

Beware the Mental Pitfalls: Confirmation Bias in Accounting

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Confirmation bias seems to be widespread in many areas of our everyday life, ranging from political discussion and opinion to many aspects of business, including accounting. In the field of financial investing, Lazaroff (2016) found that when making financial investment decisions, investors have a habit of collecting evidence that confirms their decisions, instead of taking into consideration all available evidence. The effect of confirmation bias can be even more significant with prevailing beliefs. The reason for that is because people are more likely to accept information that confirms existing beliefs while more carefully scrutinizing evidence that questions those beliefs.

INTRODUCTION

“People generally see what they look for and hear what they listen for.”
--Harper Lee, To Kill A Mockingbird

In the early 1600's. The great English statesman and philosopher, Francis Bacon (1620/2014), described what we refer to today as confirmation bias:

Once a human intellect has adopted an opinion (either as something it likes or as something accepted), it draws everything else in to confirm and support it. Even if there are more and stronger instances against it than there are in its favor, the intellect either overlooks these or treats them as negligible or does some line-drawing that lets it shift them out of the way and reject them. This involves a significant and pernicious prejudgment through which the intellect's former conclusions remain inviolate (46).

In the 1960's, long after Sir Francis Bacon, British psychologist Peter Wason performed a series of experiments which later became to be known as the Wason's Rule Discovery Task. Wason established that people tend to seek out information that confirms their current beliefs. Wason refers to this phenomenon as confirmation bias, which can prevent us from looking at information objectively. Confirmation bias can influence us and lead us into making poor or faulty decisions.

Since Wason brought this phenomenon to light more than fifty years ago, psychologists who have studied confirmation bias have found it to be widespread, ranging from scientific research to political debate. In the political spectrum, during an election campaign, voters will often seek out positive information about their favored candidate, while ignoring negative stories whether accurate or not. By not seeking out objective facts, interpreting information in a way that only supports their existing beliefs, and only remembering details that uphold these beliefs, they often miss valuable information. "Research in Psychology: Methods and Design," by C. James Goodwin provides a good illustration of confirmation bias regarding extrasensory perception.

Persons believing in extrasensory perception (ESP) will keep close track of instances when they were 'thinking about Mom, and then the phone rang, and it was her!' They ignore the far more numerous times when (a) they were thinking about Mom, and she calls and (b) they were not thinking about Mom, and she did call. They also fail to recognize that if they talk to Mom about every two weeks, their frequency of "thinking about Mom" will increase near the end of the two-week-interval, thereby increasing the frequency of a 'hit.'

Similarly, confirmation bias helps us to form and re-confirm stereotypes we have about people. According to Catherine Sanderson in her book, "Social Psychology," we ignore information contrary to our cultural expectations as we are more likely to remember and repeat information consistent with the stereotype while dismissing and forgetting information consistent with the stereotype.

Confirmation bias is also present in the medical field. Gropman (2007) found a doctor who quickly hypothesized what disease a patient has would then ask questions and search for evidence confirming the hypothesized diagnosis while ignoring other signs and symptoms. In sum, as people develop an opinion on a certain topic, they look for positive cases while ignoring negative cases. Also, when developing a hypothesis about something, they require less evidence to confirm that hypothesis than opposing evidence to reject the hypothesis.

According to Baron (2012), confirmation bias is the "tendency to notice, process, and store only information consistent with current beliefs" (p. 32); i.e., people tend only to seek out information that supports their existing preconceptions, beliefs, viewpoints, and opinions. In other words, individuals like to look for and interpret information in ways that justify (confirm) their expectations. Confirmation bias is an elaborate way of explaining the human inclination to see what people want to see and is often described as "believing is seeing." Glick (2017) equates confirmation bias to the Texas sharpshooter fallacy where immediately after firing the shot, the sharpshooter draws a target with the bulls-eye over the bullet hole. Both consciously and unconsciously, people search for opinions and information that confirms what they already believe. Likewise, people avoid or reject new information inconsistent with their presumptions and already held beliefs (Parker, 2006). People are generally more likely to accept information they agree with and consider evidence they do not agree with using a much higher standard. Confirmation bias can cause individuals to reach inaccurate conclusions when not considering facts that contradict their currently held views.

It looks as though people want the world that they work and act together with to be compatible with their thoughts and opinions. Any evidence—or interpretation of evidence—that contradicts their beliefs, views, or pre-conceived notions creates conflict in their minds that leads to mental discomfort. People appear to be conditioned to decrease or eliminate this mental discomfort, if possible, which is when confirmation bias arrives. The result of this is that people become locked into what has been termed "inferential prisons" (Baron, 2012, p. 29) where external information inconsistent with their thinking will likely be ignored or dismissed as unimportant and disregarded rather than change their thinking. Moreover, information that refutes those expectations may be ignored or dismissed as insignificant (Russo & Schoemaker, 2002).

In the field of medical diagnostics is a more startling example of confirmation bias could have life-and-death implications. Physicians are known to be predisposed to the confirmation bias when diagnosing patients (Klein, 2005). A physician may intuitively form an opinion of the diagnosis after only a few short minutes of questioning a patient. From that point onward, their questions—and interpretation of the answers—will be geared towards confirming their diagnosis.

Drew, Vö, and Wolfe (2013) questioned a group of radiologists to scrutinize a series of chest x-rays, in the same way, they would if they were looking for lung cancer. However, the radiologists were unaware that the researchers had incorporated into the x-rays a picture of something a medical professional would never expect to see: a gorilla! The picture of the gorilla was not small; it was about 45 times the size of the average cancerous lung nodule—or about the size of a matchbook in a lung. Nevertheless, some 83 percent of the radiologists missed the gorilla—even though eye-tracking showed that most of them had looked right at it. Thus, even when observers are experienced, or experts, finding what is obvious could present a challenge for them if it is very far from what they believe or expect.

Confirmation bias can be found throughout the literature in numerous variations (Nickerson, 1998). *Myside bias*, for example, occurs when people evaluate evidence or test hypotheses in ways biased towards supporting their attitudes (Stanovich, West, & Toplak, 2013). Consider also *motivated reasoning* which refers to the general phenomena whereby people often seek out, interpret, and evaluate evidence in ways that are partial to their pre-existing views. Such motivated information processing—which can involve selectively attending to, ignoring, or distorting information to support existing beliefs—is a hallmark of human thinking across a variety of circumstances (Mercier & Sperber, 2011). Snelson (1993) referred to the “ideological immune system” as human’s coordinated system of psychological defenses against evidence that contradicts their entrenched views. Confirmation bias almost surely contributes to ideological certainty and even ideological fanaticism by insulating peoples’ ideological immune systems from potentially contrary evidence (see Tavris & Aronson, 2007, for a variety of real-world examples). As Calhoun (2004) observed, ideological fanaticism is marked by “an epistemological position regarding the incontrovertible authority of one’s own opinion” and a “complete lack of epistemological humility” (p. 350).

When unchecked, cognitive bias and its variations can prevent accountants from succeeding in their endeavor to provide effective audits, tax preparation, accounting services, or other beneficial outcomes because it diminishes the accountant’s flexibility during changing conditions, and ability to respond to contrary or conflicting information.

Confirmation Bias in Accounting

The Accounting industry has demonstrated concern about confirmation bias as well. In 2012, COSO gathered together KPMG management, and teachers from Brigham Young University and these two groups created a report entitled "Enhancing Board Oversight: Avoiding Judgement Traps and Biases for Accounting and Audit professionals, board directors, and other accounting and financial managers (Bettinghouse et al., 2014). The goal of the report was to give guidance to the accounting and audit professionals who consistently need to make sound and bias-free judgements in a continually-changing global environment because "demands for corporate governance and oversight have placed a premium on sound judgment and decision making for all key players in the marketplace: management, boards of directors, auditors and others." p. 39. The authors demonstrated the typical judgment traps, and biases listed below in Table 1 for accountants explained each one in their research:

**TABLE 1
JUDGEMENT TRAPS AND BIASES**

| |
|---------------------------|
| <i>Rush to Solve</i> |
| <i>Groupthink</i> |
| <i>Judgment Triggers</i> |
| <i>Overconfidence</i> |
| <i>Confirmation</i> |
| <i>Anchoring</i> |
| <i>Availability</i> |
| <i>Self-Interest Bias</i> |

One example of accounting bias found in the literature was in a study by Bhaskar, Hopkins & Schroeder (2017). The authors noted that over 67 percent of public companies would announce their earnings before rather than after audit results are published. The authors believe this behavior could affect or put pressure on the auditor during the client/auditor audit adjustment negotiations. The authors' study concluded that auditors are significantly less likely to compel clients to adhere to auditor recommendations for aggressive financial reporting when company earnings are pre-released to the public. This behavior demonstrates auditor bias which the authors noted could result in "...less critical thinking and lower professional skepticism" p. 32.

Confirmation Bias in Tax

The literature also noted the incidence of confirmation bias with tax professionals as well. Cloyd & Spilker (2000) wrote that earlier research indicated there was a tendency for tax specialists to find results to research on their clients' tax issues that would align with a positive answer for their clients' tax dilemmas. This confirmation bias could prove to be a problem rather than researching both negative and positive outcomes for their clients. The tax professional could give advice that might inflate their clients' tax position or completely ignore any negative attributes which could hurt the client in the long run.

Kadous, Magro, & Spilker (2007) believed that not only can there be confirmation bias in audit and tax preparers' judgments, but they noted that bias would be strengthened when faced with low-practice risk and lessened bias with high-risk practice clients and that recommendations to clients would change depending upon this risk. The authors noted that this can be a costly issue and that tax professionals making biased decisions as noted above may result in making overly aggressive advising recommendations to their clients.

Another study involving 142 tax preparers found that the tax preparers demonstrated preferential treatment by utilizing specific information that would support their recent recommendations to their clients although the data disagreed with their clients' tax situation (Wheeler & Arunachalam, 2008). The authors indicated that a "justification requirement decision aid" (tool for mitigating bias) (p.1.) did decrease the tax professional's confirmation bias regarding the preparer's perceived importance of the client's issue but did not affect the total number of confirmation bias cases noted in the study.

Confirmation Bias in Auditing

The auditing profession also deals with confirmation bias as well (Kadous, Magro & Spilker, 2007) (McMillan and White, 1993). McMillan and White (1993) conducted a study on confirmation bias and noted that auditors' search for evidence could be influenced by professional skepticism (also can be referred to as conservative bias) and confirmation bias (Hollister & Shoaf, 2010). Kadous, Magro & Spilker (2008) found in their study that "high practice risk" (p. 152) appears to regulate confirmation bias in accounting practitioners' searching for facts and evidence on behalf of their clients so, therefore, a biased search will most likely result in bias evidence. The authors also noted that confirmation bias in the accounting industry appears to be widespread and difficult to eradicate. However, the researchers believed that accounting professionals would have less confirmation bias when there exists environmental practice risk and suggest that a future research question on whether accounting practitioners considering additional alternatives might reduce confirmation bias and improve the quality of accounting professionals' judgments.

The Public Company Accounting Oversight Board (PCAOB) standards define professional skepticism as "an attitude that includes a questioning mind and a critical assessment of audit evidence, and it is essential to the performance of effective audits under Board standards" (Public Company Accounting Oversight Board, 2012).

McMillan and White (1993) reminded the reader that if auditors demonstrate confirmation bias, they may look to confirm their opinion or hypothesis so that all data deemed to be sound and accurate will tend to confirm their hypothesis. The results of the authors' study specified that auditors had a different opinion in reviewing audit evidence depending upon whether the results reflected their original hypothesis or not which the authors believed demonstrate confirmation bias.

Another researcher studied the effects of audit regulations/guidance and “estimation uncertainty” (p.1) regarding confirmation bias and professional skepticism when dealing with accounting fair-value estimates (Montague, 2010). Results from the study indicated that auditors tended to demonstrate higher confirmation bias when they disagreed with their clients' estimate, and the largest incidents of confirmation bias could be found when the auditor directly opposed their clients' estimate which had similar results to other researchers' study results (Kadous, Magro & Spilker, 2007; Wheeler & Arunachalam, 2008).

Mitigating Confirmation Bias in Accounting

Bettinghaus et al. (2014) indicate that accounting professionals could avoid confirmation bias and prepared 12 strategies to mitigate biases (page 3):

Strategies to Mitigate Biases:

- Be aware of biases
- Follow a sound judgment process
- Healthy debate and avoid early consensus
- Challenge all aspects of a decision; what and why questions
- Consider multiple judgment frames
- Consider opposing viewpoints and contrary assumption and seek disconfirming evidence.
- Find independent estimates to avoid anchoring
- Replace intuition with a formal analytical process
- Consider the opposite for each aspect of the decision
- Consider multiple options at the same time.
- Consider all stakeholders' points of view
- Increase accountability for decisions

According to Hogan (2018), auditors and audit teams are subject to be hampered by a variety of cognitive biases, including confirmation bias. Hogan (2018) suggests auditors adopt the use of the scientific method in their approach to audits and examinations. In this application, the scientific method includes asking what happened, why did it happen, defining the hypothesis, gathering evidence, analyzing the evidence and determining findings. This structured approach makes good sense and could go a long way toward reducing confirmation bias.

TEN TOOLS FOR MITIGATING COGNITIVE BIAS

1. Collaboration
2. Inquiry-ask the right questions
3. Take it all in
4. Structured Brainstorming-There are no bad ideas, No ideas are criticized, Build upon other's ideas, and More ideas are better than fewer ideas (quantity over quality)
5. Embrace and Explore dissenting opinions
6. Limit pressures
7. Limit outside influences
8. Use the Scientific Method-ask what happened, why did it happen, define the hypothesis, gather evidence, analyze evidence, and determine findings
9. Seek to Disprove
10. Check your ego at the door!

Hogan (2018), DFW ACFE Fraud Conference

Hogan (2018) further describes these tools further by stating that collaboration means that auditors need to work with others throughout the organization and not presume that employees only think in one

way. Be sure to ask the right questions and do not hesitate to follow-up when needing more detailed information. By "taking it all in," auditors need to be sure to examine all the data. Do not ignore any information, especially if it seems to contradict the hypothesis. By limiting pressures, Hogan (2018) suggests that auditors not succumb to time pressures or pressures from senior managers. Outside pressures could come from senior management or organizational politics. "Seek to disprove" could be one of the most important tools the auditor can employ. By this, Hogan (2018) calls upon auditors to try to disprove your hypothesis and to play "devil's advocate" when conducting audits.

SUMMARY AND CONCLUSION

Confirmation bias is endemic throughout most aspects of everyday life. As illustrated in this article, confirmation bias affects science, the medical profession, politics, and business. We also know that confirmation bias helps fuel stereotypes. Confirmation bias closes our mind to different ways of thinking, new ideas, and discoveries. In accounting, confirmation bias can prevent auditors from finding business irregularities.

Professional accounting managers, especially those working in the audit function, need to set the proper tone by creating an environment whereby accounting biases can be eliminated. This can be done by first understanding what confirmation bias is and how confirmation bias can affect audit work. Second, audit managers should regularly review audit procedures to ensure that biases have been ignored. Finally, audit managers must foster an environment that encourages professional development (training) on critical reasoning and making sound professional judgments. Managers should also develop mentoring programs whereby experienced auditors provide advice and counsel to less experienced colleagues.

In the words of British-Austrian philosopher Sir Karl Popper, widely regarded as one of the greatest scientific philosophers of the 20th century, "If we are uncritical we shall always find what we want: we shall look for, and find, confirmations, and we shall look away from, and not see, whatever might be dangerous to our pet theories (1934/1959)."

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