

TEACHING ACCOUNTING: SETTING THE RIGHT TONE WITH A TUNE

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Why, when entering an academic environment do we remember more often those things that entertain, enthuse, motivate, and, most importantly, focus us? The Pathways Commission recommends that academicians transform the first course in accounting and one approach as outlined herein, does just that. The first accounting course plays a significant role in attracting diverse and high-potential students into the profession. We introduce the integration of music into accounting principles pedagogy, and analyze its effect on students' enthusiasm, motivation, and retention.

Using a pre-post instrument with experimental and control groups, we test the efficacy of using music to enhance the understanding and retention of accounting concepts. Additionally, we present qualitative data to further support the effectiveness of this pedagogical approach. The results support the hypothesis that infusing music into the accounting principles classroom creates a better environment for students to enjoy, get excited about, and focus on the topic.

Introduction and Background

From the perspective of a practitioner who spent over 25 years in business roles including Chief Audit Executive (CAE) and Chief Financial Officer, Author 1 knows that many of his non-financial colleagues viewed accounting as tedious, dull, and in some cases, distressing. As a CAE speaking annually to 100 worldwide leaders about accounting and auditing, he played music to develop interest in the topic, and it worked. Instead of checking emails or skipping his presentation entirely, his co-workers' curiosity about how "The Rolling Stones" and Sarbanes-Oxley connected was too interesting to ignore. What Author 1 found was that those things that entertain, enthuse, motivate, and, most importantly, focus us are most often remembered.

While conducting research for this paper, we found that many accounting principles students share disdain and anxiety with many business professionals for the discipline that we, the authors, love. Indeed, Malthus and Fowler found that first-year college students attach a "typical 'boring' stereotype" to "their image of an accountant" (2009, p. 36). Most concerning for accounting academicians is what abundant research states: students who harbor negative perceptions about accounting and the profession may not want to choose it for their career (Cohen & Hanno, 1993; Hermanson, Hermanson, & Ivancevich, 1995; Saemann & Crooker, 1999; Francisco, Kelly, & Parham, 2003; Coate & Schinski, 2003; Allen, 2004; Coleman, Kreuze, & Langsam, 2004).

When Author 1 came to the academy four years ago and found himself teaching the first course in accounting, he was committed to providing a classroom environment that would change the perceived boring paradigm and decrease the anxiety for his students. In our view, to effectively "transform the first course in accounting" as championed by the Pathways Commission (2012, p. 86), we must first begin with attacking the negative stereotypes with the introduction of music before every class. Outside the classroom, music can keep us entertained, enthused, motivated, and most importantly, focused. Bringing a song into an accounting lecture breaks the accounting stereotype and students' apprehension, and allows them to open their minds to a topic and indeed, a career in a field that they may never have thought possible.

In this paper we introduce the integration of music into accounting principles pedagogy, and analyze its effect on students' enthusiasm, motivation, and retention. We first present literature supporting not only stereotypes and paradigms about accounting and accountants, but also the anxiety about accounting held by many students and even professors. We then present our method of research and the steps taken in integrating music into accounting principles classes, followed by results and reflections from students and the authors. We close with our conclusions and recommendations for using this method in the first course in accounting, and observations for further research on the topic.

Literature Review

Our research began with gaining a better understanding as to why some have a view that accounting is boring, tedious, difficult, and solitary. In the article "The Accountant's Stereotype...", it was noted that "a prominent psychologist, further denigrated the accountants' image when he labeled them as obsessional...and noncreative" (DeCoster & Rhode, 1971, p. 652). Freebairn begins his article on "Accountants aren't boring: Breaking the stereotype" with a historical characterization of our discipline: "...many people, [have] a stereotypical image of accountants as grey, dull, introverted and boring" (2006, p. 28).

Students appear to share this undesirable image of accountants. DeCoster and Rhode's research noted that "undergraduates' perceptions" included "lacking social skills and aesthetic sensibilities, weak, cold, and submissive," among others (1971, p. 652). In their article on "Perceptions of Accounting...", Malthus and Fowler documented that New Zealand high school and college students perceive accounting in line with "the typical 'boring' stereotype" (2009, p. 33). For incoming university business majors, "...the accounting stereotype appears alive and well. One conclusion is that CPAs face the daunting task of undoing what seems to be an age-old stereotype" where "underclass college students have proxied a stereotype for their perception of the accounting profession" (Coate, Mitschow, & Schinski, 2003, p. 52).

The notion of boring and tedious is further perpetuated in the popular press as well as on stage and screen. For example, *Forbes* magazine promotes the stereotype in the article "Brutally Honest Accountants Confess To Being Boring" (Melby, 2011). The headline from *The Daily Telegraph* in the U.K. tells readers all they need to know with "It's official: scientists prove why accountants are boring" (Hall, 2005). In television, on Broadway, and in movies, accountants are often portrayed in a less than positive light. Through the "very, very, very, very unhappy" accountant, Leo Bloom on Broadway in *The Producers*, the nerdy forensic accountant in the movie *The Other Guys*, or "the money-laundering stoner in *Weeds* or the dorky auditor in *Parks and Recreation*, pop culture tends to portray an unsavory picture of accountants" (Broadway Musical Home, n.d.; Corliss, 2010; Bratcher, 2015).

A negative stereotype is only one substantial challenge for accounting academicians to overcome. Equally daunting for students and professors alike can be a profound anxiety about the topic. Research finds that students taking an accounting class experience high "accounting anxiety" or are "accounting-anxious" (Malgwi, 2004, p. 82; Buckhaults & Fisher, 2011, p. 32; Clark & Schwartz, 1987, p. 137). In addition, research also finds "teaching anxiety" with "the vast majority of accounting professors and often manifests itself in the form of physical and psychological symptoms or reactions" (Ameen, Guffey, & Jackson, 2002, p. 17).

As a numbers-based class, the first course in accounting has similarities to elementary mathematics and the documented mathophobia. Specifically, our experiences support the finding that "individuals experiencing mathophobia possess the intellectual capacity to perform mathematical tasks, but their anxiety relating to the subject precludes their success" (Clark & Schwartz, 1987, p. 137). The anxiety is quite real and must be addressed if we are to succeed in attracting the best and the brightest to our field.

A Yale study published in the *Journal of Experimental Psychology* notes that “anxiety-reduction is positively correlated with learning” (Mowrer, 1940, p. 515). In a related experiment, anxiety and performance were measured in a learning situation showing that lower-anxiety tendencies aided performance more frequently than high-anxiety (Montague, 1953, p. 95). This is where music can be effectively introduced to the classroom environment to reduce anxiety. One example from enterprising undergraduate accounting majors was to create their own rap to help them study as well as allay anxious concerns of their colleagues (Crowley & Kramer, 2013, track 1).

Faced with a similar challenge in a library setting, two researchers at Western Michigan University proposed the “piping [of] music into the information literacy classroom” (Langan & Sachs, 2013, p. 89). We found their work fascinating and on point, particularly their finding that listening to music “is an effective tool in promoting student satisfaction and learning” (Langan & Sachs, 2013, p.102). If we have a subject where students hold negative stereotypes coupled with a high anxiety about the topic, could music soothe this two-headed, savage beast? We think it can and research supports our hypothesis.

Ivanov and Geake documented the term ‘Mozart Effect’ as the “temporary enhancement of spatial reasoning abilities immediately after listening to a piece of music by Mozart” (2003, p. 405). In spite of overblown claims of music being a magic elixir, research does support the Mozart Effect’s positive impact on “brain wave activity linked to memory, cognition and open mind to problem solving” (Verrusio et. al., 2015, p. 150).

Other studies support the Mozart Effect as a simultaneously calming and energizing force, which Morgan and Davies describe as “relaxed alertness” allowing for improved learning (2004, p. 7). In addition to its relaxing qualities, researchers at The University of British Columbia noted music can help “organize the mind” and improve “participants’ information recall significantly” (Sedighian & Sedighian, 2010, p. 1).

Further, as Langan and Sachs discovered, others have confirmed that listening to music “produces an optimal level of adrenalin in the brain, causing high arousal” (Clarke, Dibben, & Pitts, 2010, p. 94). Similar to priming an engine prior to starting, researchers assert that music can do the same for our students (Berk, 2002; O’Sullivan, 2008). Specifically, O’Sullivan noted “that music can induce arousal and mood changes which, in turn, stimulate learning” (2008, p. 1). Langan and Sachs summarized the research as well as what we are attempting to accomplish in the accounting classroom: “psychological and educational research has shown that music and certain other kinds of sounds can reduce stress, increase alertness, and improve retention” (2013, p. 91).

Research Method

We studied the effect of music on undergraduate student learning and retention of accounting concepts in the first course in accounting. There were two conditions: experimental and control. The experimental treatment was music with one professor, Author 1, teaching the first accounting course integrated with music at every lecture. Other professors, the control condition, taught the same course using an identical textbook and syllabus but without music. The two primary professors in the study, one teaching in the experimental treatment and one teaching in the control treatment, had similar high ratings from students as superior lecturers. Participation in the assessment tools and survey was voluntary with no incentives provided.

Abundant research confirms that students often hold unenthusiastic perceptions about not only the accounting profession, but also accounting in general. Backed by this research and the authors’ past experiences, each accounting principles lecture opened with a song. The music began approximately one minute prior to the start of class to excite students and beckon them to the classroom. Almost

immediately, students began to leave their negative stereotypes about accounting at the door and instead, tried to figure out the song's connection to accounting. As one student noted, "It set the tone for the class and was [a] good way to start the discussion on that day's topic" (Student 1 comments, January 2015).

To start the semester and to introduce accounting as the "language of business" (Ainsworth & Deines, 2011, p. 8), students heard "Chaiyya Chaiyya Bollywood Joint" made famous in the movie *Inside Man* and performed by artists Sukhwinder Singh, Sapna Awasthi, and Panjabi MC (Rahman, Gulzar, & Panjabi, 2006, track 27). This song has been especially effective in changing paradigms right from the start of the semester as the first two artists are from India's "Bollywood" fame; they are joined by the British hip hop musician, Panjabi MC. Clearly, this is not a song typically associated with accounting.

To begin a lecture on the basic financial statements, "Photograph" by Nickelback (Kroeger, Kroeger, Peake, & Adairis, 2005, track 3) played since many students can remember the balance sheet is like a snapshot or a photograph of a company's financial position on any given date. As the balance sheet is further explored, the song "Seasons of Love" from the Broadway musical *Rent* is played (Larson, 1996/1999, track 15). In this song, students hear "526,600 minutes, how do you measure... a year" and then learn that current assets and current liabilities are often "measured" in "526,600 minutes" (i.e., one year) or less.

Before elements of the balance sheet are outlined further, students hear "Wanted Dead or Alive" by Bon Jovi as an introduction to the definition of debits (Bon Jovi & Sambora, 1986/1999, track 5). Debits in this context are referred to as "DEAD" since **D**ebits include **E**xpenses, **A**ssets, and **D**ividends. As the journey through the balance sheet continues with the introduction of fixed assets, depreciation methods of **D**eclining Balance, **U**nits of Activity, and **S**traight-line are taught with the song "DUST in the Wind" [emphasis added] by the rock band Kansas (Livgren, 1977/2002, track 7).

Initial concerns with this approach included finding enough songs to fill a semester of lectures and wondering if the songs selected by the professor would resonate with today's students. An idea from a colleague addressed both issues: provide students with extra credit (1 point each on a 1000 point scale) for up to five songs submitted over the course of the semester. The idea was an immediate success and students' creativity in connecting songs to accounting was better than we ever thought possible.

In addition to the student-suggested "Seasons of Love", Florida Georgia Line's "This is How We Roll" (Hubbard, Kelley, Swindell, & Bryanis, 2013, track 12) used when discussing an inventory rollforward or Jessie J's "Price Tag", featuring hip hop artist, B.o.B (Cornish, Gottwald, Kelly, & Simmons, 2011, track 2011) is played to define the position of debits and credits with the song's lyric "everybody look to their left, everybody look to their right." The "Korean Pop" artist Psy's smash hit "Gangnam Style" (Park & Yoo, 2012, track 3) is played when International Financial Reporting Standards are introduced as an alternative to U.S. GAAP. An instant connection to students is made since this song is the most viewed YouTube video of all time with nearly 2.4 billion views (USA Today, 2012; YouTube, 2015).

Evidence

To gain a better understanding of student-held stereotypes and anxiety about accounting as well as to determine if using music is an effective antidote, we conducted a survey of students who completed the first accounting course. The survey consisted of 9 questions that we developed that would answer certain questions regarding music and learning in an accounting principles classroom. Students selected for the survey included those that had or were taking accounting principles and included both the control and treatment classes. We received 110 replies out of 296 surveyed with the majority of respondents being business majors and about an equal number of female and male responses (see Table 1).

Table 1

Survey Respondents Major and Gender

<u>What is your major?</u>		<u>What is your gender?</u>	
Accounting	28%	Female	51%
Other Business	44%	Male	49%
Arts & Sciences	13%		100%
Pharmacy	12%		
Engineering	3%		
	100%		

We noted very positive results from the following questions (see Table 2).

Table 2

Survey Respondents' Answers to Select Questions

	<u>Yes %</u>	<u>No %</u>
-Do you think music breaks any negative paradigm(s) associated with accounting?	83	17
-Did the music used in class help you focus on the accounting topic of the day?	80	20
-If you were to be tested on the music played in class do you think you would be able to recollect the songs and apply them to an accounting topic?	91	9
-When you heard music at the start of class, did it change your mood?	97*	3

* always, most of time, or sometimes

The survey results together confirmed our hypothesis and supported our research on both changing long-held stereotypes about accounting as well as improving students' mood about the topic. With 83 percent of our respondents agreeing that music breaks negative paradigms associated with accounting and 97 percent agreeing that music changed their mood, we had students' minds ready for learning. With minds more open to learning about accounting, music helps create a better overall learning environment.

Cruz discussed the challenge of motivating and exciting non-accounting students who are taking the class merely to meet graduation requirements. She noted that the majority of non-accounting students tend to come to class with a sense of unhappiness and disinterest in the curriculum (Cruz, 2001, p. 34). With 72 percent of students surveyed being non-accounting majors and 97 percent of those same survey participants saying it changed their mood, we have shown that music is changing paradigms while also exciting students about the concepts of accounting.

In addition to the survey, a quantitative assessment of 10 songs was conducted at the start of each semester and then given again at the end of the semester. Our goal was to attempt to measure whether playing music helped students retain the links between the song and a related accounting topic. The assessment was provided to all students in the experimental and treatments, however, participation was voluntary. The pre-assessment was conducted during the first week of classes and the post-assessment was administered on the last day of class.

Of the 104 students participating, Table 3 shows a positive association between hearing a song linked to an accounting topic and retaining the related information for those in the experimental group. Indeed, the results align with responses to question #3 in Table 2 where an overwhelming majority of students thought they would perform well on such an assessment.

Table 3

Experimental Group: Results of Pre- and Post-Assessments Linking Songs to Accounting Topics

Pre Post Change¹

Mean	3.07	7.25	136%
Median	3.00	7.50	150%

¹ Change or improvement from the Pre- and Post-Assessments after song played in class and linked to an Accounting Topic.

We also tested student retention of core concepts by comparing results of students in classes where music was played (experimental) and in those where music was not (control). Again, music helped students retain the concepts by associating songs with accounting topics (see Table 4).

Table 4
Results of Experimental and Control Groups' Assessments Linking Songs to Accounting Topics

	Experimental Group ¹				Control Group ²		
	Pre	Post	Change ³		Pre	Post	Change ³
Mean	3.07	7.25	136%	Mean	3.44	5.88	71%
Median	3.00	7.50	150%	Median	3.00	6.00	100%

¹ Experimental Group was played a song before every lecture for 30 lectures; the pre/post assessment included 10 songs from a 30 lecture playlist.

² Control Group was not played any songs before lectures; the pre/post assessment included the same 10 songs as the Experimental Group's assessment.

³ Change or improvement from the Pre- and Post-Assessments after song played in class and linked to an Accounting Topic.

Finally and perhaps most importantly, we analyzed overall performance of students (as measured by course grade) in the experimental group versus the control group. Those students in the classes where music was played (experimental) performed better than those where music was not (control). Specifically, students in the experimental group earned a letter grade of A or B 13% more than those in the control group. In addition, the grade distribution across all letter grades was higher in the experimental group. Lastly, students were approximately 25% more likely to drop the class in the control treatment class than in the experimental treatment.

Reflection

In our abstract, we use the words entertain, enthuse, motivate, and focus in the context of an accounting classroom. For those who teach accounting, particularly an introductory course, these are not words typically associated with the curriculum. However, the Pathways Commission Report states we, as accounting faculty, should strive for new methods when it comes to teaching accounting (Pathways, 2012, p. 88). We as authors feel strongly our integration of music not only achieves the Commission's goal, but also entertains, enthuses, motivates, and focuses our students.

A first course in accounting is required by most undergraduate business schools. However, many students, particularly those with anxiety or indifference towards the subject, may be difficult for a professor to motivate and keep focused on the subject. Mowrer's research into anxiety reduction and its positive correlation with learning along with Montague's confirmation that lower anxiety aided performance of those with high anxiety (Mowrer, 1940, p. 515; Montague, 1953, p. 95) suggest the perfect climate for integrating music with accounting.

If we are able to use music as a tool to reduce anxiety and indifference, we will potentially increase performance as well as the motivation and focus of our students. Students surveyed commented the music “creates a welcoming environment and something to look forward to,” “made it more of an interesting introduction to get my focus,” “had a way of making me more alert and lifted my spirits,” and finally, “was a great stress reducer” (Students 2, 3, 4, & 5 comments, January 2015).

Once students are de-stressed and motivation is increased, their minds are more open to learning about the subject for which they may have held negative perceptions. Taking the student to the next level where they are enthused about the topic is also aided by music and the entertainment factor of a song. Several students surveyed noted that playing music and connecting the song to an accounting topic made the class fun and entertaining. Further, students commented that music “got me excited to learn” and “brings intrigue ...[and] gets everyone excited and eager to learn more” (Students 5 & 8, and Student 6 comments, January 2015). One student declared emphatically, “music was like a refreshing burst of air that said ‘Okay - let’s get pumped for accounting!’ And almost 100% of the time, that’s how I felt: ready (excited even) for the day’s lesson.” (Student 7 comments, January 2015).

Imagine having a principles classroom where students are “pumped for accounting!” Enthused students not only make the professor’s job of teaching the day’s topic much more enjoyable, but also help attract other students to the discipline of accounting in a way similar to the tunes used by the Pied Piper of Hamelin (Kazmi & Naaranoja, 2015, p. 58). Attracting students to the study of accounting is also championed by the Pathways Commission in their statement that the “first course in accounting is clearly a critical pathway to attracting students into the study of accounting and the accounting profession” (Pathways, 2012, p. 87).

Of course, learning the principles of accounting during this first course is critical. Music and fun enhance, not replace, learning. We found the first course in accounting that included music is much more popular than those that did not (as measured by student enrollment). Indeed, while the course textbook is the same and syllabi are virtually identical, first courses that include music have student populations that outnumber non-music courses approximately 3 to 1! If we can attract more students to the discipline of accounting using music, we have a chance at convincing more of them to consider accounting as a profession.

Conclusion

Why, when entering an academic environment do we remember more often those things that entertain, enthuse, motivate, and, most importantly, focus us? This question, that we posed at the beginning of our paper, is THE reason we contend that adding music will invigorate and positively “transform the first course in accounting” as championed by The Pathways Commission (2012, p. 86). We have presented literature, data, and our reflections as well as student input that support our hypothesis that music in an accounting principles course can be transformative.

If we use music effectively to supplement our lectures, several positive things can happen:

- Students with negative paradigms or stereotypes as well as those with anxiety are more likely to “tune-in” to the topic of the day if they are motivated by music.
- Tuned-in students may then soften or completely change their negative paradigms and become less anxious, thereby beginning to focus more on a subject they previously viewed as “boring” or “tedious.”
- With increased focus and attention on accounting principles, improved tuned-in students may be more likely to select accounting as a major and possibly a career.

- These enthusiastic students may spread the word like the Pied Piper, thus attracting even more interested students to the accounting profession, especially diverse and high-potential students.

Encouraged by the Pathways Commission to improve the first course in accounting, we have found the integration of music makes the experience more engaging and open. Indeed, Pathways further notes if we as educators do not try something new and creative, we may continue to struggle to attract top talent to our discipline. “The first course in accounting is clearly a critical pathway to attracting students into the study of accounting and the accounting profession. Without a clear role and engaging learning approaches, this course may negatively influence students...” (Pathways, 2012, p. 87).

Music can enhance students’ performance in the introductory accounting course if they perceive that the course is inviting and that “they have an aptitude for accounting” (Tan & Laswad, 2009, p. 235). With improved performance, students will be “more likely to choose an accounting major when they now consider accounting interesting and enjoyable” (Tan & Laswad, 2009, p. 235).

At a recent roundtable when this idea was presented, professors who had not used music in teaching accounting doubted their own ability to think of songs to use effectively in a first course in accounting. To allay this concern, we have included in the Appendix a partial “play list” culled from several years of accumulating songs on the topic. This list is not exhaustive; however, we have found that it is useful in stimulating linkages to other songs.

As we contemplate further research, our experiment would have benefitted from the same professor teaching all sections of the first accounting course, including some with the experimental treatment and some with the control condition. The student population at our smaller college was a limiting factor as well. Finally, testing the use of music in upper level accounting courses would also provide an opportunity for study as well as non-accounting courses, particularly where the rigor of the coursework or the anxiety of students is a significant factor.

The simple act of playing music in an accounting classroom will not suddenly solve all of the challenges outlined by The Pathways Commission. Nonetheless, we believe strongly that the approach outlined in this paper and supported by research can transform the first course in accounting and allow for improved learning with a better overall experience for both students and professors. We encourage you to try music in your accounting class and begin to dispel the negative stereotypes about our discipline. “Students will never believe accounting is a great profession unless those that practice it exude that belief first” (Albrecht & Sack, 2001, p.23). Together, let’s set the right tone with a tune and help our students embrace and succeed at accounting.

Dedication

We, the authors, dedicate our paper to Professor Stuart Schakett, late of The James F. Dicke College of Business Administration at Ohio Northern University. All that experienced his classes and lectures came away informed, enlightened, and entertained. The beat of our music will never be quite the same since his untimely passing.

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Discography

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Appendix

Partial playlist

#	Title	Artist	Accounting Topic
1.	Chaiyya Chaiyya / Bollywood Joint	Sukhwinder Singh, Sapna Awasthi, and Panjabi MC	Accounting: A New Language
2.	The End is Where We Begin	Thousand Foot Krutch	Introduction of Financial Statements
3.	Photograph	Nickleback	Balance Sheet (a snapshot / point in time)
4.	Accounting Rap	Colin Dobbs	Debit Credit Theory
5.	Price Tag	Jessie J	Debits on Left, Credits on Right
6.	Wanted Dead Or Alive	Bon Jovi	DEAD: D ebits are E xpenses, A ssets, and D ividends
7.	Seasons of Love	Cast from "Rent"	525,600 minutes = one year = Current; to introduce Current Assets / Liabilities
8.	Allowance	ABC's "Schoolhouse Rock"	Allowance for Doubtful Accounts
9.	I Love to Laugh	Julie Andrews and Dick Van Dyke from Disney's "Mary Poppins"	4 inventory methods: LAFS or LIFO, Average Cost, FIFO, & Specific Identification
10.	Whip it	DEVO	Work In Process (WIP) Inventory
11.	I'm so Paid	Lil Wayne, Young Jeezy	Inventory & Accounts Payable
12.	This Is How We Roll	Florida Georgia Line	Inventory Rollforward
13.	Dust in the Wind	Kansas	3 depreciation methods: DUS ^t or D eclining B alance, U nits of Activity, S traight-line
14.	Bills, Bills, Bills	Destiny's Child	Accounts Payable
15.	James Bond 007 Movie Theme	John Barry or Monty Norman	Bonds & Long-term Liabilities
16.	Gangnam Style	Psy	IFRS
17.	Separate Ways (Worlds Apart)	Journey	IFRS vs. U.S. GAAP
18.	If I Could Turn Back Time	Cher	Restatements
19.	Viva La Vida!	Coldplay	Ethics
20.	Low Budget	The Kinks	Budgeting
21.	Time Is On My Side	The Rolling Stones	Time Value of Money
22.	ABC	The Jackson 5	Activity Based Costing
23.	Just In Time	Frank Sinatra	JIT Inventory; Managerial Accounting
24.	Breakeven	The Script	Breakeven Analysis
25.	Sweet Sixteen	Hillary Duff	16 key ratios for financial analysis