worked for a Big Four firm is much larger still. Many are now in other professional services firms, or senior roles in industry or government. In their work, they operate according to a 'Big Four style' – or in arch reaction against it.

Paul Gillis, a former PwC partner, described the Big Four as 'supra-national organisations, substantially unrestrained by national borders, transcending nationalistic claims and state based attempts to regulate them'. The firms are formally – and seemingly intractably – integrated into the functioning of the modern financial system and modern democracies. They enjoy growing connections, too, with less democratic governments in the developing and recently developed worlds. In China, for example, the firms have become agents of the economic boom, and hot targets for regulatory control.

The four firms dominate several key markets for accounting, tax and audit services. Nearly all the largest businesses in the United States and the United Kingdom, for example, are audited by one or more of the firms. Of the 500 companies in the S&P 500 index, 497 used a Big Four auditor in 2017. Nearly all those businesses also buy management consulting services from the Big Four. In 2017, PwC alone claimed to provide services to 422 of the *Fortune* Global 500. Modern economies simply cannot function, it seems, without accountants, auditors and management consultants.

The Big Four got to where they are today through a complex process of commercial marriages and tie-ups – a process so elaborate and repetitive it is suggestive of fractal biology. Corporate mergers on a colossal scale (and with questionable rationales) were a feature of the business

THE BIG FOUR

world in the 1980s. Examples from America include Pan Am's acquisition of National Airlines, Standard Oil's purchase of Kennecott Copper, and the Campeau Corporation's hostile takeover of Federated Department Stores – a transaction that *Fortune* magazine called 'the biggest, looniest deal ever'. Accounting firm mergers also reached a crescendo in that decade. In 1986 Peat Marwick and the mostly European firm KMG came together to create KPMG. In 1989 Ernst & Whinney and Arthur Young combined to become Ernst & Young. In the same year Deloitte Haskins & Sells merged with Touche Ross to form Deloitte & Touche. With the latter two mega-mergers, the Big Eight became the Big Six.

Five years earlier, Deloitte Haskins & Sells had come close to a merger with Price Waterhouse. There was much to recommend the marriage. The firms shared a common history, stretching as far back as the sector's early days in London. Both had advised England's railway companies, for example, and helped build the professional prestige of accountancy. The merger promised to create a modern powerhouse. In America alone, Deloitte at the time had 103 offices and 8000 employees; Price Waterhouse's American footprint encompassed ninety offices and 9000 employees. But internal opposition to the merger was strong. Naysayers claimed the two firms had starkly different cultures. In fact, the cultures were not really divergent, but considered in the context of the overall sameness of accounting practices, small differences loom large. When put to an international vote among partners, the merger option was rejected.

In 1989 Price Waterhouse again found itself in merger talks, this time with Arthur Andersen, the raging upstart founded by a former Price Waterhouse employee. Those talks also failed; Price Waterhouse would have to wait another nine years before finally consummating a union – with Coopers & Lybrand, thereby forming PricewaterhouseCoopers and reducing the Big Six to five.

Soon after, Ernst & Young and KPMG flirted but did not reach third base. (Speaking about the difficulty of consummating a merger, the

THE BIG FOUR

chairman of Ernst & Young in China lamented that such exercises were ‘like wooing a pretty young lady – one may lose for no reason at all.’) Even so, the Big Five did become the Big Four – and in a way that no one expected. Arthur Andersen’s rapid and spectacular exit in 2002, in the wake of scandals involving Enron, WorldCom and Waste Management, left behind four majors. Such was the market concentration of the accounting industry now that another top-tier merger was impossible.

Since that time, the firms have been remarkably stable, and remarkably successful. So successful, in fact, that regulators and commentators have raised concerns about the monopoly power of the Big Four. Accountancy is notably less competitive than other professions, such as law and engineering. Competition is especially weak in the market for audit services. In 2016 the editor of London’s *Financial Times* called for greater competition in that market: ‘Four big firms are too few, not least because their very scarcity makes the application of strict regulation more difficult.’

Monopoly concerns were raised even before Arthur Andersen’s exit. In 1997 Christopher Pearce, finance director of Rentokil and chairman of a group representing the finance directors of FTSE 100 companies, told the *Economist* that the merger of Price Waterhouse and Coopers & Lybrand would ‘reduce the choice for auditing services and increase the conflicts of interest’. As early as 1976, the US Senate’s Metcalf Report worried that ‘[t]he Big 8 are so large and influential in relation to other CPA firms that they are able to control virtually all aspects of accounting and auditing in the US’. The economic literature on monopoly and oligopoly is well established. Faced with a captive market, the monopolist raises prices, works inefficiently and shirks on quality. With the Big Four operating under a valuable monopoly concession in auditing, observers have noticed the commoditisation of audit services, and an erosion of their scope and reliability.

On the surface, the accounting and auditing industry has reached a state of cosy equilibrium. The firms collaborate in industry forums;

THE BIG FOUR

staff move regularly between them; the firms match each other's market presence and service lines, and copy each other's pricing, outputs and marketing strategies. Cosy or not, though, things are about to change. Today, the firms have a very uncertain future. They are on the cusp of a new era. In this book, which looks both backwards and forwards in time, we describe explosive pressures in each of the major service lines of the Big Four firms. Examples are the technological innovations that are rapidly making traditional forms of audit obsolete, and new sources of competition. Taken together, these pressures for change have an inexorable power, such that the industry will not be the same in five years' time.

The transformation may well arrive sooner than that – and it might be messy. Since the 1970s, the major accounting firms have endured recurring crises and have been sued thousands of times. Some of the suits, particularly those against the Big Four as auditors, have been perilously large. In 2011 the Association of Chartered Certified Accountants published its concern that audit firms would see 'potentially catastrophic litigation'.

As recently as 2016, PwC narrowly escaped the financial equivalent of what astrobiologists term an 'extinction-level event' (ELE). Taylor, Bean & Whitaker (TBW) was a US mortgage company. Lee Farkas, the company's chair and majority owner, masterminded a fraud that bankrupted the company and its major subsidiary (and main lender), Colonial Bank, one of the twenty-five largest banks in the United States. The fraud involved cash transfers and fake mortgages that massively inflated the assets of TBW and Colonial. Soon after the FBI raided TBW's grand headquarters, the two businesses declared bankruptcy. The collapse of Colonial – the biggest bank failure of 2009, the third-biggest since the beginning of the financial crisis, and the sixth-biggest in US history – cost the Federal Deposit Insurance Corporation (FDIC) around US\$3 billion. A thousand employees lost their jobs, and multiple lawsuits were launched.

THE BIG FOUR

Federal prosecutors described Farkas as a ‘consummate fraudster’. Others called him a ‘burly college dropout’ and a ‘pathological liar’ who was ‘as generous as he was vicious’; employees on the receiving end of his office tirades referred to having been ‘Farkased’. He and his co-conspirators were accused of submitting materially false financial data to the Securities and Exchange Commission and the Government National Mortgage Association (Ginnie Mae). In 2011 Farkas was found guilty of misappropriating US\$3 billion and trying deceptively to obtain US\$570 million in taxpayers’ funds from the Troubled Asset Relief Program to prop up Colonial. Farkas used the money to buy caviar, holiday homes, classic cars, a private jet, a seaplane, strip clubs and a portfolio of Brazilian and Asian-fusion restaurants. Sentenced to thirty years, Farkas began his imprisonment at a medium-security jail in North Carolina – where Bernie Madoff was a fellow inmate. Paul Allen (TBW’s former CEO), Delton De Armas (its former CFO), and Desiree Brown (its former treasurer) also received prison sentences.

PwC had audited Colonial’s holding company, Colonial BancGroup, every year from 2002 to 2008. TBW’s bankruptcy trustee accused PwC of failing to detect an unmissable fraud, and of certifying the existence of more than a billion dollars of Colonial assets that were in fact worthless, or were not owned by the company, or never actually existed at all. The ensuing legal action – the biggest claim ever made against an audit firm – sought US\$5.5 billion from PwC.

In August 2016 PwC settled the lawsuit. The value of the confidential settlement is closely guarded but is believed to be one of the largest ever in the history of the Big Four. The TBW–Colonial fraud and its consequences featured in an episode of the television series *American Greed* – agonising watching for the auditors. And the agony is not over yet. At the time of writing, PwC is still involved in TBW-related litigation launched by the FDIC. That agency has also gone after Colonial’s former internal auditor, Crowe Horwath.

THE BIG FOUR

In 2005 KPMG faced its own ELE when the US government accused the firm of knowingly selling tax shelters that gave the finger to the Internal Revenue Service (IRS). The shelters, it was claimed, generated more than US\$100 million in fees for KPMG, and deprived the public of billions in tax revenue. In an enormous stroke of luck for KPMG, the government decided not to indict. A conviction, the government feared, would destroy the firm – and the current system of corporate auditing. Without KPMG, the lawmakers worried, the Big Four would become the Big Three, and there would not be enough large accounting firms to audit America's corporations. Terrifyingly for KPMG, though, the decision could easily have gone the other way. KPMG barely escaped a fate similar to that of its former Big Five rival Arthur Andersen.

The other firms have also had their share of trouble. In the early 1990s, for example, EY had to pay out more than US\$400 million for failures relating to the savings and loan crisis. The firm was forced to publish full-page newspaper advertisements to rebut rumours that the payouts would send it into bankruptcy. In 2010 EY was again in strife, accused of 'a broad pattern of negligence and complicity' after a series of further lawsuits and calamities. And all four firms were deeply and controversially implicated in the 2008 financial crisis, the largest financial upheaval since the Great Depression. Deloitte, for example, had audited TBW in the years leading up to Colonial Bank's collapse; Deloitte paid to settle three related lawsuits in 2013.

Just as dangerously, the Big Four have been drawn into a toxic series of tax scandals, including LuxLeaks and the Paradise Papers. Ours is a new era of transparency and digital disruption, and in no area of Big Four services are those forces more intense than in taxation advisory.

The firms have come so close to the abyss that regulators and legislators have recommended that they prepare 'living wills'. A dismal concept borrowed from banking, such wills set out contingency arrangements for the orderly transition of clients and contracts; for

THE BIG FOUR

ring-fencing of viable business units; and for the rapid winding-up of unviable ones. They also include agreements with regulators on how assets, staff and funding would be dealt with in the event of a calamitous failure.

The demise of Arthur Andersen provides a vivid case study of what such a failure looks like. Convicted in 2002 of obstruction of justice, the firm shrank from 85,000 employees to a rump of 200. (Late in 2001, Andersen's global CEO Joe Berardino had toured overseas offices and reassured staff that 'everything would be OK'.) In the months before the firm collapsed, it had become a laughing stock. In January 2002, for example, at the Alfalfa Club dinner in Washington DC, President George W. Bush joked that he'd just received a message from Saddam Hussein. 'The good news is he is willing to let us inspect his biological and chemical warfare installations,' Bush said. 'The bad news is that he insists Arthur Andersen do the inspections.'

The aftershocks of the firm's troubles reverberated far and wide. Fewer top students thought of joining the major accounting firms. Opinion poll respondents rated accountants low on professional integrity. The firms were subjected to increased government scrutiny, mainly via the *Sarbanes-Oxley Act*. The greatest impact fell on the former Andersen staff, the vast majority of whom 'had nothing to do with Enron but lost their jobs nonetheless'. They'd all been Enroned.

According to author Robert B. Reich:

Some senior partners moved to other accounting or consulting firms. Joseph Berardino ... got a lucrative job at a private equity firm. Some other senior partners formed a new accounting firm. But many lower-level employees were hit hard. Three years after the conviction, a large number were still out of work.

Partners and staff lost much of their retirement benefits. When the Supreme Court later reversed the conviction that had led to Andersen's

THE BIG FOUR

collapse, a former ‘Android’ wrote on the website for Andersen alumni: ‘Does this mean we can bring a class action against the DOJ for ruining our lives?’

★

Much of the literature on business and economics has a particular type of firm in mind: an industrial company that produces physical goods. That type of firm, though, is becoming less and less representative of the modern economy. Firms that deliver *services*, and that trade in intellectual property, have prospered spectacularly. The Big Four are an example of this, indeed an exemplar. How they deviate from the standard picture of enterprises is of much practical interest for the study of economics and business.

The Big Four provide a rare opportunity to study service firms in detail. That opportunity, though, has not been taken up in a wholly satisfactory manner. Despite the importance and success of the Big Four, and despite the precarious position in which they find themselves, they are surprisingly under-documented. Remarkably little has been written about them or their conduct. Most of the studies that do exist have a particular flavour. In large part, the academic literature on audit and accountancy consists of narrow and ahistorical studies whose attitude towards the Big Four is typically reverential, or at least non-confrontational. Moreover, as Cooper & Robson (2009) observed, most accounting firm histories are ‘whiggish in their perspectives and orientations. They tend to focus on those who led the firm and construct events as the accomplishment of professional ideals through the response to client and market demands’. Burrage (1990) similarly criticised much of the historical work on the professions:

[Historians] tended to concentrate on the elite of the profession and the issues that came to the attention of their governing bodies. They rarely sought to study the working practice of the rank and