

The Proof of Cash Should be King Among Forensic Auditing Techniques

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“Insanity seems inevitable if you are foolish enough to enter the wonderland called modern American business, where everything is done by the numbers and the numbers can be baked, broiled, steamed, sautéed—cooked whatever way is desired.” [Charles Bowden, writing in his *Acknowledgements* to the book, *Trust Me*, Binstein and Bowden, 1993, p. 420]

Introduction

If “cash is king,”¹ then we aver that among forensic accounting and auditing techniques, the “proof of cash” should be king. Indeed, the proof of cash is a thoroughly tested-and-true auditing technique with a long past but a short history. Those of us who used it growing up in the auditing profession decades ago, used it profitably, but we have lamented its relative disappearance both in the auditing literature as well as use by young auditors of the 21st century. Some auditing textbooks provide scant reference to the technique, or do not mention it at all. Not surprisingly then, Dorrell and Gadawski (2012, p. 107) refer to the proof of cash technique as “a lost art to CPAs.” In the context of a financial statement audit, beyond the obvious significance of cash and cash management in retail businesses, the audit of cash is considered important mainly due to two reasons:

- (i) Almost all business transactions are ultimately settled through the cash accounts, and the audit of cash accounts also assists in the verification of other asset and liability accounts as well as revenue and expenses, and
- (ii) Cash is a highly liquid asset in every company and thus naturally an area of high inherent risk—before consideration of any internal controls over cash—because there is a relatively high risk of misappropriation.

In this article, we attempt to resurrect the proof of cash technique, and by showing its relevance to forensic engagements and proving its timeless utility, demonstrate that the “news of its death may have been greatly exaggerated.” The proof of cash is appropriately used as a forensic type auditing procedure that is consistent with the results of the auditor’s risk assessment, particularly in the area of bank and cash balances.

To our knowledge, several recent cases—those of Satyam (India), Parmalat (Italy), Lehman Bros., Peregrine Financial, MF Global, 1MDB, etc., involved suspect cash transfers, and constituted situations where a proof of cash was probably a recommended technique that could have been used by the auditors. For instance, in the case of one of India’s largest frauds in 2009—called “India’s Enron”—at Satyam Computer Systems, a technology outsourcing firm that served several Fortune 500 as clients, over one billion dollars of cash reported on the balance sheet was missing, a significantly material amount in Indian currency (cf. U.S. \$1.00 > Rupees 50.00, so, over Rs. 50 billion). Remarkably, Satyam had high debt on its balance sheet despite huge amounts of available cash compelling global brokerage firm CLSA to observe, “With almost \$1.2 billion of cash, we find it intriguing that Satyam closed 2007–08 with fifty-six million dollars of debt.” (Maguire-Krupp, Krull, and Ramamoorti, 2011). The auditors, the Indian arm of PwC did not appear to have performed a proof of cash, nor even conducted proper third-party confirmations (per the U.S. SEC’s censure of the Indian PW firm)

¹ Although the origin of the classic phrase, “cash is king,” is not well established, during the post-1987 global stock market crash period, the phrase was used by Pehr G. Gyllenhammar in 1988, then Chief Executive Officer (CEO) of Swedish car group Volvo. In general, it is best to keep one’s investment money in cash, especially when the prices in the securities markets are too high, build up cash reserves, and wait for an opportune break in the market.

that could have exposed the fraud. This problem is particularly troubling because cash positions and bank reconciliations appeared to have been recognized as a risk factor by the auditors.

As the epigraph to this article suggests, books can be cooked in a variety of ways, but a diligent auditor can detect at least some of the cooking when it involves cash and bank accounts. In this regard, a tried-and-true technique is the proof of cash. For a defined time period of say, a month,² a proof of cash accomplishes the reconciliations—in addition to those of the beginning and ending bank balances—of the cash receipts and disbursements recorded on the entity’s books with the cash deposited into and disbursed from the entity’s bank account, giving rise to the alternate appellation “four column bank reconciliation.”³ In other words, the proof of cash enables the comparison of actual bank deposits, withdrawals, and transfers to reported bank deposits and withdrawals (Messier, Glover, and Prawitt, 2014; Arens, Elder, Beasley, and Hogan, 2017; Dorrell and Gadawski, 2012). When the risk of misstatements in cash and bank balances is high, as a corollary, the merits of using the proof of cash technique must be seriously considered.

Based on the Transparency International (TI) publication *Paradise Lost*,⁴ a conference was held in May 2016 in London, U.K. In the wake of the recent Panama Papers expose which illustrates how wealthy individuals, including public officials, hide assets from public scrutiny, the TI publication explores the role of U.K. based accountants, lawyers, estate agents, and other “professional enablers” in making it easy for corrupt individuals to hide their cash. Their role is consistent with the lament of Columbia University law professor, John Coffee, that lawyers and accountants have proven to be only “reluctant guardians of the public interest” (Coffee, 2006). When it comes to hiding cash, and successfully unearthing it, if it is recorded in either the cash book or in the bank’s records, there are few techniques as effective as the “proof of cash” or the four-column bank reconciliation that can help a forensic accountant or an auditor using forensic type procedures to verify the underlying transactions and activities. While the proof of cash is by no means dispositive, in circumstances that suggest suspicious cash transactions, such as money laundering by drug traffickers, not utilizing this technique can only be called a missed opportunity. In addition, performance of this procedure has the salutary effect of increasing the “perception of detection” and thus helps deter fraud and corruption, and in creating a fraud-resistant culture and environment.

We hope that this article can assist in bringing greater attention to the proof of cash technique’s potential usefulness and helping with its re-emergence as a preferred procedure in the (forensic) auditor’s toolkit when cash and balances appear to show suspiciously high levels and amounts of activity, unexplained deposits and withdrawals by unidentified third parties or anonymous entities, across jurisdictions known for fraud and corruption (e.g., Transparency International’s Corruption Index, see <http://www.transparency.org/>) Later in the article, we explore the applications of the proof of cash technique in the context of anti-money laundering initiatives, a significant focus of banking regulators internationally.

The Context for Using the Proof of Cash

Cash and cash equivalents are very often not material assets on entity’s balance.⁵ Obviously, when cash balances are material, they automatically beg for more scrutiny. The typical financial statement assertions embedded in these accounts are: existence, valuation, completeness, and presentation and disclosure. When assessing inherent risk regarding these assertions, the forensic accountant or auditor evaluates how susceptible the financial statement assertions are to material misstatement given the nature of the client’s business, but without considering controls. Consideration of controls and their effectiveness is factored in when assessing control risk. Figure I below describes various assertions and audit testing objectives.

² The second author, at the outset of his career, distinctly recalls being required to complete so-called four column bank reconciliations for each month of the year under audit, which thus became a forty-eight-column bank reconciliation (the proof of cash assignment). If the auditee maintained multiple checking accounts, this requirement applied to each account, which, as described further in the body of this article, served as a powerful tool to detect kiting.

³ Also, known by other appellations, e.g., “block proof.”

⁴ A copy of this Transparency International-U.K. publication can be downloaded from: <https://issuu.com/transparencyuk/docs/ti-uk-paradise-lost>

⁵ However, a 2014 report by U.S. Trust revealed that Apple and Microsoft both have bigger piles of cash than the U.K. Treasury (Murray-Morris, 2014). Also, Apple has the largest cash reserves, with £95 billion, far greater than the cash held by Malaysia, Turkey, or Poland. Reluctance on the part of U.S. companies to bring overseas profits back can be traced back to the high taxes they are forced to pay in their home country.

Figure I: Objectives for Testing Various Financial Statement Assertions Related to Cash Balances

1. Existence	To ensure that the cash is actually in existence and belongs to the company at a given date or at the year-end date.
2. Completeness	To ensure that there is no unrecorded cash resulting in an understatement of reported cash on the balance sheet.
3. Accuracy	To ensure cash at bank(s) stated on the reconciliation is accurate.
4. Cut-off	To ensure that amounts are correctly recorded in the proper period.
5. Presentation and disclosure	To ensure that the cash balance and related statement of comprehensive income entries are correctly disclosed in the financial statements in accordance with generally accepted accounting principles (GAAP) and applicable laws and regulations.
6. Detail tie-in	Cash in the bank as stated on the reconciliation foots correctly and agrees with the general ledger.

When reviewing management assertions in financial statements, existence is an overstatement assertion and as such examining the entity's bank statements, bank reconciliations and perhaps obtaining bank confirmations is appropriate (although bank confirmations are not a required auditing procedure). The purpose of bank confirmations is manifold, and includes obtaining other information about compensating balances, debt, cash restrictions, signatories, etc. In recent years, the other information content is not in the standard confirmation, but it is in other communications with the bank. If the bank balance(s) is not significant at the end of the period being audited, the procedure to audit cash (existence) could be quite limited. Valuation of cash can be an issue for cash-equivalents, but is usually not a risk unless there are functional currency issues and foreign currency is a material part of the cash balance. Completeness, therefore, begs for attention as the most significant risk pertaining to the cash balance, which could be understated (e.g., as noted earlier, in the case of the 2009 Satyam Computer Systems fraud in India, the cash balance was understated by over one billion dollars). If the entity does significant cash business and there is a risk of unrecorded cash, a fraud risk, the principal procedures are to perform controls testing over the assertion, and analytical tests such as gross profit testing by segment/product.

A more common problem may be the disbursements being recorded in the subsequent period after the checks have been issued, but such adjustments are typically not material. Importantly, because cash does not have a predictable relationship with other financial statement accounts owing to its residual nature, the auditor's use of analytical procedures for auditing cash balances is limited to comparison with prior period balances, as well as budgeted amounts, review of long-outstanding checks and patterns of cash realizations in subsequent periods, and their effect on year-end balances.

Given this backdrop, here is what the four-column bank reconciliation, a most effective forensic type procedure, will help the auditor determine (Arens et al., 2017, pp. 749–751):

- whether all recorded client cash receipts have been deposited
- whether all bank deposits have been recorded in client cash receipts records
- whether the bank has paid all recorded client cash payments
- whether all bank payments have been recorded in client cash payments records

A proof of cash is essentially a roll forward of each line item in a bank reconciliation from one accounting period to the next, incorporating separate columns for cash receipts and cash disbursements. The columns (and formula), pertaining to all recorded receipts and disbursements, used for a proof of cash are:

$$\text{Beginning balance} + \text{Cash receipts in the period} - \text{Cash disbursements in the period} = \text{Ending balance}$$

When used for each line item in the bank reconciliation, the proof of cash highlights areas in which there are discrepancies, and which may therefore require further investigation. Oftentimes, the need for some adjusting or correcting entries will become apparent, such as the following:

- (a) Bank fees not recorded
- (b) Not sufficient funds (NSF) checks not deleted from the deposit records
- (c) Interest income or expense not recorded
- (d) Checks or deposits recorded by the bank in different amounts than what the entity recorded them
- (e) Checks cashed by suppliers that the entity voided
- (f) Cash disbursements and/or receipts recorded in the wrong account.

A proof of cash or the four-column bank reconciliation can also uncover instances of fraud: its most important function. Unfortunately, a clever accountant can also use the proof of cash as a weapon of choice in committing financial crimes. We are familiar with a fraud case where the finance director of a large municipality used the proof of cash to “manage” the journal entries: she used to spread her \$1.42 million fraud throughout the city’s general ledger. For example, if there is a difference between the totals reported for receipts and disbursements as between book and bank amounts, but no disparity in beginning or ending balances, it can indicate the presence of unauthorized borrowings and repayments within the time covered by a single bank statement where the borrowings and repayments have been recorded. Thus, if a controller were to make an unauthorized, but recorded withdrawal of \$10,000 from the company accounts near the beginning of the month for her personal use, and replaced the funds before the end of the month and recorded it, the issue would not appear in the standard bank reconciliation as a reconciling item. However, a proof of cash would likely flag the extra cash withdrawal and cash return within the period.

The proof of cash is also a most powerful tool to identify the fraudulent technique known as kiting, described below. However, there are some irregularities or errors that will not be detected by the four-way bank reconciliation, if applied only to a single test month during a period under audit, such as:

- unrecorded checks that have not cleared the bank (possible kiting)
- unrecorded deposits that have not cleared the bank
- checks written for incorrect amounts, etc.

If the proof of cash tool is applied to each month of the fiscal year being examined, most of these limitations disappear, but at the cost of substantial additional work. Even when used for a single sample month, there is a price to pay: a proof of cash is somewhat more complicated to complete than the standard bank reconciliation. Nevertheless, because it provides more detail, and so makes it easier to locate errors than the standard bank reconciliation, it may be cost-effective to employ when it is expected that a large number of different cash-related errors have occurred within an accounting period. This may especially be true for smaller entities that have many cash transactions and a relatively weak internal control environment.

In terms of using the proof of cash procedure most practically and efficiently, it is best to start with a proof for the year then, only if differences are encountered, drill down successively to smaller periods to determine the pervasiveness of the cause over time or the specific period or periods of the occurrence(s).

Skimming, Lapping, and Kiting

Cash thefts or frauds often involve skimming or lapping schemes, which are not subject to detection by the four-column bank reconciliation as commonly employed. Indeed, effective design and maintenance of classic internal control procedures will be the most efficacious means of addressing those risks.

A proof of cash will not detect skimming (i.e., a theft of cash before it was recorded in the entity’s books). However, when investigating disbursement schemes that include siphoning off cash using unrecorded disbursements, it would be wise to utilize a proof of cash as the method would likely detect it.

Where skimming is suspected, the auditor must look to advising management about implementing proper segregation of duties as well as a lockbox system. Where a lockbox system is not used, a daily cash listing must be prepared, and checks should be restrictively endorsed when received. Further, the total of the remittance advices is vetted against the daily remittance report by the cash receipts department. The auditor can also observe the entity’s personnel endorsing the checks and preparing the cash listing. Subsequently, the auditor may test, on a sample basis, the reconciliation of the

daily cash receipts with the postings to the accounts receivable subsidiary ledger. Another practical method suggested in the literature is to bond all cash-handling employees. All these procedures provide confidence regarding the completeness of accounting for cash receipts.

In weak control environments, with poor segregation of duties arrangements, employees may have incompatible functions, such as the ability to embezzle cash as well as the ability to record entries to hide the theft. An extreme example of this situation existed at Peregrine Financial, where the chief executive, Russell R. Wasendorf, Sr., not only was the authorized signatory but also obtained the unopened monthly bank statements, which he then replaced with “desktop published” versions before delivering them to the accounting clerks, ultimately concealing over \$215 million in thefts he had perpetrated over twenty years (FBI, 2013). This gross departure from even a rudimentary set of controls—all the more shocking given that most of the abstracted cash was from “customer funds” accounts subject to more stringent regulatory requirements—went unnoticed by successive teams of auditors.

A more pedestrian form of cash theft occurs when checks sent by customers are stolen by the party responsible for opening the mail and separating checks from remittance receipts. Because missing payments from customers will, often within a month, be noted by the customers, leading to complaints and discovery, the thief will need to “cover” the original theft by applying a subsequent, unrelated customer’s payment to the earlier missing one. Such manipulation is called lapping the accounts receivable. A clever perpetrator who has access to accounts receivable records, may additionally use artifices such as issuing bogus credit memoranda, authorizations for feigned uncollectible write-offs, or simply non-recording of revenue for selected transactions. These possibilities make it even harder for the auditor to detect what is going on, unless they carefully go through the process of checking specific remittances and tracing them to the appropriate customer accounts. Of course, proper procedures for authorizations of, e.g., bad debts, and strict segregation between cash and non-cash responsibilities, will preclude such frauds. Four-column bank reconciliations or the proof of cash will not be useful in this regard.

On the other hand, extended four-column reconciliation practices can be effective in detecting another fraudulent device, kiting. This manipulation is sometimes used when an employee has extracted cash by, e.g., writing a check to him/herself or an ally such as a bogus supplier, and is also found in instances where there is organized management fraud involving overstatement of cash and total assets. To effect kiting, two or more bank accounts are required, with a check drawn on one remaining unrecorded while it is deposited the same period in another account, recorded as such. Thus, the “same dollars” appear in both bank accounts, inflating total cash and assets, possibly to “window dress” the entity’s apparent liquidity position or to conceal theft. For instance, the proof of cash was most effectively utilized as a forensic accounting technique in a civil matter involving tobacco excise taxes that led to the discovery and unearthing of substantial unreported funds from the South African subsidiary of a U.S. holding company, intended to avoid excise tax charges.

Consider an employee who has embezzled cash, and attempts to cover the cash larceny by transferring money from one bank account to another and recording the transactions improperly, just before period end. In such a scenario, the malefactor would prepare a check on one account, but not record it as a cash disbursement until after the year-end, thereby taking advantage of the float.⁶ Electronic wire transfers are rapid with very little “float” and almost eliminate kiting, but even in those scenarios, there is often a one-day delay that makes kiting possible.

One way to investigate kiting is for the auditor to prepare an interbank transfer schedule that would show all such transactions in sharp relief and identify potentially irregular and suspicious transactions. However, if properly utilized, the four-column bank reconciliation, particularly when done for all bank accounts for each month of the fiscal year, should also result in detection, since the deposit in the receiving bank in one month will correspond to a disbursement in the immediate subsequent month from another of the entity’s bank accounts. Although possibly hidden among other receipts and disbursements—because the reconciliations only report totals, not individual transactions—when the kiting is being perpetrated by management to fraudulently present financial statements, the amounts will generally be large enough

⁶ Money in the banking system that is briefly counted twice due to delays in processing checks. Float is created when a bank credits a customer’s account as soon as a check is deposited. However, it takes some time for the check to be received from the payer’s bank. Until the check clears from the payer’s bank, the amount of the check appears in the accounts of both the recipient’s and payer’s banks. <http://www.investopedia.com/terms/f/float.asp> This is only deemed to be kiting, and thus fraud, if done deliberately to falsely overstate total cash available.

to stand out, if the four-column procedures are applied to consecutive months, rather than being done only for a single, sampled month in the year under audit.

The recent Lehman Bros. fraud is an example of where careful deployment of expanded four-column bank reconciliations might have proved useful. Lehman's fraud was to engage in large scale repurchase transactions (repos) that were improperly accounted for as sales of securities, rather than as borrowings, and then using the proceeds—as much as fifty billion dollars at each quarter-end—to pay down other, real liabilities, thereby grossly distorting its balance sheets by concealing the actual extent of its leverage, and thus its riskiness. Notwithstanding its accounting for these repos as sales, the bank statements for successive periods would have revealed the true nature of these transactions as repayments were made and the recurring pattern of “window dressing” became visible four times each year.⁷

Potential Applications in Frauds Involving Cash Amounts, Including Money Laundering

The 2016 *Report to the Nations*, a global survey of fraud from the Association of Certified Fraud Examiners indicates that smaller organizations generally have a weak internal control environment, and lack of segregation of duties is a common failing. Where the same employee—especially the cashier—has both the custody of cash as well as the ability to do the recordkeeping, skimming, kiting, and lapping are only to be expected.

Ramamoorti and Koletar (2015) have written about the Geneva-based private banking unit of the HSBC Holdings plc embroiled in a controversy that has been dubbed “Swiss Leaks.” Specifically, leaked documents reveal the bank's dealings with clients engaged in a spectrum of illegal behavior, especially in hiding hundreds of millions of dollars from tax authorities. They also show private records of famed soccer and tennis players, cyclists, rock stars, Hollywood actors, royalty, politicians, corporate executives, and old-wealth families. According to the *International Consortium of Investigative Journalism*, these disclosures reveal the intersection of international crime and legitimate business, and they expand what is known about potentially illegal or unethical behavior in recent years at HSBC, one of the world's largest banks. The Bank of England's top regulator Andrew Bailey maintained that senior HSBC executives should take personal responsibility for the scandal at the Swiss private bank. Even before those revelations became known, Mr. Bailey had argued that fining and firing more individual bankers is a better way to punish bad behavior than hitting banks with crippling fines. It is in the investigation of such allegations of money laundering that forensic accountants can find the proof of cash to be immensely helpful. It can help establish a clear audit trail that constitutes compelling evidence.

Given the increased efforts worldwide related to anti-money laundering (AML), it is worthwhile to explore the relevance of proof of cash in that context as well. In general, money laundering refers to a financial transaction scheme that aims to conceal the identity, source, and destination of illicitly-obtained money. The money laundering process can be broken down into three stages. First, the illegal or unauthorized activity that begets the money places it in the money launderer's hands. Second, the launderer conveys the money through a complex scheme of transactions to hide or obscure who initially received the money from the criminal enterprise. Third, the scheme returns the money to the launderer in an obscure, convoluted, and indirect way. Tax evasion and fraudulent accounting practices constitute common types of money laundering. Often, criminals achieve these objectives using shell companies, holding companies, and offshore accounts.

To launder money, the shell company purports to perform some service that would reasonably require its customers to often pay with cash. Cash transactions increase the anonymity of customers and therefore decrease the government's ability to trace the initial recipient of the illicitly obtained or generated money. Money launderers commonly select beauty salons, plumbing services, restaurants, and other cash-based service vehicles as shell companies. The launderer then deposits the money with the shell company, which deposits it into its bank accounts. The company then creates fake invoices and receipts to account for the cash. Such transactions create the appearance of propriety and clean money (the “whitewash” technique). The shell company can then make withdrawals and either return the money to the initial criminal enterprise or pass the money on to further shell companies before returning it to further obfuscate who first deposited the money. In any case, if the cash and bank records are involved at some point in these elaborate transactions, an “eyeballing” of the detailed proof of cash would allow a perspective, and possibly cues and a roadmap for the forensic

⁷ See also the detailed and extensive Bankruptcy Examiner's Report in the Lehman Brothers matter at <https://jenner.com/lehman>. The Examiner in this matter was Mr. Anton R. Valukas, Chairman of Jenner & Block. A proof of cash exercise, in conjunction with the whistleblower letter by Mr. Matthew Lee, a fourteen-year Lehman executive, would have perhaps highlighted the circumstances surrounding such Repo 105/Repo 108 transactions.

auditor or the investigator go about their work in excavating and unearthing further details. As noted before, just undertaking this exercise would also make the “launderers” and their associates nervous as their work would be scrutinized and subject to discovery.

Criminals often use offshore accounts to hide money because they offer greater privacy, less regulation, and reduced taxation. Because the U.S. government has no authority to require foreign banks to report the interest earned by U.S. citizens with foreign bank accounts, the criminal can keep the account abroad, fail to report the account’s existence, and receive the interest without paying personal income taxes on it in the U.S. This limitation has now been partly rectified through the passage of Foreign Account Tax Compliance Act (FATCA).⁸

More recently, as the largest U.S. banks try to meet their legal obligations to avoid helping drug traffickers and other criminals launder ill-gotten gains, one of their most daunting challenges is dealing with third-party cash deposits, especially those that people make into the accounts of others. From the standpoint of risk—not only of laundering money but also of landing the bank in the crosshairs of regulators or the Justice Department—banks that allow third-party cash deposits are “running with scissors,” said John Tobon, Miami-based assistant special agent in charge of ICE homeland security (Wolf, 2015). Clearly, in such circumstances carrying out a proof of cash procedure, even as a matter of routine, would not only help the possible identification of suspect deposits, but would have a deterrent effect on those seeking to make the third-party deposits with the knowledge that they would likely be questioned about it.

Concluding Remarks

This article describes the design and application of a proof of cash, or the four-column bank reconciliation, and the types of misstatements in cash and bank balances it would detect, if one or both sides of such transactions are recorded. In most circumstances, it is a forensic type procedure, and an effective one in those circumstances. We provide several examples of financial frauds and cash larceny—embezzlements, skimming, kiting, and lapping—highlighting the circumstances in which the proof of cash can be profitably used. We have also highlighted the potential applications of the proof of cash in the context of anti-money laundering efforts, particularly where anonymous third-party deposits and withdrawals may be involved.

The four-column bank reconciliation or proof of cash, particularly if expanded to simultaneously cover all cash accounts and, ideally, all interim periods within the year, is a powerful forensic accounting tool that should be restored to the audit toolbox whenever professional skepticism about cash transactions warrants it, and not remain reserved only for fraud investigations. It is one of a class of auditing techniques that rely on reconciliations that have only become easier to employ with universal computerization, but have been inexplicably “rationalized away” from standard financial statement audits.⁹ Indeed, we believe that a proof of cash should be as routinely reported as any financial statement. Whether an entity is global or local their general ledger report writer¹⁰ can automatically generate a proof cash requiring little manual effort. Indeed, advances in technology and automation have greatly improved forensic accountants’ ability to produce useful documents and reports with minimal effort. Combined with such other ‘stand-bys’ as closer attention to control weaknesses and advanced analytical techniques, this once-commonly employed tool could improve the current state of the art of auditing. With numerous instances of cash-based fraud and money laundering on the rise, there is little excuse for not deploying this forensic accounting technique. In countries like India where Prime Minister Narendra Modi has recently launched a massive effort to root out “black money” (illegitimate and unaccounted for cash in large bills), the proof of cash technique may prove particularly valuable in the coming months (*The Times of India*, 2016).

⁸ The provisions commonly known as the Foreign Account Tax Compliance Act (FATCA) became law in March 2010. Here are the highlights of the provisions of FATCA that targets tax non-compliance by U.S. taxpayers with foreign accounts. FATCA focuses on reporting: (i) by U.S. taxpayers about certain foreign financial accounts and offshore assets; (ii) by foreign financial institutions about financial accounts held by U.S. taxpayers or foreign entities in which U.S. taxpayers hold a substantial ownership interest; and (iii) the objective of FATCA is the reporting of foreign financial assets; withholding is the cost of not reporting.

⁹ An example of a reconciliation not involving cash transactions would be that of intra-company inventory transfers, such as should have been done, but was not done, in the well-known Phar-Mor fraud of the early 1990s, where book entries concealed \$300 million in non-existent inventory by end-of-year *faux*-transfers from locations to be tested by the auditors to those locations which the auditors agreed were not to be examined in the current audit cycle. Reconciling those “transfers” and correlating them with audit testing plans would have surely led to the discovery of this multi-year fraud.

¹⁰ Or, for small companies using *QuickBooks* the data can be exported and used by IDEA® or similar audit software to produce the proof of cash.

Writing in *The Wall Street Journal*, Ensign, and Ng (2016) assert: “Tens of billions of dollars every year move through opaque law-firm bank accounts that create a gap in U.S. money-laundering defenses...[T]hese accounts were used by suspects in a multibillion-dollar scandal involving a Malaysian state investment fund known as 1MDB...[and]...also played a part in a Florida Ponzi scheme, in a case related to an official of Equatorial Guinea and in a dozen other U.S. money-laundering cases over the past decade...” Given the preponderance of such money laundering activities, in addition to the HSBC Swiss Leaks scandal recounted earlier in this article, it is an opportune time to rethink, revisit, and re-establish the potential usefulness of the proof of cash as a valuable forensic accounting technique.

The proof of cash is an elegant (forensic) audit technique developed and widely used by the auditing profession in earlier years. Its status as an expanded, special purpose, or “forensic-type” auditing tool needs to be re-considered. There exists a compelling rationale behind it, and we will now show why it works so effectively. It all starts with the “law of trichotomy.”

In mathematics, the law of trichotomy states that every real number is either positive, negative, or zero. More generally, trichotomy is the property of an order relation such that for any x and y , exactly one of the following holds: $x < y$, $x = y$, or $x > y$. In other words, the law of trichotomy simply states that for arbitrary real numbers, x and y , only three possibilities exist: either $x > y$, or $x < y$, or $x = y$ (Apostol, 1967, p. 20; Knuth, 1998, p. 4).

Now, if we denote x = the entity’s cash ledger balance, and y = the balance per the bank, it is easy to see that whenever the two amounts are unequal, by means of the proof of cash technique, we should be able to unearth each balancing item.

So, if all the amounts related to the cash and bank balances have been properly identified,¹¹ and there are no other “off balance sheet” and unrecorded items, the proof of cash will be dispositive and quite effective in identifying any discrepancies. After all, as Sir Arthur Conan Doyle had his immortal fictional creation, Sherlock Holmes emphatically state: “How often have I said to you that when you have eliminated the impossible, whatever remains, however improbable, must be the truth?” (Sherlock Holmes in *The Sign of the Four*, Doubleday, p. 111). The proof of the proof of cash is thus iron-clad, water-tight, and comes close to providing incontrovertible evidence that can be fruitfully used by forensic accountants as well as internal and external auditors both in routine contexts and in fraud investigations.

¹¹ This identification also means that third-party documents, such as bank statements and confirmations, have not been fraudulently altered. As noted later in the body of this article, the risk of bogus, “desktop published,” documents being presented to auditors has expanded significantly in recent years. No mechanical device, including the four-column bank reconciliation, can surmount the risks present when falsified information is used as a starting point for the analysis.

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