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**AN EMPIRICAL EXAMINATION OF GENDER, POLITICAL
AFFILIATION, AND FAMILY COMPOSITION ISSUES
AFFECTING REASONABLE COMPENSATION
IN CLOSELY HELD CORPORATIONS**

by

W. Brian Dowis, B. S., M.P.A., C.P.A.

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Business Administration

COLLEGE OF BUSINESS
LOUISIANA TECH UNIVERSITY

August 2015

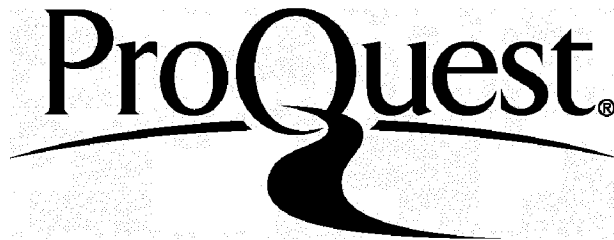
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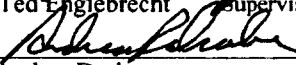
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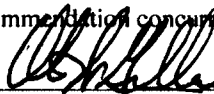
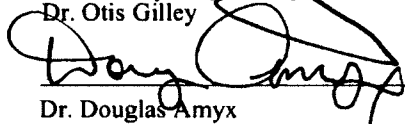
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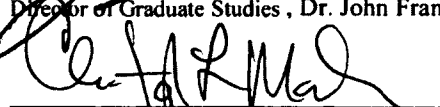
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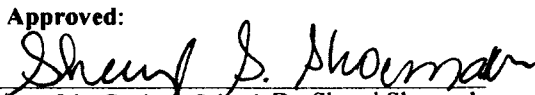

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ABSTRACT

This study examines the effect of gender, political affiliation, and family composition issues on reasonable compensation in closely held corporations. It is broken down into two parts: an archival and behavioral (survey) portion. The archival part analyzes decisions made in the U.S. Tax Court spanning 1983-2014 through the use of simple regression, multiple regression/ordinary least squares, and logistic regression. Four variables were found to be significant: judge gender, tenure, number of tax years decided, and taxpayer gender. The behavioral portion investigates the current perceptions of tax practitioners through surveying Certified Public Accountants (CPAs). Analysis of variance is used in this portion. The significant variable from this part is political affiliation.

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CHAPTER ONE

INTRODUCTION

One of the most frequent areas of tax confrontation, since 1918, for corporations is the disallowance of compensation by the Bureau of Internal Revenue (known today as the Internal Revenue Service¹) (Holzman 1971). What constitutes a reasonable salary has been one of the most mistreated areas in the Internal Revenue Code reaching as far back as when this issue was included in Code Section 23(a)(1)(A) (Griswold 1945). Additionally, it has been described as one of the most burdensome and abused clauses in the Internal Revenue Code (Griswold 1945) and one of the most vexing issues accompanying the taxing of closely held corporations (Englebrecht and Windlinger 1979). The term “reasonable” does seem to indicate an objective standard. Although reasonable is easy to define, it does represent a challenge when trying to apply it to a real life scenario. That is, objectivity may or may not be present when closely held corporations are involved. Also, the term compensation not only includes wages but fringe benefits consisting of medical insurance, death benefits, meals and entertainment, and pension and profit-sharing. Furthermore, the parties that are affected on a recurring basis in this highly litigated arena are tax professionals, management, and taxing authorities (Englebrecht and Windlinger 1979). Therefore, many parties are affected by this far-reaching tax issue.

¹ Internal Revenue Service will be referred to as IRS, Service, and Commissioner interchangeably throughout this dissertation.

Reasonable Compensation Origins

Originally, Section 234(a) of the 1918 Revenue Act addressed reasonable compensation. It provided, in calculating net income, a reasonable allowance for salaries and other compensation for services personally rendered, as an ordinary and necessary expense incurred or paid during the taxable year in carrying on a trade or business. Therefore, the original intention of Congress was to broaden the language within the Internal Revenue Code allowing a deduction even when no salaries were paid.² This worked to counteract the effects of the excess profits tax implemented on October 3, 1917 (Griswold 1945). Because the original intentions provided for a broadening of the language in the Internal Revenue Code, a shareholder-employee benefits substantially from receiving compensation as salary payments escaping double taxation. Naturally, an objective of any intelligent shareholder would be to receive payments from a corporation in the form of a salary resulting in being taxed only once (Englebrecht and Windlinger 1979). The lack of clear-cut guidelines existing in the Internal Revenue Code and Treasury Regulations has encouraged the litigation of compensation disallowed by the Service over the years. As a result, the significant number of cases heard in court appears to be a result of inadequate guidance provided to corporations and taxpayers.

² From the Griswold (1945) article footnote on page 287 which said “The basic part of this material apparently first came to light in a brief filed by Marvin Haynes, Esq., of Washington D.C., in a case which was thereafter settled so that no decision on the question was required.”

Lucas and Gustafson

Two of the earliest cases deciding reasonable compensation were *Lucas v. Ox Fibre Brush Co.*, brought before the Supreme Court, and *Gustafson Manufacturing Co.* The *Lucas v. Ox Fibre Brush Co.* case was heard by the U.S. Supreme Court. The details surrounding this case involved two employees, the president and the treasurer. Each employee received \$24,000 in additional compensation. Additionally, each employee devoted all of their time to the corporation and guaranteed considerable bank loans personally. Furthermore, both employees guided the corporation's general policies while leading the charge for all large purchases. As a result, the compensation paid for prior services, was deemed reasonable because of the substantial benefits the corporation received from the two individuals. Therefore, if the corporation wants to reward the work performed by the individuals, the corporation has every right to do so. In *Gustafson Manufacturing*, the taxpayer was a close corporation organized under Tennessee state law. The president and general manager was the majority stock owner. He received a \$20,000 salary in 1918, and regularly and actively participated in management. Furthermore, he devoted all of his time to the business of the corporation. The IRS challenged the compensation allowing \$16,000 in 1918. The court rendered a decision for the Commissioner disallowing a deduction for compensation exceeding the amount allowed by the Service.

Why the Scrutiny?

Typically, reasonable compensation is challenged because within these corporations being contested, few people hold a majority of the stock while being employed by the corporation in significant positions. This means these individuals usually

act in a decision-making role either as a senior officer or employee (Englebrecht and Windlinger 1979). Moreover, in one specific instance, the judiciary's ability to challenge small businesses' reasonable compensation could stem from the growth of entrepreneurial companies throughout economic growth periods and the arrival of small and mid-sized high-tech companies (Person 1995). Practitioners have even gone as far as to build a roadmap when advising their clientele in dealing with reasonable compensation. This guidance has provided for proper corporate documentation, avoidance of building profits in order to make large payments, instituting a history of paying dividends, paying high compensation to productive major principals, allowing for compensation-based benefit programs, and ultimately, consideration of becoming a limited liability company or S corporation (Person 1995). Further suggestions include researching what other companies of comparable size in similar business lines pay their owners, examining how the company matches up with companies in the same industry, keeping adequate records of responsibilities of owner-executives, explaining the reasons for accumulating profits, and formally connecting compensation to company performance. Also, the business or corporation needs to make clear that their owner-executive (or person receiving the compensation) is entitled to every penny paid by the business or corporation.³ Additionally, the corporation/taxpayer must take into consideration the burden of proving that the amount paid is reasonable (Swift 1966). The determination deemed reasonable by the Service is presumed to be correct leaving the task of justifying the higher amounts in the hands of the taxpayer (Hoffman 1979). In this regard, an arm's length standard must be present when determining the reasonableness of the compensation deduction.

³ *Compensation & Benefits Report*. May 2003. Vol. 17, Issue 5, pg. 10-11.

One avenue taxpayers have explored, to combat the disallowance in the past, has been the hiring of an expert witness to confirm or verify the reasonableness of the compensation (Englebrecht and Windlinger 1979).

Quantifying the Impact

The impact of litigation can be far-reaching. According to Hoffman (1979), the contested portion of compensation claimed by a corporation can cost the business up to nearly 48% of the disallowed amount because unearned income could go as high as 70% (Hoffman 1979). Furthermore, all businesses can potentially be affected by this tax issue including sole proprietorships and partnerships. Also, closely-held corporations and publicly held corporations are both equally susceptible to scrutiny from the Service.

Tax Guidance

Code Section 162 provides that a reasonable allowance for compensation is allowed as an ordinary and necessary expense deduction. An expense is deemed ordinary if it is typically incurred in the type of activities that the business is operating within. Moreover, would taxpayers operating in similar businesses incur the same type of expense? A necessary expense is an expense which is helpful, appropriate, or able to contribute to the taxpayer's profit seeking activities. Also, a necessary expense does not always qualify as an ordinary expense. If an expense is necessary but not ordinary, the expense fails to be deductible.⁴ Ultimately, this deduction has the power to reduce a company's taxable income and thereby its tax liability. Regulation Sec. 1.162-7 (b)(1)

⁴ *Deputy v. DuPont*, 40-1 USTC ¶9161, 23 AFTR 808, 308 U.S. 488 (USSC, 1940) from CCH Federal Taxation Comprehensive Topics 2015 Edition

posits further guidance indicating compensation that exceeds the purchase price or value of services rendered may be a distribution of a dividend. When the distribution is deemed a dividend, the salary payment no longer becomes deductible. This leads to double taxation, first, at the corporate level and then at the individual level.⁵ As a result, the corporation's taxable income is larger, and the corporation's tax liability is increased. If earnings are paid out as salary, the individual tax is the only tax that remains.⁶ Naturally, the determination of reasonable compensation for corporations and the Internal Revenue Service (IRS) has significant tax consequences.

Example

The following example illustrates the reasonable compensation conundrum.

Example: Taxpayer A and B, wife and husband, each have a 50% ownership interest in ABC Corporation. In 2015, ABC Corp. compensated each \$150,000, and had taxable income of \$100,000 following the salary payments. Taxpayer A and B file a joint return and claim no dependents. When audited, the Internal Revenue Service (IRS) determined reasonable compensation to be \$75,000 for each individual. The excess (\$150,000) was determined to be classified as a dividend. This reclassification causes a tax increase of \$58,500 for ABC Corporation, as illustrated in Examples 1 and 2.

⁵ *Compensation & Benefits Report*. May 2003. Vol. 17, Issue 5, pg. 10-11.

⁶ *Compensation & Benefits Report*. May 2003. Vol. 17, Issue 5, pg. 10-11.

Example 1

| | |
|--|----------------|
| Personal Income Tax Return – Taxpayer A and B | |
| Adjusted Gross Income | 300,000 |
| Less: Standard Deduction | -12,600 |
| Personal and Dependency Exemptions | -8,000 |
| Taxable Income | <u>279,400</u> |
| Tax $(279,400-230,450) \times 0.33 = 16,153.5$ | |
| 51,577.50 | |
| Total Tax | <u>67,731</u> |
| ABC Corporation | |
| Taxable Income | <u>100,000</u> |
| Tax $50,000 \times 0.15 = 7,500$ | |
| 25,000 $\times 0.25 = 6,250$ | |
| 25,000 $\times 0.34 = 8,500$ | |
| Total Tax | <u>22,250</u> |

Example 2

| | |
|--|----------------|
| Personal Income Tax Return – Taxpayer A and B | |
| Reasonable Salaries Allowed | 150,000 |
| Dividend Income | 150,000 |
| Adjusted Gross Income | 300,000 |
| Less: Standard Deduction | -12,600 |
| Personal and Dependency Exemptions | -8,000 |
| Taxable Income | <u>279,400</u> |
| Tax $(279,400-230,450) \times 0.33 = 16,153.5$ | |
| 51,577.50 | |
| Total Tax | <u>67,731</u> |
| ABC Corporation | |
| Taxable Income Claimed on Return | 100,000 |
| Add: Disallowed Compensation | 150,000 |
| Adjusted Gross Income | <u>250,000</u> |
| Tax $50,000 \times 0.15 = 7,500$ | |
| 25,000 $\times 0.25 = 6,250$ | |
| 25,000 $\times 0.34 = 8,500$ | |
| 150,000 $\times 0.39 = 58,500$ | |
| Total Tax | <u>80,750</u> |

Summary

Difference in Tax Consequences

| | Taxpayer A and B | ABC Corporation | Total Tax |
|-----------------------|------------------|-----------------|---------------|
| Original Calculation | 67,731 | 22,250 | 89,981 |
| Disallowance Included | 67,731 | 80,750 | 148,481 |
| Increase in Tax | <u>0</u> | <u>58,500</u> | <u>58,500</u> |

Judicial History

The topic of reasonable compensation has generated numerous judicial decisions over the last 60 years. Nonetheless, four landmark cases have emerged over this timeframe. These cases are *Mayson Mfg. Co. vs. Commissioner*, 49-2 USTC ¶9467 (CA-6, 1949), *Elliot's Inc. v. Commissioner*, 83-2 USTC ¶9610 (1983), *Exacto Spring Corp. v. Commissioner*, 1999-2 USTC ¶50,964 (CA-7, 1999), and *Miller and Sons Drywall Inc. v. Commissioner*, 89 TCM 1279, T.C. Memo. 2005-14 (2005).

Mayson Mfg. Co. vs. Commissioner

In the *Mayson Mfg. Co.* case⁷, the company was organized in Michigan in the middle of 1929. Four shareholders held the initial 800 shares. The issue under examination in this case focused on the compensation of three individuals (May, Peterson, and Hosier) of which two were initial shareholders. May was the president and general manager from 1934-1943. Peterson was the vice president in charge of manufacturing during that same time period and Hosier held the position of secretary, treasurer, and salesman. The factors (9 in all) used by the court to determine reasonableness of

⁷ *Mayson Mfg. Co. vs. Commissioner*, 49-2 USTC ¶9467 (CA-6, 1949)

compensation included the 1) employee's qualifications, 2) the nature, extent and scope of the employee's work, 3) the size and complexities of the business, 4) a comparison of salaries paid with the gross income and the net income, 5) the prevailing general economic conditions, 6) comparison of salaries with distributions to stockholders, 7) the prevailing rates of compensation for comparable positions in comparable concerns, 8) the salary policy of the taxpayer as to all employees, and 9) the compensation paid to the specific employee in prior years. Only one of these factors failed to provide evidence of support for the reasonableness of paid compensation to Hosier, Peterson, and May. The decision rendered, on appeal, was that the Tax Court's position was clearly erroneous and should be put aside.

Elliot's Inc. v. Commissioner

In *Elliot's Inc.*⁸, the petitioner was an Idaho corporation in the business of selling John Deere manufactured equipment and John Deere services equipment. This corporation was incorporated in 1952, and it started with eight individuals. Over the next 23 years, the corporation had 40 employees. However, the issue of compensation revolved around the corporation's chief executive officer and sole shareholder. He was compensated through a fixed salary and a bonus at year-end. The Service challenged the reasonableness under Section 162(a)(1). Five broad categories were used to determine the reasonableness of the compensation. These categories consisted of 1) role in company, 2) external comparison, 3) character and condition of the company, 4) conflict of interest, and 5) internal consistency. On appeal, the court concluded that the failure to pay dividends and

⁸ *Elliot's Inc. v. Commissioner*, 83-2 USTC ¶9610 (1983)

the employee's role as sole shareholder does not cause the compensation payments to be treated as disguised dividends. Furthermore, the case was reversed and remanded back to the Tax Court.

Exacto Spring Corp. v. Commissioner

In *Exacto Spring Corp.*⁹, the corporation was in the business of precision spring manufacturing. This closely-held corporation compensated its principal owner, cofounder, and chief executive (same individual) in the amounts of \$1.3 million in 1993 and \$1.0 million in 1994. The IRS allowed only \$381,000 for 1993 and \$400,000 for 1994. The Tax Court ruled nearly halfway between the petitioner's and the Service's amounts allowing \$900,000 in 1993 and \$700,000 in 1994. The appellate court considered seven factors comprised of 1) the type and extent of the services rendered, 2) the scarcity of qualified employees, 3) the qualifications and prior earning capacity of the employee, 4) the contributions of the employee to the business venture, 5) the net earnings of the employer, 6) the prevailing compensation paid to employees with comparable jobs, and 7) the peculiar characteristics of the employer's business. After evaluating the factors, the appellate court concluded the factors were neutral and ruled in favor of the taxpayer. Therefore, the court reversed the decision of the Tax Court and rendered a decision in favor of the taxpayer.

⁹ *Exacto Spring Corp. v. Commissioner*, 1999-2 USTC ¶50,964 (CA-7, 1999)

Miller and Sons Drywall Inc. v. Commissioner

In the *Miller and Sons Drywall Inc.*¹⁰ case, a father and son began operating in the drywall construction business in the 1970s. The son then acquired the drywall construction company prior to 1980 from his father operating it as a sole proprietorship in the beginning. The business was then incorporated as a C corporation in the middle of 1980 and had three shareholder-employees including a chief executive officer/president, a vice president, and a secretary/treasurer. The factors (9 in total) considered by the court included 1) employee qualifications, 2) nature, extent, and scope of the employee's work, 3) the size and complexity of the business, 4) prevailing general economic conditions, 5) the employee's compensation as a percentage of gross and net income, 6) the employer-shareholders' compensation compared with distributions to shareholders, 7) the employee-shareholders' compensation compared with that paid to non-shareholder-employees or paid in prior years, 8) prevailing rates of compensation for comparable positions in comparable concerns, and 9) comparison of compensation paid to a particular shareholder-employee in previous years where the corporation has a limited number of officers. The factors ruled in favor of the three employees were factors one, two, three, four, and five. The factors deemed neutral were seven and nine. Factors six and eight ruled in favor of the Service. Ultimately, the Tax Court decided the compensation paid to the three shareholders was reasonable and, thereby deductible in full for the years at issue.

¹⁰ *Miller and Sons Drywall Inc. v. Commissioner*, 89 TCM 1279, T.C. Memo. 2005-114 (2005)

Prior Compensation and Gender Research

With each major case, a shift in factors that judges use to render decisions has been forthcoming. There have even been attempts to curtail the abuse by allowing corporations to receive repayment of deemed excessive compensation from the executive or other individuals when the IRS disallows part or all of the compensation as reasonable (Holzman 1971). Prior studies have examined which factors the judges deem most important in making their decisions. In the Englebrecht et al. (2014) article, the authors found that through the use of logistic regression, four factors were very significant in explaining the court's rulings. Other studies have found different significant factors (Boyd 1977; Price 1981; Porcano 1982; Carpenter 1984).

While reasonable compensation is an ever growing area of litigation and research, the effect of gender on decision-making, specifically in court, continues to intrigue and challenge researchers in numerous fields of study. Accounting and taxation research is no less immune to the effect of gender. The research done in the gender effect arena pertaining to accounting and taxation has looked at valuation in estate tax cases, innocent spouse relief, differences in ideology, differences in culture, hiring decisions, voting patterns, ethical judgments, identifying a "just society", ethical behaviors, decisions in arbitration, and employee evaluation.

Decision making has also been a widely studied area. Theories that have surfaced to predict decision making are: 1) identity, 2) law and partisanship, 3) strategy, and 4) personal experiences and relationships (Glynn and Sen 2015). Several studies have scrutinized the makeup of judges in order to gain a better understanding of why judges make the decisions that they do. These aspects of judges include gender, race, and even

personal relationships. With the study of personal relationships, four theories are explored to build a link between the judges and the decisions they make. These four theories include preference realignment, lobbying, learning, and protectionism. Preference realignment and lobbying relate to the idea that judges have differing beliefs from the beliefs of close family members. Furthermore, they incur cost because they tend to be punished at home for their social views (Glynn and Sen 2015). The theory of learning and exposure encompass the idea that learning is affected by personal relationships. Additionally, empathy is created as a result of educating one's self about the worldview of others. Last, protectionism can be described as wanting to avoid physical or emotional harm.

Objectives of this Study

The main objective of this study is to determine what factors outside of the facts and circumstances of the case affect the decision made by a judge when faced with a reasonable compensation issue. The archival portion of this study tries to achieve this result by building a model using multiple and logistic regression comprised of variables previously found significant in prior studies. Factors will be extracted from the summary opinions offered by the Tax Court judges in reasonable compensation cases contested in the U.S. Tax Court between 1983 and 2014. The behavioral portion of this study will use survey vignettes to gauge the current views of professionals on the topics of reasonable compensation and gender.

This study addresses the following research questions:

- 1) Is there a significant difference in how male and female judges render a reasonable compensation decision?

- 2) Do judges simply come to a “Compromise” decision, represented as the arithmetic mean, when deciding a reasonable compensation decision?
- 3) Are male judges more likely to rule for a higher amount of compensation for the taxpayer than female judges?
- 4) Are judges more likely to rule for a higher amount of compensation when the taxpayer is the same sex as the judge?
- 5) Are male taxpayers more likely to receive a compensation decision higher than female taxpayers?
- 6) Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge appointed by a Democratic president?
- 7) Do judges have a higher probability of ruling in favor of the taxpayer when the taxpayer has at least one appraiser?
- 8) Do judges have a higher probability of ruling in favor of the IRS when the IRS has at least one appraiser?
- 9) Do judges have a higher probability of ruling in favor of the taxpayer’s value when multiple years are involved?
- 10) Do judges have a higher probability of ruling in favor of the IRS’ value when the judge has at least one daughter?

Organization of the Dissertation

This dissertation is organized in the following manner. Chapter One presents the reasonable compensation topic. Chapter Two explains the historical background of reasonable compensation and reviews the literature associated with reasonable

compensation, judicial forums, and gender differences. Chapter Three discusses the research methodology. Chapter Four analyzes the data and explains the results. Chapter Five offers a summary, discussion of the results, limitations of the study, and areas for future research.

CHAPTER TWO
HISTORICAL BACKGROUND AND
LITERATURE REVIEW

The objective of this chapter is to present the statutory and administrative authority designed to address the topic of reasonable compensation. Prior research in the reasonable compensation and gender arena are presented and discussed.

Historical Background

Code Sec. 162(a)(1)

The Internal Revenue Code of 1986 addresses reasonable compensation in Code Section 162(a)(1). Section 162(a)(1) provides for an ordinary and necessary expense deduction for expenses paid or incurred for reasonable allowance pertaining to salaries or other compensation for actually rendered personal services.

U.S. Treasury Regulation 1.162

With less than clear guidance in the Internal Revenue Code, the U.S. Treasury Regulations provide additional assistance. Treas. Reg. 1.162-7(a) provides that deductibility of compensation payments relates to whether the payments are reasonable and are made purely for services. Naturally, when compensation exceeds salaries paid for similar services, the excessive payments will receive dividend treatment as though from a

distribution of earnings from stock. Reg. Sec. 1.162-7 (b)(1) expands its explanation by describing an ostensible salary paid by a company as a dividend distribution on stock. This happens in corporations with few shareholders in situations where the shareholders all receive salaries payments. When the salaries paid closely parallel the stockholdings of the employees or officers, it can signal that salaries are not paid solely for services rendered. In that situation, it would appear the salary is being paid as a distribution of earnings. Reg. Sec. 1.162-7 (b)(2) posits that how the compensation is formed or the method used to fix the compensation does not always decide deductibility. Moreover, a flat rate compensation does not receive differing treatment from contingent compensation because both forms of compensation will receive equal scrutiny. Reg. Sec. 1.162-7(b)(3) also asserts compensation that is characterized as true and reasonable needs to be compensation paid “for like services by like enterprises under like circumstances.” Additionally, circumstances surrounding the compensation paid needs to occur at the date the contract was created for the services, not the date the contract is challenged. Reg. Sec. 1.162-8 explains the excess compensation treatment. This regulation holds when the payments exceeding reasonableness mirror or closely align with stockholdings and is deemed to be earnings or profit distribution, then those excess payments will receive dividend treatment. Last, Reg. Sec. 1.162-9 specifically targets bonuses. This regulation provides that employee bonuses will also be allowed as a deduction from gross income when the payments are made for services actually rendered and in good faith. However, the bonus payments cannot exceed reasonable compensation for the rendered services.

Revenue Ruling 79-8

Revenue Ruling 79-8 offers specific guidance when a corporation has not paid more than a small amount of dividends from earnings since this situation can catch the attention of the IRS. Various cases were discussed within this ruling. These included *Charles McCandless Tile Service v. United States*¹¹, *Botany Worsted Mills v. United States*¹², *Davis & Sons, Inc. v. Commissioner*¹³, *Nor-Cal Adjusters v. Commissioner*¹⁴, *Charles Schneider & Co. v. Commissioner*¹⁵, and *Edwin's Inc. v. United States*.¹⁶ Each case involved dividend history. After careful examination, the revenue ruling indicated that a closely held corporation failing to pay out more than a small portion of its earnings as dividends is a very important factor when determining the deductibility of paid compensation to a shareholder-employee of a corporation. Nonetheless, once the facts and circumstances surrounding compensation provide support to the reasonableness of the compensation, deductions shall not be disallowed because small dividends have been paid out on its outstanding stock.

Literature Review

The topics of reasonable compensation and gender effects on decision-making have been studied by researchers in the past. However, they have not been studied

¹¹ 422 F.2d 1336 (Ct. Cl. 1970)

¹² 278 U.S. 282 (1929), Ct. D. 39, VIII-1 C.B. 279 (1929)

¹³ T.C. Memo 1975-229

¹⁴ T.C. Memo 1971-200

¹⁵ 500 F. 2d 148, 153 (8th Cir. 1974)

¹⁶ 501 F. 2d 675 (7th Cir. 1974)

together. The research conducted in the reasonable compensation arena has focused on determining which factors are deemed most significant when the IRS disallows a portion of the reasonable compensation claimed by the taxpayer. Moreover, the research done in the gender effect arena has looked at valuation in estate tax cases, innocent spouse relief, differences in ideology, differences in culture, hiring decisions, voting patterns, ethical judgments, identifying a “just society”, ethical behaviors, decisions in arbitration, and employee evaluation.

Theory

Critical Mass Theory

Kanter (1977)

In the Kanter (1977) article, a framework is discussed pertaining to dominants and tokens. Four types of groups are discussed. The first group type is a uniform group consisting of one of kind of person and one significant social type. The typological ration for a uniform group is 100:0. The second group type is a skewed group. The ratio for a skewed group would be 85:15. The dominants can be described in this group as the individuals controlling the group and the culture. The token, on the other hand, represents the smaller portion of individuals opposing the dominants and are typically treated as symbols of their category as opposed to individuals. The tilted group has a ratio of 65:35 and the balanced group has a ratio of 50:50. Specifically, within the skewed group, tokens are either alone or are virtually alone and must act on behalf of their ascribed category whether they want to or not. The U.S. Tax Court has 33 total judges (15 regular, 14 senior, and four special) who can preside over a case. Currently, of the 15 U.S. Tax Court regular judges, two are female representing a ratio of 13:2 or 87:13. Of the 14 senior judges on

the U.S. Tax Court, three are female demonstrating a ratio of 11:3 or 79:21. Last, the four special judges are all male. The overall ratio including regular, senior, and special U.S. Tax Court judges is 85:15 (28 male; five female).¹⁷ This ratio is on par with the skewed group ratio. According to the Kanter (1977) article, the women judges would be considered tokens. Additionally, three perceptual phenomena are associated with token status. These three phenomena are visibility, polarization, and assimilation (Kanter 1977). Visibility can be described as receiving a higher awareness share since there is less of this type of individual as compared to one of the dominants. Polarization focuses on the idea that having a token as part of the group will result in dominant members of the group determining common characteristics and differing characteristics from the token individual. Last, assimilation can be defined as taking the token's characteristics and distorting them to fit the generalization (Kanter 1977). The impact on the token is performance pressure, isolation of the token, group boundary heightening, and role entrapment.

Social Identity Theory

A second underlying theory pertaining to individuals and decision-making is social identity theory. First, a "social group" is perceived as a collection of individuals who identify themselves as members of the same social category. Furthermore, they may have similar emotional involvement in how they define themselves. Last, the individuals may come to a collective understanding as to the evaluation of the group and their being a part of it (Tajfel and Turner 1979). Social identity can be described as aspects of an individual's

¹⁷ <https://www.ustaxcourt.gov/judges.htm>

self-image that originate from the social categories to which the individual finds himself or herself belonging (Tajfel and Turner 1979). The social group and social identity in this study is the gender group. Specifically, one question is whether female judges identify with female taxpayers as being in their same group. The same inquiry also arises with male judges and male taxpayers. Conversely, social identity theory provides for out-group discrimination. Therefore, female judges under this theory would treat males worse than their female counterparts and vice versa.

Reasonable Compensation Empirical Research

Englebrecht et al. (2014)

The Englebrecht et al. (2014) study investigated reasonable compensation in closely-held corporations. Specifically, this study only focused on cases litigated in the U.S. Tax Court. The time period spanned 1991 through 2011. This resulted in 53 cases. The final sample resulted in 145 individual observations because several cases included more than one year and/or people. Of the ten factors included in the original model (employee qualification, nature, extent, and scope of employee's work, business size and complexity, comparison of salaries paid to net and gross income, prevailing general economic conditions, comparison of salaries with distributions to shareholders, rates of compensation for comparable positions/companies, employer's salary policy as to all employees, conflict of interest, and compensation paid in previous years), four were deemed significant. These four significant factors included factor four (comparison of salaries paid to net and gross income), six (comparison of salaries with distributions to shareholders), seven (rates of compensation for comparable positions/companies), and eight (employer's salary policy as to all employees). Logistic regression was used in this

article. Additionally, the model was able to predict with 100% accuracy a holdout sample of randomly selected cases.

Carpenter (1984)

The Carpenter (1984) dissertation targeted creating a better understanding of the term “reasonableness” as it relates to closely-held corporations and owner-operators. The original model employed consisted of 26 independent variables. These independent variables were pulled from the internal revenue code, treasury regulations, *Mayson Mfg. Co. vs. Commissioner*, 49-2 USTC ¶9467 (CA-6, 1949) and other cases, and the IRS Audit Guidelines tests. The independent variables included:

employee’s qualifications, nature, extent, and scope of employee’s work, size of the business, complexity of the business, comparison of owner’s salary paid to gross income and comparison of owner’s salary paid to net income, general economic conditions, dividend history of the firm, comparison of owner’s salary paid to industry averages, salary structure of the firm, average compensation paid to owner-operator in prior years, formality and timing of the board of directors, salary increase or bonuses paid to owners in property to stockholdings, future prospects of the firm, living conditions of the particular locality, time devoted to other businesses by the owner-operator, scarcity of other qualified employees, employee’s responsibility for the firm’s inception and/or success, existence of a contingent compensation formula, comparison of owner’s salary paid in contested years to earlier years, a compensation plan consistently followed, owner compensation payments as incentive to remain with the firm, firm’s financial condition after owner compensation payments, owner compensation payments as

tax avoidance scheme, extent of control exerted by owner-operator, and expert witness testimony.

The dependent variables were either considered a “taxpayer win” (meaning the court ruled for 100% of the amount claimed by the taxpayer) or a “taxpayer loss” (meaning the court sided with the IRS disallowing 100% of the challenged amount). The methodology used was stepwise logistic regression or logit. The data was comprised of 165 Tax Court cases and 44 U.S. District Court cases. Also, the predictive ability of the Tax Court logistic regression model was then tested on the cases heard in the U.S. District Court. One of the results indicate a five-variable Tax Court Logit Model was capable of correctly categorizing 97% of the 165 observations/cases on reasonable compensation decided between 1950 and 1980. Similarly, a second eight-variable Tax Court Logit model was able to accurately classify 96.4% of the cases heard in the U.S. Tax Court. These models had similar success in predicting cases heard in the U.S. District Court. Furthermore, the researchers found courts are more likely to rule in favor of unreasonable compensation when the employee has marginal qualifications for the job, there is vagueness to the scope and nature of the employee’s duties, the salary of the owner is exceedingly higher than the other employee salaries in the firm, the business is not very profitable, and the salary of the owner is significantly higher in the year under investigation compared to earlier years. This study added to the literature by providing a model useful for the Service and the taxpayer. As a result, the taxpayer could use this model when creating future compensation plans. This model could also assist in relieving the large amount of cases burdening the judicial system. Last, this research shows that logistic

regression is an appropriate form of statistical analysis for cases ruling on reasonable compensation.

Porcano (1982)

The Porcano (1982) article assessed the Tax Court's determination of reasonable compensation. The purpose behind this study was to construct a predictive multiple regression model capable of forecasting the compensation amount permitted by the courts as a percentage of the disputed amount between the IRS and the taxpayer. The sample consisted of 86 court cases spanning January 1, 1970 through December 31, 1979. The total number of observations summed to 219 with the court awarding to the firm 100% of the amount claimed 42% of the time and the court awarding at least 70 percent of the claimed amount 51.5 percent of the time. The judicial forum was limited to the Tax Court. Decisions made by the District Court, Court of Claims, Court of Appeals, and the Supreme Court were eliminated from the analysis because of insufficient number of cases or lack of consistent authority between circuits and districts. The original model started with 33 variables. Of these 33 variables, 28 were dichotomous, 14 of the 28 variables were dummy variables, three variables had values from one to three, and one variable had a value from one to four. The final stepwise multiple regression model included 15 variables. Therefore, 18 variables were dropped from the model. The R^2 of the final model was 0.825 indicating that the model was able to explain approximately 83% of the variation in the predicted variable of settlement value or the percent of the amount disputed with the IRS. The overall results of this analysis offered a company's management a framework to evaluate contested reasonable compensation decisions heard in the U.S. Tax Court.

Hoffman (1979)

In the Hoffman (1979) article, reasonable compensation cases are examined to see which factors tend to have the most significance in determining the final outcome of a case heard either in the U.S. Tax Court, the U.S. District Court (separating out cases with a jury from those without a jury), and the U.S. Court of Claims. The data used included court decisions heard between January 1, 1970 and December 31, 1977. This resulted in 90 reasonable compensation cases totaling 162 shareholder-employees. The data was divided into three categories. In those cases where the court rendered a decision of at least two-thirds of the compensation disputed, the decision was deemed a “win” for the taxpayer. In cases where the court ruled for one-third or less of the disputed amount, the decision was considered a “win” by the IRS. In those instances, where the court figures the compensation amount to be more than one-third but less than two-thirds, the decision is considered a compromise decision. The researchers also divided out cases based on total annual compensation. The levels of compensation were also separated out into: 1) \$0-\$25,000, 2) \$25,001-\$50,000, 3) \$50,001-\$75,000, 4) \$75,001-\$100,000 5) \$100,001-\$150,000 and 6) over \$150,000. The results concluded that taxpayers will have the best chance to win a reasonable compensation case when exhibiting the following characteristics: 1) the taxpayer exhibits managerial responsibility over all of the aspects of the operation and dedicates a significant amount of time leading the corporation’s affairs, 2) the corporation is experiencing success and the success is attributable to the shareholder-employee, 3) the salary and contingent-compensation of the shareholder-employee is fixed by the board of directors at the beginning of the period., 4) the contingent compensation formula for the industry is common and can include employees who are not shareholders

but do have managerial responsibility, 5) contingent compensation that is non-pro rata based on stockholdings when there is greater than one shareholder-employee, and 6) the corporation has distributed at least minimal dividends annually. On other hand, the characteristics of the taxpayer that tend to result in losses consist of: 1) a division of effort and time by the shareholder-employee between various businesses, 2) a bonus is paid towards the end of the year once operating results are determined, 3) the shareholder-employee's services performed remains consistent but the compensation figure increases significantly, 4) non-shareholder employees are not included in the bonus arrangement and bonuses or compensation are pro-rata based on shareholdings, and 5) a dividend has never been paid by the corporation. Some other results indicate the judicial forum, having a jury versus not having a jury, and the compensation amount can all affect the outcome of the case (see Table 2.1)

Judicial Decision-Making Empirical Research

Glynn and Sen (2015)

In the Glynn and Sen (2015) article, the researchers focus on determining whether personal relationships affect how judges make decisions in court. The specific relationship studied is whether the judges have a daughter. Four theories are posited by the authors supporting how personal relationships can impact decision-making. These four theories consist of preference alignment, lobbying, learning, and protectionism. The data used in this article includes cases heard in the U.S. Court of Appeals (judicial decisions in non-tax arena) between 1996 and 2002. The final count regarding votes cast and number of judges was 2,674 and 244, respectively.

Table 2.1

Empirical Studies Examining Reasonable Compensation from 1979-2014

| Article | Year | Years Included in Study | Total Cases | Significance |
|-----------------------------------|------|-------------------------|--|---|
| Englebrecht, Holcombe, and Murphy | 2014 | 1991-2011 | 53 Cases | 4 factors (p-values of 0.000, 0.001, 0.013, 0.035) and predicted hold-out sample with 100% accuracy |
| Carpenter | 1984 | 1950-1980 | 209 Cases (165 Tax Court, 44 District Court) | 5 factors - 97% 8 factors - 96.4% |
| Porcano | 1982 | 1970-1979 | 219 Observations | 15 variables, R ² of 0.825 |
| Hoffman | 1979 | 1970-1977 | 90 Cases | 6 factors favoring taxpayer & five factors favoring IRS |

Nevertheless, fertility data was available for only 224 judges. The appellate court is considered a middle tier court in the federal court system. The methodology employed was weighted least squares regression, logistic regression, and ordered logistic regression. The results indicate that relationships can have an effect on judges' voting behavior. Other results suggest the theories currently surrounding judicial politics needs to be revisited and expanded. Last, male judges tend to vote more liberally when they have daughters.

Jackson et al. (2013)

The Jackson et al. (2013) article considered the court's part in asset and business valuation from an estate tax perspective. The main argument centers on how the court values the issues brought by the taxpayer and the Commissioner (IRS). The authors use 126 combined cases resulting in 174 court valuation determinations. The time period under inquiry spanned January 1, 1986 to December 31, 2010 which was similar to the analysis conducted in the Englebrecht and Davison (1977) study. The judicial forum in this study consists of the Tax Court and the District Court. Additionally, most of the cases were heard in the Tax Court. The main finding from this article advocates although the court's decision and the mean between the taxpayer's and IRS claimed figures are highly correlated, the court does not simply split the disputed amounts down the middle.

Greenaway (2009)

The Greenaway (2009) paper highlights the judicial forums when litigating a federal civil tax issue. The various forums include U.S. bankruptcy courts, the U.S. Court of Federal Claims, U.S. District Courts, and the U.S. Tax Court. Furthermore, when a tax issue is heard in court, the taxpayer is bringing either a refund suit or a prepayment action.

A taxpayer should consider several items when deciding to take a decision before the court. These considerations include timing, money, and whether or not this is a new issue to name a few. Surprisingly, judges presiding in the Tax Court tend to rule relatively quickly trying to avoid laborious trials. On the other hand, District Court trials seem to take longer when compared with Tax Court trials. Also, when the Tax Court is confronted with a valuation case, through the use of analytical approaches and weighing in on the opinions and facts of both parties in litigation, the judiciary will reach conclusions neither party wanted.¹⁸ Other significant factors in need of consideration include potential appellate venue and controlling precedent. Additionally, the Tax Court will render one of four different types of opinions: summary opinions, bench opinions, division opinions, and memorandum opinions.¹⁹ The only opinion of the four that exerts controlling precedent is the division opinion. Last, the taxpayer should contemplate who will be deciding the case. Does a taxpayer want a generalist, a tax specialist, or a specialist in money disagreements with the government?

Posner (2008)

The Posner (2008) article targeted judges' political biases and whether these biases or other characteristics impacted the voting patterns of judges. This author posits that the judiciary is comprised of judges who align with the majority's partisan bias and judges who align with the out-of-power minority's partisan bias. Consequently, judges render decisions based on their own biases. Two types of biases are explained. The first bias is

¹⁸ E.g., *Estate of Auker v. Commissioner*, 75 T.C.M. (CCH) 2321, 1998 T.C.M. (RIA) ¶ 98,185 (Cited in Greenaway -2009 article).

¹⁹ Honourable Mary Ann Cohen, *How to Read Tax Court Opinions*, 2000 Hous. Bus.

political bias. Political bias is described as an ideological or partisan bias which can be further broken down into a desire for an outcome to the right or left of an impartial outcome. Personal bias, on the other hand, is making a decision based on helping family and friends or to receive personal financial gain. Other biases that play a role in decision-making are implicit and explicit biases. An explicit bias is defined as the conscious desire to create an outcome the judge knows is incorrect, if it satisfies a party or other constituency. Implicit bias arises because each individual views the world differently. Furthermore, judicial review is very important because it results in the enacting of statutes that are fair and efficient because little possibility exist of highly unfair laws remaining after appeal. Thereby, laws that are deemed fair will probably outlast repeal. Last, judges should be assessed based on three dimensions: legislative competence, ideology, and judicial competence.

Howard (2007)

The Howard (2007) study focuses on litigation patterns, national policy, and court preferences where taxpayers were litigating in either the District Court or the Tax Court between 1994 and 2000. The dependent variable used by the researchers was created by taking the amount of lawsuits filed in the Tax Court and dividing that figure by the amount of lawsuits filed in the District Courts per state by year. The results appear to show forum shopping does occur when choosing to litigate. Furthermore, taxpayers making decisions based on the highest chance of winning leads them to choose the Tax Court over the District Court. Additionally, the conservative nature of the Tax Court also encourages taxpayers to shy away from the District Court and seek out the Tax Court.

DiGabriele (2006)

The DiGabriele (2006) article examines the question of whether methods of valuation of closely held businesses selected by courts was a result of case type and court level. The data used in this study was gathered from the Business Valuation Resources, LLC database and looked at the timeframe between January 1994 and December 2000. The dependent variable was the preferred valuation method/approach. The independent variables used consisted of the case type, whether a State or federal case, and type of industry. The final data sample was comprised of 164 cases. The results suggest systematic trends relating to preferences among the courts for differing valuation approaches and methods.

Beatty et al. (1999)

In the Beatty et al. (1999) article, statistical property predictions are compared to the positions of valuations taken by judges, taxpayers, and the IRS in cases regarding gift and estate tax. Specifically, the part of the study pertaining to estate and gift tax valuation included 31 cases. The results tend to suggest that many of the common valuation approaches are not preferred. Also, regression is advocated as a potential alternative for estimating values. Last, the conclusions reached tend to show the Tax Court is very effective in evaluating privately held firms and assigning proper values to them.

Englebrecht and Jamison (1979)

In the Englebrecht and Jamison (1979) study, the researchers examined whether a “compromiser model” was used by the Tax Court when litigated over charitable contribution property valuations. The data included 41 Tax Court judgments covering 67

valuations (real estate, manuscripts, works of art, furniture, dogs, a computer, etc.) spanning January 1, 1970 through April 30, 1977. The variables gathered from each case were the taxpayer's claimed amount, the figure permitted by the IRS, and the Court's determination. A simple regression and chi-square test were used in the study. The conclusions reached were that the Tax Court did not make decisions in a compromising manner. Additionally, the specific property of manuscripts and real estate were not assigned values bigger or smaller than other property types. Moreover, the Court seemed to evaluate each case on its own merit seeking to assign an equitable and fair value based on the facts and circumstances surrounding each case.

Madeo (1979)

In the Madeo (1979) article, the objective of the study was to find the variables that distinguish cases lost and won by the taxpayer when litigated on the basis of the accumulated earnings cases. The data pool consisted of 67 post-1954 accumulated earnings cases brought before the Tax Court which was then narrowed down to 59 cases falling between the dates of 1954 and 1970. Three groups were identified. These groups were broken into "winners" designated as owing no tax, "losers" designated as paying some portion of tax, and "split decisions" designated as owing no tax for some years and paying tax for other years. A stepwise discriminant analysis was used as the methodology. The findings suggest the IRS variables were able to create better results than using the regulation variables (see Table 2.2).

Table 2.2

Studies Evaluating Judicial Decision-Making and Judicial Forums

| Article | Year | Years Included in Study | Connection | Ruling |
|-------------------------|------|-------------------------------|--|---|
| Glynn and Sen | 2015 | 1996-2002 | Gender/decision-making | Males voted more liberally when they have daughters |
| Jackson et al. | 2013 | Jan. 1, 1986-Dec. 31, 2010 | Compromiser Model | Court does not use "Compromise" Model |
| Greenaway | 2009 | No years | Judicial Forums | Helps a taxpayer decide what forum to litigate in |
| Posner | 2008 | No years | Judge's biases/decision-making | Judges should be evaluated based on legislative competence, judicial competence, and ideology |
| Howard | 2007 | 1994-2000 | Judge's decisions in U.S. District Court and U.S. Tax Court | Tax Court is picked over District Court |
| DiGabriele | 2006 | 1994-2000 | Case type and court level | There are systematic trends relating to preferences of the courts in valuation approaches and methods |
| Beatty et al. | 1999 | 1980-1992 | Comparing statistical predictions vs. judge valuations | Tax Court is effective at properly valuing privately held firms |
| Englebrecht and Jamison | 1979 | Jan. 1, 1970 - April 30, 1977 | Compromiser Model or Objective Judge Evaluation | Each charitable contributions case was determined on its own merit |
| Madeo | 1979 | 1954-1970 | Distinguishing Winning Accumulated Earnings Cases from Losing Accumulated Earnings Cases | IRS Audit Guideline variables were better predictors than regulation variables |

Gender Empirical Research

Several gender studies have been conducted related to decision making in various arenas. These forums include court, ideology, the workplace, and across cultures. Empirical and behavioral studies have targeted this cumbersome area of research. Researchers have used survey vignettes along with decisions rendered in court and other survey instruments.

Pippin et al. (2014)

The Pippin et al. (2014) study examined court rulings in estate tax cases. The main dependent variable was the difference between the taxpayer/IRS mean and the court valuation divided by the mean. This dependent variable was regressed on 10 variables to include gender, number of appraisers used by the taxpayer, number of appraisers used by the IRS, whether or not appointed by a Republican president, and business valuation to name a few. The sample included the 25-year timeframe spanning 1986 to 2010. This consisted of 126 combined cases and 174 court valuation determinations. This study of the relationship between estate court valuations and judges' attributes concluded that the type of asset being valued, the quantity of appraisers employed by the taxpayer, and the complexity and age of the case played a significant role in the judiciary's decisions. The results suggest that male judges tend to rule in favor of the taxpayer when the dispute involves valuation.

Pierce et al. (2013)

The Pierce et al. (2013) article evaluated the effects of taxpayer perception and gender on the provisions of innocent spouse relief. Specifically, their article studied

whether Revenue Procedure 2003-61 was an improvement over Revenue Procedure 2000-15. The sample included 370 responses from females and 151 responses from males. After elimination of participants who failed the manipulation check, the usable responses totaled 367. The results of this article implied that taxpayers have different perceptions of expectations on what the Service should do and what the Service would do when making a decision on equitable relief. Gender biases were also found pertaining to both genders. Specifically, males grant equitable relief more when a male is the requesting spouse. Additionally, Revenue Procedure 2003-61 was an improvement over Revenue Procedure 2000-15.

Collins et al. (2010)

The Collins et al. (2010) article studied the gender role in legal decision making in cases litigated in the U.S. Federal District Courts through the application of critical mass theory. That is, the researchers determined whether male jurists displayed behavior that was different from the female jurists. Critical mass theory suggests when women work in a profession that is dominated mostly by men, they will align their thinking with that of the men. It is not until later when women's numbers increase do they begin to make decisions separate from their male colleagues. The data used in this study was taken from the Federal Supplement and focused on the decisions rendered by U.S. District Court judges. The timeframe extended from 1977 to 2000. The dependent variable was the decision's ideological direction as being either liberal or conservative. The types of cases consisted of labor and economic regulation, civil rights and liberties, and criminal justice. The results imply the decision-making exhibited by male judges is significantly different from female judges as the quantity of females serving at a court point rises. Moreover, differences in

gender were the largest in cases of a criminal nature with women having a higher probability of making a liberal decision than males when critical mass was reached. Last, the presence of other women in the profession appears to also play a role in how decisions are made.

Norrander and Wilcox (2008)

The Norrander and Wilcox (2008) article examines differences in gender in ideology. The database used by the researchers was the National Election Studies survey (ANES) cumulative data file. Evidence is found pertaining to a consistent gender gap, a shifting gender gap in the issues and groups related to ideological identities, and general changes over time. That is, the results suggest females and males overtime become more willing to choose an ideological identity and that both genders have become more conservative over time. Additionally, in one segment women have become more liberal. Conversely, men have been shown to become more conservative on a consistent basis and more Republican as time passes even though women have not experienced as much change. Last, men seem to only become more conservative while women have a tendency to exhibit more conservative and more liberal characteristics.

Roxas and Stoneback (2004)

In the Roxas and Stoneback (2004) article, the authors explore the role gender plays when decisions are made across different cultures. The data were comprised of 750 junior and senior accounting students originating from eight different countries (U.S.A., Canada, Australia, China, Philippines, Thailand, Germany, and Ukraine). The percentage of female participants ranges from a low of 20.3 in Germany to a high of 65.9% in the Philippines. The majority of subjects came from the U.S.A. (136) and the least amount of subjects came

from Australia (39). The instrument implemented was an ethical vignette coming from the Arthur Andersen Business Ethics Program. The vignette outlined an employee named Jim and described a situation where he realized he has made a forecast error and is not sure what to do since his promotion is on the horizon. Six questions are then provided to the subjects and must be answered through using a seven point Likert scale. The results from this study tend to be mixed in nature. Overall, the results denote females are more ethical. On the other hand, significant differences only appear in two of the countries (China and Ukraine).

Hardin et al. (2002)

In the Hardin et al. (2002) article, the authors were trying to determine if hiring decisions were affected by either the accounting firm recruiter's gender or the gender of the entry-level accountant. The sample consisted of 159 recruiters spanning ten states. These subjects were employed by the Big Five firms. Female recruiters accounted for 39% with male recruiters making up the other 61%. The research instrument was a variation of the instrument used in the Moncada and Sanders (1999) study with that used in the Hardin and Socks (1995) study. Each subject was informed that he or she would be recruiting for an entry-level position and given information describing the potential employee. Next, the participant would give each student a score ranging from zero to 100 and provide a salary offer. The results suggest the recruiter's gender did not have an effect on the rating assigned to the employee prospect nor did it affect salary offer deemed appropriate by the recruiter. Moreover, an interesting finding did occur. Male recruits were offered a higher salary than female recruits when interacting with a female recruiter.

Segal (2000)

In the Segal (2000) article, the researchers try to answer the inquiry whether the appointments made by President Clinton to the Federal District Court have resulted in policy representation to the groups represented. The methodology used consisted of a pairing strategy through various characteristics. These characteristics included both political and demographic. The pool the judges were taken from was the presidential appointments made by Clinton between the years of 1993 and 1996. There were 13 gender pairs, 12 race pairs totaling 39 judges in all. The dates of the cases started January 13, 1994 and ended May 25, 1999. The total number of cases involved in the gender analysis was 799 cases. The results imply that even though the gender and race of Clinton's appointees differ from the so-called traditional roles of that period, the decisions by the non-traditional judges are not necessarily more likely to sustain a judicial role that is susceptible to the assertions of numerous out-groups in American culture.

Smith and Rogers (2000)

In the Smith and Rogers (2000) article, gender-based differences are examined using specific situation vignettes. Two theoretical frameworks are targeted to include gender socialization theory and occupational socialization theory. The data consisted of public accounting and industry accountants along with upper-level accounting students from a southwestern regional university in the United States. Four vignettes were used followed by two questions addressing the ethics of the individual's actions and the probability the individual would act in the same manner as the individual described in the vignette. In two of the scenarios (Scenario 2 and 3), a "gray" situation was described

potentially prompting gender biases. The results of this article imply both genders tended to side with the female actors' ethical actions.

Songer and Crews-Meyer (2000)

The Songer and Crews-Meyer (2000) study examines whether the voting pattern exhibited between female judges and their male colleagues is different. The two political areas of judicial policy explored in this article are civil liberties and criminal justice. The methodology used to estimate the parameters was logistic regression. The data is derived from all of the state supreme courts (two states have separate last resort courts for criminal and civil cases totaling 52 state supreme courts). The obscenity cases were decided from 1982 to 1993. Also, due to the large nature of death penalty cases, a selected sample was derived from that same timeframe. There are various results found by the researchers. First, male judges do not vote as liberally as their female colleagues with regards to death penalty and obscenity cases. Also, when male judges have female colleagues, males tend to vote for more liberal outcomes.

Cohen and Sharp (1998)

In the Cohen and Sharp (1998) study, gender differences were assessed with regards to ethical judgments (ethical orientation, ethical intention, and ethical evaluations). The sample included undergraduate students majoring in business and liberal arts from four universities located in the Northeastern United States. The breakdown of the subjects used was 307 female, 338 male, 194 accounting majors, 311 non-accounting business majors, and 140 liberal arts majors. The researchers used the Multidimensional Ethics Scale and eight business ethic vignettes. The vignettes tended to be a more general situation based

on the sample audience being used. The scenarios varied from describing a situation where a product has not undergone the proper amount of testing but the sales person authorizes the promotion and sale of the production anyway to a situation where a manager authorizes a “good will gesture” payment to a local distributor manager in a foreign country to name a few. Overall, the results seem to indicate there are gender effects on how questionable actions are examined with women perceiving questionable actions to be less ethical and therefore seem to have less intentions to carry out these actions compared to their male counterpart.

Prasad et al. (1998)

In the Prasad et al. (1998) article, the authors strives to understand and recognize how respondents would describe a “just society” and identify if any differences exist based on gender. The data used by the researchers amounted to 191 students with 98 female and 93 male. The data had approximately 90% business majors. The participants were pooled from a population of nearly 2,000 university business students. Furthermore, no random sampling techniques were implemented. The questionnaire administered had 51 statements to examine the subjects’ opinions of a “just society” using a five point Likert scale. Some specific results relating to gender differences centered on 10 statements where differences were found because of gender. Additionally, in four of the 10 statements females and males failed to agree based on their average responses.

Schminke (1997)

In the Schminke (1997) article, the individual’s gender and manager’s ethical decision models are studied to determine if a relationship exist. The data included a final

sample size of 165 after eliminating those questionnaires failing to be accurately completed. The subjects consisted of full-time managers and senior undergraduate students majoring in business. The gender composition was 32% female and 68% male. Moreover, three vignettes were used in this study. These vignettes were rated as either neutral, utilitarian, or formalist. Naturally, after reading through each vignette, subjects were to decide whether the individual portrayed in the vignette made the correct decision, whether the reasons leading to the decision were correct, and whether the decision made by the individual was typical. The third decision specifically addressed the issue of gender. Overall, the results indicate that differences in gender do affect the subjects' reaction to others' ethical quandaries.

Smith and Oakley (1997)

In the Smith and Oakley (1997) article, the gender relationship is observed with regards to evaluating ethically acceptable behaviors in the workplace. The data were comprised of undergraduate and graduate students from a public state university and a four-year nonsectarian private college of which both are located in a southeastern state. The student population of the public university was approximately 23,000 students and the student population of the private university was approximately 1,600 students. The total number of respondents summed to 318 subjects with 174 being male and 144 being female. A 16-item instrument was used identifying 16 hypothetical business scenarios seeking the response of the subjects on how they viewed the various situations as being ethically acceptable always or never ethically acceptable. The conclusions reached from this study show gender-related differences do not exist when assessing the ethical behaviors pertaining to violation of organization policies or the law.

Songer et al. (1994)

The Songer et al. (1994) study explored the United States Court of Appeals judge's behavior in order to unravel whether gender is affecting voting behavior differences. The data sample consisted of regular United States Court of Appeals judges from the 11 numbered circuits and the District of Columbia circuit spanning the timeframe from 1981 to 1990. Specifically, three types of cases are evaluated. These cases include obscenity, employment discrimination, and search and seizure cases. The methodology employed is logit or logistic regression. Results are divided. With regards to search and seizure and obscenity cases, no gender differences are found in voting behavior. Gender differences do exist in employment discrimination cases. The overall results imply that gender effect on decisions made by judges depends on the situation surrounding the decision-making process.

Bemmels (1988)

In the Bemmels (1988) article, the grievant's gender is investigated to see if a relationship exist with the arbitrator's decisions regarding discharge. The arbitration decisions were filed between the dates of January 1, 1981 and June 30, 1983 with the Public Service Employee Relations Board or the Director of Mediation Services. The researchers chose to only focus on the disciplinary discharge arbitrations. The final sample totaled 104 cases with 61 cases having a grievance sustained ruling and 43 cases having a grievance denied. Moreover, 31 of the grievants were women and 73 of the grievants were male. The result imply that male grievants were treated more harshly by male arbitrators than female grievants were in the discharge arbitration cases.

Jackson et al. (1985)

In the Jackson et al. (1985) article, reward allocations were the focus of the study based on two gender-related variables. The gender-related variables were the gender role of the allocator and the gender role of a co-worker of the opposite sex. The data was composed of 74 female and 74 male undergraduate students from an introductory psychology course enticed by extra credit for participating. The instrument the researchers used was the Bem Sex Role Inventory (Short Form) to distinguish between the gender role of the subjects and to manipulate the co-workers' gender role. Four groups were determined as masculine, feminine, androgynous, and undifferentiated. Also, a post-task questionnaire was administered. The results of this study conclude that masculine coworkers were awarded less generous allocations than the feminine co-workers.

Walker and Barrow (1985)

The Walker and Barrow (1985) study focused on nontraditional judges such as female and black judges by specifically looking at the policy and process consequences of adding these judges to the U.S. District Court. The District court was selected in this article because this forum has the highest amount of these types of judges (minority and female). The instrument employed was a "matched pair" strategy. From a gender comparison standpoint, twenty four judges were used and were matched up in twelve female-male pairs. Gender-differences were found in some areas and not found in others. The areas gender-differences did not exist were in cases involving women's rights and criminal policy. On the other hand, females were less likely to rule in favor of minority policy and personal liberty claims. Therefore, the results suggest that women tended to render decisions in favor of government entities. One possible explanation extended by the

authors is women have received more preferential treatment from the government than from nongovernmental entities.

Welch (1985)

The Welch (1985) article focuses on answering the question on whether women exhibit more liberal voting patterns than men in the House of Representatives. The data sample covered four congresses from 1972 through 1980. The dependent variable was the Congressional Quarterly's coalition support score and the independent variable was the judge's gender. The methodology employed was multiple regression. The results conclude that men tend to vote in a less liberal direction than women in Congress. Also, the difference among the genders in regarding voting behavior has lessened over time.

Oliphant and Alexander (1982)

In the Oliphant and Alexander (1982) article, the relationship of resume determinateness (defined as lack of ambiguity) and prospective employer evaluation was examined. With each applicant, four variables were identified. These variables include academic achievement depicted through listing a GPA or not listing a GPA, marital status categorized as single, married, or not listed, age depicted through a younger age or an older age, and sex categorized as male, female, or not listed. The data sample included six female and six male personnel professionals. Each professional was assigned to assist in a selection and screening process for large firms located in the Mid-South. The industries involved manufacturing, service, and distribution industries. Each personnel profession was given the task to ascribe a probability that an applicant would receive a recommendation for a management trainee position. A score of seven meant that the

professional assigned a probability of “highly likely that I would recommend for an interview” with a score of one indicating a probability of “highly unlikely that I would recommend for an interview.” The results conclude that there is a significant difference between the female and male raters when evaluating the resumes of females and males. Additionally, males seem to have significantly lower demands on the applicants.

Gruhl et al. (1981)

The Gruhl et al. (1981) study considered male and female public officials and the patterns in their rendered decisions. Specifically, the researchers evaluated how judges convict and sentence to determine if a systematic difference arose. The data sample consisted of women and men judges from a city located in the northeastern United States. The timeframe extended from 1971 to September 1979. The number of cases totaled 32,529. The methodology used was a difference of means test and multiple regression. The results provide little support that female judges were more lenient than their male counterparts. On the other hand, some results suggest that women tend to be harsher when sentencing females to prison. Also, men are more likely to sentence men to prison than sentencing women to prison.

Rose and Andiappan (1978)

In the Rose and Andiappan (1978) article, participants were asked to assess managerial position applicants based on being either male or female (see Tables 2.3 and 2.4). The total number of subjects was 75 with 20 being female and 55 being male. Those partaking in the study were upper division business administration students.

Table 2.3

Research Addressing Gender Effects and Differences in Accounting 1998-2014

| Article | Year | Years Included in Study | Connection | Ruling |
|------------------------|------|------------------------------|--|--|
| Pippin et al. | 2014 | 1986 - 2010 | Judge gender and valuation | Males judges tend to render decisions ruling in favor of the taxpayer when valuing estates for tax purposes |
| Pierce et al. | 2013 | No years | Gender perception of IRS decision-making and use of vignettes | Males permit equitable relief more when the male is a requesting spouse |
| Collins et al. | 2010 | 1977 - 2000 | Gender's role in District Court decision-making | Significant differences in gender's decision-making with women ruling more liberally as critical mass is reached |
| Norrander and Wilcox | 2008 | 1972 - 2004 | Differences in gender ideology | Men become more conservative and Republican over time with some women exhibiting more conservative characteristics and others exhibiting more liberal attributes |
| Roxas and Stoneback | 2004 | No years | Uses ethical vignettes to gauge cross cultural gender effect | Females are more ethical with significant differences arising in China and Ukraine |
| Hardin et al. | 2002 | No years | Used instruments created by Moncada and Sanders (1999) and Hardin and Socks (1995) to look at gender of recruiter and entry-level accountant | Gender of recruiter did not have effect on assigned rating but male recruits received higher salaries from female recruiters than female recruits |
| Segal | 2000 | Jan. 13, 1994 - May 25, 1999 | Policy representation targeting gender and race | No difference in judges between traditional and non-traditional judges |
| Smith and Rogers | 2000 | No years | Specific situation vignettes are used to address potential gender-based differences | Both genders agreed with the ethical actions taken by the female actor |
| Songer and Crews-Meyer | 2000 | 1982 - 1993 | Voting pattern between female and male judges | Females vote more liberally than male counterparts and when male judges have female colleagues, males vote more liberally |
| Cohen and Sharp | 1998 | No years | Used eight business ethics vignettes | Women find questionable actions to be less ethical suggesting lower intent to carry out these actions |
| Prasad et al. | 1998 | No years | A "just society" is evaluated by different genders | Differences were found based on gender |

Table 2.4

Research Addressing Gender Effects and Differences in Accounting 1978-1997

| Article | Year | Years Included in Study | Connection | Ruling |
|------------------------|------|------------------------------|---|---|
| Schminke | 1997 | No years | Used three vignettes | Gender differences affect the reaction of the subjects to others' ethical dilemmas |
| Smith and Oakley | 1997 | No years | 16-Item instrument was used describing 16 hypothetical business scenarios | Gender-related differences are not present when assessing ethical behaviors regarding organization policies and laws |
| Songer et al. | 1994 | 1981 - 1990 | Gender's effect on voting behavior in search and seizure and obscenity cases | The effect of gender depends on the situation encompassing the process of decision-making |
| Bemmel | 1988 | Jan. 1, 1981 - June 30, 1983 | The effect of gender on the decision made for the grievant | Male judges treated male grievants more harshly than female grievants |
| Jackson et al. | 1985 | No years | Reward allocations based on gender | Masculine coworkers were given less generous allocations than there feminine coworkers |
| Walker and Barrow | 1985 | No years | The effect of adding nontraditional gender and races to the U.S. District Court | Females showed less inclination to rule in favor of personal liberty claims and minority policy while supporting the government's position |
| Welch | 1985 | 1972 - 1980 | Do women vote more liberally in the House of Representatives? | Women vote more liberally than men but has lessened over time |
| Oliphant and Alexander | 1982 | No years | Females and males were assigned to evaluate prospective employees | A significant difference exists with males have a lower demand on applicants |
| Gruhl et al. | 1981 | 1971 - Sept. 1979 | Female and male public officials' voting patterns are studied | Women are harsher on females whereas men are more likely to sentence men to prison than women |
| Rose and Andiappan | 1978 | No years | Participants were assigned to assess managerial position applicants based on gender | There does not appear to be a significant difference on how male and female applicants are examined but a strong effect surfaces when the subordinate and applicant sex matches |

Each student was given the role of considering a fictitious applicant who was applying for a branch banking firm managerial position. The subjects were then required to evaluate each applicant on four criteria to include 1) the chance of being an overall success on the job, 2) the chance of having a long career with the employer, 3) the chance of satisfying the firm's customers, and 4) keeping the subordinates working under the applicant satisfied. The results seem to specify when male and female applicants are evaluated and show comparable characteristics, the applicant's gender by itself does not appear to be significant. Yet, a strong effect exists when the sexes of the subordinate and applicant match.

Summary

There has been limited empirical research on reasonable compensation. Additionally, the research conducted in the gender area in accounting/taxation has been scarce addressing the following areas: valuation in estate tax cases (Pippin et al. 2014), innocent spouse relief (Pierce et al. 2013), differences in ideology (Norrander and Wilcox 2008), differences in culture (Roxas and Stoneback 2004), hiring decisions (Segal 2000), voting patterns (Songer and Crews-Meyer 2000; Songer et al. 1994; Welch 1985; Gruhl et al. 1981), ethical judgments (Smith and Rogers 2000; Cohen et al. 1998), identifying a "just society" (Prasad et al. 1998), ethical behaviors (Smith and Oakley 1997), decisions in arbitration (Bemmels 1988), and employee evaluation (Oliphant and Alexander 1982; Rose and Andiappan 1978). However, no prior research has examined the effects of gender, political affiliation, and family composition in the corporate and individual income tax arena involving reasonable compensation.

CHAPTER THREE

METHODOLOGY

The objective of this chapter is to discuss the research questions and identify the hypotheses and procedures to be used in addressing these questions. Also, development of the survey, participant selection, and data analysis are presented.

Research Questions

This study examines the following research questions on reasonable compensation and gender.

- 1) Is there a significant difference in how male and female judges render a reasonable compensation decision?
- 2) Do judges simply come to a “Compromise” decision, represented as the arithmetic mean, when deciding a reasonable compensation case?
- 3) Are male judges more likely to rule for a higher amount of compensation for the taxpayer than female judges?
- 4) Are judges more likely to decide on a higher amount of compensation when the taxpayer is the same sex as the judge (male/male or female/female)?
- 5) Are male taxpayers more likely to receive a higher amount of compensation than female taxpayers?

- 6) Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge selected by a Democratic president?
- 7) Do judges have a higher probability of ruling in favor of the taxpayer when the taxpayer presents at least one appraiser?
- 8) Do judges have a higher probability of ruling in favor of the IRS when the Service chooses to have at least one appraiser?
- 9) Do judges have a higher probability of ruling in favor of the taxpayer's claimed value when multiple tax years are involved?
- 10) Do judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter?

Hypotheses – Archival Portion

The following hypotheses are derived from the research questions and are in their alternate form pertaining to the archival portion.

- H₁: There is a statistically significant difference between male and female judge decisions in reasonable compensation cases.
- H₂: The “Compromise” amount (arithmetic mean) will be significant in explaining the Court's determined figure.
- H₃: Male judges are more likely to rule for a higher amount of compensation for the taxpayer than female judges.
- H_{3A}: Male judges are more likely to rule for a higher amount of compensation when the taxpayer is male as opposed to a female taxpayer.
- H_{3B}: Female judges are more likely to rule for a higher amount of compensation when the taxpayer is female compared to a male taxpayer.

- H₄: Male taxpayers are more likely to receive a compensation decision higher than female taxpayers.
- H₅: Judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge named by a Democratic president.
- H₆: Judges have a higher probability of ruling in favor of the taxpayer when the taxpayer presents at least one appraiser.
- H₇: Judges have a higher probability of ruling in favor of the IRS when the Service has at least one appraiser testify.
- H₈: Judges have a higher probability of ruling in favor of the taxpayer's value when multiple tax years are involved.
- H₉: Judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter.

Hypotheses – Behavioral Portion

The following hypotheses are also drawn from the preceding research questions and are in their alternate form belonging to the behavioral portion.

- H₁₀: Male (female) judges grant higher compensation to male (female) taxpayers when compared to female (male) judges when the outcome of the case is protaxpayer.
- H₁₁: Female (male) judges agree more with an unfavorable outcome when dealing with male (female) taxpayers.
- H₁₂: Conservative (liberal) judges agree more with favorable (unfavorable) outcomes than liberal (conservative) judges.
- H₁₃: A judge having at least one daughter agrees more with a decision of an unfavorable outcome for the taxpayer than a judge who does not have at least one daughter.

H₁₄: A judge having at least one daughter agrees more with a decision with a favorable outcome for a female taxpayer than a judge who does not have at least one daughter.

Survey Instrument - Behavioral Portion

The behavioral portion of this study involves the use of two survey vignettes. The first survey vignette bears a slight resemblance to the case *Universal Marketing, Inc. v. Commissioner*, TC Memo 2007-305 as a model for the creation of the scenario. However, the name of the corporation is changed along with the numbers representing salary, gross receipts, and total income. The five factors used by the court to determine reasonableness of compensation and the evidence ruling in favor of the taxpayer or the IRS are very similar. This case was chosen as a template because the court rendered a decision declaring the amount allowed by the Service as the reasonable amount. Thirty-two questions were then provided to the participant regarding how they would decide, why they would decide, and some demographic/professional qualification questions. Furthermore, three different survey vignettes emerged from the first survey vignette. One vignette will describe a male taxpayer, the second a female taxpayer, and last a genderless taxpayer. The following represents the scenario in the first vignette:

John (or Mary), who is a taxpayer, works for a business named International Design (ID). ID does not have a compensation policy and pays bonuses to employees at the end of the year once the amount of cash available is determined.

- ID is a closely held company that provides printing, marketing, and advertising activities
- ID reported gross receipts of \$1,583,149.50

- When added with gross rents and gross royalties, the total income for ID was \$1,715,202
- ID paid compensation amounting to a \$40,000 salary and a \$500,000 bonus to Mary
- No dividends were paid that year
- Mary was president, secretary, and treasurer
- Mary was responsible for handling all of ID's managerial duties
- A specific item of time spent with ID was disclosed as 80% of Mary's time and evidence was found that Mary spent 20% of the remaining time with ID's sister corporation
- No evidence was provided by the corporation identifying a comparison of paid compensation to other companies providing similar services

ID has the following information regarding its operations:

- ID paid total wages of approximately \$635,000, of which \$540,000 were paid to Mary and \$95,000 were paid to all other employees
- ID is a small company with not very extensive operations
- ID had a return on equity of 42% which more than satisfied a hypothetical independent investor test
- ID was thinly capitalized
- ID had equipment with a fair market value of \$80,332.50

OUTCOME: The Internal Revenue Service (IRS) upon receiving ID's tax return deems \$150,000 in compensation as reasonable for Mary. Thereby, the IRS

disallowed \$390,000 of Mary's compensation. Factors commonly considered by the courts are:

- character and condition of the company
- comparison of salaries paid with the gross income and the net income
- comparison of salaries with distributions to stockholders
- compensation paid to the specific employee in prior years
- conflict of interest
- employee's qualifications
- nature, extent and scope of the employee's work
- prevailing general economic conditions
- prevailing rates of compensation for comparable positions in comparable concerns
- salary policy of the taxpayer as to all employees
- scarcity of qualified employees
- taxpayer's role in the company

The second survey vignette parallels the case *Universal Marketing, Inc. v. Commissioner*, TC Memo 2007-305 as a template for the establishment of the scenario. The name of the corporation is modified in addition to switching the numbers used as salary, gross receipts, and total income. The five factors acknowledged by the court in figuring reasonable compensation and the evidence favoring the taxpayer or the IRS are comparable. This second vignette is manipulated by switching the last sentence in the first paragraph of the vignette so that more evidence favors the taxpayer. Thirty-two questions were once again provided to the participant regarding how they would decide, why they

would decide, and some demographic/professional qualification questions. Additionally, two different survey vignettes will emerge from the second survey vignette depicting either a male taxpayer or a female taxpayer. The following represents the scenario in the second vignette:

John (or Mary), who is a taxpayer, works for a business named International Design (ID). ID does have a compensation policy and pays bonuses based on the employee's individual performance. This policy was the same for all employees and originated from a bonus plan voted on and approved by the board of directors at the beginning of the year.

- ID is a closely held company that provides printing, marketing, and advertising activities
- ID reported gross receipts of \$1,583,149.50
- When added with gross rents and gross royalties, the total income for ID was \$1,715,202
- ID paid compensation amounting to a \$40,000 salary and a \$500,000 bonus to Mary
- No dividends were paid that year
- Mary was president, secretary, and treasurer
- Mary was responsible for handling all of ID's managerial duties
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- ID had equipment with a fair market value of \$80,332.50

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- character and condition of the company
- comparison of salaries paid with the gross income and the net income
- comparison of salaries with distributions to stockholders
- compensation paid to the specific employee in prior years
- conflict of interest
- employee's qualifications
- nature, extent and scope of the employee's work
- prevailing general economic conditions
- prevailing rates of compensation for comparable positions in comparable concerns
- salary policy of the taxpayer as to all employees
- scarcity of qualified employees
- taxpayer's role in the company

The experimental design for the behavioral portion is a 2 (taxpayer's gender: male/female) X 2 (favorableness: taxpayer win/IRS win) X 2 (participant's gender: male/female) between subject full factorial design. Thus, the first factor represents two levels when the taxpayer is either male or female. The second factor represents two levels where there is either an IRS win or taxpayer win. The third factor in the experiment represents the participant's gender which was either male or female. The population for the behavioral portion of this study was 302 CPAs.

Subjects

Since tax professionals' perceptions of reasonable compensation and gender are being evaluated, certified public accountants (CPAs) are needed for this study. Qualtrics was selected to find the survey participants and administer the survey. Qualtrics awarded the subjects according to their compensation policies.

Case Selection

The archival portion of this study analyzed reasonable compensation cases. The time span studied includes cases decided during the period of 1983-2014. The cases were collected from Research Institute of America (RIA). The method of finding the reasonable compensation cases involved searching the RIA database for the keywords "reasonable compensation." Next, each case summary was read by the researcher and specific items were identified from Tax Court opinions. The variables extracted from each summary opinion were judge making the ruling, the taxpayer, the amount claimed/deducted by the taxpayer/corporation, the amount allowed by the IRS, the amount deemed reasonable by the court, whether or not the taxpayer had an expert witness/appraiser, whether or not the

IRS had an expert witness/appraiser, and the number of tax years decided by the court in the case. Because political affiliation is also investigated in this study, the appointing president was identified. The presidents responsible for appointing the tax court judges include Truman, Eisenhower, Kennedy, Johnson, Nixon, Carter, Reagan, George H.W. Bush, Clinton, and George W. Bush. On numerous occasions, the court ruled on more than one year for more than one taxpayer. In these instances, each year and each taxpayer constituted a single observation. Therefore, one case could have multiple taxpayer genders and taxpayer decisions for both the taxpayer and the Service.

Numerous electronic sources (i.e., <http://www.ustaxcourt.gov/press/022304.pdf>, <http://ustaxcourt.gov/press/011702.pdf>, to name a few) were used to identify the family composition of the judges.

Tax Court Decisions – Archival Portion

Research Question 1

Is there a significant difference in how male and female judges render a reasonable compensation decision?

The following areas have been studied trying to find a difference between males and females: valuation in estate tax cases (Pippin et al. 2014), innocent spouse relief (Pierce et al. 2013), differences in ideology (Norrander and Wilcox 2008), differences in culture (Roxas and Stoneback 2004), hiring decisions (Segal 2000), voting patterns (Songer and Crews-Meyer 2000; Songer et al. 1994; Welch 1985; Gruhl et al. 1981), ethical judgments (Smith and Rogers 2000; Cohen et al. 1998), identifying a “just society” (Prasad et al. 1998), ethical behaviors (Smith and Oakley 1997), decisions in arbitration (Bemmels 1988), and employee evaluation (Oliphant and Alexander 1982; Rose and Andiappan

1978). Results have been mixed and, therefore, provide an area for further research. Prior studies lead to the subsequent hypothesis H₁:

H₁: There is a statistically significant difference between male and female judge decisions in reasonable compensation cases.

This hypothesis will be measured using a Chi-Square test to determine if the difference is statistically significant.

Research Question 2

Do judges simply come to a “Compromise” decision, represented as the arithmetic mean, when deciding a reasonable compensation case?

In Englebrecht (1976), the author examined how judges value closely held stock. This study's objective was to determine whether the judges approached each case objectively using the facts and circumstances of the case or assumed the role as arbitrator/compromiser in estate and gift tax cases. The computed R² in the Englebrecht (1976) study was 97.49%. This high coefficient of determination in gift and estate tax cases heard in the U.S. Tax Court suggest judges may not give much weight to the information presented by both parties (taxpayer and IRS). At this time, estate and gift taxes were minor revenue raisers, however, when they were applicable, they presented an oppressive decedent's tax burden with rates as high as 77% with a limited 50% marital deduction. Therefore, the estate could place undue hardship on surviving spouses. On the other hand, the Englebrecht and Jamison (1979) study examined whether a “compromiser model” was used by the Tax Court when deciding charitable contribution property valuations. The conclusions showed the Tax Court did not rule in a compromising manner providing evidence that for the big revenue raisers, the court appears to go the extra mile

to determine the “true value.” Moreover, the Court seemed to evaluate each case on its own merit assigning an equitable and fair value based on the evidence and details of each case. Most recently, the Jackson et al. (2013) article investigated the court’s role in asset and business valuation from a perspective of estate taxes. The main issue addressed was how the court valued the issues brought by the taxpayer and the Service (IRS). The main outcome from this article advocated even though the court’s verdict and the mean between the taxpayer’s and IRS claimed figures are exceedingly correlated, the court does not simply split the disputed amounts at the mean. These mixed conclusions lead to the following hypothesis H₂:

H₂: The “Compromise” amount (arithmetic mean) will be significant in explaining the Court’s determined figure.

A simple ordinary least squares regression will be utilized to answer this research question.

Research Question 3

Are male judges are more likely to rule for a higher amount of compensation for the taxpayer than female judges?

Critical mass theory is described in Kanter (1977). Specifically, the article posits that no difference will exist between the dominant group which in this study is male judges and the token group represented by female judges. Accordingly, this theory predicts no differences in how male and female judges make decisions. In Welch (1985), the authors found that females rule less conservatively than males in Congress. When examining a tax issue, a conservative approach has been known to favor the taxpayer and a liberal decision the government/IRS. Since females tend to be more liberal, then it would seem that females

would lean toward deciding in favor of the government/IRS and males should rule for the taxpayer. Additional evidence exists in Walker and Barrow (1985) where the authors also concluded that female judges deferred to the governmental position. More recently, in Pippin et al. (2014), male judges favored the taxpayer and female judges favored the government. Also, Songer and Crews-Meyer (2000) showed females vote more liberally than males on death penalty and obscenity cases. These consistent findings across the empirical studies lead to the following hypothesis H₃:

H₃: Male judges are more likely to rule for higher amounts of compensation than female judges.

This research question will be answered through the use of ordinary least squares to determine a specific difference in percent ruled for. Logit will also be included in the analysis to determine a probability of selecting the taxpayer's amount over the IRS's amount by a male judge compared to a female judge.

Research Question 4

Are judges more likely to decide on a higher amount of compensation when the taxpayer is the same sex as the judge (male/male or female/female)?

Social identity theory discussed in Tajfel and Turner (1979) targets intergroup relations. Tajfel and Turner (1979) posit the existence of in-group favoritism and out-group discrimination. According to Tajfel and Turner (1979), male judges will show favoritism to individuals in their in-group or the male taxpayer. Also, female judges will display preferential treatment to their in-group of female taxpayers. On the other hand, each gender will discriminate against the opposing gender. A recent empirical article providing evidence for social identity theory is Pierce et al. (2013). This article revealed

males grant equitable relief at a higher rate when the requesting spouse is male. On the other hand, literature providing contrary evidence to social identity theory includes Hardin et al. (2002), Segal (2000), Bemmels (1988), and Gruhl et al. (1981). Hardin et al. (2002) presented evidence that female recruiters offered male recruits higher salaries than female recruits. The results of Segal (2000) suggest judges do not make decisions specifically for their respective groups. In the Bemmels (1988) article, females receive better treatment than males when dealing with a male arbitrator. Last, Gruhl et al. (1981) provides support that female judges have a higher probability of sentencing female defendants than male judges. The mixed results in intergroup relations suggest that more research is needed. Following, social identity theory and more recent literature leads to hypothesis H_{3A} and H_{3B}:

H_{3A}: Male judges are more likely to rule for a higher amount of compensation when the taxpayer is a male opposed to a female taxpayer.

H_{3B}: Female judges are more likely to rule for a higher amount of compensation when the taxpayer is female compared to a male taxpayer.

This research question will be examined through the use of ordinary least squares to find a difference in percent decided. Logit will be used to calculate a probability of selecting the taxpayer's amount over the IRS's amount by the different combinations of male and female judges and taxpayers.

Research Question 5

Are male taxpayers more likely to receive a higher amount of compensation than female taxpayers?

Mixed results have surrounded which gender receives preferential treatment when compared against one another. Hardin et al. (2002), in the recruiting arena, illustrated that male recruits obtain higher salary offers than female recruits. However, Bemmels (1988) provides evidence that females receive favorable treatment over males in the arbitration forum. In the Jackson et al. (1985) article, feminine coworkers were awarded more generous allocations than masculine coworkers. This mixed line of research leads to the following hypothesis:

H₄: Male taxpayers are more likely to receive a decision of higher compensation than female taxpayers.

The research question will be measured with OLS. Also, through the use of logit, a probability of selecting the taxpayer's amount over the IRS's amount with a male taxpayer compared to a female taxpayer will be computed.

Research Questions 6, 7, 8, and 9

Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge selected by a Democratic president?

Do judges have a higher probability of ruling in favor of the taxpayer when the taxpayer presents at least one appraiser?

Do judges have a higher probability of ruling in favor of the IRS when the IRS chooses to have at least one appraiser?

Do judges have a higher probability of ruling in favor of the taxpayer's claimed value when multiple tax years are involved?

Jackson et al. (2013) examined estate tax cases and business and asset valuation. This study resulted in four significant variables in combined cases. These variables included number of taxpayer appraisers, political affiliation, type of asset, and age/complexity of the case. The authors, using a correlation matrix, found a negative and significant association between the *ScaledDiff* number and the variables of Republican, TP appraisers, business property, and case age. The *ScaledDiff* variable represented the court value minus the mean value of the taxpayer and IRS's value. A negative association would indicate a decision in favor of the taxpayer. Because of the nature of this study, the business property significance does not have a corresponding hypothesis. Also, the variable CaseAge in the Jackson et al. (2013) study is replaced in the current study with a variable representing a case that spans multiple years. This multiple years variable has been added because of the docket load associated with U.S. Tax Court judges. Many cases are litigated in this tax forum. Therefore, if the docket load is large and judges strive to efficiently and effectively rule, then a multiple tax year case may be decided in an accelerated manner toward the taxpayer or Service. Additionally, the Howard (2007) article found taxpayers litigate in the U.S. Tax Court because they believe that arena is more conservative. Thereby, a multiple year case may favor the taxpayer. This rationale leads to the following four hypotheses H₅-H₈:

H₅: Judges appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge named by a Democratic president.

- H₆: Judges have a higher probability of ruling in favor of the taxpayer when the taxpayer presents at least one appraiser.
- H₇: Judges have a higher probability of ruling in favor of the IRS when the Service has at least one appraiser.
- H₈: Judges have a higher probability of ruling in favor of the taxpayer's value when multiple tax years are involved.

These research questions will be evaluated through the use of OLS to determine a specific difference in percent ruled for in the tax decisions. Using logit in addition to ordinary least squares, a probability of selecting the taxpayer's amount over the IRS's amount by political affiliation, either the taxpayer or the Service having at least one appraiser, and the amount of tax years will be calculated.

Research Question 10

Do judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter?

The last hypothesis was generated from the Glynn and Sen (2015) article published in the *American Journal of Political Science*. This article targeted judicial empathy and concluded judges are affected by personal experiences and relationships. The findings show a judge with at least one daughter has a higher likelihood of deciding in a liberal direction. This article result leads to the following hypothesis:

- H₉: Judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter.

This research question will be addressed through OLS. Logit will be implemented to determine a probability of selecting the taxpayer's amount over the IRS's amount by a judge with no daughters compared to a judge with at least one daughter.

Models – Archival Portion

Chi-Square Test – Archival

Chi-square is defined as a statistical difference measure that compares the estimated and observed covariance matrices. Furthermore, this test has been described as the “only measure that has a direct statistical test as to its significance and it forms the basis for many other goodness-of-fit measures” (Hair et al. 2006, p. 706). The Chi-Square test will be the first test used to determine if there is a statistically significant difference between male and female judges and whether the U.S. Tax Court rules closer to the taxpayers deducted (claimed) amount or the IRS's allowed amount.

Simple Regression/Naïve Model - Archival Portion

Multiple models were constructed and examined in this study. The first model was a simple regression or naïve model. A univariate model consists of a single independent variable and a single dependent variable depicted through the equation below:

$$Y = b_0 + b_1X_1 + \varepsilon$$

Y = The amount deemed reasonable by the U.S. Tax Court judge.

b_1X_1 = The “Compromiser” or “Arbitrator” amount (arithmetic mean between the taxpayer's claimed amount and the IRS's allowed amount).

ε = Error term.

The Y value equals the dependent variable or the Court determined amount. The X value represents the independent variable or the “Compromiser”/“Arbitrator” amount. The b_0 signifies the y-intercept term if the arithmetic mean equals “0.” The b_1 is the slope for each additional increase in one unit of the “Compromiser” or “Arbitrator” amount. In Englebrecht (1976), the author examined the role judges play in valuing closely held stock. The purpose of that study was to determine whether the judges objectively approached each case or assumed the role as arbitrator in estate and gift tax cases. The independent variable was the arithmetic mean between the IRS’s value and the taxpayer’s value. The dependent variable was the closely held stock price decided by the Tax Court. The computed R^2 in the Englebrecht (1976) study was 97.49%. This high coefficient of determination in gift and estate tax cases heard in the U.S. Tax Court provides evidence judges fail to give adequate weight to the facts and circumstances of each case. Using the Englebrecht (1976) study as a guide, the dependent variable in the current study is the Tax Court determined dollar amount. The independent variable is the “Compromiser” or “arbitrator” amount calculated by taking the arithmetic mean between the taxpayer/corporation deducted amount and the amount deemed reasonable or allowed by the IRS.

Multiple Regression/Ordinary Least Squares – Archival

Naturally, when using statistical analysis containing more than one independent variable, multiple regression is a popular and useful tool. However, four assumptions must be met to insure that inferences made are valid. Logistic regression models, on the other hand, are best suited when predictor variables do not have a normal distribution. Furthermore, some or all of the independent variables are categorical or discrete (Johnson

1998). The main difference between logistic regression and multiple regression is the dependent variable of the logistic regression tends to be binary in nature. The dependent variable in multiple regression typically is continuous (Johnson 1998). In this study, both multiple regression and logistic regression or logit will be implemented.

Multiple Regression Model

Multiple regression consists of a model with more than one independent variable and a single dependent variable. The form of multivariate regression is depicted below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + \varepsilon$$

$$Y = \text{The Court's percent} = \frac{\text{Court Amount} - \text{IRS Amount}}{\text{Taxpayer Claimed or Deducted Amount} - \text{IRS Amount}}$$

b_1X_1 = Judge gender dummy variable

b_2X_2 = Judge's number of daughters variable

b_3X_3 = Tenure variable (Year decided – year appointed)

b_4X_4 = Political affiliation dummy variable

b_5X_5 = Number of years decided variable

b_6X_6 = Taxpayer gender dummy variable

b_7X_7 = Number of taxpayer appraisers/expert witnesses variable

b_8X_8 = Number of IRS appraisers/expert witnesses variable

The multiple regression model included a dependent variable which is a continuous variable of the Court's ruled percentage of the amount claimed between the taxpayer and the IRS. The independent variables consisted of a judge gender dummy variable (JSex), a judge's number of daughters variable (ofDaughters), the tenure of the judge represented by the difference in years between the deciding of the case and the original appointment of the judge (Tenure), a dummy variable of the political party of the president who appointed the

judge (PoliticalAffiliation), a variable representing the number of tax years the court is ruling on (NumberofYearsDecided), a taxpayer gender dummy variable (TSex), a variable representing the number of taxpayer appraisers/expert witnesses (TPApp), and a variable representing the number of IRS appraisers/expert witnesses (IRSApp).

Coding Method – Archival

The researcher identified the decision rendered as the actual Court decided amount minus the IRS's allowed amount divided by the amount claimed by the taxpayer less the allowable amount given by the Service. The independent variables were coded as follows: the gender/sex of the judge as a "0" (female) or "1" (male), the judge's number of daughters variable, the tenure of the judge (year the decision was issued minus the year the judge was appointed), the political party of the president who appointed the judge as a "0" (Democrat) or "1" (Republican), the number of tax years being decided in the case, the gender of the taxpayer as a "0" (female) or "1" (male), the taxpayer's number of appraisers, and the IRS's number of appraisers.

Multiple Logistic Regression/Logit Model – Archival

The multiple logistic regression model included a dependent variable which is a categorical variable of the winning party. The decision is designated as a "0" if the amount ruled is greater than the "Compromiser" amount or arithmetic mean and closer to the taxpayer's claimed amount. The decision is coded "1" if the amount ruled is equal to or less than the "Compromiser" amount or arithmetic mean. The independent variables will consist of a judge gender dummy variable (JSex), a judge's daughter dummy variable (Daughter), the tenure of the judge represented by the difference in years between the

deciding of the case and the original appointment of the judge (Tenure), a dummy variable of the political party of the president who appointed the judge (PoliticalAffiliation), a dummy variable representing the case as being a single-year decision or a multi-year decision (Multiyearcase), a taxpayer gender dummy variable (TSex), an interaction variable of judge gender and taxpayer gender (JSex#TSex), a dummy variable representing whether or not the taxpayer has at least one appraiser/expert witness (AtLeastOneTPAPP), and a dummy variable signifying whether or not the IRS has at least one appraiser/expert witness (AtLeastOneIRSAPP).

Coding Method – Archival

The researcher identified the decision rendered as being closer to the taxpayer's amount as a "0" or equal to the mean or closer to the IRS's allowed amount as a "1". The gender of the judge was coded as a "0" (female) or "1" (male), the judge's daughter dummy variable as a "0" (the judge does not have a daughter) or "1" (the judge has at least one daughter), the tenure of the judge (year the decision was issued minus the year the judge is appointed), the political party of the president who appointed the judge as a "0" (Democrat) or "1" (Republican), a dummy variable representing whether or not the case involved a single tax year or multiple tax years with a single tax year case coded as a "0" and a multiyear case coded as a "1", the gender of the taxpayer as a "0" (female) or "1" (male), the interaction of judge's gender and taxpayer's gender, the taxpayer's number of appraisers as a "0" (no appraisers) or "1" (1 or more appraisers), and the IRS's number of appraisers as a "0" (no appraisers) or "1" (1 or more appraisers).

Surveys – Behavioral Portion

The behavioral portion of this study is assessed through the use of two survey vignettes portraying a reasonable compensation case. The first vignette described an IRS win situation varied the taxpayer's gender. The genders were male, female, or unknown. The second vignette will vary slightly with a different last sentence depicting a taxpayer win. Also, the genders were male, female, or unknown.

Models – Behavioral Portion

Chi-Square Test – Behavioral

Chi-square is defined as a statistical difference measure that compares the estimated and observed covariance matrices. Furthermore, this test has been described as the “only measure that has a direct statistical test as to its significance and it forms the basis for many other goodness-of-fit measures” (Hair et al. 2006, p. 706). The Chi-Square test will be used several times to determine if there is a statistically significant difference between the different groups discussed below.

Analysis of Variance – Behavioral

Analysis of variance (ANOVA) is described as a “statistical technique used to determine whether samples from two or more groups come from populations with equal means” (Hair et al., p. 384). Specific groups will be identified using the survey vignettes. These groups consisted of males and females, conservative and liberals, and judges with or without daughters. Running ANOVA will then determine if a statistically significant difference exists between the groups.

Research Question 4

Are judges more likely to decide on a higher amount of compensation when the taxpayer is the same sex as the judge (male/male or female/female)?

Social identity theory discussed in Tajfel and Turner (1979) describes in-group favoritism and out-group discrimination. The groups in this study are males and females. In-group would depict a situation of a male judge deciding on a male taxpayer and female judge rendering a decision on a female taxpayer. Out-group would consist of a male judge and a female taxpayer and vice versa. Since, Tajfel and Turner (1979) posit in-group favoritism, a male taxpayer would receive preferential treatment from a male judge. Additionally, a female taxpayer would experience similar treatment from a female judge. On the other hand, a female judge would rule more harshly toward a male taxpayer and a male judge would act the same with a female taxpayer. An empirical study that exhibits results aligned with social identity theory is Pierce et al. (2013). In that study addressing innocent spouse relief, males grant equitable relief more when the requesting spouse is male. Studies providing opposite results include Hardin et al. (2002), Segal (2000), Bemmels (1988), and Gruhl et al. (1981). Hardin et al. (2002) found higher salaries were offered to males over females by female recruiters. Segal (2000) concluded that judges do not provide policy representation to their respective groups. The admission of African Americans and women were specifically studied in this article comparing them to whites and males. In the Bemmels (1988) article, male arbitrators gave favorable treatment to females over males. Last, the results in Gruhl et al. (1981) indicated female judges have a higher likelihood of sentencing female defendants than male judges. These studies lead to the following hypotheses H_{10} and H_{11} :

H₁₀: Male (female) judges give favorable compensation to male (female) taxpayers when compared to female (male) judges when the outcome of the case is protaxpayer.

H₁₁: Female (male) judges agree more with unfavorable outcomes when dealing with male (female) taxpayers.

This research question will be assessed by running an ANOVA and Chi-Square Test to determine if a difference exists between the specified parties. Logit also will be implemented to determine the probability of selecting the taxpayer's amount over the IRS's amount by a male judge and a female judge.

Research Question 6

Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge selected by a Democratic president?

Jackson et al. (2013) examined business and asset valuation in estate tax cases. Four significant variables were found in the study. Among these variables included political affiliation. The authors found an association both negative and significant between the *ScaledDiff* variable and the variable of Republican using a correlation matrix. The court value minus the mean value of the taxpayer and IRS's value constituted the *ScaledDiff* variable. A negative association, therefore, would depict a decision in favor of the taxpayer. This result leads to hypothesis H₁₂ described below:

H₁₂: Conservative (liberal) judges agree more with favorable (unfavorable) outcomes for the taxpayer than liberal (conservative) judges.

This research question will be addressed through the use of both an ANOVA and Chi-Square Tests to determine if a difference exists between the conservative judges and

the liberal judges. Logit will be implemented to analyze the probability of selecting the taxpayer's amount over the IRS's amount by a conservative judge with a liberal judge.

Research Question 10

Do judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter?

Based on the Glynn and Sen (2015) article, a judge having at least one daughter will vote in a more liberal direction. Furthermore, a liberal decision in the U.S. Tax Court tends to favor the IRS. Additionally, a decision for the Service would be deemed an unfavorable outcome. This research leads to the following hypothesis:

H₁₃: A judge having at least one daughter will agree more with a decision of an unfavorable outcome for the taxpayer than a judge who does not have at least one daughter.

ANOVA and Chi-Square Test will be conducted to determine if a significant difference exists between judges having at least one daughter and judges without a daughter. Logit will compute the probability of selecting the taxpayer's amount over the IRS's amount by a judge with at least one daughter and a judge without any daughters.

The last hypothesis is a mixture of the literature presented so far. Social identity theory highlights in-group favoritism and out-group discrimination. Coupled with social identity theory, Glynn and Sen (2015) found evidence that having a daughter influences an individual to make decisions in a more liberal direction. Also, females have been shown to be more liberal. Therefore, an individual who has a daughter is going to vote similarly to a female and will show a female taxpayer more favor than a male taxpayer. The ensuing hypothesis describes this situation:

H₁₄: A judge having at least one daughter will agree more with a decision with a favorable outcome for a female taxpayer than a judge who does not have at least one daughter.

The difference will be evaluated after calculating an ANOVA and Chi-Square Test between judges having at least one daughter and judges not having at least one daughter in rendering a decision for a female taxpayer. Additional analysis will be done with logit to determine the probability of selecting the taxpayer's amount over the IRS's amount by a judge with at least one daughter with a judge that does not have at least one daughter when deciding a female taxpayer's case.

CHAPTER FOUR

DATA ANALYSIS

The objective of this chapter is to explain the results of the data analysis. Descriptive statistics are discussed first for the archival portion, then results are addressed through the research questions for the analysis of U.S. Tax Court judicial decisions. Next, descriptive statistics are revealed for the behavioral portion examining CPAs and their decision-making, followed by an interpretation and discussion of the results. Also, a connection is made with prior studies supporting or failing to support previous findings.

Archival Portion

Descriptive Statistics – Gender, Political Affiliation, Tenure, Etc.

Data

The time span studied included cases decided during the period of 1983-2014. The decisions were collected from Research Institute of America (RIA). The method used to find the cases involved searching the RIA database using the keywords “reasonable compensation.” Each judicial holding was read by the researcher and specific items were identified from each case. The number of observations totaled 240 observations from 88 U.S. Tax Court cases. The number of judges included in the sample was 37. Of the 37 judges, 30 of the judges were male while seven of the judges were female. The seven female judges accounted for 80 of the observations.

This means 30 male judges accounted for the other 160 observations. The presidents responsible for appointing the tax court judges included Truman, Eisenhower, Kennedy, Johnson, Nixon, Carter, Reagan, George H.W. Bush, Clinton, and George W. Bush. On numerous occasions, the court ruled on more than one tax year for more than one taxpayer.

In these specific instances, each year and each taxpayer constituted a single observation. Therefore, one case could have multiple taxpayer genders and taxpayer holdings.

Additionally, the focus of this study was closely held corporations. To address this specific area, only businesses described in the following manner were kept: two controlling shareholder-employees, 50% owned by shareholder/president and 50% owned by shareholder/wife, all stock owned by husband and wife, CEO was 99% shareholder of subsidiary's parent, CEO majority shareholder, closely held, closely held corporation, closely owned, controlling officer-shareholders, each individual owned 50% of the business, family-owned, five shareholders, founding shareholder, officer-shareholder, only shareholders/brothers, owned by three individuals, owned substantially all of the corporation, owner owned all of the stock, owner-manager and son-in-law manager, owner-officer, paid to its shareholders based on stock ownership, president/majority shareholder, president – two shareholders, president /indirect sole shareholder, president and sole shareholder, president/chief stockholder, president/indirect shareholder, president majority shareholder, principal stockholder-CEO, private foundation, S corporation, shareholder-employee of professional corporation, shareholder-employee, shareholder's son, sole officer and shareholder, sole proprietor, sole shareholder and partnership, sole

shareholder/president/CEO, sole stockholder, solely owned, stock owned by four people, taxpayer-corporation's president and vice president, wholly-owned corporation, wife of corporation's sole shareholder, and wife of sole stockholder (see Table 4.1).

Table 4.1

Other Descriptive Statistics for Archival Portion

| | N | Minimum | Maximum | Mean | Std. Deviation |
|-----------------------------|-----|---------|---------|--------|----------------|
| Number of Tax Years Decided | 240 | 1.0 | 8.0 | 2.825 | 1.6925 |
| Allowed Percent of 100 | 240 | 0 | 100 | 44.98 | 39.798 |
| Tenure | 240 | 1.0 | 35.0 | 12.404 | 8.6619 |

Table 4.1 shows the mean number of tax years decided per reasonable compensation case at 2.83 tax years. Additionally, the average percent of compensation allowed of the disallowed amount is 44.98%. This figure is high and would intrigue a lot of taxpayers to consider litigating if any part of their compensation is disallowed. Last, the mean years of experience a judge has with the U.S. Tax Court, based on original appointment, when hearing a case is 12.4 years of experience.

Research Question 1

Is there a significant difference in how male and female judges render a reasonable compensation decision?

Chi-Square Test Results – Archival

Table 4.2 illustrates the results of running the Chi-Square test between male and female judges. Of the 240 total observations, 80 of the decisions were made by a female judge and 160 decisions by male judges.

Table 4.2

Chi-Square Results Between Gender

| Judge Sex | Closer to the Taxpayer or IRS | | Total |
|---------------------------|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| Female | 9 | 71 | 80 |
| Male | 85 | 75 | 160 |
| Total | 94 | 146 | 240 |
| Pearson chi2(1) = 39.2509 | | Pr = 0.000 | |

The p-value from running the Chi-Square test was 0.000. This computed p-value indicates there is a statistically significant difference between how male and female judges rule in deciding a case for the taxpayer (amount granted greater than the “Compromise” value) or the IRS (amount granted less than or equal to the “Compromise” value). Additionally, this result gives evidence to continue with the study of judge sex in the subsequent models and provides support for H₁. The finding of a difference in gender supports Prasad et al. (1998) and Schminke (1997). Prasad et al. (1998) concluded a gender effect between individuals evaluating a “just society.” Schminke (1997) also revealed gender differences existed when studying a subject’s reaction of others’ ethical dilemmas. Moreover, an ANOVA was run to determine if a significant difference existed based on the percent allowed of the total disallowed amount by a male judge and a female judge. Table 4.3 illustrates the average awarded percent of disallowed compensation.

Table 4.3

Mean Percent Allowed of Male and Female Judges Deciding Cases in the U.S. Tax Court

| Judge Sex | Mean | Std. Deviation | N |
|-----------|-------|----------------|-----|
| Female | 22.26 | 26.761 | 80 |
| Male | 56.33 | 40.443 | 160 |
| Total | 44.98 | 39.798 | 240 |

An ANOVA was calculated to determine if the means were significantly different.

Table 4.4 depicts the results of the ANOVA based on U.S. Tax Court judge gender.

Table 4.4

Results of Running an ANOVA Between Male and Female U.S. Tax Court Judges

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|-----------------|-------------------------|-----|-------------|---------|------|
| Corrected Model | 61917.294 ^a | 1 | 61917.294 | 46.540 | .000 |
| Intercept | 329434.192 | 1 | 329434.192 | 247.619 | .000 |
| Judge Sex | 61917.294 | 1 | 61917.294 | 46.540 | .000 |
| Error | 316636.597 | 238 | 1330.406 | | |
| Total | 864022.338 | 240 | | | |
| Corrected Total | 378553.892 | 239 | | | |

a. R Squared = .164 (Adjusted R Squared = .160)

The findings from the ANOVA show a strong statistical difference between the percent of the disallowed amount deemed allowable by a female judge (22.26%) and a male judge (56.33%) with a p-value of 0.000. This highly significant difference warrants further examination into the deviation of decision-making in the U.S. Tax Court.

Research Question 2

Do judges simply come to a “Compromise” decision, represented as the arithmetic mean between the amount claimed by the taxpayer and the amount allowed by the IRS, when deciding a reasonable compensation decision?

Simple Regression/Naïve Model Results – Archival

The next part of this study used a naive model to determine if the “Arbitrator” or “Compromiser” amount significantly explained the number derived by the judge in the U.S. Tax Court. The “Compromiser” amount was the independent variable represented as the arithmetic mean between the claimed amount by the taxpayer and the allowed amount by the IRS. The dependent variable was the actual dollar amount determined by the U.S. Tax Court (see Table 4.5).

Table 4.5

Simple Regression Results from Court Amount and Compromise Value

| Court Amount | Coefficient | Robust Std. Error | t | P> t | [95% Conf. Interval] | |
|-------------------|-------------|-------------------|------|-------|----------------------|------------|
| Compromiser Value | 1.42791 | 0.381151 | 3.75 | 0 | 0.6770492 | 2.17877 |
| Intercept | -295,915.10 | 211,233.40 | -1.4 | 0.163 | -712,041 | 120,210.80 |

The overall model is statistically significant with a p-value of 0.0002. The R^2 is 0.7934. This means that the “Compromiser” or “Arbitrator” amount explains 79.34% of the variation in the amount deemed reasonable by the judge. This number is very high but not high enough to suggest the judge does not weigh the facts and circumstances of the case. Additionally, the p-value of the “Compromiser” variable is 0.000. Since the “Compromiser” model is significant, this provides support for H_2 . This result aligns with

Jackson et al. (2013) which affirmed that the court does not use a “Compromise” model in U.S. Tax Court and District Courts. Specifically, support is provided for Englebrecht and Jamison (1979) indicating each income tax case is determined on its own merit.

Multiple Regression/Ordinary Least Squares Results – Archival

Next, this study examined the decision rendered in terms of percentage allowed of the disputed amount (taxpayer claimed amount – IRS allowed amount). This part is interesting because as one unit is added to the different independent variables, the multiple regression/OLS model allows the researchers to see the direct impact on the decision rendered by the judge on the U.S. Tax Court (see Table 4.6).

Table 4.6

Ordinary Least Squares Regression Results with Allowed Amount as Percent of 100 of Disallowed Amount

| Allowed Amount as Percent of 100 | Coefficient | Robust Std. Error | t | P> t | [95% Conf. Interval] | |
|----------------------------------|-------------|-------------------|-------|-------|----------------------|------------|
| Judge Sex | 31.90988 | 4.388995 | 7.27 | 0.000 | 23.2623 | 40.55746 |
| Number of Daughters | 0.8224883 | 2.43408 | 0.34 | 0.736 | -3.973346 | 5.618323 |
| Tenure | -0.5293153 | 0.2536465 | -20.9 | 0.038 | -1.029072 | -0.2095589 |
| Political Affiliation | 3.927222 | 8.550331 | 0.46 | 0.646 | -12.91938 | 20.77383 |
| Number of Years Decided | -8.266022 | 1.132516 | -7.3 | 0.000 | -10.4974 | -6.03464 |
| Taxpayer Sex | 10.76669 | 5.617658 | 1.92 | 0.057 | -0.3017062 | 21.83509 |
| Number of Taxpayer Appraisers | 4.383818 | 3.354757 | 1.31 | 0.193 | -2.226016 | 10.99365 |
| Number of IRS Appraisers | 5.657033 | 3.704058 | 1.53 | 0.128 | -1.641023 | 12.95509 |
| Intercept | 31.65067 | 11.44305 | 2.77 | 0.006 | 9.104586 | 54.19676 |

The overall fit of this model is statistically significant with a p-value of 0.0000. The R² is 0.2930. This means that the eight independent variables included in this model

explain 29.30% of the variation in the decision rendered by the judge. The statistically significant independent variables consisted of judge's sex, tenure, number of years decided, and taxpayer's sex. The p-value of judge's gender was 0.000 indicating statistical significance at the 0.10, 0.05, and 0.01 significance levels with a coefficient of 31.90988. This coefficient amount suggests as the sex of the judge switches from being a female to a male, the amount considered reasonable by the court increases by 31.9099%. This result is very similar to the ANOVA results depicted in Table 4.3 indicating male judges hold reasonable compensation to be nearly 34% higher than female judges. These conclusions provide support for Pippin et al. (2014), Norrander and Wilcox (2008), Songer and Crews-Meyer (2000), Walker and Barrow (1985), and Welch (1985). Pippin et al. (2014) conceded male judges tend to render decisions in the taxpayer's favor when valuing estates. Norrander and Wilcox (2008) showed males become more conservative and Republican over time. Walker and Barrow (1985) found that females support the government's position and Welch (1985) indicated that women vote more liberally. The p-value of tenure is 0.038 exhibiting statistical significance at the 0.10 and 0.05 significance levels with a coefficient of -0.529. This coefficient figure implies as the judge gains more experience, the amount considered reasonable by the court decreases by 0.529% per additional year of experience. The p-value of number of tax years decided is 0.000 signifying statistical significance at the 0.10, 0.05, and 0.01 significance levels with a coefficient of -8.266. This coefficient number means as the case involves more than one tax year, the amount considered reasonable by the court decreases by 8.266% per year involved in the case. This finding provides opposite support from Pippin et al. (2014) which showed the complexity and age of the case determined by the courts played a significant role in the judge's

decisions. The p-value of taxpayer's sex is 0.057 exhibiting statistical significance at the 0.10 significance level and marginal significance at the 0.05 level with a coefficient of 10.767. This coefficient figure reveals as the taxpayer switches from being a female to a male, the amount considered reasonable by the court increases by 10.767%. The taxpayer gender significance substantiates the conclusions reached in Hardin et al. (2002) that male recruits were awarded higher salaries than female recruits. These findings are very significant for taxpayers contemplating litigation. Additionally, the current study is focusing on the income tax, which is a huge revenue raiser for the government. Whereas past studies have concentrated on estate tax accounting for a very small portion of government revenue.

Meeting the Assumptions

Table 4.7 illustrates the results adjusted using a robustness test and identifies the robust standard errors for each independent variable.

Table 4.7

Ordinary Least Squares Regression Results with Allowed Amount as Percent of 100 of Disallowed Amount with Robust Standard Errors

| Allowed Amount as Percent of 100 | Coefficient | Robust Std. Error | t | P> t | [95% Conf. Interval] | |
|----------------------------------|-------------|-------------------|-------|-------|----------------------|------------|
| Judge Sex | 31.90988 | 4.388995 | 7.27 | 0.000 | 23.2623 | 40.55746 |
| Number of Daughters | 0.8224883 | 2.43408 | 0.34 | 0.736 | -3.973346 | 5.618323 |
| Tenure | -0.5293153 | 0.2536465 | -20.9 | 0.038 | -1.029072 | -0.2095589 |
| Political Affiliation | 3.927222 | 8.550331 | 0.46 | 0.646 | -12.91938 | 20.77383 |
| Number of Years Decided | -8.266022 | 1.132516 | -7.3 | 0.000 | -10.4974 | -6.03464 |
| Taxpayer Sex | 10.76669 | 5.617658 | 1.92 | 0.057 | -0.3017062 | 21.83509 |
| Number of Taxpayer Appraisers | 4.383818 | 3.354757 | 1.31 | 0.193 | -2.226016 | 10.99365 |
| Number of IRS Appraisers | 5.657033 | 3.704058 | 1.53 | 0.128 | -1.641023 | 12.95509 |
| Intercept | 31.65067 | 11.44305 | 2.77 | 0.006 | 9.104586 | 54.19676 |

Multicollinearity is the next assumption to address since many of the independent variables may be highly correlated based on similar coding of the measures. Table 4.8 illustrates the computation of Variance Inflation Factors (referred to as VIFs).

Table 4.8

Variance Inflation Factors for OLS Model Addressing Multicollinearity

| OLS Variables | VIF | 1/VIF |
|-------------------------------|------|----------|
| Number of IRS Appraisers | 1.41 | 0.711697 |
| Number of Taxpayer Appraisers | 1.38 | 0.722405 |
| Judge Sex | 1.29 | 0.775154 |
| Number of Years Decided | 1.20 | 0.830469 |
| Tenure | 1.19 | 0.841641 |
| Number of Daughters | 1.12 | 0.890372 |
| Political Affiliation | 1.09 | 0.915431 |
| Taxpayer Sex | 1.06 | 0.939281 |

Based on the mean VIF figure of 1.22, there does not appear to be any multicollinearity since the general rule of thumb is 10 or greater suggest multicollinearity. This 1.22 number is very important since a large number of the independent variables are coded "0" and "1". Because multicollinearity does not appear to be a problem, the inferences taken from running the OLS seem to be valid.

Multiple Logistic Regression Results

Table 4.9 summarizes the results of running multiple logistic regression and will be used to run margins and predict probability.

Table 4.9

Logistic Regression Results with a Binary Dependent Variable of Closer to the Taxpayer or IRS

| Closer to Taxpayer or IRS | Coefficient | Standard Error | z | P> z | [95% Conf. Interval] | |
|------------------------------------|-------------|----------------|-------|-------|----------------------|-----------|
| Judge Sex | -1.915948 | 0.4492014 | -4.27 | 0.000 | -2.796366 | -1.035529 |
| Number of Daughters | -0.0672168 | 0.1632682 | -0.41 | 0.681 | -0.3872167 | 0.252783 |
| Tenure | 0.0196014 | 0.0213324 | 0.92 | 0.358 | 0.0222094 | 0.0614121 |
| Political Affiliation | -0.6540848 | 0.4851294 | -1.35 | 0.178 | -1.604921 | 0.2967513 |
| Number of Years Decided | 0.3509333 | 0.1175577 | 2.99 | 0.003 | 0.1205244 | 0.5813421 |
| Taxpayer Sex | -0.1904989 | 0.4723572 | -0.40 | 0.687 | -1.116302 | 0.7353042 |
| | | | | | | |
| Judge Sex/Taxpayer Sex Interaction | | | | | | |
| Female Judge/Female Taxpayer | 0 | Empty | | | | |
| Female Judge/Male Taxpayer | 0 | Omitted | | | | |
| Male Judge/Female Taxpayer | 0 | Omitted | | | | |
| Male Judge/Male Taxpayer | 0 | Omitted | | | | |
| | | | | | | |
| Number of Taxpayer Appraisers | -0.0456372 | 0.2317017 | -0.20 | 0.844 | -0.4997642 | 0.4084898 |
| Number of IRS Appraisers | -0.1012684 | 0.2553626 | -0.4 | 0.692 | -0.60177 | 0.3992331 |
| Intercept | 1.536521 | 0.9310881 | 1.65 | 0.099 | -0.2883779 | 3.36142 |

Table 4.10 depicts probability a decision will be made equal to the Compromiser amount or less depending on the independent variable selected.

Table 4.10

Results of Running Margin Commands of Judge and Taxpayer Gender Following Logistic Regression

| Variable | Margin | Delta-method Std. Err. | z | P> z | [95% Conf. Interval] | |
|---------------------------------------|-----------|---------------------------|-------|-------|----------------------|-----------|
| Judge Sex | | | | | | |
| Female | | (not estimable) | | | | |
| Male | 0.4724653 | 0.0401198 | 11.78 | 0.000 | 0.3938319 | 0.5510986 |
| Taxpayer Sex | | | | | | |
| Female | | (not estimable) | | | | |
| Male | 0.5680693 | 0.0322756 | 17.6 | 0.000 | 0.5048102 | 0.6313283 |
| Judge Sex/Taxpayer Sex Interaction | | | | | | |
| Female Judge/Female Taxpayer | | (not estimable) | | | | |
| Female Judge/Male Taxpayer | 0.8428244 | 0.0503794 | 16.73 | 0.000 | 0.7440826 | 0.9415663 |
| Male Judge/Female Taxpayer | 0.5117243 | 0.1017622 | 5.03 | 0.000 | 0.312274 | 0.7111746 |
| Male Judge/Male Taxpayer | 0.4678073 | 0.0428207 | 10.92 | 0.000 | 0.3838802 | 0.5517344 |

Using the Logit margin command, the results indicate if the distribution of the decisions made remains the same in the population, but every judge was male, one would anticipate about 47% of the decisions made by a male judge would have an outcome where the court decides a compensation amount equal to the “Compromiser” amount or less. The gender of male is highly significant with a p-value of 0.000.

Next, the results suggest if the distribution of the decisions made is the same in the population, but every taxpayer was male, one could predict approximately 57% of the decisions made for a male taxpayer would have an outcome where the court decides a compensation amount equal to or less than the “Compromiser” amount appearing to side with the IRS. The taxpayer’s sex of male is statistically significant with a p-value of 0.000.

Last, the Logit margin command evaluated the interaction of judge gender and taxpayer gender. The conclusions show if the distribution of the decisions made remains the same in the population, but every judge and taxpayer was male, one could predict approximately 46.8% of the decisions made between a male judge and a male taxpayer would have an outcome where the court decides a compensation amount equal to or less than the “Compromiser” amount. Furthermore, using the same rationale for female judges and male taxpayers, one would expect about 84.3% of the decisions made for a male taxpayer with a rendering by a female judge would have an outcome where the court decides a compensation amount equal to the “Compromiser” amount or less. With a male judge and a female taxpayer, one could estimate approximately 51.2% of the decisions made would have a rendering where the court decides a compensation amount equal to or less than the mean of the amount claimed by the taxpayer and the amount allowed by the IRS. These interaction results are very significant. All combinations (male/male, male/female, and female/male) of the sexes are statistically significant with a p-value of 0.000. The results with a male judge support Pierce et al. (2013) which found males awarded equitable relief more with a male requesting spouse.

One interesting part of the analysis in determining probabilities of the judge’s decision based on the judge’s sex and the taxpayer’s sex occurred in the situation of a female judge and a female taxpayer. There were twenty decisions made between a female judge and a female taxpayer. In all 20 of these holdings, the judge ruled equal to the “Compromiser” amount or less. This is 100% predicted success between a female judge and a female taxpayer indicating that female judges treat female taxpayers worse than male taxpayers. This is opposite of what social identity posits. Conversely, the findings when

the judge was female align with Hardin et al. (2002) which showed that female recruiters grant larger salaries when evaluating male recruits than female recruits. Specifically, in the current study, female judges were tougher on female taxpayers deciding on lower compensation closer to the IRS's allowed amount. Moreover, this evidence backs Gruhl et al. (1981) which concluded that women public officials treat females more harshly in determining a prison sentence.

Research Question 3

Are male judges more likely to rule for a higher amount of compensation for the taxpayer than female judges?

Using OLS and a dependent variable of “Percent of 100”(court determined amount - IRS determined amount)/(taxpayer claimed amount – IRS determined amount), the p-value of the variable judge sex is 0.000 suggesting statistical significance at the 0.10, 0.05, and 0.01 levels with a coefficient of 31.90988. This suggests as the judge switches from being a female to a male, the “Percent of 100” increases by 31.91% providing strong evidence for H₃. The marginal effects were also calculated using Logit. Using the Logit margin command with male judges, one could expect about 47.24% of the decisions made by a male judge would have an outcome where the court decides a compensation amount equal to 50% between the amount deducted by the taxpayer and the amount allowed by the IRS or less. The judges' sex of male is highly significant with a p-value of 0.000. Female judges ruled closer to the taxpayer nine out 80 times which makes predicting probabilities for female judges very difficult and prevents estimation. For male judges, this additional analysis using Logit supports H₃. These results support Hardin et al. (2002) finding males receive higher compensation compared with female recruits. Pippin et al. (2014)

concluded comparable findings when male judges ruled closer to the taxpayer when faced with an estate tax valuation case. Also, Norrander and Wilcox (2008) revealed males become more conservative over time. A conservative influence would lend to higher compensation amounts siding with the taxpayer. Songer and Crews-Meyer (2000) found similar results identifying that females tend to vote more liberally (siding with the Service) which means rendering a lower percent of the disallowed amount.

Research Question 4

Are judges more likely to rule for a higher amount of compensation when the taxpayer is the same sex as the judge?

Logit was used as a predictive tool in this analysis. The findings suggests if the distribution of the decisions made is similar in the population, but every judge and taxpayer was male, one could predict approximately 46.8% of the decisions made between a male judge and a male taxpayer would have an outcome where the court decides a compensation amount equal to the Compromise value or less. Furthermore, using the same rationale for female judges and male taxpayers, we could expect about 84.3% of the decisions made for a male taxpayer heard by a female judge would have an outcome where the court decides a compensation amount equal to the Arbitrator amount or less. With a male judge and a female taxpayer, we could predict approximately 51.2% of the decisions made would have an outcome where the court decides a compensation amount equal to the “Compromiser” amount or less. These interaction results are very interesting and significant to this study. All combinations (male/male, male/female, and female/male) of the sexes are statistically significant with a p-value of 0.000. Hypothesis H_{3A} is supported but hypothesis H_{3B} is not supported. Pierce et al. (2013) findings mirror these results when a male judge is deciding

since the male taxpayer received better treatment than the female taxpayer. Results in the opposite direction are provided when the judge is female with males getting preferential treatment to females. Last, female judges ruled against female taxpayers 20 out of 20 times making predicting probabilities for female judges very difficult and unable to be computed based on no variation when both genders are female. Hardin et al. (2002) concluded similar results with female judges compensating male recruits more than female recruits.

Research Question 5

Are male taxpayers more likely to receive a compensation decision higher than female taxpayers?

After running OLS with a dependent variable of “Percent of 100” (court determined amount - IRS determined amount)/(taxpayer claimed amount - IRS determined amount), the p-value of the variable taxpayer sex is 0.057 with a coefficient of 10.767. This suggests as the taxpayer changes from being a female to a male, the “Percent of 100” increases by 10.77% providing evidence at the 0.10 significance level and marginal significance at the 0.05 level for H₄. These results support Hardin et al. (2002) where male recruits were given higher compensation than female recruits. The marginal effects are also calculated using Logit. The margin commands of Logit find if the distribution of the decisions made remains the same in the population, but every taxpayer was male, one could anticipate about 56.8% of the decisions made for a male taxpayer would have an outcome where the court decides a compensation amount equal to the “Compromiser” value or less. The taxpayers’ sex of male is highly significant with a p-value of 0.000. This additional analysis for males, using Logit, also supports H₄. Because female judges use a

Compromise approach or ruled closer to the IRS 20 out of 20 times for female taxpayers, probabilities for female judges are unable to be calculated.

Research Question 6

Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge appointed by a Democratic president?

Running OLS coupled with a dependent variable of “Percent of 100”(court determined amount - IRS determined amount)/(taxpayer claimed amount – IRS determined amount), the p-value of the variable political affiliation is 0.646 with a coefficient of 3.927. This result fails to provide support for H₅ because of the lack of significance. Next, Logit was implemented but because political affiliation was not found in the list of covariates, the margins command was unable to predict the probability failing to suggest support for H₅. Moreover, to determine whether or not there was a significant difference between the decision-making of a Republican appointed president and a Democratic appointed president, a Chi-Square test was run which is illustrated in Table 4.11.

Table 4.11

Chi-Square Results Between Political Parties

| Political Affiliation | Closer to the Taxpayer or IRS | | Total |
|--------------------------|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| Democrat | 9 | 17 | 26 |
| Republican | 85 | 129 | 214 |
| Total | 94 | 146 | 240 |
| Pearson chi2(1) = 0.2535 | | Pr = 0.615 | |

There is not a significant difference in how the decisions are rendered at any level of significance with a p-value of 0.615. This lack of an effect based on presidential

appointment's political party is contrary to the Jackson et al. (2013) study where an association was found with political affiliation and the valuation decision made by the judge. However, the lack of significance and inability to predict probability may suggest presidential appointment has very little effect on the rendered decisions. This means judges, regardless of appointment party, rule in very similar manners which is support for a lack of bias in the U.S. Tax Court.

Research Question 7

Do judges have a higher probability of ruling in favor of the taxpayer when the taxpayer has at least one appraiser?

Following the calculating of OLS with a dependent variable of "Percent of 100" $(\text{court determined amount} - \text{IRS determined amount}) / (\text{taxpayer claimed amount} - \text{IRS determined amount})$, the p-value of the variable of number of appraisers testifying for the taxpayer is 0.193 with a coefficient of 4.383. The number of appraisers brought to court was used in the OLS to study the impact of each individual appraiser/expert witness brought before the court. This high p-value fails to provide support for H₆ because of the lack of significance. This conclusion is different from Jackson et al. (2013) which found an association based on the number of appraisers presented by the taxpayer. Then, Logit was implemented but because of having at least one appraiser was not found in the list of covariates, the margins command was also unable to predict the probability failing to suggest support for H₆. Furthermore, to determine whether or not there was a significant difference between the decision-making of a judge hearing the testimony of at least one appraiser and a case where no appraiser was put before the court, a Chi-Square test was run which is illustrated in Table 4.12.

Table 4.12

Chi-Square Results Between Taxpayers Presenting No Appraisers and One or More Appraisers

| | Closer to the Taxpayer or IRS | | Total |
|------------------------------|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| No Appraisers | 32 | 32 | 64 |
| At Least One Appraiser | 62 | 114 | 176 |
| Total | 94 | 146 | 240 |
| Pearson $\chi^2(1) = 4.2988$ | | Pr = 0.038 | |

The findings show a significant difference in how the decisions are rendered at the 0.10 and 0.05 significance levels with a p-value of 0.038. However, the inability to predict probability may suggest the presence of an expert witness has very little effect on the rendered decisions. This means judge's holdings may be weakly affected by an expert witness testifying on the taxpayer's behalf in the U.S. Tax Court forum.

Research Question 8

Do judges have a higher probability of ruling in favor of the IRS when the Service has at least one appraiser?

Once the OLS was computed with a dependent variable of "Percent of 100"(court determined amount - IRS determined amount)/(taxpayer claimed amount – IRS determined amount), the p-value of the variable of number of appraisers testifying for the Service is 0.128 with a coefficient of 5.657. Consequently, the number of appraisers brought to court by the Commissioner was used in the OLS to study the impact of each individual appraiser brought before the court. This conclusion fails to provide strong support for H₇ because of the marginal significance at the 0.10 level. This result is similar to Jackson et al. (2013) which did not reveal an association based on the number of appraisers presented by the

IRS. Next, logit was conducted but because of having at least one appraiser was not found in the list of covariates, the margins command was unable to predict the probability failing to suggest support for H₇. To determine whether or not there was a significant difference between the decision-making of a judge hearing the testimony of at least one appraiser and a case where no appraiser was put before the court by the Service, a Chi-Square test was run which is illustrated in Table 4.13.

Table 4.13

Chi-Square Results Between the IRS Presenting No Appraisers and One or More Appraisers

| | Closer to the Taxpayer or IRS | | Total |
|-------------------------------|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| Presenting an Appraiser (IRS) | | | |
| No Appraisers | 35 | 46 | 81 |
| At Least One Appraiser | 59 | 100 | 159 |
| Total | 94 | 146 | 240 |
| Pearson chi2(1) = 0.8389 | | Pr = 0.360 | |

A significant difference was not found in how the decisions were made with a p-value of 0.360. Also, the inability to estimate probability may suggest the presence of an expert witness presented by the Service has very little effect on the rendered decisions. This means judges' decisions may be weakly impacted in the U.S. Tax Court arena by the presence of an IRS expert witness.

Research Question 9

Do judges have a higher probability of ruling in favor of the taxpayer's value when multiple years are involved?

The OLS was computed with a dependent variable of “Percent of 100”(court determined amount - IRS determined amount)/(taxpayer claimed amount – IRS determined amount). As a result, the p-value of the variable of number of years decided is 0.000 with a coefficient of -8.266022. The number of years decided was studied in the OLS to evaluate the effect of each individual tax year on the court decided amount. The result indicates opposing support for H_3 because of the significance and negative direction of the coefficient. This conclusion provides opposing results to Jackson et al. (2013) which found an association based on the valuation of property or case having one or more parts. Multiple tax years was the proxy for having one or several parts. Furthermore, Logit was conducted but because the multiyear variable was not found in the list of covariates, the margins command was unable to forecast probability failing to suggest support for H_3 . Additionally, to determine whether or not there was a significant difference between the decision-making of a judge hearing a case covering a single tax year compared to multiple tax years, a Chi-Square test was used which is depicted in Table 4.14.

Table 4.14

Chi-Square Results Between Cases with a Single Tax Year or Multiple Tax Years

| Single/Multiple Tax Year Cases | Closer to the Taxpayer or IRS | | Total |
|--------------------------------|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| Single Tax Year | 15 | 20 | 35 |
| Multiple Tax Years | 79 | 126 | 205 |
| Total | 94 | 146 | 240 |
| Pearson chi2(1) = 0.2342 | | Pr = 0.628 | |

No significant difference was found in how the decisions were rendered at the 0.10, 0.05, and 0.01 significance levels with a p-value of 0.628. However, the inability to predict

probability may suggest that judges take the same approach when hearing cases involving one tax year and cases involving multiple tax years.

Research Question 10

Do judges have a higher probability of ruling in favor of the IRS' value when the judge has at least one daughter?

The statistical tool OLS was implemented with a dependent variable of “Percent of 100” $(\text{court determined amount} - \text{IRS determined amount}) / (\text{taxpayer claimed amount} - \text{IRS determined amount})$. The calculated p-value representing the variable of number of daughters of the judge is 0.736 with a coefficient of 0.8224883. The number of daughters is examined in the OLS to study the effect of each individual daughter on the court determined amount. This evidence provides a lack of support for H_9 because the p-value is not significant and is different from Glynn and Sen (2014) which showed that males with daughters voted more liberally. Moreover, Logit was used but because the having a daughter or not having a daughter variable was not found in the list of covariates, the margins command was unable to predict the probability failing to suggest support for H_9 . Also, to determine whether or not there was a significant difference between the decision-making of a judge having at least one daughter or having only sons, a Chi-Square test was used which is illustrated in Table 4.15.

Table 4.15

Chi-Square Results Between a Judge Having No Daughters and a Judge Having at Least One Daughter

| Family Composition - Having a Daughter | Closer to the Taxpayer or IRS | | Total |
|---|-------------------------------|------------|-------|
| | Taxpayer | IRS | |
| Does Not Have a Daughter | 38 | 64 | 102 |
| Has At Least One Daughter | 56 | 82 | 138 |
| Total | 94 | 146 | 240 |
| Pearson $\chi^2(1) = 0.2721$ | | Pr = 0.602 | |

The results indicate there is not a significant difference in how the decisions are rendered at the 0.10, 0.05, or 0.01 significance levels with a p-value of 0.602. Therefore, there does not seem to be evidence that family composition or personal relationships effect how decisions are made in the U.S. Tax Court.

Survey Vignette - Behavioral Portion

Descriptive Statistics

A sample of CPAs was needed to determine current perceptions of tax professionals to see if there was a gender, political affiliation, or family composition effect on how their decisions were made. The surveys were sent out a week after April 15th in order to allow CPAs to recover from tax “busy season.” CPAs were the target population for several reasons. CPAs must go through rigorous training consisting of a certain course curriculum, specified number of minimum credit hours, four examinations with a low pass rate, and a required amount of time learning and working under another CPA. The four exams demand proficiency in different areas of accounting (taxation, auditing, law, business economic concepts). Also, a required amount of continuing professional education hours are needed to renew the license every one or two years depending on the state.

Additionally, taxpayers and corporations hire CPAs in a variety of advisory roles including setting reasonable compensation levels in closely held corporations. A pilot study or “soft launch” was conducted and ended in the collection of 15 usable responses from 26 collected surveys. Adjustments were made to the survey in order to improve manipulation checks on gender and compensation policy. Vast improvements were made to the survey followed by a resending of the updated vignette.

The first “full launch” resulted in 305 responses. After analyzing the data, 61 responses were discarded from the data. One of those responses inputted a reasonable compensation of \$3,000,000 which was nearly twice the amount of the company’s total income. The other 60 responses had compensation amounts of less than \$30,000. The responses were dropped because of the absurdity of the subjects’ replies. A participant even entered compensation amounts as low as \$5. Following the removal and replacement of the 61 responses, 305 adequate surveys were completed out of 1,919 finished surveys. This resulted in a response rate of 15.89%. Also, multiple levels of checks were implemented by Qualtrics. First, a profession question began the survey and offered five choices of answers. Only when CPA was selected would the individual be permitted to move forward. Next, a question addressed whether the participant had experience in estimating reasonable compensation. If this question was answered in the negative, the subject was dropped out of the survey. For the subjects that responded in the positive, one of four vignettes was presented varying the gender of the described taxpayer and the compensation policy. Two attention filters were located throughout the survey and a separate question required compliance with selecting a certain color from the answer choices. All of these filters were designed to remove those individuals who were not

paying attention. Finally, a last guard against receiving unusable responses involved removing any subject who responded to years of experience in estimating reasonable compensation with zero years. The overall collection period took a month and eight days. Also, the survey ended up with 151 male and 151 female responses with a total of 302 usable responses. Qualtrics describes itself as a “leading insight technology provider.”²⁰ Services provided by Qualtrics include Customer Sat (satisfaction) and NPS (Net Promoter Score)²¹ tracking, market research, giving a voice to customers, academic research, employee feedback, and concept testing.²² Pursuant to a discussion with a Qualtrics employee, a unique process of gathering completed surveys is implemented. First, an advertisement is sent out regarding the type of survey instrument. Subjects will then begin completing the survey. However, once a quota is met, which in this case is gender, any further participants are turned away. The quota requested by the researchers was a 50/50 gender split. Table 4.16 provides some descriptive statistics about the 302 CPA subjects. The average time to complete each survey was 801.778 seconds or 13.36 minutes.

²⁰ <http://www.qualtrics.com/about/>

²¹ http://success.qualtrics.com/rs/qualtrics/images/Customer-Satisfaction-Survey-Questions.pdf?mkt_tok=3RkMMJWWf9wsRoivKnNZKXonjHpfsX87u0lXaO0IM1%2F0ER3fOvrPUfGjI4FS8Zhl%2BSDLdWEYGJlv6SgFT7THMaZt3LgJWhM%3D

²² <http://www.qualtrics.com/about/>

Table 4.16

Descriptive Statistics of CPA Subjects

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--|-----|----------|-------------|-------------|----------------|
| Time to Complete Survey* | 302 | 222.0 | 19035.0 | 801.778 | 1273.3912 |
| Compensation | 302 | 30,000.0 | 1,500,000.0 | 230,398.288 | 172308.5162 |
| Years Estimating Reasonable Compensation | 302 | 1.0 | 50.0 | 6.523 | 7.1925 |
| Age | 302 | 23.0 | 92.0 | 41.480 | 12.6863 |

* Time is represented in seconds

Manipulation Checks

Prior to the full launch, a first “soft launch” was conducted by Qualtrics designed to identify potential problems with the survey. This pilot study resulted initially in 15 usable responses following the removal of several inadequate responses. Because of the low accuracy of the manipulation checks, the format of the vignette/scenario was changed from predominantly paragraph form to presenting the information using bullet points. The manipulation check percentages for correct responses were 93.33% (name of the taxpayer), 100% (taxpayer’s sex), 86.67% (amount disallowed by the IRS), 53% (existence of compensation policy), and 60% (how bonuses were determined).

Five manipulation checks were used to determine if the subjects were paying attention to the variables being manipulated. The first manipulation check asked the participant to identify the name of the taxpayer in the scenario. This question examines whether the subject knows the gender of the individual portrayed in the vignette. Of the 302 total responses, 266 correct answers (see Table 4.17) were given which means 88% of the participants got the gender right in this question.

Table 4.17

Manipulation Check Crosstabs for Name of Taxpayer Question and Gender of Taxpayer in Scenario

| | | What was the name of the taxpayer in the scenario? | | | Total |
|--------------|--------|--|------|-------------|-------|
| | | John | Mary | Do not know | |
| Scenario Sex | Male | 132 | 10 | 13 | 155 |
| | Female | 10 | 134 | 3 | 147 |
| Total | | 142 | 144 | 16 | 302 |

Table 4.18 shows the accuracy with which subjects answered a second manipulation check based on the gender of the individual described in the scenario. As noted in Table 4.18, 272 responses out of 302 were correct, resulting in 90% accuracy in selecting the correct gender. Both checks on gender indicated a high accuracy rate on the importance of gender when deciding reasonable compensation.

Table 4.18

Manipulation Check Crosstabs for Gender of Taxpayer Question and Gender of Taxpayer in Scenario

| | | What was the sex of the taxpayer in the scenario? | | | Total |
|--------------|--------|---|--------|-------------|-------|
| | | Male | Female | Do not know | |
| Scenario Sex | Male | 141 | 8 | 6 | 155 |
| | Female | 11 | 131 | 5 | 147 |
| Total | | 152 | 139 | 11 | 302 |

A third manipulation check concentrated on the amount disallowed by the IRS. The “correct” disallowed amount was \$390,000. As noted in Table 4.19, 188 out of 302 (62.3%) individuals got this number right. The rationale behind this lower accuracy percentage may be attributed to the subject focusing on other aspects of the scenario such

as total income or ROE. Also, while 62.3% is not as high as originally anticipated, it still reflects that nearly two-thirds of the subjects understood the correct disallowed amount.

Table 4.19

Manipulation Check Frequency Tab for the Correct Disallowed Amount

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
| Valid | \$290,000 | 31 | 10.3 | 10.3 | 10.3 |
| | \$390,000 | 188 | 62.3 | 62.3 | 72.5 |
| | \$490,000 | 29 | 9.6 | 9.6 | 82.1 |
| | \$590,000 | 30 | 9.9 | 9.9 | 92.1 |
| | Do not know | 24 | 7.9 | 7.9 | 100.0 |
| | Total | 302 | 100.0 | 100.0 | |

The results of the fourth manipulation check requesting the subject to recall whether the firm described in the vignette had a compensation policy had an accuracy rate of 61.5%. Only 29.1% answered the question incorrectly (9.4% did not know). This percent may be lower because CPAs may not give substantial weight to an explicit compensation policy or lack thereof. However, well over half of the subjects got this question correct and the percentage of correct responses is deemed a suitably robust manipulation for the experiment (see Table 4.20).

Table 4.20

Manipulation Check Crosstab for Compensation Policy Question and Party Favored in the Scenario

| | | Did ID have a compensation policy? | | | Total |
|----------------|----------|------------------------------------|-----|-------------|-------|
| | | Yes | No | Do not know | |
| Scenario Favor | Taxpayer | 90 | 44 | 14 | 148 |
| | IRS | 44 | 96 | 14 | 154 |
| Total | | 134 | 140 | 28 | 302 |

The last manipulation check question also examined the subject's knowledge on how the bonuses were paid, which relates to the type of compensation policy manipulated in each scenario. As revealed in Table 4.21, 69.2% of the participants answered this question correctly and only 20.2% answered this question incorrectly (10.6% did not know). Thus, over two-thirds of the subjects knew when bonuses were paid relating to the favorableness of the corporate compensation policy, as this manipulation check was strong.

Table 4.21

Manipulation Check Crosstab for Bonus Determination Question and Party Favored in the Scenario

| | | How were bonuses determined? Check only one below. | | | Total |
|----------------|----------|--|-------------------|-------------|-------|
| | | At the end of year based on availability | Beginning of year | Do not know | |
| Scenario Favor | Taxpayer | 39 | 89 | 20 | 148 |
| | IRS | 120 | 22 | 12 | 154 |
| Total | | 159 | 111 | 32 | 302 |

The main variable being studied and manipulated in the survey was gender. Both of the manipulation check questions related to gender were answered with high accuracy (88% and 90%). Overall, the modification of the vignette material after the pilot study increased the correct response percent regarding the compensation policy. Because most of the subjects correctly distinguished gender, the researchers felt confident in the survey instrument. The manipulation checks analyzing responses to the disallowed amount and compensation policy questions were not as high as the gender questions. However, this fact does not necessarily detract from the results. These findings may indicate the disallowed amount or how compensation was structured to be awarded did not play a major role in the CPA's determination of reasonable compensation. However, a majority of the subjects in all cases understood the information in the scenarios which is most important.

Last, three attention filters were inserted throughout the survey. Each question directed the subject to select a specific answer to demonstrate that the respondent was reading the question and following instructions by appropriately selecting the correct answer. If a participant selected an incorrect answer, that participant would be removed from the survey. As a result, none of the participants retained in the final analysis selected an incorrect response and all three filters reflected a 100% positive response rate. Thus, the attention filters further reinforced that all participants were paying attention to the survey questions and following directions.

Research Question 1

Is there a significant difference in how male and female judges render a reasonable compensation decision?

After running an ANOVA with the dependent variable of reasonable compensation decided on by the subject's gender partaking in the survey, gender is not statistically significant based on a p-value of 0.526 (see Table 4.22). This result is inconsistent with the findings from the archival portion. However, because CPAs were the individuals completing the surveys, this result is not entirely surprising. The lack of significance from administering the ANOVA suggests gender does not impact decision-making by tax practitioners when taking a position on a tax return. In addition, CPAs must meet similar requirements across the country in order to become a CPA. Some of these requirements include 150 credit hours, completing all four sections of the CPA exam, and meeting a time requirement working under another CPA. Also, penalties on tax professionals for understating tax liability or due to fraud are quite severe (5% to 75%). Moreover, this conclusion supports Segal (2000) which found no difference in the way traditional judges (white and male) make decisions from those non-traditional judges (African American and female). Smith and Oakley (1997), similarly, failed to identify gender-related differences when evaluating ethical behaviors.

Table 4.22

Results of Running an ANOVA Between Male and Female CPA Subjects Mean Compensation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--|------------------------------|-----|--------------------|---------|------|
| Corrected Model | 12007595179.088 ^a | 1 | 12007595179.088 | .404 | .526 |
| Intercept | 16031178087285.100 | 1 | 16031178087285.100 | 538.878 | .000 |
| CPA Gender | 12007595179.103 | 1 | 12007595179.103 | .404 | .526 |
| Error | 8924750059624.840 | 300 | 29749166865.416 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .001 (Adjusted R Squared = -.002) | | | | | |

Research Question 3

Are male judges more likely to rule for a higher amount of compensation for the taxpayer than female judges?

Table 4.23 shows the calculated means for a male subject and a female subject. The arithmetic mean for a male subject deciding reasonable compensation for the taxpayer described in the scenario is \$224,092.72. The average for a female subject deciding reasonable compensation for the taxpayer designated in the vignette is \$236,703.86. The difference between these two means is \$12,611.14. As noted earlier, with a p-value of 0.526, the difference in reasonable compensation based on the participant's gender is not statistically significant which may imply that gender does not impact a CPA's judgment when giving tax practitioner advice.

Table 4.23

Mean Compensation of Male and Female CPA Subjects

| CPA Gender | Mean (dollars) | Std. Deviation | N |
|------------|----------------|----------------|-----|
| Male | 224,092.72 | 174311.8891 | 151 |
| Female | 236,703.86 | 170627.3690 | 151 |
| Total | 230,398.29 | 172308.5162 | 302 |

Research Question 4

Are judges more likely to decide on a higher amount of compensation when the taxpayer is the same sex as the judge (male/male or female/female)?

The highest mean arises from a female participant and a female taxpayer with compensation of \$252,260.27 (see Table 4.24). The lowest average occurs in the situation with a male subject and a male taxpayer at \$214,831.17 (see Table 4.24). In one regard, these results provide evidence of social identity when both individuals are female. On the other hand, a male in both roles produces the lowest arithmetic mean indicating support against social identity theory. Consequently, the interaction is not statistically significant.

Table 4.24

CPA Gender and Taxpayer Gender in Scenario Interaction Mean Compensation

| CPA Gender and Taxpayer Gender | | Mean (dollars) | Std. Deviation | N |
|--------------------------------|--------|----------------|----------------|-----|
| Male | Male | 214,831.17 | 172682.8286 | 77 |
| | Female | 233,729.73 | 176648.6566 | 74 |
| | Total | 224,092.72 | 174311.8891 | 151 |
| Female | Male | 222,144.65 | 144449.3781 | 78 |
| | Female | 252,260.27 | 194586.5294 | 73 |
| | Total | 236,703.86 | 170627.3690 | 151 |
| Total | Male | 218,511.50 | 158626.3436 | 155 |
| | Female | 242,931.97 | 185368.3360 | 147 |
| | Total | 230,398.29 | 172308.5162 | 302 |

The interaction of participant sex and taxpayer sex described in the scenario has a p-value of 0.778 which is not statistically significant (see Table 4.25). This result indicates that whether the gender between the subject and taxpayer is the same (male/male or female/female) or different (male/female or female/male), the decision made is not significantly different. It appears that the participant makes the same decision regardless of the sex of the taxpayer described in the vignette. Also, the main effects of subject gender and scenario sex or taxpayer's sex outlined in the scenario are not significant with a p-value of 0.516 and 0.218, respectively (see Table 4.25). As a result, it would appear that CPAs make decisions in an objective manner based on the facts and circumstances presented. The male CPA subject finding fails to provide support for social identity theory and Pierce et al. (2013) which concluded that males permit equitable relief more when the requesting spouse is male. However, Bemmels (1988) concluded a similar result to the current findings where male grievants were treated worse than female grievants by male judges. Hardin et al. (2002) results align with the results of this study since opposite genders were being treated better when the judge in the current study was male.

Table 4.25

CPA Gender and Taxpayer Gender in Scenario Interaction Mean Compensation ANOVA Results

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--|------------------------------|-----|--------------------|---------|------|
| Corrected Model | 59684742260.348 ^a | 3 | 19894914086.783 | .668 | .572 |
| Intercept | 16066979016892.600 | 1 | 16066979016892.600 | 539.362 | .000 |
| CPA Gender | 12597472883.338 | 1 | 12597472883.338 | .423 | .516 |
| Taxpayer Gender | 45311296092.752 | 1 | 45311296092.752 | 1.521 | .218 |
| CPA Gender* Taxpayer Gender | 2373127162.204 | 1 | 2373127162.204 | .080 | .778 |
| Error | 8877072912543.580 | 298 | 29788835276.992 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .007 (Adjusted R Squared = -.003) | | | | | |

Table 4.26 depicts judge gender, taxpayer gender, and the type of vignette described either favoring the taxpayer or the IRS. For a male judge, H_{10} is not supported since the mean compensation for a male taxpayer (\$209,612.50) in a vignette with more support (Compensation policy is retained) for the taxpayer is lower than when a female taxpayer (\$229,600) is described in the same situation (see Table 4.26). These results are contrary to social identity theory. Conversely, H_{10} is supported when a female judge rules with a taxpayer favored vignette because female taxpayers (\$290,735.29) receive a higher average compensation than male taxpayers (\$205,128.21). H_{11} is not supported either when a male or female judge is rendering a decision in an IRS favored (No retained compensation policy) vignette since the taxpayer of the opposite gender is receiving a higher mean compensation in both situations. A male taxpayer's case decided on by a female judge received \$239,161.10 where a female taxpayer's case was only awarded \$218,717.95.

When the judge was male and the evidence sided with the Service, a male taxpayer was given an average compensation of \$220,472.97 and a female taxpayer was compensated at \$237,435.90. This result contradicts social identity theory because the out-group or taxpayer with the opposite gender from the judge/participant received better treatment than the in-group or same gender taxpayer.

Table 4.26

CPA Gender, Taxpayer Gender in Scenario, and Scenario Favor Interaction Mean Compensation

| CPA Gender/Taxpayer Gender/Scenario Favor | | | Mean (dollars) | Std. Deviation | N |
|---|--------|----------|----------------|----------------|-----|
| Male | Male | Taxpayer | 209,612.50 | 185044.9179 | 40 |
| | | IRS | 220,472.97 | 160604.8440 | 37 |
| | | Total | 214,831.17 | 172682.8286 | 77 |
| | Female | Taxpayer | 229,600.00 | 201885.9900 | 35 |
| | | IRS | 237,435.90 | 153129.0812 | 39 |
| | | Total | 233,729.73 | 176648.6566 | 74 |
| | Total | Taxpayer | 218,940.00 | 192025.1595 | 75 |
| | | IRS | 229,177.63 | 155995.2073 | 76 |
| | | Total | 224,092.72 | 174311.8891 | 151 |
| Female | Male | Taxpayer | 205,128.21 | 117380.8869 | 39 |
| | | IRS | 239,161.10 | 167056.0067 | 39 |
| | | Total | 222,144.65 | 144449.3781 | 78 |
| | Female | Taxpayer | 290,735.29 | 259253.3929 | 34 |
| | | IRS | 218,717.95 | 104376.0783 | 39 |
| | | Total | 252,260.27 | 194586.5294 | 73 |
| | Total | Taxpayer | 245,000.00 | 199815.8875 | 73 |
| | | IRS | 228,939.53 | 138762.0753 | 78 |
| | | Total | 236,703.86 | 170627.3690 | 151 |
| Total | Male | Taxpayer | 207,398.73 | 154396.8700 | 79 |
| | | IRS | 230,062.93 | 163123.8798 | 76 |
| | | Total | 218,511.50 | 158626.3436 | 155 |
| | Female | Taxpayer | 259,724.64 | 232259.8623 | 69 |
| | | IRS | 228,076.92 | 130526.4833 | 78 |
| | | Total | 242,931.97 | 185368.3360 | 147 |
| | Total | Taxpayer | 231,793.92 | 195675.5951 | 148 |
| | | IRS | 229,057.03 | 147034.2625 | 154 |
| | | Total | 230,398.29 | 172308.5162 | 302 |

Research Question 5

Are male taxpayers more likely to receive a higher amount of compensation than female taxpayers?

Table 4.27 illustrates the means of the taxpayers delineated in the vignette based on gender. When the scenario identifies a male taxpayer, the average reasonable compensation awarded is \$218,511.50. On the other hand, when the vignette depicts a female taxpayer, the mean reasonable compensation is \$242,931.97. This suggests female taxpayers get better treatment in reasonable compensation cases compared to male taxpayers with a difference of \$24,420.41.

Table 4.27

Mean Compensation of Male and Female Taxpayers Described in Scenario

| Taxpayer Sex | Mean (dollars) | Std. Deviation | N |
|--------------|----------------|----------------|-----|
| Male | 218,511.50 | 158626.3436 | 155 |
| Female | 242,931.97 | 185368.3360 | 147 |
| Total | 230,398.29 | 172308.5162 | 302 |

Table 4.28 shows scenario sex has a p-value 0.219 which is approaching significant but is not significant at the 0.10 level. This finding suggests that female taxpayers receive similar compensation amounts to male taxpayers. This lack of significance provides differing results from Hardin et al. (2002) which found males were treated better than females by receiving higher salaries.

Table 4.28

Results of Running an ANOVA Between Male and Female Taxpayer Awarded Mean Compensation in Scenario

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|------------------------------|-----|--------------------|---------|------|
| Corrected Model | 44993534497.281 ^a | 1 | 44993534497.281 | 1.518 | .219 |
| Intercept | 16064940093609.900 | 1 | 16064940093609.900 | 542.016 | .000 |
| Taxpayer Sex | 44993534497.297 | 1 | 44993534497.297 | 1.518 | .219 |
| Error | 8891764120306.650 | 300 | 29639213734.356 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .005 (Adjusted R Squared = .002) | | | | | |

Research Question 6

Do judges who are appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge selected by a Democratic president?

Table 4.29 presents the arithmetic means of determined compensation among subjects who identified themselves as either republican, democrat, independent, other, or individuals with no affiliation. The average compensation for a republican subject is \$266,822.22. A democratic participant had a mean amount of \$215,082.28. Independent and “other” political affiliations had averages of \$195,443.93 and \$250,000.00, respectively. Finally, no political affiliation had an arithmetic mean of \$300,534.04.

Table 4.29

Mean Compensation of Subjects Based on Political Affiliation

| Political Affiliation | Mean (dollars) | Std. Deviation | N |
|-----------------------|----------------|----------------|-----|
| Republican | 266,822.22 | 170458.9692 | 90 |
| Democrat | 215,082.28 | 152365.2711 | 79 |
| Independent | 195,443.93 | 145880.3194 | 107 |
| Other | 250,000.00 | 0.0000 | 3 |
| None | 300,534.04 | 293970.8460 | 23 |
| Total | 230,398.29 | 172308.5162 | 302 |

Table 4.30 indicates a p-value of 0.011 following the running of an ANOVA. This implies that there is a statistically significant difference between the political affiliations of the CPAs and how they render decisions. This finding is important because it illustrates that the CPA's political affiliation whether Republican, Democrat, or another type of affiliation affects the individual's judgment when confronted with making an objective decision based on facts and circumstances. The significant political affiliation aligns with Jackson et al. (2013) which identified an association between having a Republican affiliated president appoint the judge and estate valuation.

Table 4.30

Results of Running an ANOVA of Mean Compensation Between Subjects Based on Political Affiliation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|-------------------------------|-----|-------------------|---------|------|
| Corrected Model | 382958738074.143 ^a | 4 | 95739684518.536 | 3.324 | .011 |
| Intercept | 3677963053765.700 | 1 | 3677963053765.700 | 127.704 | .000 |
| Political Affiliation | 382958738074.150 | 4 | 95739684518.537 | 3.324 | .011 |
| Error | 8553798916729.790 | 297 | 28800669753.299 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .043 (Adjusted R Squared = .030) | | | | | |

Table 4.31 shows the interaction mean compensation of political affiliation and favorable or unfavorable outcomes. H_{12} is supported because a taxpayer favored scenario had a mean compensation of \$271,574.47 when ruled on by a Republican CPA compared with a mean compensation of \$215,041.67 when decided by a Democratic CPA. When the vignette favors the IRS, the Democratic CPA's mean is lower compensating the individual at \$215,116.28 with the Republican CPA holding an average compensation to be \$261,627.91. This finding indicates a Republican CPA tends to render higher amounts of compensation favoring the taxpayer and the Democratic CPA awards lower amounts of compensation appearing to side with the IRS's decision.

Table 4.31

Political Affiliation and Scenario Favor Interaction Mean Compensation

| Political Affiliation and Scenario Favor | | Mean (dollars) | Std. Deviation | N |
|--|----------|----------------|----------------|-----|
| Republican | Taxpayer | 271,574.47 | 176071.2238 | 47 |
| | IRS | 261,627.91 | 166027.5398 | 43 |
| | Total | 266,822.22 | 170458.9692 | 90 |
| Democrat | Taxpayer | 215,041.67 | 146785.4788 | 36 |
| | IRS | 215,116.28 | 158615.6194 | 43 |
| | Total | 215,082.28 | 152365.2711 | 79 |
| Independent | Taxpayer | 183,684.21 | 163591.1888 | 57 |
| | IRS | 208,850.00 | 122910.9620 | 50 |
| | Total | 195,443.93 | 145880.3194 | 107 |
| Other | IRS | 250,000.00 | 0.0000 | 3 |
| | Total | 250,000.00 | 0.0000 | 3 |
| None | Taxpayer | 416,250.00 | 456858.4495 | 8 |
| | IRS | 238,818.87 | 140388.3583 | 15 |
| | Total | 300,534.04 | 293970.8460 | 23 |
| Total | Taxpayer | 231,793.92 | 195675.5951 | 148 |
| | IRS | 229,057.03 | 147034.2625 | 154 |
| | Total | 230,398.29 | 172308.5162 | 302 |

Table 4.32 identifies the main effects of political affiliation and scenario favor and the two-way interaction of affiliation and favor. Political affiliation is very significant by itself with a p-value of 0.003. Also, the scenario favor is also significant having a p-value of 0.093. The interaction is significant with a p-value of 0.10 indicating statistical significance between the political affiliation and scenario favor. The statistical significance can be found in Table 4.32.

Table 4.32

Results of Running an ANOVA of Mean Compensation Between Subjects Based on Political Affiliation and Scenario Favor

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|---|-------------------------------|-----|-------------------|---------|------|
| Corrected Model | 566302096086.736 ^a | 8 | 70787762010.842 | 2.478 | .013 |
| Intercept | 5560427141828.210 | 1 | 5560427141828.210 | 194.638 | .000 |
| Whatisyourpoliticalaffiliation | 459355008566.078 | 4 | 114838752141.520 | 4.020 | .003 |
| ScenarioFavor | 80943354566.873 | 1 | 80943354566.873 | 2.833 | .093 |
| Whatisyourpoliticalaffiliation * ScenarioFavor | 180260523530.355 | 3 | 60086841176.785 | 2.103 | .100 |
| Error | 8370455558717.190 | 293 | 28568107708.932 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .063 (Adjusted R Squared = .038) | | | | | |

Research Question 10

Do judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter?

Table 4.33 delineates the arithmetic means of derived compensation for subjects who have at least one daughter and for subjects who do not have at least one daughter. The average for a participant with at least one daughter is \$224,632.08. The arithmetic mean for a participant with no daughters is \$236,809.67. This comparison provides limited support, however, it is not statistically significant as indicated in Table 4.34.

Table 4.33

Mean Compensation for CPAs With and Without Daughters

| Having at least one daughter | Mean (dollars) | Std. Deviation | N |
|------------------------------|----------------|----------------|-----|
| Yes | 224,632.075 | 184140.3346 | 159 |
| No | 236,809.671 | 158518.2748 | 143 |
| Total | 230398.288 | 172308.5162 | 302 |

Even though an individual that does not have at least one daughter has a higher mean, the difference is not statistically significant with a p-value of 0.541 (see Table 4.34) failing to support H_{13} . Therefore, there is no support that having a daughter makes a difference in how subjects decide reasonable compensation failing to support Glynn and Sen (2015) although mean compensation is lower when the CPA subject has at least one daughter showing a more liberal voting pattern.

Table 4.34

Results of Running an ANOVA of Mean Compensation Between Subjects Having At Least One Daughter and Not Having At Least One Daughter

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--|------------------------------|-----|--------------------|---------|------|
| Corrected Model | 11164758475.281 ^a | 1 | 11164758475.281 | .375 | .541 |
| Intercept | 16030976752111.100 | 1 | 16030976752111.100 | 538.821 | .000 |
| Having or Not Having A Daughter | 11164758475.290 | 1 | 11164758475.290 | .375 | .541 |
| Error | 8925592896328.650 | 300 | 29751976321.096 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .001 (Adjusted R Squared = -.002) | | | | | |

The ANOVA revealed that the mean for a male participant with at least one daughter examining a male taxpayer is \$214,512.50 (see Table 4.35). That same individual and situation where the individual does not have a daughter is \$215,175.68 (see Table 4.35). When a male subject with at least one daughter is evaluating a female taxpayer, the mean is \$216,545.46 (see Table 4.35). This same circumstance where the male does not have a daughter produces a mean of \$247,560.98 (see Table 4.35) hinting at a lack of support for H₁₄. These results support an individual ruling more liberally (siding with the Service) when having at least one daughter supporting Glynn and Sen (2015).

The average for a female participant, assuming the judge's role, with at least one daughter examining a male taxpayer is \$207,209.30 (see Table 4.35). That same person and situation where the participant, assuming the judge's role, does not have a daughter is \$240,493.80 (see Table 4.35). When a female subject with at least one daughter is evaluating a vignette depicting a female taxpayer, the mean compensation is \$257,674.42 (see Table 4.35). This same circumstance where the female does not have a daughter shows

a mean compensation of \$244,500 (see Table 4.35). When a female judge has a daughter and is ruling on a female taxpayer, the mean tends to be the highest of all decisions made by the female judge indicating support for H₁₄. The result may show personal alignment toward the taxpayer providing a favorable ruling. On the other hand, when a female judge rules for a male taxpayer, having a daughter decreases the allowed compensation resulting in a more liberal holding.

Table 4.35

CPA Gender, Taxpayer Gender, and Having or Not Having a Daughter Interaction Based on Mean Compensation

| CPA Gender, Taxpayer Gender, Having or Not Having Daughter | | | Mean (dollars) | Std. Deviation | N |
|--|--------|-------|----------------|----------------|-----|
| Male | Male | Yes | 214,512.50 | 211073.0669 | 40 |
| | | No | 215,175.68 | 121190.9774 | 37 |
| | | Total | 214,831.17 | 172682.8286 | 77 |
| | Female | Yes | 216,545.45 | 154070.0107 | 33 |
| | | No | 247,560.98 | 193697.9670 | 41 |
| | | Total | 233,729.73 | 176648.6566 | 74 |
| | Total | Yes | 215,431.51 | 186234.5690 | 73 |
| | | No | 232,198.72 | 163162.5422 | 78 |
| | | Total | 224,092.72 | 174311.8891 | 151 |
| Female | Male | Yes | 207,209.30 | 126769.8624 | 43 |
| | | No | 240,493.80 | 163627.2546 | 35 |
| | | Total | 222,144.65 | 144449.3781 | 78 |
| | Female | Yes | 257,674.42 | 224619.6490 | 43 |

| CPA Gender, Taxpayer Gender, Having or Not Having Daughter | | | Mean (dollars) | Std. Deviation | N |
|--|--------|-------|----------------|----------------|-----|
| | | No | 244,500.00 | 144325.7212 | 30 |
| | | Total | 252,260.27 | 194586.5294 | 73 |
| | Total | Yes | 232,441.86 | 183071.4168 | 86 |
| | | No | 242,342.82 | 153838.3197 | 65 |
| | | Total | 236,703.86 | 170627.3690 | 151 |
| Total | Male | Yes | 210,728.92 | 171563.5469 | 83 |
| | | No | 227,483.10 | 142936.1232 | 72 |
| | | Total | 218,511.50 | 158626.3436 | 155 |
| | Female | Yes | 239,815.79 | 196985.7329 | 76 |
| | | No | 246,267.61 | 173410.5745 | 71 |
| | | Total | 242,931.97 | 185368.3360 | 147 |
| | Total | Yes | 224,632.08 | 184140.3346 | 159 |
| | | No | 236,809.67 | 158518.2748 | 143 |
| | | Total | 230,398.29 | 172308.5162 | 302 |

The main effects, two-way, and three-way interactions are shown in Table 4.36. The main effect of participant's gender is not significant with a p-value of 0.486. This indicates that the subject's gender is not statistically significant by itself. The taxpayer's sex main effect variable is also non-statistically significant with a p-value of 0.270 implying that gender of the individual described in the vignette is not significant on its own. Last, the main effect of having at least one daughter or having no daughters is not significant with a p-value of 0.520. The two-way interaction of gender of the survey taker

and the sex of the person described in the survey is not significant having a p-value of 0.803. This provides evidence against social identity theory. The second two-way interaction of judge's sex and having at least one daughter is not significant either with a p-value of 0.886. The interaction of taxpayer gender and the judge having at least one daughter is not significant with a p-value of 0.841. Last, the three-way interaction of subject's sex, taxpayer's sex, and family composition is not statistically significant having a p-value of 0.340. As a result, there is no statistically significant evidence that having a daughter makes a difference in how subjects decide reasonable compensation failing to back Glynn and Sen (2015).

Table 4.36

CPA Gender, Taxpayer Gender, and Having or Not Having a Daughter Interaction ANOVA Results based on Mean Compensation

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
|--|-------------------------------|-----|--------------------|---------|------|
| Corrected Model | 101724597683.525 ^a | 7 | 14532085383.361 | .484 | .846 |
| Intercept | 15799847503915.300 | 1 | 15799847503915.300 | 525.765 | .000 |
| CPA Gender | 14619976493.892 | 1 | 14619976493.892 | .487 | .486 |
| Taxpayer Gender | 36727141945.417 | 1 | 36727141945.417 | 1.222 | .270 |
| Having or Not Having a Daughter | 12466852059.747 | 1 | 12466852059.747 | .415 | .520 |
| CPA Gender * Taxpayer Gender | 1869161813.283 | 1 | 1869161813.283 | .062 | .803 |
| CPA Gender * Having or Not Having A Daughter | 622083170.239 | 1 | 622083170.239 | .021 | .886 |
| Taxpayer Gender * Having or Not Having A Daughter | 1205845570.041 | 1 | 1205845570.041 | .040 | .841 |
| CPA Gender * Taxpayer Gender * Having or Not Having A Daughter | 27424284952.724 | 1 | 27424284952.724 | .913 | .340 |
| Error | 8835033057120.400 | 294 | 30051132847.348 | | |
| Total | 24967935742089.000 | 302 | | | |
| Corrected Total | 8936757654803.930 | 301 | | | |
| a. R Squared = .011 (Adjusted R Squared = -.012) | | | | | |

Summary of Hypotheses and Results

Archival Portion

- H₁: There is a statistically significant difference between male and female judge decisions in reasonable compensation cases. **SUPPORTED**
- H₂: The “Compromise” amount (arithmetic mean) will be significant in explaining the Court’s determined figure. **SUPPORTED**
- H₃: Male judges are more likely to rule for higher amounts of compensation than female judges. **SUPPORTED**
- H_{3A}: Male judges are more likely to rule for a higher amount of compensation when the taxpayer is a male opposed to a female taxpayer. **SUPPORTED**
- H_{3B}: Female judges are more likely to rule for a higher amount of compensation when the taxpayer is female compared to a male taxpayer. **NOT SUPPORTED**
- H₄: Male taxpayers are more likely to receive a decision of higher compensation than female taxpayers. **SUPPORTED**
- H₅: Judges appointed by a Republican president have a higher probability of ruling in favor of the taxpayer than a judge named by a Democratic president. **NOT SUPPORTED**
- H₆: Judges have a higher probability of ruling in favor of the taxpayer when the taxpayer presents at least one appraiser. **NOT SUPPORTED**
- H₇: Judges have a higher probability of ruling in favor of the IRS when the IRS presents at least one appraiser. **NOT SUPPORTED**
- H₈: Judges have a higher probability of ruling in favor of the taxpayer’s value when multiple tax years are involved. **NOT SUPPORTED**

H₉: Judges have a higher probability of ruling in favor of the IRS's value when the judge has at least one daughter. **NOT SUPPORTED**

Survey Results

H₁₀: Male (female) judges grant higher compensation to male (female) taxpayers when compared to female (male) judges when the outcome of the case is protaxpayer.

NOT SUPPORTED

H₁₁: Female (male) judges agree more with unfavorable outcomes when dealing with male (female) taxpayers. **NOT SUPPORTED**

H₁₂: Conservative (liberal) judges agree more with favorable (unfavorable) outcomes for the taxpayer than liberal (conservative) judges. **SUPPORTED**

H₁₃: A judge having at least one daughter will agree more with a decision of an unfavorable outcome for the taxpayer than a judge who does not have at least one daughter. **NOT SUPPORTED**

H₁₄: A judge having at least one daughter will agree more with a decision with a favorable outcome for a female taxpayer than a judge who does not have at least one daughter. **NOT SUPPORTED**

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

The objective of this chapter is to review the findings of this study and their implications. Also, limitations of the study and future research suggestions are presented along with concluding remarks. The chapter starts with an overview of the preceding chapters.

Summary of Previous Chapters

Chapter One begins with the introduction of the reasonable compensation concept. Why this area of taxation is so important to closely held corporation is summarized and the tax ramifications. Additionally, no previous study has examined reasonable compensation, gender, political affiliation, and family composition in the same study.

A review of significant events, cases, and authority leading up to the current tax code on reasonable compensation is discussed in Chapter Two. Moreover, prior research on the reasonable compensation and gender topic are presented separately.

Chapter Three discusses the research questions and the methodology to be used in investigating these questions. Also, survey development, selection of the study subjects, case selection, and analytical methods for both the archival and behavioral portion are discussed.

In Chapter Four, the study's results are presented. First, descriptive information describing the cases involved in the archival portion of the study is presented. Next, the methodology used is analyzed and the results are interpreted based on the findings related to the archival part. Then, descriptive statistics are delineated from the participants in the behavioral portion of this study followed by the implemented statistical tools and the subsequent findings.

Summary of Research Findings – Archival Portion

The results indicate that judge gender plays a significant role in the decisions made by U.S. Tax Court judges. That is, a male judge rules for a statistically significant higher amount of reasonable compensation than a female judge when facing a reasonable compensation issue in the Tax Court arena by almost 32%. This provides support that characteristics other than the facts and circumstances of a case do come into play when a dispute is brought before the judiciary. Furthermore, since a higher proportion of the total amount of judges in the U.S. Tax Court are male, a taxpayer has a higher probability of being assigned to a male judge increasing the chances of either sustaining the amount of compensation claimed or receiving a decision allowing more than the IRS permits.

Gender also plays an important role coming from the standpoint of the individual who is challenging the Service. When a male taxpayer litigates against the Commissioner, the judge renders a decision significantly higher than when a female decides to challenge the IRS's allowed amount by nearly 11%. This piece of evidence can affect the decision-making process of an individual or closely-held corporation when determining whether or not to challenge a ruling handed down by the Service.

Other significant variables from running the ordinary least squares regression included tenure of the judge and number of years decided in the case. Tenure, representing the number of years between when the case was ruled on and the year of appointment, suggests the more experience a judge receives over the years of being on the judicial panel, the more he or she sides with the decisions made by the Commissioner with each additional year of experience. Also, as the number of tax years in a case increase, the compensation allowed decreases providing evidence that judges, in order to potentially combat a heavy docket load, tend to side more with the IRS when multiple tax years are involved.

An interesting finding is the number of appraisers provided by the taxpayer and the Service is not significant in figuring the amount of allowable reasonable compensation. That is, additional support for a party's position is more impacted by the facts and circumstances highlighted in the business as opposed to having an expert witness argue on their behalf.

Additionally, political affiliation is not significant positing that little bias exists based on the president's political party alignment flowing through to the decisions made by their judicial appointments to the U.S. Tax Court. This piece of evidence shows that judges are not affected by the individual who appoints them or the party affiliated with that person. If this variable was significant, then the power of appointment would be crucial in shaping tax law and the tax judicial process.

Last, family composition, studied by examining the number of daughters of each judge, is not significant giving little evidence that family relationships affect a judge's decision in the U.S. Tax Court. Because each individual's personal relationships are different, this variable could differ depending on family makeup of the judge.

Summary of Research Findings – Behavioral Portion

The results from the behavioral portion of this study indicate some interesting findings. First, the gender of the CPA is not significant. This finding is not surprising based on the training a CPA must undergo to get licensed and retain a license. Each state establishes its own guidelines in order to become a CPA. Typically, these criteria involve a minimum number of college credits in accounting, a time requirement working under a CPA, and the passage of four different exams keying in on certain accountings areas. Furthermore, continuing professional education requirements must be met each year. There is variation among the states, but overall the conditions are very similar. The lack of statistical significance provides evidence that CPAs, based on common training, make decisions by examining the facts and circumstances of the situation at hand and not letting their gender play a role in how they make decisions. Because a lot of CPAs offer tax advice, this evidence shows the position CPAs are taking appear to be without gender bias.

Second, the sex of the taxpayer the CPA is ruling on fails to be statistically significant. This implies that CPAs give similar counsel to their clients based only on the evidence provided to them. As a result, it appears that gender characteristics do not affect CPAs in their decision-making process.

Third, political affiliation is statistically significant at all three levels of significance. This conclusion posits that CPAs' political views do impact their decision-making manner. Republicans rule for a higher amount of compensation providing support that these individuals are more pro-taxpayer than democrats and independents.

Implications

Reasonable compensation will continue to be a highly litigated area of taxation under the current federal tax system because of the ambiguity that exists in the code and regulations as well as the large number of closely held corporations that operate in the United States. To address this ambiguous area of taxation, code sections, treasury regulations, and revenue rulings have been promulgated to assist in providing measurable guidelines. However, deciding on the reasonableness of compensation paid by closely held corporations to key employees will remain a subjective process warranting individual assessment based on the facts and circumstances of each specific case. Identifying other characteristics that impact a judge's decision-making process will not only assist the taxpayer in determining whether to move forward with litigation, it will also provide a roadmap based on the probability of getting a certain type of judge with specific types of characteristics. In the archival part of this study, the chances of having a male judge rule over a case are much higher and the likelihood of receiving a higher amount of reasonable compensation is significantly higher. Also, the gender of the taxpayer can potentially affect the awarded amount of compensation. This particular detail is known prior to any type of litigation. The objective of reasonable compensation is to allow an equitable amount of payments to be made to individuals based on the value they bring to the company. If the ruling is made based on the gender of the judge, the taxpayer's gender, or other characteristics outside the scope of the facts and circumstances of the case, then an objective ruling may not be rendered. In addition, explicit all-inclusive factors, the need for an appraiser approved by the IRS or some other third party, or a Supreme Court ruling would shed much needed light onto this area of ambiguity.

In the behavioral portion of this research, the current perceptions of Certified Public Accountants depict a lack of gender bias. This finding may be attributed to similar training required by the different states in order to become licensed. The other party affected in these decisions is the taxpayer. Although female taxpayers received a higher mean compensation amount than male taxpayers, the difference was not statistically significant. This suggests that CPAs treat the taxpayers relatively the same when giving tax advice. On the other hand, political affiliation is significant based on the CPA's self-selected party alignment. As a result, a taxpayer may need to inquire about his or her CPA's political views when taking positions recommended by their tax counsel.

Limitations of the Study

There are several limitations from the archival portion. The first limitation is the available information on the judges and their family composition. The only information found on Judge Simpson about his family was that he was 59 years old with no children. Therefore, this judge was coded as having 0 daughters. Another judge did not appear to have any children by blood but was found to have adopted children. In this specific case, the adopted offspring was looked at no differently than those judges having kids by blood. Judge Goffe was left out of the analysis because information was not available on family composition. This resulted in two less observations. Four other observations were excluded based of the lack of information provided in the tax summary opinions describing the businesses. Therefore, no conclusion could be determined whether these were closely held corporations or not. In comparison to the overall number of cases, these omissions were not considered serious.

A second limitation included dropping cases when no numbers were given regarding amounts. In these cases, the court decided in favor of the IRS or the taxpayer, but no further detail was given. The amount deducted by the taxpayer and the amount allowed by the IRS could not be determined or the amounts could not be distinguished based on the detail provided in the tax court summary opinion. As a result, these cases were not included in the analysis. Also, three cases involving S corporations contested based on reasonable compensation were dropped when the IRS was challenging the taxpayer's salary arguing it was too low. Obviously, this is a different situation where the taxpayer is trying to bail more money out as distributions. Since this situation is contrary to that being studied, these cases were not included in the study. Additionally, some cases contained combined amounts of deductions taken and amounts disallowed by the IRS. In these instances, the cases were included if the sex of all of the taxpayers were the same. If multiple sexes and taxpayers were looked at and the amounts were not divided to distinguish between amounts, then the cases were removed from the analysis.

A third limitation is that the scenario described in the vignette closely resembles a case where the U.S. Tax Court sided with the IRS. A different case may have resulted in different numbers had the details been more favorable toward the taxpayer's position. Using a completely different scenario would serve to validate the findings from this study. A fourth limitation may arise because CPAs with no experience estimating reasonable compensation were dropped from the survey panel. However, since experience builds business and tax acumen, this is not viewed as a serious limitation.

Future Research

The results from this study posit that there is a gender effect based on the judge rendering the decision and the sex of the taxpayer. This leads to the question of whether a gender bias is present in other areas of taxation that are frequently litigated such as realtor versus dealer status. Additionally, a study implementing a different scenario targeting lawyers or CVAs (Certified Valuation Analysts) would be useful in validating the study's findings.

Conclusion

When reasonable compensation is challenged by the IRS and litigated in U.S. Tax Court, gender does influence the way judges decide. Also, to whom decisions are made for is affected by gender. Interestingly enough, number of tax years decided and tenure of the judge also play significant roles in the judiciary's rationale of determining reasonable compensation for a taxpayer employed by a closely held corporation. However, a gender effect does not appear to exist affecting how CPAs make reasonable compensation decisions nor does the gender of the taxpayer affect their decision-making process. Political affiliation, on the other hand, is significant and affects the compensation amount decided on by a CPA. A republican affiliated CPA tends to render a higher amount of compensation than a democratic or independent CPA.

APPENDIX A

SURVEY INSTRUMENTS

SURVEY INSTRUMENT NUMBER ONE

TITLE OF PROJECT: An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations

PURPOSE OF STUDY/PROJECT: To understand how professionals view reasonable compensation issues.

PROCEDURE: Your participation in this study will involve reading a scenario and answering questions designed to assess perceptions of reasonable compensation.

INSTRUMENTS: The survey vignettes consist of a scenario and 32 questions. The questions are intended to gather basic demographic information and assess the perceptions of reasonable compensation.

RISKS/ALTERNATIVE TREATMENTS: There are no foreseeable risks concerning this survey. However, if participants feel uncomfortable at any time, they may withdraw from the study at any time. The participant understands that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

The following disclosure applies to all participants using online survey tools: This server may collect information and your IP address indirectly and automatically via “cookies”.

BENEFITS/COMPENSATION: Qualtrics subjects will be compensated as determined by Qualtrics policy.

I attest that I have read and understood the following description of the study, An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations, and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study will not affect my relationship with Louisiana Tech University. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations.

Yes ___ No ___

Please identify your profession.

Educator ___ Government Worker ___ CPA ___ Military ___ Other ___

Do you have any experience with estimating reasonable compensation?

Yes ___ No ___

You are:

Male ___ Female ___

Vignette – ID Did Not Retain Compensation Policy (Includes John and Mary as taxpayers)

John (or Mary), who is a taxpayer, works for a business named International Design (ID). ID does not have a compensation policy and pays bonuses to employees at the end of the year once the amount of cash available is determined.

- ID is a closely held company that provides printing, marketing, and advertising activities
- ID reported gross receipts of \$1,583,149.50
- When added with gross rents and gross royalties, the total income for ID was \$1,715,202
- ID paid compensation amounting to a \$40,000 salary and a \$500,000 bonus to Mary
- No dividends were paid that year
- Mary was president, secretary, and treasurer
- Mary was responsible for handling all of ID's managerial duties
- A specific item of time spent with ID was disclosed as 80% of Mary's time and evidence was found that Mary spent 20% of the remaining time with ID's sister corporation
- No evidence was provided by the corporation identifying a comparison of paid compensation to other companies providing similar services
- ID has the following information regarding its operations:
- ID paid total wages of approximately \$635,000, of which \$540,000 were paid to Mary and \$95,000 were paid to all other employees
- ID is a small company with not very extensive operations
- ID had a return on equity of 42% which more than satisfied a hypothetical independent investor test
- ID was thinly capitalized
- ID had equipment with a fair market value of \$80,332.50

OUTCOME: The Internal Revenue Service (IRS) upon receiving ID's tax return deems \$150,000 in compensation as reasonable for Mary. Thereby, the IRS disallowed \$390,000 of Mary's compensation. Factors commonly considered by the courts are:

- character and condition of the company
- comparison of salaries paid with the gross income and the net income
- comparison of salaries with distributions to stockholders
- compensation paid to the specific employee in prior years
- conflict of interest
- employee's qualifications
- nature, extent and scope of the employee's work
- prevailing general economic conditions
- prevailing rates of compensation for comparable positions in comparable concerns
- salary policy of the taxpayer as to all employees

- scarcity of qualified employees
- taxpayer's role in the company

Based on the facts provided above please answer the following questions.

I have read the above scenario.

Yes ___ No ___

Put yourself in the role of a U.S. Tax Court judge in deciding this case. What dollar amount, based on the facts and circumstances described above in the scenario, would you deem as reasonable compensation for the taxpayer? (Provide your dollar amount in the space below)

What factors were most significant in rendering your decision?

In general, do you see reasonable compensation as a major problem for small businesses in this country?

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

In general, do you anticipate litigation of the reasonable compensation issue by the IRS in the near future will increase, decrease, or remain the same?

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

Explain your answer to the issue of litigation by the IRS in the near future.

Please rank the top five (5) factors from the list below that you deem most significant in determining reasonable compensation, where 1 represents the most significant, 2 represents the second most significant, through 5 being the least significant of the 5. Factors are arranged in alphabetical order. (Drag and drop your top 5 factors and then rank them in order from 1 through 5. 1 will be the most significant and 5 will be the least significant of the 5.)

- Character and condition of the company
- Comparison of employees' salaries with distributions to stockholders in the company
- Comparison of salaries paid to employee with the company's gross income and the net income
- Compensation paid to the specific employee in prior years
- Conflict of interest
- Employee's qualifications
- Employee's role in the company
- Nature, extent, and scope of the employee's work
- Prevailing general economic conditions

- Prevailing rates of compensation for comparable positions in comparable concerns
- Salary policy of the taxpayer as to all employees
- Scarcity of qualified employees

Please indicate any additional factors you feel are critical that were not included in this scenario.

If in the scenario, an appraiser (i.e. an expert compensation valuator) was hired by the taxpayer, such an action would help with the taxpayer's position regarding reasonable compensation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

This question is an attention filter. In order to continue, please select 'disagree'. Thank you for your participation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

If in the scenario, an appraiser (i.e. an expert compensation valuator) was hired by the IRS, such an action would help with the IRS's position regarding reasonable compensation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

Please select the color yellow below.

Orange ___ Blue ___ Green ___ Red ___ Yellow ___ Brown ___ Purple

If the court ruled **in favor of the IRS** (i.e. the court upheld the dollar amount submitted by the IRS), describe your feelings about the decision made by the court in terms of providing reasonable compensation to the taxpayer by answering all three of the drop down items below.

If the court ruled **in favor of the taxpayer** (i.e. the court upheld the dollar amount submitted by the taxpayer), describe your feelings about the decision made by the court in terms of providing reasonable compensation to the taxpayer by answering all three of the drop down items below.

Have you or any of your clients ever been audited by the IRS?

Yes ___ No ___

If you have experience with estimating reasonable compensation, enter the number of years in the space below. If no experience, enter "0."

What was the name of the taxpayer in the scenario?

John Mary Do not Know
 What was the sex of the taxpayer in the scenario?
 Male Female Do not Know

Identify the dollar amount disallowed by the IRS.
 \$290,000 \$390,000 \$490,000 \$590,000 Do not Know
 Did ID have a compensation policy?
 Yes No Do not know

How were bonuses determined? Check only one below.
 Bonuses were paid at the end of the year once the amount of cash available was determined
 Bonuses were paid based on the employee's individual performance, were the same for all employees, and originated from a bonus plan voted on and approved by the board of directors at the beginning of the year
 Do not know

Was the firm's method of compensating the taxpayer appropriate based on whether or not there was a compensation policy and how and when the bonuses were paid to employees?
 Very Inappropriate Inappropriate Somewhat Inappropriate Neutral
 Somewhat Appropriate Appropriate Very Appropriate

This is an attention filter. In order to continue, please select 'appropriate'.
 Very Inappropriate Inappropriate Somewhat Inappropriate Neutral
 Somewhat Appropriate Appropriate Very Appropriate

What is your current age in years?

Please indicate your race:
 Caucasian African American Hispanic Asian/Pacific Islander American Indian Other

What is your political affiliation?
 Republican Democrat Independent Other None

Indicate your degree of liberalism/conservatism as it relates to your political beliefs.
 Very Liberal Liberal Somewhat Liberal Moderate Somewhat Conservative
 Conservative Very Conservative
 Do you have one or more daughters?
 Yes No

Select the answer that best describes your current employment arrangement.
 Self-Employed Employed Unemployed Retired

How many years of work experience do you have in your field

If currently working, how many years have you been in your current employment arrangement? If you are retired, enter "R." If you are unemployed, enter "0."

Are you the primary income earner in your family?

Yes ___ No

Please indicate your household taxable income level.

\$0-\$18,150 ___ \$18,151-\$45,975 ___ \$45,976-\$73,800 ___ \$73,801-\$111,325 ___
\$111,326-\$148,850 ___ \$148,851-\$187,850 ___ \$187,851-\$226,850 ___ \$226,851-
\$315,975 ___ \$315,976-\$405,100 ___ \$405,101-\$457,600 ___ \$457,601 and over ___

SURVEY INSTRUMENT NUMBER TWO

TITLE OF PROJECT: An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations

PURPOSE OF STUDY/PROJECT: To understand how professionals view reasonable compensation issues.

PROCEDURE: Your participation in this study will involve reading a scenario and answering questions designed to assess perceptions of reasonable compensation.

INSTRUMENTS: The survey vignettes consist of a scenario and 32 questions. The questions are intended to gather basic demographic information and assess the perceptions of reasonable compensation.

RISKS/ALTERNATIVE TREATMENTS: There are no foreseeable risks concerning this survey. However, if participants feel uncomfortable at any time, they may withdraw from the study at any time. The participant understands that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

The following disclosure applies to all participants using online survey tools: This server may collect information and your IP address indirectly and automatically via "cookies".

BENEFITS/COMPENSATION: Qualtrics subjects will be compensated as determined by Qualtrics policy.

I attest that I have read and understood the following description of the study, An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations, and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study will not affect my relationship with Louisiana Tech University. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. Upon completion of the study, I understand that the results will be freely available to me upon request. I understand that the results of my survey will be confidential, accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in An Empirical Examination of Factors Affecting Reasonable Compensation in Closely Held Corporations.

Yes ___ No ___

Please identify your profession.

Educator ___ Government Worker ___ CPA ___ Military ___ Other ___

Do you have any experience with estimating reasonable compensation?

Yes ___ No ___

You are:

Male ___ Female ___

Vignette – ID Did Retain Compensation Policy (Includes John and Mary as taxpayers)

John (or Mary), who is a taxpayer, works for a business named International Design (ID). ID does have a compensation policy and pays bonuses based on the employee's individual performance. This policy was the same for all employees and originated from a bonus plan voted on and approved by the board of directors at the beginning of the year.

- ID is a closely held company that provides printing, marketing, and advertising activities
- ID reported gross receipts of \$1,583,149.50
- When added with gross rents and gross royalties, the total income for ID was \$1,715,202
- ID paid compensation amounting to a \$40,000 salary and a \$500,000 bonus to Mary
- No dividends were paid that year
- Mary was president, secretary, and treasurer
- Mary was responsible for handling all of ID's managerial duties
- A specific item of time spent with ID was disclosed as 80% of Mary's time and evidence was found that Mary spent 20% of the remaining time with ID's sister corporation
- No evidence was provided by the corporation identifying a comparison of paid compensation to other companies providing similar services
- ID has the following information regarding its operations:
- ID paid total wages of approximately \$635,000, of which \$540,000 were paid to Mary and \$95,000 were paid to all other employees
- ID is a small company with not very extensive operations
- ID had a return on equity of 42% which more than satisfied a hypothetical independent investor test
- ID was thinly capitalized
- ID had equipment with a fair market value of \$80,332.50

OUTCOME: The Internal Revenue Service (IRS) upon receiving ID's tax return deems \$150,000 in compensation as reasonable for Mary. Thereby, the IRS disallowed \$390,000 of Mary's compensation. Factors commonly considered by the courts are:

- character and condition of the company
- comparison of salaries paid with the gross income and the net income
- comparison of salaries with distributions to stockholders
- compensation paid to the specific employee in prior years
- conflict of interest
- employee's qualifications
- nature, extent and scope of the employee's work
- prevailing general economic conditions

- prevailing rates of compensation for comparable positions in comparable concerns
- salary policy of the taxpayer as to all employees
- scarcity of qualified employees
- taxpayer's role in the company

Based on the facts provided above please answer the following questions.

I have read the above scenario.

Yes ___ No ___

Put yourself in the role of a U.S. Tax Court judge in deciding this case. What dollar amount, based on the facts and circumstances described above in the scenario, would you deem as reasonable compensation for the taxpayer? (Provide your dollar amount in the space below)

What factors were most significant in rendering your decision?

In general, do you see reasonable compensation as a major problem for small businesses in this country?

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

In general, do you anticipate litigation of the reasonable compensation issue by the IRS in the near future will increase, decrease, or remain the same?

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

Explain your answer to the issue of litigation by the IRS in the near future.

Please rank the top five (5) factors from the list below that you deem most significant in determining reasonable compensation, where 1 represents the most significant, 2 represents the second most significant, through 5 being the least significant of the 5. Factors are arranged in alphabetical order. (Drag and drop your top 5 factors and then rank them in order from 1 through 5. 1 will be the most significant and 5 will be the least significant of the 5.)

-Character and condition of the company

-Comparison of employees' salaries with distributions to stockholders in the company

-Comparison of salaries paid to employee with the company's gross income and the net income

-Compensation paid to the specific employee in prior years

- Conflict of interest
- Employee's qualifications
- Employee's role in the company
- Nature, extent, and scope of the employee's work
- Prevailing general economic conditions
- Prevailing rates of compensation for comparable positions in comparable concerns
- Salary policy of the taxpayer as to all employees
- Scarcity of qualified employees

Please indicate any additional factors you feel are critical that were not included in this scenario.

If in the scenario, an appraiser (i.e. an expert compensation valuator) was hired by the taxpayer, such an action would help with the taxpayer's position regarding reasonable compensation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

This question is an attention filter. In order to continue, please select 'disagree'. Thank you for your participation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

If in the scenario, an appraiser (i.e. an expert compensation valuator) was hired by the IRS, such an action would help with the IRS's position regarding reasonable compensation.

Strongly Disagree ___ Disagree ___ Somewhat Disagree ___ Neither Agree nor Disagree ___ Somewhat Agree ___ Agree ___ Strongly Agree ___

Please select the color yellow below.

Orange ___ Blue ___ Green ___ Red ___ Yellow ___ Brown ___ Purple

If the court ruled **in favor of the IRS** (i.e. the court upheld the dollar amount submitted by the IRS), describe your feelings about the decision made by the court in terms of providing reasonable compensation to the taxpayer by answering all three of the drop down items below.

If the court ruled **in favor of the taxpayer** (i.e. the court upheld the dollar amount submitted by the taxpayer), describe your feelings about the decision made by the court in terms of providing reasonable compensation to the taxpayer by answering all three of the drop down items below.

Have you or any of your clients ever been audited by the IRS?

Yes ___ No ___

If you have experience with estimating reasonable compensation, enter the number of years in the space below. If no experience, enter "0."

What was the name of the taxpayer in the scenario?

John Mary Do not Know

What was the sex of the taxpayer in the scenario?

Male Female Do not Know

Identify the dollar amount disallowed by the IRS.

\$290,000 \$390,000 \$490,000 \$590,000 Do not Know

Did ID have a compensation policy?

Yes No Do not know

How were bonuses determined? Check only one below.

Bonuses were paid at the end of the year once the amount of cash available was determined

Bonuses were paid based on the employee's individual performance, were the same for all employees, and originated from a bonus plan voted on and approved by the board of directors at the beginning of the year

Do not know

Was the firm's method of compensating the taxpayer appropriate based on whether or not there was a compensation policy and how and when the bonuses were paid to employees?

Very Inappropriate Inappropriate Somewhat Inappropriate Neutral

Somewhat Appropriate Appropriate Very Appropriate

This is an attention filter. In order to continue, please select 'appropriate'.

Very Inappropriate Inappropriate Somewhat Inappropriate Neutral

Somewhat Appropriate Appropriate Very Appropriate

What is your current age in years?

Please indicate your race:

Caucasian African American Hispanic Asian/Pacific Islander American

Indian Other

What is your political affiliation?

Republican Democrat Independent Other None

Indicate your degree of liberalism/conservatism as it relates to your political beliefs.

Very Liberal Liberal Somewhat Liberal Moderate Somewhat Conservative

Conservative Very Conservative

Do you have one or more daughters?

Yes ___ No ___

Select the answer that best describes your current employment arrangement.

Self-Employed ___ Employed ___ Unemployed ___ Retired ___

How many years of work experience do you have in your field

If currently working, how many years have you been in your current employment arrangement? If you are retired, enter "R." If you are unemployed, enter "0."

Are you the primary income earner in your family?

Yes ___ No ___

Please indicate your household taxable income level.

\$0-\$18,150 ___ \$18,151-\$45,975 ___ \$45,976-\$73,800 ___ \$73,801-\$111,325 ___
\$111,326-\$148,850 ___ \$148,851-\$187,850 ___ \$187,851-\$226,850 ___ \$226,851-
\$315,975 ___ \$315,976-\$405,100 ___ \$405,101-\$457,600 ___ \$457,601 and over ___

APPENDIX B

HUMAN USE APPROVAL LETTER



LOUISIANA TECH
UNIVERSITY

MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO: Dr. Ted Englebrecht, Dr. Doug Amyx and Mr. Brian Dowis
 FROM: Dr. Stan Napper, Vice President Research & Development
 SUBJECT: HUMAN USE COMMITTEE REVIEW
 DATE: March 12, 2015

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

“An Empirical Examination of Gender, Political Affiliation, and Family Composition Issues Affecting Reasonable Compensation in Closely Held Corporations”

HUC 1283

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. *This approval was finalized on March 12, 2015 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond March 12, 2016.* Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Dr. Mary Livingston at 257-2292 or 257-5066.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM

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APPENDIX C

LEGISLATIVE AND ADMINISTRATIVE GUIDANCE

**Legislative and Administrative Guidance
Used in this Study Cases**

Glass Blocks Unlimited v. Commissioner, TC Memo 2013-180
Thousand Oaks Residential Care Home v. Comm., TC Memo 2013-156
Aries Communications Inc. & Subs. v. Commissioner, TC Memo 2013-97
K & K Veterinary Supply, Inc. v. Commissioner, TC Memo 2013-84
Thousand Oaks Residential Care Home v. Commissioner, TC Memo 2013-10
Allen L. Davis, et al. v. Commissioner, TC Memo 2011-286
Mulcahy, Pauritsch, Salvador & Co. v. Commissioner, TC Memo 2011-74
Mona L. Herrington, TC Memo 2011-73
Multi-Pak Corporation v. Commissioner, TC Memo 2010-139
Universal Marketing, Inc. v. Commissioner, TC Memo 2007-305
Vitamin Village, Inc., TC Memo 2007-272
Ronald Francis, et ux. v. Commissioner, TC Memo 2007-33
Wechsler & Co., Inc. v. Commissioner, TC Memo 2006-173
E.J. Harrison & Sons, Inc., TC Memo 2006-133
PK Ventures, Inc. & Subsidiaries, et al. v. Commissioner, TC Memo 2006-36
Miller & Sons Drywall, Inc. v. Commissioner, TC Memo 2005-114
Beiner, Inc. v. Commissioner, TC Memo 2004-219
Menard, Inc., et al. v. Commissioner, TC Memo 2004-207
E.J. Harrison and Sons, Inc. v. Commissioner, TC Memo 2003-239
Brewer Quality Homes, Inc. v. Commissioner, TC Memo 2003-200
Devine Brothers, Inc. v. Commissioner, TC Memo 2003-15
Haffner's Service Stations, Inc. v. Commissioner, TC Memo 2002-38
B & D Foundations Inc. v. Commissioner, TC Memo 2001-262
Damron Auto Parts Inc. v. Commissioner, TC Memo 2001-197
Wagner Construction Inc. v. Commissioner, TC Memo 2001-160
Metro Leasing and Development Corp., et al. v. Comm., TC Memo 2001-119
Pediatric Surgical Associates P.C. v. Commissioner, TC Memo 2001-81
Durham Farms #1, J.V., et al. v. Commissioner, TC Memo 2000-159
Law Offices of Richard Ashare P.C. v. Commissioner, TC Memo 1999-282
Simco Automotive Pump Co., et al. v. Commissioner, TC Memo 1999-235
Robert L. Boehm, et ux. et al. v. Commissioner, TC Memo 1999-227
Eberl's Claim Service Inc. v. Commissioner, TC Memo 1999-211
River City Ranches #4 J.V., et al. v. Commissioner, TC Memo 1999-209

Frank Muhich, et ux. et al. v. Commissioner, TC Memo 1999-192
Dexsil Corp. v. Commissioner, TC Memo 1999-155
Herold Marketing Associates Inc., TC Memo 1999-26
C.H. Robinson Inc., et al. v. Commissioner, TC Memo 1998-430
J. Michael Joly, et ux. et al. v. Commissioner, TC Memo 1998-361
Labelgraphics Inc. v. Commissioner, TC Memo 1998-343
Leonard Pipeline Contractors Ltd. v. Commissioner, TC Memo 1998-315
William J. Heitz, et ux. et al. v. Commissioner, TC Memo 1998-220
Chen C. Wang, et ux. et al. v. Commissioner, TC Memo 1998-127
Choate Construction Co. v. Commissioner, TC Memo 1997-495
H&A International Jewelry Ltd. v. Commissioner, TC Memo 1997-467
Alpha Medical Inc. v. Commissioner, TC Memo 1997-464
Max Burton Enterprises Inc. v. Commissioner, TC Memo 1997-421
Tricon Metals & Services Inc. v. Commissioner, TC Memo 1997-360
Sunbelt Clothing Co. v. Commissioner, TC Memo 1997-338
O.S.C. & Associates Inc. v. Commissioner, TC Memo 1997-300
John L. Ginger Masonry Inc. v. Commissioner, TC Memo 1997-251
The Escrow Connection, Inc. v. Commissioner, TC Memo 1997-17
Summit Sheet Metal Co. v. Commissioner, TC Memo 1996-563
Leonard Pipeline Contractors, Ltd. v. Commissioner, TC Memo 1996-316
PMT, Inc. v. Commissioner, TC Memo 1996-303
Lumber City Corp. v. Commissioner, TC Memo 1996-171
Pulsar Components Int'l, Inc. v. Commissioner, TC Memo 1996-129
Alondra Industries Ltd., et al v. Commissioner, TC Memo 1996-32
Guy Schoenecker Inc., et al v. Commissioner, TC Memo 1995-539
Avis Industrial Corp., et al v. Commissioner, TC Memo 1995-434
Tool Producers, Inc. v. Commissioner, TC Memo 1995-407
Comtec Systems, Inc. v. Commissioner, TC Memo 1995-310
Khalil T. Ghosn, et ux. et al. v. Commissioner, TC Memo 1995-192
Mad Auto Wrecking, Inc. v. Commissioner, TC Memo 1995-153
Dexsil Corporation v. Commissioner, TC Memo 1995-135
Rapco Inc. v. Commissioner, TC Memo 1995-128
Donald Palmer Company Inc. v. Commissioner, TC Memo 1995-65
Acme Construction Co. Inc. v. Commissioner, TC Memo 1995-6
Boca Construction Inc. v. Commissioner, TC Memo 1995-5
Comtec Systems Inc. v. Commissioner, TC Memo 1995-4

Universal Manufacturing Company, Inc. and Subs., TC Memo 1994-367
S.A. Manohara, M.D., Inc., TC Memo 1994-333
L & B Pipe & Supply Company, TC Memo 1994-187
Mortex Manufacturing Co., Inc., TC Memo 1994-110
C.T.I. Incorporated, TC Memo 1994-82
Thomas A. Curtis, M.D., Inc., TC Memo 1994-15.
Modernage Developers, Inc., TC Memo 1993-591
William T. Wright, et al., TC Memo 1993-328
Automotive Investment Development, Inc., TC Memo 1993-298
Nelson Brothers, Inc, TC Memo 1992-726
M. & E. Shindler, Inc., TC Memo 1992-290
Friendly Finance, Inc., TC Memo 1991-551
Richlands Medical Association, TC Memo 1990-660
Estate of Wallace, 95 TC 525
Kermit Fischer Foundation, TC Memo 1990-300
Jerry Lipps, Inc., et al, TC Memo 1990-293
Summit Publishing Company, Inc., TC Memo 1990-288
Hendricks Furniture, Inc., TC Memo 1988-133
Gerrit VanderPol, TC Memo 1987-555.
Contract Reproduction Co., Inc., et al., TC Memo 1987-476
Rosemary Bussiculo, TC Memo 1987-467
Rotolo v. Commissioner, 88 TC 1500
RTS Investment Corporation, TC Memo 1987-98
Sniktaw Petroleum, Inc., TC Memo 1986-554
James H. Rutter, TC Memo 1986-407
William D. Larimore, TC Memo 1986-326
Dewey D. Halligan, et al, TC Memo 1986-243
Bickes-Wilbert Burial Vault Co., Inc., TC Memo 1986-172
Diverse Industries, Inc., TC Memo 1986-84
Webster Tool & Die, Inc., TC Memo 1985-604
Joe J. Adams, TC Memo 1985-297
Owensby & Kritikos, Inc., TC Memo 1985-267
Luther R. Patton, TC Memo 1985-148
H. Kalicak Construction Co., et al., TC Memo 1984-552
Ray Clymer, Jr., TC Memo 1984-203
Estate of David B. Worster, TC Memo 1984-123

Woesner Abstract & Title Co., TC Memo 1983-764
Est. of Grace Shantz, et al, TC Memo 1983-743
Harry L. Snyder, et al., TC Memo 1983-692
Demian, Ltd., TC Memo 1983-683
Marcus Wigutow, TC Memo 1983-620
Royal Crown Bottling Co. of Winchester, Inc., TC Memo 1983-611
Georgia Crown Distributing Co., et al, TC Memo 1983-459
Leroy M. Lefkowitz, TC Memo 1983-356
John C. Barrier, TC Memo 1983-258
Geraldine C. Medina, et al, TC Memo 1983-253

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