

The Influence of an Audit Partner's First-Born Daughter on Audit Quality

June 2021

JEL Classifications: G41, M42

Keywords: audit quality, audit partner, first-born child, gender

The Influence of an Audit Partner's First-Born Daughter on Audit Quality

ABSTRACT

We examine the association between the gender of the first-born audit partner's child and audit quality. Our motivation and intuition is based on prior research in sociology and psychology literatures which finds that parental values and preferences are shaped by having a first-born daughter. Specifically, parents with daughters are found to be more cautious, conservative, risk adverse and adopt many female preferences and values. These daughter effects potentially promote characteristics known to lead to higher audit quality for which we find strong evidence. The findings are confirmed by an array of robustness check and thus contribute to the literature that an audit partner's family environment shapes audit outcomes. These findings potentially have direct implications for internal audit firm management as well as investors and regulators.

I. INTRODUCTION

Individual audit partners differ with respect to innate characteristics such as their experiences, incentives and “styles”, and these differences are associated with audit quality (DeFond and Francis 2005; Church, Davis, and McCracken 2008; Chin and Chi 2009; Chen, Sun, and Wu 2010; Francis 2011; Gul, Wu, and Yang 2013). For example, Knechel et al. (2015) find that aggressive or conservative financial reporting systematically relates to audit partner attributes and therefore is not randomly distributed across audit engagements.

There are calls in the literature to study individual audit partner innate attributes, beyond the existing demographic data, and their impact on audit quality (DeFond and Francis 2005; Church et al. 2008; Gul et al. 2013; DeFond and Zhang 2014; Cameran, Dittillo, and Pettinicchio 2018; Lennox and Wu 2018). Gul et al. (2013) highlights the need for studies to investigate audit partners’ family backgrounds and whether they contribute to variations in audit quality across individual partners. We respond to these calls and examine the effect on audit quality of the gender of the audit partner’s first-born child, specifically the daughter.

There is substantial literature in both the sociology and developmental psychology fields that has found the gender of a first-born child – specifically a daughter – has wide ranging and significant impact on parents’ preferences, values and attitudes (Lundberg, 2005; Warner 1991; Sharrow, Rhodes, Nteta, and Greenlee 2018). Two theories suggest possible reasons for this effect. Firstly, that daughters need greater protection than boys because they are weaker or face greater societal biases – *protectionism theory*, and secondly that parents are socialized by their children and hence that parents with daughters become more sensitive to gender issues – *female socialisation theory*.

The literature consistently finds parents with daughters are found to be more risk adverse, cautious, conservative and more likely to adopt more female preferences and values (Warner, 1991; Chen and Li 2009). For instance, utilizing ultrasound scan data, Pogrebna et

al. (2018) finds causal evidence that offspring gender affects adult risk-aversion, specifically, parents who find they are having a daughter become almost twice as risk adverse as those who are having a son. Similarly, within the economics literature a child's gender has been shown to affect many aspects of parental behavior and decision-making. Specifically, daughters affect the decision-making of CEOs, including, the propensity to recruit women (Dahl, Dezsó, and Ross 2012), in communicating the importance of CSR activities (Cronqvist and Yu 2017) in determining wage levels (Dahl et al. 2012) and the gender balance on executive boards (Gompers and Wang 2017).

Why would the first-born daughter of an audit partner specifically affect their audit quality? The prior literature suggests that the daughter effect described above promotes preferences and attitudes that may lead to higher audit quality. The prior auditing literature, examining female audit partners, would suggest female preferences are associated with higher audit quality (Li, Qi, Tian, and Zhang 2017; Cameran, Campa, and Francis 2020) and audit partner's risk aversion is also associated with higher levels of audit quality (Knechel et al. 2015; Pittman, Stein, and Valentine 2021). Furthermore, the first-born daughter in the one that appears to have the most impact (Sharro et al., 2018) and audit partners early experiences are more likely to be imprinted on their subsequent behavior (He et al. 2018). This provides us with a strong motivation and intuition to believe it is the first-born daughter that is more likely to be associated with higher quality audits.

We take advantage of a unique setting in Sweden, where both the identity and the family situation—including gender of children—is publicly available. The sample is made up of firms listed on the main Swedish stock exchange in the years 2005 to 2016, resulting in 1,952 firm-year observations and 210 unique audit partners who have at least one child. Slightly less than half of the partners have a first-born daughter.

We infer audit quality by examining several measures of the audit process as suggested by DeFond and Zhang (2014). Specially, we estimate a number of abnormal accruals measures relating to the earning properties of the clients (Caramanis and Lennox 2008; Feroz, Kyungjoo, and Pastena 1991; Dechow, Sloan, and Sweeney 1996; Becker, DeFond, Jiambalvo, and Subramanyam 1998; Gunny and Zhang 2013). Also we measure the likelihood of misreporting (Amiram et al., 2015; Chakrabarty, Moulton, Pugachev and Wang, 2020; Amiram, Bozanic, and Rouen 2015), the level of conditional conservatism and audit fees (Dao et al. 2012; Gul and Goodwin 2010; Fung et al. 2012; Pittman et al. 2021).

Consistent with our predictions, we find that audit partners with a first-born daughter are associated with significantly lower levels of abnormal accruals (more so for income-increasing accruals). They are less likely to be associated with misreported earnings and are significantly associated with higher conditional conservatism and total audit fees. We also investigate the overall effect of just having a daughter, or a having a high percentage of daughters, and find no significant results. This is consistent with the gender of the first-child having a more pronounced effect on parents than the gender of subsequent children. Collectively these findings indicate first-born daughters are associated with higher audit quality, than first-born sons.

An important benefit of examining the gender of the first-born children is that it is exogenous to other partner characteristics as nature randomly allocates a first-born child's gender. However, there could be an endogeneity effect if partners self-select to certain industries and clients after their first child is born, and this self-selection systematically depends on the first-born child's gender. To avoid this potential weakness, we include client fixed effects to capture unobservable time-invariant client characteristics and conduct a propensity score matching to mitigate observable confounding effects. Moreover, we also conduct a difference-in-difference analysis where we focus on changes in partners, holding

constant the audit and client firm. We find firms that change from an audit partner with a first-born son to one with a first-born daughter have a significant increase in audit quality following the change, while the reverse is true for firms that change from first-born daughter to first-born son. There is no effect if the audit partner is replaced without a change in the gender of the first-born child, ruling out a pure change effect. This within-client-audit firm analysis reinforces our overall findings and indicates that partners with first-born daughters bring about, and not merely reflect higher quality audits and that our results are unlikely to be driven by any omitted client or audit firm level characteristics.

A potential limitation of our study is that the impact of first-born daughters we document may be influenced by cultural and regulatory differences specific to the Swedish setting and so our results may not be generalizable. This caveat notwithstanding, we believe our findings are of relevance to other countries. First, research finds Swedish parents are very similar to US parents in so far as they exhibit a strong preference for having one child of each gender (Andersson et al. 2007; Pollard and Morgan 2002). Second, the first-daughter effect is of such a fundamental nature that its effects appear to be universal, existing in many countries - Japan (Takaku 2018), US (Cronqvist and Yu 2017; Sharrow et al. 2018), China (Chew et al. 2018), UK (Pogrebna et al. 2018); Ukraine (Pogrebna et al. 2018), Germany (Oswald and Powdthavee 2010), and Canada (Warner and Steel 1999). Third, the Swedish audit setting is very similar to other Western countries, it is dominated by the Big 4 audit firms, so audit partners career paths, audit methods and tools, quality control and the knowledge base is embedded in global networks. IFRS is mandatory for listed firms in Sweden and audits must follow ISA (Carrington et al. 2019). Thus, our sample of partners appear to be comparable with other audit partner studies in terms of busyness, age, tenure etc. Consequently, we believe our results are not a direct consequence of the cultural and audit partner differences in the Swedish setting. Indeed it may be the case that given the level of gender equality in Sweden (Adams

and Funk 2012) that the first-born daughter effect we observe could be even stronger in a less gender equal country.

The study makes a significant contribution to the audit partner literature which clearly illustrates the importance of needing to know more about audit partners and the potential effects they may have on audit quality (Francis, 2011; Nelson and Tan, 2005; Cameron et al, 2018; Lennox and Wu, 2018). We add to this body of work, by linking it with a first-born child gender bias literature and thereby finding that the daughter-effect has a direct consequence on audit quality. Furthermore, the prior literature identifies a number of characteristics that may not only have potential explanatory effects on audit quality but are also likely to affect audit partners' choices. For example, education and experience are acquired by the auditors and the decision to acquire these characteristics are likely to be correlated with audit quality as well as client choices (Amir et al. 2014). However, since the first-born daughter is an exogenous variable, we are able to overcome this particular issue.

We also contribute to the recent literature that demonstrates the importance of family environments on an individual's behaviors (Cronqvist and Yu, 2017; Glynn and Sen, 2015 and Washington, 2008), specifically on the effect of the first-born child's gender. Existing literature in health and behavioral economics shows that parents with daughters have lower risk tolerance (Chew et al. 2018; Pogrebna, Oswald, and Haig 2018) and higher ethical standards (Cronqvist and Yu 2017) than parents with sons. Further, the literature shows that in particular a first-born daughter (as compared to daughters in general) has a stronger effect on parents' political views (Sharro et al. 2018). To our knowledge, our study is unique in directly addressing the first-born daughter effect in the field of accounting and auditing.

The study also has policy implications for regulators, investors and particularly accounting firm managers. Our findings emphasize the importance of the individual audit partner's innate characteristics for audit quality and should be considered in the internal

allocation of partners to different audit assignments. Given, that many audit firms assign review partners (Epps and Messier, 2007) and prior research indicates that the process of allocating these partners appears to need significant improvements (Messier, Kozloski and Kochetova-Kozloski 2010) our findings suggest that an audit partner with a first-born daughter should review those audits conducted by a partner with a first-born son, potentially improving the review process.

The paper proceeds as follows: In Section 2, we review the related literature and form hypothesis of this study. Section 3 describes the data and research design. Section 4 details descriptive statistics and we present our results in Section 5. We conclude in Section 6.

II. MOTIVATION AND HYPOTHESIS

Our investigation as to whether audit quality is affected by biases related to the audit partner's first-born daughter is motivated by two theoretical ideas and empirical findings. First, that an audit partner's individual preferences and attitudes affect the audit quality and second that an audit partner who has a first-born daughter will have a distinctive set of preferences and attitudes compared to an audit partner with a first-born son.

2.2. Audit Partners' Preferences and Attitudes and Audit Quality

Individual audit partners have a high degree of autonomy when exercising their professional judgment during the audit process, from assessing the internal control system to determining the scope of the audit, reviewing the critical assessments, assessing the appropriateness of clients' accounting choices and negotiating with their clients (O'Keefe, Simunic, and Stein 1994; Hackenbrack and Knechel 1997; Knechel et al. 2015; Gibbins, Salterio, and Webb 2001; Gibbins, McCracken, and Salterio 2007; Amir, Kallunki, and Nilsson 2014). How this judgment is exercised, therefore, ultimately determines the audit quality. Consequently, if audit partners' innate traits vary (Knechel et al. 2015; He, Kothari, Xiao, and

Zuo 2018; Lennox and Wu, 2018) and affect their judgment and decision-making (Hambrick 2007; Ho and Waymond 1993; Nelson and Tan 2005; Church et al. 2008; Francis 2011; Amir et al. 2014; PCAOB 2013) it is also likely that the quality of the audit will also vary across audit partner engagements (Nelson 2009; Nelson and Tan 2005; Knechel et al. 2015).

A growing body of evidence confirms a relationship between readily observable individual audit partner's attributes and audit quality (DeFond and Francis 2005; Church et al. 2008; Francis 2011), highlighting that audit partner quality is not homogenous (Knechel 2000; Lennox and Wu 2018; Nelson 2009; Nelson and Tan 2005). Recent studies employing partner fixed effects methodology find that individual partners differ systematically in their level of audit quality (Gul et al. 2013; Porumb, De Jong, Huijgen, Marra, and Van Dalen 2017; Cameran et al. 2020) and these partner effects provide a greater explanatory power than the audit firm or audit office (Cameran et al. 2020). However, only a small proportion of these partner effects are explained by observable demographic attributes (Cameran et al. 2020; Gul et al. 2013) suggesting other unobservable partner characteristics such as their preferences and attitudes may also lead to varying audit quality.

Prior research finds an association between audit quality and an audit partner's: prior education (Chou, Pittman, and Zhuang 2018; Gul et al. 2013; Li et al. 2017; Chu, Florou, and Pope 2016); client and pre-client experience (Chin and Chi 2009; Chi, Myers, Omer, and Xie 2017; Wang, Wang, Yu, Zhoa, and Zhang 2015); tenure (Carey and Simnett 2006; Chi and Huang 2005); specialization (Bell, Causholli, and Knechel 2015; Chi and Chin 2011; Hsieh and Lin 2016; Kallunki, Kallunki, Niemi, and Nilsson 2019; Ittonen, Johnstone, and Myllymäki 2015; Duh, Knechel and Lin 2020); and gender (Ittonen, Vähämaa, and Vähämaa 2013; Chin and Chi 2010; Gul et al. 2013; Cameran et al. 2020). Research examining the more innate personality traits of audit partners, beyond these existing demographic data, is fairly scarce given they are difficult to observe and quantify (DeFond and Zhang, 2014). To-date the

research finds that an audit partner's: level of narcissism proxied by size of their signature (Chou et al. 2018); level of ethics proxied using criminal convictions (Jones, Massey, and Thorne 2003; Amir et al. 2014; Pittman et al. 2021); 'style' (Knechel et al. 2015; Wang, Yu, and Zhao 2015) proxied by prior reporting decisions are all associated with audit quality. For example, both Knechel et al. (2015) and Wang et al. (2015) find that an audit partner's innate 'style' varies systematically across individual auditors and is persistent within clients and across clients of the same audit partners (see also Li et al. (2017)). Overall, the evidence finds that audit quality is influenced by the engagement partner¹.

2.1. The Daughters Effect: Influences on Parents' Preferences and Attitudes

There is extensive evidence in both the sociology and developmental psychology literatures that parental values and preferences are shaped, in part, by their children (Brody and Steelman 1985; Downey, Jackson, and Powell 1994; Harris and Morgan 1991; Morgan, Lye, and Condran 1988; Pollard and Morgan 2002) particular by their daughter (Warner 1991; Warner and Steel 1999; Glynn and Sen 2015).

Across many settings, from family dynamics, political party preferences, work and women's rights to corporate environments, empirical research provides significant and consistent evidence of a daughter effect on their parents' preferences, attitudes and actions. Specifically, parenting daughters is found to have an impact on: the division of labor within the family (Lundberg 2005; Pollmann-Schult 2015); the support for traditional gender roles (Lytton and Romney 1991; Borrell-Porta, Costa-Font, and Philipp 2019; Shafer and Malhotra 2011); family expenditure (Parish and Willis 1993; Lundberg 2005; Lundberg and Rose 2003; Freese and Powell 1999); family stability (Dahl and Moretti 2008; Morgan et al. 1988); as well as on congressional voting (Washington 2008) and political party preferences (Oswald and

¹ Although audit decisions are made by audit teams, the prior literature finds it is the engagement partner that drives the audit quality because their behavior and attitudes are found to influence the behavior and attitudes of their audit team members (DeZoort and Lord 1994; Lord and DeZoort 2001; Kaplan and Lord 2001; Tan and Jamal 2001).

Powdthavee 2010). Parents of daughters are also more likely to be more risk adverse (Oswald and Powdthavee 2010; Powdthavee, Wu, and Oswald 2009 Chew et al. 2018; Pogrebna et al. 2018) and to be more sensitive and sympathetic to women's issues (Warner 1991; Warner and Steel 1999; Brody and Steelman 1985; Shafer and Malhotra 2011; Sharrow et al. 2018).

But why would daughters affect parental preferences and attitudes? Although research posits multiple theories the ones that have gained the most traction are *protectionism* and *female socialization*. The protectionism theory assumes that individuals want to protect those with whom they have a strong personal relationship. Under this theory, it is argued that daughters need a greater level of protection relative to sons. This need to protect daughters may be because of the deeply ingrained societal discourse which portrays girls as the “weaker sex” (Connell and Messerschmidt 2005; Larbeer 1995; Lips 2003, 2013; Schorck and Schwalbe, 2009) or because parents acknowledge that girls will face significantly more societal biases and discrimination than boys (Warner 1991; Warner and Steel 1999; Glynn and Sen 2015) and therefore need greater protection. This unconscious need to protect daughters is argued to be one of the reasons why parents treat daughters very differently to sons². For example, parents use more supportive speech with daughters as opposed to more autonomy-supporting speech with sons (Tenebaun and May, 2014) and believe sons can be more independent than daughters (Clearfield and Nelson, 2006). Kane (2012) finds that daughters stay closer emotionally and financially long after childhood relative to sons. Recent literature on individuals' economic decisions finds parents of daughters actively manage their household wealth (Bogan 2013; Arnaboldi and Gioia 2019), providing their daughters with future intergenerational transfers

² There is a long literature that documents parental differential treatment of daughters and sons (Raley and Bianchi 2006; Sidorowicz and Lunney 1980; Condry, Condry, and Pogatshnik 1983). For example, parents tend to: respond more quickly to the sound of baby-girls crying relative to baby-boys (Condry et al. 1983); hold and play with their baby-girls differently from baby-boys (Sidorowicz and Lunney 1980); have an altruistic fear of crime more so for daughters than sons continuing even when the daughters reach adulthood (Warr & Ellison, 2000; Vozmediano et al, 2017).

thereby financially protecting them from the effects of any societal gender biases (Blau and Kahn 2000; Goldin 2014; Olivetti and Petrongolo 2016).

While female socialization is based on the assumption that parents are sensitive to the life experiences of their offspring, in a way that is similar to their own experiences, and that consequently parental self-interest extends to the interests of their offspring. The effect is that parents of daughters adopt more female preferences and values (Warner, 1991) and identify more with what women derive utility from (Chen and Li 2009). For example, by identifying with female issues they become more sensitive to gender equality and feminist issues, relative to parents of sons (Brody and Steelman 1985; Shafer and Malhotra 2011; Sharrow et al. 2018; Warner 1991; Warner and Steel 1999). Recent literature also finds that after the birth of their first daughter, CEOs tend to hire more female executives and women in general (Dahl et al. 2012; Dasgupta, Ha, Jonnalagadda, Schmeiser, and Youngerman 2018; Gompers and Wang 2017; Wang, Gao, and Feng 2019). They are more generous with female wages (Dahl et al. 2012), are associated with a higher level of corporate social responsibility (CSR) reporting and are more inclusive, understanding and supportive of female employees (Cronqvist and Yu 2017).

Under both the protectionism and female socialization theories both the mother and father are assumed to be similarly affected. So, despite females already identifying with female issues, following the birth of a daughter, they become even more sensitive to these issues (Warner, 1991). Similarly, although women are generally found to be more risk-averse, when they have a daughter their risk aversion significantly increases further (Pogrebna et al. 2018).

The daughter effect is also found to be stronger when the daughter is the first-born (Dahl et al. 2012; Sharrow et al. 2018; Cronqvist and Yu 2017). Research finds that first-born children fundamentally alter the sociology of the family (Simmel 1950) triggering major psychological and economic shifts in the parents' lives (Grossman, Pollack, and Golding 1988;

Grossman, Pollack, Golding, and Fedele 1987; Palkovitz and Palm 2009; Deave and Johnson 2008; Elder, Johnson, and Crosnoe 2003; Knoester and Eggebeen 2006; Umberson, Pudrovska, and Reczek 2010).³ For example, psychological research has shown both men and women undergo a process of self-socialization following the birth of their first child (Deutsch, Lussier, and Servis 1993; Ruble, Brooks-Gunn, Fleming, Fitzmaurice, Stangor, and Deutsch 1990; Doucet 2009). Both the female socialization and the protectionism theories require psychological activation and the catalyst for this is the first-born child rather than the birth of additional children (Dahl et al. 2012; Nyström and Öhrling 2004; Sharrow et al. 2018). For example, having a daughter as a first child, as opposed to a daughter in general or a higher proportion of daughters, represents a critical socializing event which significantly increases support for those policies aimed at mitigating gender inequality (Sharrow et al. 2018).

2.2.1 The first-born daughter and audit quality

Audit partners differ in terms of their preferences, values and experiences and these differences are found to be associated with audit quality (Knechel et al. 2015; Farmer 1993; Kennedy and Peecher 1997; Messier, Owghoso, and Rakovski 2008). It is therefore conceivable that if the socialization and/or protectionism theories are germane to audit partner's then accordingly first-born daughters will also influence their audit partner parents' preferences and attitudes. However, whether these distinctive daughter-shaped preferences and attitudes result in higher quality audits is an empirical question.

The prior literature certainly suggests that the daughter effect could promote preferences and attitudes that are known to lead to higher audit quality. Specifically, parents of a daughter are more likely to be cautious, conservative and risk adverse (Pogrebna et al. 2018;

³ A large body of research identifies the birth of a first child as a distinct and critical life-course transition (Baxter, Buchler, Perales, and Western 2015) and are associated with changes in parents' self-identity and self-concept (Jessner, Weigert, and Foy 1970; Stewart 1982; Stewart, Sokol, Healy and Chester 1986).

Powdthavee, Wu, and Oswald 2009; Chew et al. 2018) and/or adopt relatively more female preferences (Warner 1991; Warner and Steel 1999; Chen and Li 2009) such as being less overconfident (Barber and Odean 2001; Bliss and Potter 2002; Huang and Kisgen 2013; Schubert 2006); more benevolent and universally concerned (Beutel and Marini 1995; Adams and Funk 2012) or more ethical in their perceptions and behavior (Roxas and Stoneback 2004; O'Fallon and Butterfield 2005; Ruegger and King 1992; Eynon, Hills, and Stevens 1997; Bernardi and Arnold 1997; McManus and Subramaniam 2009).

If audit partners with first-born daughters adopt some of these attributes, which are important traits in the auditing process, then an audit partner with a first-born daughter is likely to be associated with higher quality audits, relative to audit partners with a first-born son. For example, if an audit partner with a first-born daughter adopts more female preferences, then consistent with the auditing literature examining female audit partners, we should expect them to be associated with higher quality audits (Chin and Chi 2010; Hardies, Breesch, and Branson 2016; Krishnan and Parsons 2008) relative to audit partners with sons. This is primarily because female audit partners are found to be more risk-adverse⁴, conservative and more ethical than their male counterparts (Hardies, Breesch, and Branson 2013; Niskanen, Karjalainen, Niskanen, and Karjalainen 2011; Bernardi and Arnold 1997).

Ittonen et al. (2013), Cameran, Prencipe, and Trombetta (2016), Cameran et al. (2020), and Li et al. (2017) all find that female audit partners are more effective in constraining excessive earnings management and are associated with smaller abnormal accruals and thus higher quality audits, relative to male audit partners. Moreover, Hardies, Breesch, and Branson (2016) find that female audit partners' preferences are more aligned with the quality-orientated

⁴ Prior accounting literature has also employed female gender to proxy for low risk tolerance (Ge, Matsumoto, and Zhang 2011; Hodge, Rajgopal, and Shevlin 2009).

aspects of the audit profession, whereas male auditors' preferences are more aligned with revenue-orientated aspects of the profession.

Furthermore, if having a first-born daughter makes an audit partner relatively more cautious, conservative and risk averse, then this will also be associated with higher audit quality. The prior auditing literature suggests that audit partners' risk preferences significantly affect audit quality (Nelson and Tan 2005; Knechel et al. 2015; Pittman et al. 2021). For example, Pittman et al. (2021), find that audit partners who have engaged in risky behavior in their personal life, resulting in a criminal conviction(s), also conduct lower quality audits. In addition, an audit partner's need to protect their daughter will potentially incentivize them to provide higher quality audits since audit failures result in the loss of clients, audit fees and reputation (Hennes, Leone and Miller, 2014; Ball, 2009; Landsman, Nelson and Rountree 2009; Cao, Myers and Omer, 2011; Blouinm Grein, Rountree, 2007) thus significantly impeding the ability to financially protect their daughters.

Combining these first-born daughter effects (Dahl et al. 2012; Sharrow et al. 2018), with studies that find experiences occurring earlier in an individual's life have an important and persistent impact on their behavior and preferences (Dinas 2013; Sears 1981; Sears and Valentino 1997; Nteta and Greenlee 2013; Giuliano and Spilimbergo 2014; Cronqvist, Siegel, and Yu 2015) strongly suggests that the first-born daughter effect is more likely to be associated with audit quality. Early-career stages are found to be the most relevant period when experiences are "imprinted" on individual behavior (Marquis and Tilcsik 2013; Schoar and Zuo 2016, 2017), and a He et al. (2018) finds this "imprinting" to hold true for audit partners. Specifically, an audit partner's level of skepticism appears to depend on the economic conditions that existed when they first entered the auditing profession. Thus, given the birth of an audit partner's first child is more likely to have occurred in the earlier stages of their career and becoming a parent of a daughter is associated with significant changes in their

preferences and values, any daughter effects are likely to impact and be imprinted on the partner's subsequent behavior.

However, there are several reasons why we may not expect the first-born daughter to be associated with audit quality. First, auditors have to work within the confines of their country's regulatory framework as well as their audit firm's quality control mechanisms. Consequently, this restricts the opportunity for an audit partner's personal preferences to be imprinted on the audit. For example, in Sweden, as in the US, all audit partners have strong incentives to ensure high quality audits given their compensation structures⁵ and that their individual reputational risk is high. As a member of the European Union, Sweden is embedded in the EU regulatory structure, so individual auditors are subject to the risk of significant sanctions by Swedish Inspectorate of Auditors - *Revisorinspektion* (similar to PCAOB) if auditing standards are not adhered to or IFRS GAAP is not complied with. In addition, the audit market in Sweden is dominated by the Big 4 auditor firms which further constrains an individual auditor's preferences as they will be required to follow the same audit firm methods and procedures as well as to adhere to the same quality control mechanisms and oversight rules. Although, Pittman et al. (2021) finds, in the US, auditor risk preferences, proxied by prior criminal convictions, are associated with lower audit quality, this reflects those individuals who do not adhere to the legal rules and therefore are unlikely to adhere to auditing and accounting rules etc. Since the daughter effect is more subtle than prior criminal convictions, there is a greater possibility that the audit regulations etc. will dilute its effect. Second, audits are undertaken by audit teams (with varying combinations of first-born daughters and sons), potentially diluting the daughter effect on audit outcomes. Lastly, Sweden has a long history of gender equality and is one of the most gender equal countries in the world, treating men and

⁵ Audit partners in Sweden have a large variability in compensation with a low base salary and high dividends linked to client fees (find reference!).

women equally (Oláh and Bernhardt 2008). Consequently, this may limit any observable behavioral differences between those audit partners with first-born daughters and those with first-born sons, as girls in Sweden face significantly less societal biases.

Overall, on-balance we contend that the prior theory and empirical findings suggest that audit partners with first-born daughters are more likely to be associated with higher levels of audit quality. This leads us to our hypothesis stated in the alternative form:

H₁: Audit Partners with first-born daughters are associated with higher audit quality, relative to audit partners with first-born sons.

III. DATA AND RESEARCH DESIGN

3.1. Sample of Audit Partners

The sample contains audit partners⁶ of Swedish non-financial firms listed on Nasdaq Stockholm⁷ during the period January 1, 2005 to December 31, 2016. We use the Swedish setting for a number of reasons. First, Sweden has a long history of requiring the disclosure of the audit partner names on the audit report. Second, official Government documents are accessible to the public enabling us to identify and obtain personal characteristics of the entire population of audit partners, which reduces any potential selection bias. Lastly, Sweden is a noteworthy country to examine the daughter effect given high levels of gender equality potentially biasing against any significant daughter effect on audit quality.

We obtained the names of the lead audit partners and their unique Social Security Number (SSN) along with the names of their clients from the Swedish Companies Registration Office (*Bolagsverket*). This provided us with an initial sample of 380 unique firms listed on

⁶In Sweden a company may have more than one audit partner on an audit. So consistent with the prior literature (Amir et al. 2014) we focus only on those auditors who are identified as the auditor-in-charge (Lead Auditor). The auditor-in-charge of the audit engagement is responsible for the key client-specific decisions, including the scope and pricing of the audit engagement. When more than one auditor is identified as the Lead, we exclude them from our sample.

⁷Nasdaq Stockholm is the main stock market in Sweden. It is a regulated market in accordance with Directive 93/22/EEC and is subject to EU Regulations. An alternative market owned by Nasdaq is First North Stockholm which is not regulated and therefore not included in our analysis.

the Nasdaq Stockholm (2,904 firm-year observations) that were audited by 302 unique audit partners. We excluded 35 unique financial firms (audited by 16 unique partners) since their financial information is not comparable to the rest of the sample. We obtained accounting data from WorldScope and audit fee data from Audit Analytics⁸. Data was not available for some of our control variables, resulting in a sample of 332 unique firms (2,515 firm-year observations) audited by 280 unique partners.

Using the audit partners' unique SSN, we obtained information from The Swedish Tax Authority (*Skatteverket*, which keeps census data on residents of Sweden) relating to the audit partners' child(ren) (if any), specifically gender(s) and year of birth. In addition, we obtained the audit partners' marital status. To increase internal validity, and consistent with prior literature, we limit our analysis to audit partners with biological children, thus we exclude audit partners without children or with adopted or step-children. Therefore, we exclude 23 partners without children and seven audit partners with adopted children given the adoption process allows parents gender preferences to drive the child's gender (Glynn and Sen 2015; Lee and Conley 2015). The *Skatteverket* data does not include step-children. We also exclude one audit partner with first-born twins consistent with Perales, Jarallah, and Baxter (2018), resulting in a sample of 249 audit partners.

To avoid confounding firms and auditor choices (Teoh and Wong 1993) we exclude firms who were audited by two or more lead audit partners. Our final sample consists of 210 unique partners who audited 298 unique client firms providing 1,952 firm-year observations. Table 1 summarizes the selection process, which leads to our final sample.

[Table 1 here]

3.2. First-Born Child Methodology

⁸Audit Analytics only has Swedish audit fee data from 2009, consequently we with hand collected the audit fees for the period 2005 to 2008.

Given that family structure is endogenous, focusing on the gender of the audit partner's first-born child is arguably a more exogenous measure (Bennedsen, Nielsen, Perez-Gonzalez, and Wolfenzon 2007). In the absence of pre-natal selection⁹, the gender of the first child should be completely random and thus approximate the conditions of a natural experiment since it is unlikely to be influenced by the parents' characteristics (Shafer and Malhotra 2011). Since the sex of the first-child is random it provides us with the opportunity to make casual inferences from our cross-sectional data.

In contrast, the birth of subsequent children may be the result of endogenous stopping rules arising from differential fertility choices and gender preferences of the audit partner (Dahl and Moretti 2008)¹⁰. Consequently, studies examining the percentage of children that are daughters (Conley and Rauscher 2013; Washington 2008) or if the individual has at least one daughter (Prokos, Baird, and Keene 2010) potentially suffer from the parents' gender preferences. We capture the first-daughter effect by creating a dummy variable (*First_Daughter*) for audit partners with first-born daughters (Shafer and Malhotra 2011; Sharrow et al. 2018).

Table 2 reports descriptive statistics for the audit partners in our sample. Approximately 47% of audit partners have a first-born daughter (*First_Daughter*) which is consistent with the human population where the natural ratio between girls and boys at birth is slightly biased towards boys and estimated to be about 1.05-1.06 boys for every 100 girls (Grech, Savona-Ventura, and Vassallo-Agius 2002). This ratio is also comparable to the set of US CEOs examined by Cronqvist and Yu (2017). The average partner has 2.2 children, the majority of audit partners have exactly two children (58%), followed by 23% with three children, 15%

⁹ There are no signs that gender preferences for children in Nordic countries are so strong that they have produced drastic outcomes like selective abortion (Dahl, Beutel, Brosig, and Hinsch 2003; Dahl, Gupta, Beutel, Stoebel-Richter, Brosig, Tinneberg, and Jain 2006; Andersson, Hank, and Vikat 2007).

¹⁰ A stopping rule with a girl preference predicts, if the first-born is a boy, that parents will continue to have more children until they have a baby girl. Once a girl is born, the parents stop having children.

with one child, 3% with four children and 1% with five children. The majority of audit partners are *Married*, 11% are *Divorced* and 10% have never been married (*Single*). The majority of audit partners are men, with 16% being female, and the average partner age is 51. Audit partners on average audit 1.7 listed clients (*Busy*) during our sample period and 29% are identified as having industry experience (*Ind_Exp*). 90% of the audit partners work in a Big4 accounting firm. We split the sample between those with first-born daughters (columns 7-9) and those with first-born sons (columns 10-12). We find no significant difference in the audit partner characteristics between those audit partners with a first-born daughter and those without (see columns 13 and 14), which supports the exogenous nature of the first-born measure.

[Insert Table 2]

3.3. Measures of Audit Quality

Since audit quality is unobservable, we follow DeFond and Zhang's (2014) suggestion and consider several measures to triangulate our inferences about audit quality. We therefore infer audit quality by examining several output measures of the audit process related to the earning properties of the clients (Caramanis and Lennox 2008; Feroz, Kyungjoo, and Pastena 1991; Dechow, Sloan, and Sweeney 1996; Becker, DeFond, Jiambalvo, and Subramanyam 1998; Gunny and Zhang 2013), as well as the likelihood of misreporting (Amiram et al., 2015; Chakrabarty, Moulton, Pugachev and Wang, 2020). We also examine an audit input measure - audit fees (Dao et al. 2012; Gul and Goodwin 2010; Fung et al. 2012; Pittman et al. 2021). In addition, we also measure the level of conditional conservatism (Basu, 1997; DeFond and Zhang 2014; Knechel et al. 2013; Amir et al., 2014; Pittman et al., 2021).

3.3.1. Abnormal Accruals Measures

A core attribute of high-quality audit is its ability to constrain errors or earnings management in financial statements which is often introduced through the use or abuse of the

accruals process (Subramanyam 1996; Jones 1991; Dechow 1994; Dechow, Sloan, and Sweeney 1995; DeFond and Jiambalvo 1994; Wysocki 2004).

We use four abnormal accruals measures to proxy for audit quality, each one capturing different aspect of earnings and audit quality. The measures characterize a client's earnings properties and therefore reflect the actual procedures applied by auditors to ensure that financial reports are unbiased (Dopuch, King, and Schwartz 2003). Consistent with prior studies (Francis and Krishnan 1999; Gul et al. 2013), higher abnormal accruals indicate more aggressive accounting, lower earnings quality and lower audit quality (Dechow, Ge, and Schrand 2010).

Our first measure is the absolute abnormal working capital accruals (*AAWCA*). Consistent with DeFond and Park (2001) and Carey and Simnett (2006), we define *AAWCA* as:

$$AAWCA_{j,t} = \left| WC_{j,t} - WC_{j,t-1} * \frac{Sales_{j,t}}{Sales_{j,t-1}} \right| \quad (1)$$

where, $WC_{j,t}$ is the actual level of working capital for firm j in year t defined as (*Current assets_{j,t} – Cash and equivalents_{j,t} – Short term investments_{j,t}*) – (*Current liabilities_{j,t} – Short term debt_{j,t}*), scaled by total assets. The second term $\left(WC_{j,t-1} * \frac{Sales_{j,t}}{Sales_{j,t-1}} \right)$ in Equation (1) represents the predicted value of working capital, and it is calculated as the working capital in year $t-1$ adjusted for the change in sales. According to Wysocki (2004), this measure of abnormal accruals is particularly suitable for firms listed in small stock markets such as the Nasdaq Stockholm exchange¹¹. Consistent with prior literature (e.g., Carey and Simnett 2006; Fargher, Lee, and Mande 2008), we use the absolute values of abnormal working capital accruals to

¹¹ As it avoids the estimation problems, associated with the more sophisticated models (Jones 1991) especially using European data (Maijor and Vanstraelen 2006; Francis et al. 2009; Cameran et al. 2015; André et al. 2016).

mitigate any potential offsetting effect between positive and negative abnormal accruals (Francis and Krishnan 1999; Gul et al. 2013).

Our second measure is the absolute value of the residuals (*ADDT*) from the Dechow and Dichev (2002) model as modified by McNichols (2002):

$$TCA_{j,t} = \alpha_0 + \beta_1 CFO_{j,t-1} + \beta_2 CFO_{j,t} + \beta_3 CFO_{j,t+1} + \beta_4 \Delta AR_{j,t} + \beta_5 PPEG_{j,t} + \varepsilon_{j,t} \quad (2)$$

where, $TCA_{j,t}$ is total current accruals for firm j in year t , defined as $\Delta Current\ assets_{j,t} - \Delta Current\ liabilities_{j,t} - \Delta Cash\ and\ equivalents_{j,t} + \Delta Short\ term\ debt_{j,t}$. $CFO_{j,t-1}$, $CFO_{j,t}$ and $CFO_{j,t+1}$ is the cash flow from operations for firm j in year $t-1$, t and $t+1$ respectively. $\Delta AR_{j,t}$ is the annual change from year t to $t-1$ in accounts receivable for firm j , and $PPEG_{j,t}$ is the gross property, plant and equipment for firm j in year t . All variables are scaled by beginning of year t total assets. The residual thus captures the portion of current accruals that is not attributed to the time series of cash flows and other fundamentals, thereby proxying for managerial discretion in accruals.

Our third measure is the absolute value of discretionary revenues (*ARESREV*) (Chen, Hope, Li, and Wang 2011; McNichols and Stubben 2008; Stubben 2010). Specifically, *ARESREV* is the absolute value of the residual from a regression that relates the annual change in accounts receivable to annual change in revenues:

$$\Delta AR_{j,t} = \alpha_0 + \beta_0 \Delta Rev_{j,t} + \varepsilon_{j,t} \quad (3)$$

where, $\Delta AR_{j,t}$ and $\Delta Rev_{j,t}$ represent the change from year t to $t-1$ for firm j in accounts receivable and revenues respectively. As Stubben (2010) notes, *ARESREV* is subject to smaller measurement error compared to other measures of discretionary accruals.

Our fourth measure is the absolute value of total accruals (*ATOTACC*). We define total accruals as a change in current assets minus a change in current liabilities minus a change in

cash and equivalents plus a change in short term debt minus depreciation and amortization— all scaled by opening total assets (Aobdia 2019).

3.3.2. *Likelihood of Misreporting*

Ideally, we would like to directly measure audit quality by examining any going concern opinions, audit opinions or earnings restatements (DeFond and Zhang, 2014; Carey and Simnett 2006; Geiger and Raghunandan 2002; Myers, Myers, and Omer 2003). Unfortunately, we had either no cases or only a handful of cases making any meaningful inferences impossible.¹² Consequently, we use an alternative measure - the *MAD_Score* - which measures the divergence of the first leading digit between the actual distribution of a firm's financial statement numbers from a theoretical distribution predicted by Benford's Law. The higher the *MAD_Score* the higher the likelihood of accounting manipulation (Amiram et al., 2015; Chakrabarty, Moulton, Pugachev and Wang, 2020; Amiram, Bozanic, and Rouen 2015). Amiram et al. (2015) find the *MAD_Score* is positively associated with a higher likelihood of: financial statement errors and material misstatement, accruals-based earnings management, and earnings manipulation.¹³ Consistent with prior literature we measure the *MAD_Score* as the mean of the absolute value of the difference between the frequency of each first digit within the sample, and the frequency as determined by Benford Law.

$$Raw_MAD_Score = \frac{\sum_{i=1}^K |AF-EF|}{K} \quad (4)$$

Where *AF* is the actual frequency of the leading digit observed, *EF* is the expected frequency as determined by Benford Law, and *K* is the number of leading digit bins (equal to 9 for the first leading digit). The *MAD* score is highly sensitive to the pool of digits (Amiram et al. 2015; Nigrini 1996; 2011; 2012), such that a higher *MAD* score may not be due earnings

¹² To note, the one and only qualified audit opinion we identified was provided by an audit partner with first-born daughter.

¹³ We were unable to construct the more commonly used F-score (Dechow et al. 2011) because we observed no restatements during our sample period.

management but merely reflect a lower pool of digits. To control for difference in the pool of digits we adjust the *Raw_MAD_Score* for the coefficient of variation of the total pool of digits across industry and year (*Adj_MAD_Score*) similar to Chakrabarty et al. (2020).

3.3.3. Audit Fee

Prior literature has also employed audit fees to proxy for audit quality since it reflects the level of audit effort (Abodia, 2019), and audit effort is found to be positively associated with audit quality (Xiao, Geng and Yuan 2020). We therefore examine total audit fees (*AUDFEE*) given the advantage that they are continuous and therefore are able to capture subtle variations in audit quality (Defond and Zhang 2014). In addition, we also examined the sensitivity of our results by estimating abnormal audit fees using the Blankley et al. (2012) audit fee model (reported in on-line appendix table 1).

3.4. Modelling Audit Quality and First Daughter Effect

To test our hypothesis, that audit partners with first-born daughters are associated with higher quality audits, we estimate the following cross-sectional regression that includes the indicator variable (*First_Daughter*) equaling one if the audit partner has a first-born daughter and zero otherwise (omitting firm *i* and time *t* indexing):

$$\begin{aligned}
 AQ = & \alpha + \beta_1 First_Daughter + \beta_2 Num_Children + \beta_3 Single + \beta_4 Divorced + \beta_5 Age \\
 & + \beta_6 Tenure + \beta_7 Female + \beta_8 Busy + \beta_9 Ind_Exp + \beta_{10} Client_Impt + \beta_{11} P_Rotation + \beta_{12} Big_4 \\
 & + \beta_{13} Size + \beta_{14} OCF + \beta_{15} Loss + \beta_{16} Lev + \beta_{17} Growth + \beta_{18} ROA + \beta_{19} MTB + \beta_{20} Firm_Age \\
 & + \beta_{21} Cross_Listed + \beta_{22} December_FY + Year_F.E + Client_F.E. + \varepsilon
 \end{aligned}
 \tag{5}$$

where, *AQ* is either *AAWCA*, *ADD*, *ARESREV*, *ATOTACC*, *Adj_MAD_Score*, or *AUDFEE* for firm *j* in year *t*, as defined in Appendix 1. High levels of *AQ* (except in the case when *AQ* captures audit fees) indicates more aggressive accounting, lower earnings quality, and thus lower audit quality (Dechow et al. 2010). Under our hypothesis we therefore expect β_1 to be

negative and significantly different from zero, indicating that audit partners with a first-born daughter are associated with higher quality audits. When AQ reflects audit fees we expect β_i to be positive as auditors with first-born daughters are more likely to provide higher levels of audit effort and hence charge higher fees relative to auditors with first-born sons. This prediction is also consistent if the audit fees captures the risk premia (DeFond and Zhang, 2014) given parents with first-born daughters are found to be more risk adverse (Powdthavee et al. 2009; Chew et al. 2018; Pogrebna et al. 2018) it is likely they will charge a higher premia (Pittman et al., 2021; Amir et al., 2014).

Consistent with prior literature, we include a number of audit partner and client control variables. To better isolate the *First_Daughter* effect we control for two characteristics of the partner's family environment. Specifically, we include the total number of biological children the partner has (*Num_Children*) (Cronqvist and Yu 2017; Warner and Steel 1999) along with marital status (Warner 1991; Warner and Steel 1999) which has been found to be associated with the gender of their child. Specifically, research finds that having a daughter increases the probability that parents will divorce and thus a first-born daughter is significantly less likely to be living with her father compared to a first-born son (Dahl and Moretti 2008; Lundberg and Rose 2003; Bolzendahl and Myers 2004; Pollard and Morgan 2002; Katzev et al. 1994; Mammen 2003).

In addition, we include several audit partner characteristics which have been found in prior literature to be associated with audit quality. We control for partner age (*Age*) as a proxy for experience and a signal of resistance to risk taking (Li et al. 2017; Pittman et al. 2021); partner tenure (*Tenure*) (Carey and Simnett 2006; Manry, Mock, and Turner 2008); partner gender (*Female*) (Ittonen et al. 2013; Hardies, Breesch, and Branson 2015; Hardies et al. 2016; Li et al. 2017); partner workload (*Busy*) (Zerni 2012; Kallunki et al. 2019); partner industry expertise (*Ind_Exp*) (Zerni 2012); client importance (*Client_Impt*) (Gul et al. 2013; Li et al.

2017; Chen et al. 2010), and partner rotation (*P_Rotation*) (Cunningham, Li, Stein, and Wright 2019; Pittman et al. 2021).

We also control for a number of client and audit firm time-variant characteristics that could affect audit partner reporting decisions (DeFond, Francis, and Wong 2000; Chen, Chen, and Su 2001; DeFond, Raghunandan, and Subramanyam 2002; Chan, Lin, and Mo 2006). Specifically, we control for: Big 4 accounting firms (*Big_4*)¹⁴ (Becker et al. 1998; Francis, Maydew, and Sparks 1999); the size of the client-firm (*Size*), since abnormal accruals are found to be negatively related to firm size (Cameran, Francis, Marra, and Pettinicchio 2015; Johnson, Khurana, and Reynolds 2002; Cameran et al. 2016); operating cash flows (*OCF*) as an accruals-free measure of client firm performance (Carcello and Chan 2013; Davis, Soo, and Trompeter 2009); whether the firm reports a loss (*D_Loss*), since firms reporting losses are expected to engage more aggressively in earnings management (Carey and Simnett 2006; Cameran et al. 2015); leverage (*Lev*), since earnings management is often used to avoid violation of debt covenants (Carey and Simnett 2006; DeFond and Jiambalvo 1994); firm growth (*Growth*), given the impact on accruals (Carey and Simnett 2006); the return-on-assets ratio (*ROA*), controlling for the potential effects of profitability on abnormal accruals (Kothari, Leone, and Wasley 2005); and the market-to-book ratio (*MTB*). Moreover, we control for firm age (*Firm_Age*), whether it is cross-listed (*Cross_Listed*), and if its fiscal-year end is December (*FY_December*).

When audit quality (*AQ*) is proxied using *AUDFEE* we include a number of additional controls variables to Eq. (6) consistent with prior research (Fung, Gul and Krishnan, 2012; Gul and Goodwin, 2010; Francis et al., 2005; Cunningham et al., 2019; Pittman et al., 2021).

¹⁴ We also examined the sensitivity of our result to the inclusion of additional audit-firm characteristics. Specifically, we included audit-firm tenure (*AF_Tenure*) (Gul et al. 2013; Bell et al. 2015); client firm importance for audit firm (*Client_Impt_AF*) (Gul et al. 2013; Chen et al. 2010); audit firm rotation (*AF_Change*) (Bell et al. 2015; Cameran et al. 2016). Our results were robust to their inclusion, in some instance increasing the significance of our variable of interest.

Specifically, we control for the level of audit complexity (*RECINV*, *Foreign*, *Segments*) the client's short-term capital (*Quick*) and asset mix (*CA_TA*).

Clients are also unlikely to be randomly assigned to partners and therefore we are likely to suffer from endogeneity effects such that our results may reflect the client firm's innate financial reporting quality instead of audit partner performance (Lawrence, Minutti-Meza, and Zhang 2011). In order to mitigate the potential effects of endogeneity we include client-firm fixed effects in addition to year fixed effects. We do not include audit office fixed effects since the vast majority of audits for listed firms are concentrated in Stockholm offices. To mitigate the influence of outliers we winsorize all continuous variables at the bottom and top 1% level. Appendix 1 provides details on the measurement of all our variables. Robust standard errors are clustered at the client-firm level¹⁵.

3.4.1. Conditional Conservatism

In addition to the models above we also examine audit quality using conditional conservatism (DeFond and Zhang 2014; Knechel et al. 2013; Amir et al., 2014; Pittman et al., 2021), which reflects a fundamental characteristic of high-quality earnings (Watts, 2003; Skinner, 1997, Ettredge et al., 2012; Amir et al. 2014; Pittman et al., 2021). Conditionally conservative accounting reports a more timely recognition of bad news relative to good news through transitory negative accrual items (e.g., Basu, 1997; Ball and Shivakumar, 2006; Patatoukas and Thomas, 2011; Ball et al., 2013; Patatoukas and Thomas, 2016). Consistent with prior studies the less conservative the earnings the more aggressive the accounting, thus the lower the audit quality (DeFond and Zhang 2014; Knechel et al. 2013; Amir et al., 2014; Pittman et al., 2021).

¹⁵ We find our results are not sensitive to alternative clustering levels, for example, clustering by either partner level or by partner-client level provides consistent results to those reported.

We measure conditional conservatism by extending the Basu (1997) asymmetric loss recognition model (Krishnan, 2005; Cunningham et al 2019; Ettredge et al., 2012; Amir et al., 2014; Pittman et al., 2021). Specifically, we estimate the following cross-sectional model:

$$\begin{aligned}
EP = & \alpha + \beta_1 RET + \beta_2 NEG + \beta_3 RET * NEG + \beta_4 First_Daughter + \beta_5 RET * First_Daughter \\
& + \beta_6 NEG * First_Daughter + \beta_7 RET * NEG * First_Daughter + \beta_8 Size + \beta_9 Lev + \beta_{10} MTB + \\
& \beta_{11} RET * Size + \beta_{12} RET * Lev + \beta_{13} Ret * MTB + \beta_{14} NEG * Size + \beta_{15} NEG * Lev + \beta_{16} NEG * MTB \\
& + \beta_{17} RET * NEG * Size + \beta_{18} RET * NEG * Lev + \beta_{19} RET * NEG * MTB + Year_F.E + Client_F.E. + \varepsilon
\end{aligned}
\tag{6}$$

where EP is earnings-per-share divided by beginning-of-the-year share price, RET is annual stock return and NEG is a dummy variable that equals one if RET is negative and zero otherwise (Amir et al., 2014). Again to mitigate the potential effects of endogeneity we include client-firm fixed effects in addition to year fixed effects and robust standard errors are clustered at the client-firm level. Under our hypothesis, we expect β_7 to be positive indicating that auditors with first-born daughters exhibit a higher degree of conditional conservatism relative to auditors with first-born sons.

IV. DESCRIPTIVE STATISTICS

We report descriptive statistics in Table 3. Panel A shows the distributions of the audit quality measures for the full sample, the sample when $First_Daughter$ equals 1 and the sample when $First_Daughter$ equals 0. For the full sample $AAWCA$ has a mean (median) value of 0.045 (0.027), $ADDT$ has a mean (median) value of 0.047 (0.029), $ARESREV$ a mean (median) of 0.038 (0.022), $ATOTACC$ a mean (median) of 0.064 (0.046). The average (median) Adj_MAD_Score is 6.497 (6.003)¹⁶. Audit fees ($AUDFEE$) have a mean (median) of 13.723 (14.037) and EP a mean (median) of 0.025 (0.056). Preliminary investigation of the accruals audit quality proxies reveals no significant differences between those with and without first-

¹⁶ The Raw_MAD_Score average (median) is 0.031 (0.030) which is consistent with the prior literature (Amiram et al 2015; Chakabarthi et al. 2020).

born daughters samples, with the exception of *ARESREV* which is marginally different under the Wilcoxon test, but not for the t-test. The *Adj_MAD_Score* is marginally higher, contrary to expectations, under the t-test but not for the Wilcoxon test. We do observe *AUDFEE* is significantly lower, contrary to expectations, for audit partners with first-born daughters relative to those without.

[Insert Table 3]

Panel B shows descriptive data for the audit partner and client-firm characteristics. With respect to audit partner characteristics, we find 42% of our firm-year observation audit partners have first-born daughters. The average client partner *Tenure* is approximately 2.95 years with an average number of clients per year of 2.8 (*Busy*). Thirty-five percent of audit partners have industry experiences (*Ind_Exp*) and 53% of their clients are important (*Client_Impt*). Approximately, ten percent of firm-year observations include a female audit partner and 93% are audited by a Big 4 accounting firm, while 20% of the firm-year observations include an audit partner rotation (*P_Rotation*).

As for the control variables, about 22% of firm-year observations report a prior loss, they have an average ratio of debt to total assets (*LEV*) of 0.21, and an average *Growth* of 0.08. Both average *ROA* and operating cash flows (*OCF*) are positive with means of 0.70 and 0.07 respectively, and the average market to book of (*MTB*) is 1.2.

Panel C presents the pairwise Pearson (Spearman) correlation coefficients below (above) the diagonal. All our audit quality measures are highly correlated at 1% significance, although none are significantly correlated with *First_Daughter*, except *AUDFEE* and *EP*. Audit partners with first-born daughters are likely to have more children and less likely to be single relative to those without a first-born daughter. They are also more likely to audit smaller, younger clients, clients who have lower levels of leverage (*Lev*) and *ROA* relative to audit partners with first-born sons, which provides an explanation for the lower audit fees.

V. RESULTS

Table 4, Panel A presents estimates of equation (5) where the dependent variable is absolute abnormal working capital accruals (*AAWCA*) in columns (1) and (2); absolute value of the residuals (*ADDT*) in columns (3) and (4); absolute value of discretionary revenues (*ARESREV*) in columns (5) and (6); and absolute value of total accruals (*ATOTACC*) in columns (7) and (8). Panel B presents the estimates of equation (5) where the dependent variable is the *Adj_MAD_Score* in columns (1) and (2) and total audit fee (*AUDFEE*) in columns (3) and (4). Panel C presents the estimates for the Basu (1997) model, equation (6). Overall, we find consistent evidence across all audit quality measures supporting our hypothesis that audit partners with first-born daughters (*First_Daughter*) are associated with higher audit quality.

Specifically, the coefficients on *First_Daughter* for all accrual measures are negative and significant at either the one or five percent level (Panel A, columns 1 to 8). In Panel B the coefficients on *First_Daughter* are significant with the predicted coefficient sign. Specifically, when the dependent variable is *Adj_MAD_Score* the coefficient on *First_Daughter* is negative and significant at 5%. When the dependent variable is either *AUDFEE* the coefficient on *First_Daughter* is positive and significant at 5%, this is consistent using abnormal audit fee (see On-Line Appendix Table 1, columns 3 and 4). In economic terms an audit partner with a *First_Daughter* is associated with approximately a 22% to 18%¹⁷ reduction in the mean accruals measures with a 7% reduction of the mean *Adj_MAD_Score* and approximately an 10% increase of the mean of total audit fees (*AUDFEE*). In Panel C, consistent with expectations the coefficient on *REG*NEG*First_Daughter* is positive and significant at the 5% level. Collectively, these results provide strong evidence of a daughter effect on audit quality.

¹⁷ The mean *AAWCA* for this sample is 0.045, so a coefficient of 0.010 reflects a 22% effect.

[Insert Table 4]

With respect to additional audit partner characteristics only *Num_Children*, *Divorced* and *P_Rotation* are statistically significant. *Num_Children* is negative and significant at 10% for the *Adj_MAD_Score* only, *Divorced* is positive (except in relation to *ARESREV*) and marginally significant at 10% for the *AAWCA* analysis. *P_Rotation* is positive and significant for *AAWCA* and *ATOTACC* analysis. With respect to the client firm characteristics, growth (*Growth*) and *MTB* is positive and significant at 10% or stronger for all accruals analysis except *ATOTACC* for *Growth* and *AAWCA* and *ATOTACC* for *MTB*. *Firm_Age*, *Cross_listed* and *December_FY* are negative (except in the case of *ARESREV*) and significant at 10% or higher level. The other controls are largely insignificant for the accruals, but this is likely attributable to the use of firm-fixed effects which reduces the variability of the independent variables.¹⁸ For the audit fee analysis we find *Size*, *Firm_Age* and *Cross_Listed* are positive at significant at 1%. All other variables are insignificant consistent with the use of firm-fixed effects.¹⁹

The prior literature finds income-increasing accruals to be more opportunistic than income-decreasing accruals (Beneish and Vargus 2002; Callen, Livnat, and Segal 2006; Kanagaretnam, Lim, and Lobo 2010). Therefore, auditors are more eager to constrain upward, rather than downward, earnings management (Lennox, Xi, and Zhang 2014; Nelson, Elliott, and Tarpley 2002). Consequently, we split abnormal accruals into income-increasing (positive) and income-decreasing (negative) accruals (Becker et al. 1998; Chung, Firth, and Kim 2002; Beneish and Vargus 2002; Ashbaugh-Skaife, Collins, Kinney, and LaFond 2008; Francis and Yu 2009). Table 5 reports results for this analysis. For the positive accruals sample we find the coefficients on *First_Daughter* are all negative and statistically significant at the 10% and 5% level for *AAWCA* and *ADDT* respectively (columns 1 and 2). For the negative accruals we find

¹⁸ The lack of significance for our control variables is consistent with the prior literature that includes firm fixed effect (Cameran et al. 2015; Horton, Livne, and Pettinicchio 2020).

¹⁹ The following variables lose significance in one or more specifications when we include firm fixed effects instead of industry fixed effects: *SIZE*, *LEV*, *OCF*, *LOSS*, *ROA*, *AGE* and *Cross_Listed*

First_Daughter is negative for all measures although none are significant. These results provide partial evidence suggesting that audit partners with first-born daughters are relatively less tolerant of income-increasing than income-decreasing earnings management.

[Insert Table 5]

5.1. Sensitivity tests

We test the sensitivity of our main results to alternative samples and specifications. First, we limit our analysis to audit partners working only for Big 4 accounting firms. Big 4 accounting firms are expected to have relatively more standardized audit procedures and a better set of quality control systems, thereby narrowing the opportunity for partner characteristics to matter (Pittman et al. 2021; Chou et al. 2018). We find our results are robust to these specifications and are reported in the on-line appendices (Tables 2 to 6). Specifically, we find the coefficients on *First_Daughter* are as predicted - a negative and significant at the one percent level for *AAWCA* and five percent level for all other accruals. Similarly the *Adj_MAD_Score* is as predicted, negative and significant at 5%. While *AUDFEE* is positive and significant at the 5% level.

5.2. Only a First-born daughter effect?

Is the association we observe a first-born daughter phenomenon or is it the effect of having daughters in general? To examine this, we modify our cross-sectional models and replace *First_Daughter* with either *Daughter* - which equals one if the audit partner has a daughter and zero otherwise, or alternatively with *%Daughters* which equals the percentage of daughters an audit partner has. In the on-line appendices (Tables 7-9) we find audit partners with a least one daughter (*Girl*) have consistent signs with *First_Daughter* but are not significant²⁰. This is also true for the percentage of girl and total number of girls specifications. Overall, our findings suggest that the daughter effect, in the context of audit partners, is

²⁰ Except when we consider *AUDFEE* where it is positive and significant at 5%

stronger when the daughter is the first-born. This is consistent with the prior literature that find experiences that occur earlier in an individual’s life, especially the birth of the first child, have an important and persistent impact on behavior and preferences (Dinas 2013; Sears 1981; Sears and Valentino 1997; Nteta and Greenlee 2013; Giuliano and Spilimbergo 2014; Cronqvist et al. 2015) and, for audit partners, it is the most relevant period when experiences are “imprinted” on their behavior (He et al. 2018).

VI. ADDITIONAL ANALYSIS

As we noted earlier, clients are unlikely to be randomly assigned to partners and this presents a potential endogeneity issue (Lawrence et al. 2011). In addition to our use of client-firm fixed effects to mitigate this concern, we also undertake a PSM (Lawrence et al. 2011; Lennox and Pittman 2010) and a type of difference-in-difference analysis whereby we hold constant both the client and audit firm. This enables us to reduce the risk that our documented association between first-born daughters and audit quality spuriously reflects variation in observable client level characteristics rather than partner effects.

6.1. Propensity Score Matching

We employ PSM and use a one-to-one matched pair design, within common support, without replacement, and with a calliper distance of 0.03 (Pittman et al. 2021; Lawrence et al. 2011), to identify for each audit partner with a first-born daughter with an audit partner without a first-born daughter. Our matching algorithm uses variables typically related to audit partner and client-specific variables highlighted in the audit quality literature. Specifically, we match on the following audit partner characteristics: *Num_Children*, *Married*, *Age*, *Busy*, *Ind_Exp*, *Gender*, *Big_4* and the following client-firm characteristics: *Size*, *OCF Lev*, *Growth*, *ROA*, *MTB*, *Firm_Age*, *Year* and *Industry*.

Table 6, Panel A, reports the mean difference in covariate values and reveals the impact of the matching process for the *AAWCA* sample and Table 10 in the on-line Appendices reports

the first-stage regression for the *AAWCA* sample. We assess the balance with reference to the bias reduction and t-test (columns 7 and 8). In Panel A, pre-matching covariate mean differences are statistically significant (consistent with the correlations noted above) for *Num_Children*, *Size*, *Lev*, *ROA* and *Firm_Age* but after matching they cease to be significantly different.²¹

[Insert Table 6]

Panels B, C and D reports the regression estimates using the matched samples for each audit quality sample. Our results continue to hold providing us with some reassurance that our results are not driven by the potential screening by auditor partners and self-selection by their clients (Lawrence et al. 2011; Lennox and Pittman 2010). Specifically, in Panel B, the variable of interest, *First_Daughter*, is negative and significant when the dependent variable is one of the accrual measures, Panel C when the dependent variable is the *Adj_MAD_Score* (*AUDFEE*) *First_Daughter* is negative (positive) and significant. Similarly, we find *REG*NEG*First_Daughter* (Panel D) continues to be positive and significant. The size of the *First_Daughter* coefficient indicates that an audit partner with a *First_Daughter* is associated with approximately a 34% - 20% reduction of the mean accruals measure, a reduction of 6.18% in the *Adj_MAD_Score* and a 13.5% increase in *AUDFEE*. In addition we also re-estimate all the models using entropy balancing, reported in the online appendices (Table 11) and find consistent results to those of the PSM. Entropy balancing is a generalized conventional propensity score weight designed to ensure balance in the distributions of covariates across the treatment and control group similar to PSM but has the added advantage that observations are not lost nor is matching dependant on the calibration choice (Glendening, Mauldin & Shaw, 2019; Wilde, 2017; Hainmueller, 2012, Chu, Florou & Pope, 2020).

²¹ For conditional conservatism model we match it based on just *Size*, *Lev* & *MTB*. And for all audit quality samples, except *AAWCA* sample we find consistent pre- and post-match significances.

6.2. Difference-in-Difference Analysis

We employ a research design similar to a differences-in-difference specification.²² Specifically, we create a sub-sample of client firms whose audit partner, but not audit firm, rotated. During our sample period all rotations were voluntary. Thus, both the client and audit firm are held constant enabling us to control for unobservable client-specific and audit firm-specific variation that may be associated with audit quality. We identify, within this sample, firms with a transition from (a) an audit partner with a first-born daughter to an audit partner with a first-born son (*Daughter-to-Son*), (b) an audit partner with a first-born son to an audit partner with a first-born girl (*Son-to-Daughter*), and (c) audit partners without a change in the gender of the first-born (*Daughter-to-Daughter*; *Son-to-Son*). We compare the association of *Daughter-to-Son* (or *Son-to-Daughter*) to audit quality relative to the sample with no change (*Daughter-to-Daughter*; *Son-to-Son*) by applying the following specification:

$$AQ = \alpha + \beta_1 POST + \beta_2 \text{Daughter-to-Son(or Son-to-Daughter)} * POST + \beta_3 \text{Num_Children} + \beta_4 \text{Single} + \beta_5 \text{Divorced} + \beta_6 \text{Age} + \beta_7 \text{Female} + \beta_8 \text{Busy} + \beta_9 \text{Ind_Exp} + \beta_{10} \text{Client_Impt} + \beta_{11} \text{Big_4} + \beta_{12} \text{Size} + \beta_{13} \text{OCF} + \beta_{14} \text{Loss} + \beta_{15} \text{Lev} + \beta_{16} \text{Growth} + \beta_{17} \text{ROA} + \beta_{18} \text{MTB} + \beta_{19} \text{Firm_Age} + \beta_{20} \text{Cross_Listed} + \beta_{21} \text{December_FY} + \text{Year_F.E.} + \text{Client_F.E.} + \text{Audit_Firm_F.E.} + \varepsilon \quad (7)$$

where *POST* equals one for all years following an audit partner rotation and zero otherwise. *Son-to-Daughter* (*Daughter-to-Son*) equals one, if the transition involves an audit partner with a first-born son (daughter) to an audit partner with first-born daughter (son) and zero otherwise. All other variables are described in Appendix 1. Robust standard errors are clustered at the client firm audit partner pairs.²³

Consistent with prior studies (e.g., Francis, Hasan, Park, and Wu 2015), we require a) that each audit partner has audited the client for at least three consecutive years prior to or after rotation, enabling enough time for both partners to have had a chance of imprinting their style

²² Ideally, we would have liked to undertake a differences-in-difference analysis which identifies audit partners who during the sample period became a parent for the first time and also continued to audit the same clients and work for the same audit firm. However, given the average age of our audit partners is 51 we find, not surprisingly only 4 audit partners who had a first-born during our sample period.

²³ We also clustered by audit partner. Results were not sensitive to this alternative specification.

on the client financial reports and b) if a client firm rotates its audit partner more than once we only count the most recent change (Francis et al. 2015; Laurion, Lawrence, and Ryans 2017).

Following our findings that audit partners with a first-born daughter are associated with higher quality audits, we expect a client firm replacing an audit partner with a first-born son (daughter) with one with a first-born daughter (son) to be associated with an increase (decrease) in their clients' audit quality relative to rotations that do not involve a first-child gender change. Therefore, we expect β_2 to be negative when our variable of interest is *Son-to-Daughter*POST* and positive when it is *Daughter-to-Son*POST* for all audit quality measures except *AUDFEE*. When the dependent variable is *AUDFEE* we expect to see opposite results.

Table 7 reports the difference-in-difference results. Panel A presents estimates of our cross-sectional models where the dependent variable is absolute abnormal working capital accruals (*AAWCA*) in columns (1) and (5); absolute value of the residuals (*ADDT*) in columns (2) and (6); absolute value of discretionary revenues (*ARESREV*) in columns (3) and (7); absolute value of total accruals (*ATOTACC*) in columns (4) and (8). Panel B present the diff-in-diff results for the *Adj_MAD_Score* in columns (1) and (5); total audit fee (*AUDFEE*) in columns (2) and (6); earnings (*EP*) in columns (3) and (7). Columns (1) to (4) report the *Son-to-Daughter* analysis and Columns (5) to (8) the *Daughter-to-Son* analysis.

Despite the limited number of audit partner rotations and a highly demanding specification with respect to statistical power, we obtain results consistent with expectations. A *Son-to-Daughter* (*Daughter-to-Son*) transition is associated with an increase (decrease) in audit quality under all accrual specifications, except one. Specifically, the coefficients on *Son-to-Daughter*POST* are negative and significant for all accrual measures except *ADDT*. The significance level is 1% for *AAWCA* and all other accrual measures are at 5%. While the coefficients on *Daughter-to-Son*POST* are positive and significant at the 1% level for both *AAWCA* (column 5) and *ATOTACC* (column 8), and positive and significant at the 10% level

for *ADDT* (column 6). The exception is for *ARESREV* where we find a negative coefficient, although it is not significant (column 7).²⁴ Also consistent with our expectations we find a *Son-to-Daughter* transition significantly decreases the *Adj_MAD_Score* at the 5% significance level, although contrary to expectations *Daughter-to-Son* also decreases the *Adj_MAD_Score* but the coefficient is not significant. With respect to the audit fees consistent with our expectations a *Son-to-Daughter* (*Daughter-to-Son*) transition is positive (negative) and significant at 10% (5%). For the conditional conservatism we find both *Son-to-Daughter* and *Daughter-to-Son* transitions are positive but insignificant. The lack of results for this analysis may be due in part to the low sample size (Ryan, 2006; Wang et al., 2008). Overall, these combined results provide a strong indication that audit partners with first-born daughters bring about, and not merely reflect, higher audit quality.

[Insert Table 7]

To assess the robustness of these results we also examine alternative samples and specifications. First, we limit the sample to: Big 4 accounting firms only, to rotations that did not involve a change in the gender of the audit partner, e.g. focus only a male (female) audit partner replacing a male (female) audit partner— thereby removing any change in audit quality which may be due to the change in audit partner gender. Lastly we estimate the effect on audit quality following a transition from *Daughter-to-Son*, relative to a *Son-to-Son* transition, and *Son-to-Daughter* transition, relative to *Daughter-to-Daughter* transition, keeping the child's gender in the post transition period comparable. Despite a drop in sample size, reducing the power of our test, we find our results are robust to these different specifications (see online appendices, Tables 12-14).

²⁴ We also examined whether a *Son-to-Son* relative to *Daughter-to-Daughter* transition is associated with a significant change in audit quality. Under all specifications, as expected, we do not find *Son-to-Son* is significantly different from *Daughter-to-Daughter*.

Collectively, our results provide a clear indication that the increase in audit quality following an audit partner rotation is, at least in part, explained by whether the new audit partner has a first-born daughter.

VII. CONCLUSION

Audit quality depends on audit partner characteristics. In addition to knowledge-related characteristics, such as industry specialization, client tenure and audit experience, we find the audit partner's family environment also has an effect – specifically a daughter effect.

Specifically we find that firm-year observations where the audit partner has a first-born daughter have significantly lower abnormal accruals, lower propensity to misstate, higher audit fees and higher conditional conservatism. Our findings are robust to a number of different specifications. Moreover, we find when focusing on changes in audit partners, in a type of difference-in-difference analysis, that a transition to a partner with a first-born daughter improves quality, whereas a transition to a partner with a first-born son reduces audit quality, holding constant the client and audit firm.

Our study contributes to an expanding literature on the effects of audit partner characteristics on audit quality. The benefit of examining the first-born daughter effect is that it is not endogenously linked to audit partner self-selection bias. The gender of the first-born child is randomly allocated by nature, without any link to the career of the audit partner, but still has an effect on characteristics that matter for the audit. This has implications for regulators, investors and managers in audit firms.

REFERENCES

- Adams, R. B., and P. Funk. 2012. Beyond the Glass Ceiling: Does Gender Matter? *Management Science* 58 (2):219-235.
- Amir, E., J. P. Kallunki, and H. Nilsson. 2014. The association between individual audit partners' risk preferences and the composition of their client portfolios. *Review of Accounting Studies* 19 (1):103-133.
- Amiram, D., Bozanic, Z. and Rouen, E., 2015. Financial statement errors: Evidence from the distributional properties of financial statement numbers. *Review of accounting studies*, 20(4), pp.1540-1593.
- Andersson, G., K. Hank, and A. Vikat. 2007. Understanding parental gender preferences in advanced societies: Lessons from Sweden and Finland. *Demographic Research* 17:135-155.
- Aobdia, D. 2019. Do practitioner assessments agree with academic proxies for audit quality? Evidence from PCAOB and internal inspections. *Journal of Accounting and Economics* 67 (1):144-174.
- Aobdia, D., 2020. The economic consequences of audit firms' quality control system deficiencies. *Management Science*, 66(7), pp.2883-2905.
- Arnaboldi, F., and F. Gioia. 2019. Portfolio choice: Evidence from new-borns: Università di Modena e Reggio Emilia, Dipartimento di Economia "Marco Biagi".
- Ashbaugh-Skaife, H., D. W. Collins, W. R. Kinney, and R. LaFond. 2008. The Effect of SOX Internal Control Deficiencies and Their Remediation on Accrual Quality. *The Accounting Review* 83 (1):217-250.
- Ball, R. and Shivakumar, L., 2006. The role of accruals in asymmetrically timely gain and loss recognition. *Journal of accounting research*, 44(2), pp.207-242.
- Ball, R., 2009. Market and political/regulatory perspectives on the recent accounting scandals. *Journal of accounting research*, 47(2), pp.277-323.
- Ball, R., 2013. Accounting informs investors and earnings management is rife: Two questionable beliefs. *Accounting Horizons*, 27(4), pp.847-853.
- Barber, B. M., and T. Odean. 2001. Boys will be boys: Gender, overconfidence, and common stock investment. *Quarterly Journal of Economics* 116 (1):261-292.
- Basu, S., 1997. The conservatism principle and the asymmetric timeliness of earnings. *Journal of accounting and economics*, 24(1), pp.3-37.
- Baxter, J., S. Buchler, F. Perales, and M. Western. 2015. A Life-Changing Event: First Births and Men's and Women's Attitudes to Mothering and Gender Divisions of Labor. *Social Forces* 93 (3):989-1014.
- Bell, T. B., M. Causholli, and W. R. Knechel. 2015. Audit Firm Tenure, Non-Audit Services, and Internal Assessments of Audit Quality. *Journal of Accounting Research* 53 (3):461-509.
- Beneish, M. D., and M. E. Vargus. 2002. Insider Trading, Earnings Quality, and Accrual Mispricing. *The Accounting Review* 77 (4):755-791.
- Bennedsen, M., K. M. Nielsen, F. Perez-Gonzalez, and D. Wolfenzon. 2007. Inside the Family Firm: The Role of Families in Succession Decisions and Performance. *The Quarterly Journal of Economics* 122 (2):647-691.
- Bernardi, R. A., and D. F. S. Arnold. 1997. An Examination of Moral Development within Public Accounting by Gender, Staff Level, and Firm. *Contemporary Accounting Research* 14 (4):653-668.
- Beutel, A. M., and M. M. Marini. 1995. Gender and Values. *American Sociological Review* 60 (3):436-448.
- Blankley, A.I., Hurtt, D.N. and MacGregor, J.E., 2012. Abnormal audit fees and restatements. *Auditing: A Journal of Practice & Theory*, 31(1), pp.79-96.

- Blau, F. D., and L. M. Kahn. 2000. Gender differences in pay. *The Journal of Economic Perspectives* 14 (4):75-99.
- Bliss, R. T., and M. E. Potter. 2002. Mutual Fund Managers: Does Gender Matter? *Journal of Business & Economic Studies* 8 (1):1-15.
- Blouin, J., Grein, B.M. and Rountree, B.R., 2007. An analysis of forced auditor change: The case of former Arthur Andersen clients. *The Accounting Review*, 82(3), pp.621-650.
- Bogan, V. L. 2013. Household investment decisions and offspring gender: parental accounting. *Applied Economics* 45 (31):4429-4442.
- Bolzendahl, C. I., and D. J. Myers. 2004. Feminist Attitudes and Support for Gender Equality: Opinion Change in Women and Men, 1974-1998. *Social Forces* 83 (2):759-789.
- Borrell-Porta, M., J. Costa-Font, and J. Philipp. 2019. The 'mighty girl' effect: does parenting daughters alter attitudes towards gender norms? *Oxford Economic Papers* 71 (1):25-46.
- Brody, C. J., and L. C. Steelman. 1985. Sibling Structure and Parental Sex-Typing of Children's Household Tasks. *Journal of Marriage and Family* 47 (2):265-273.
- Callen, J. L., J. Livnat, and D. Segal. 2006. Accounting restatements: Are they always bad news for investors? *The Journal of Investing* 15 (3):57-68.
- Cameran, M., A. Ditillo, and A. Pettinicchio. 2018. Audit Team Attributes Matter: How Diversity Affects Audit Quality. *European Accounting Review* 27 (4):595-621.
- Cameran, M., A. Prencipe, and M. Trombetta. 2016. Mandatory Audit Firm Rotation and Audit Quality. *European Accounting Review* 25 (1):35-58.
- Cameran, M., D. Campa, and J. R. Francis. 2020. The Relative Importance of Auditor Characteristics Versus Client Factors in Explaining Audit Quality. *Journal of Accounting, Auditing & Finance*:1-26.
- Cameran, M., J. R. Francis, A. Marra, and A. Pettinicchio. 2015. Are There Adverse Consequences of Mandatory Auditor Rotation? Evidence from the Italian Experience. *Auditing: A Journal of Practice & Theory* 34 (1):1-24.
- Cao, Y., Myers, J.N., Myers, L.A. and Omer, T.C., 2015. Company reputation and the cost of equity capital. *Review of Accounting Studies*, 20(1), pp.42-81.
- Caramanis, C., and C. Lennox. 2008. Audit effort and earnings management. *Journal of Accounting and Economics* 45 (1):116-138.
- Carcello, J. V., and L. Chan. 2013. Costs and Benefits of Requiring an Engagement Partner Signature: Recent Experience in the United Kingdom. *The Accounting Review* 88 (5):1511-1546.
- Carey, P., and R. Simnett. 2006. Audit Partner Tenure and Audit Quality. *The Accounting Review* 81 (3):653-676.
- Carrington, T., T. Johansson, G. Johed, and P. Öhman. 2019. The Client as a Source of Institutional Conformity for Commitments to Core Values in the Auditing Profession. *Contemporary Accounting Research* 36 (2):1077-1097.
- Chakrabarty, B., Moulton, P.C., Pugachev, L. and Wang, X.F., 2020. Catch Me If You Can: Improving the Scope and Accuracy of Fraud Prediction. Available at SSRN 3352667.
- Chan, K. H., K. Z. Lin, and P. L. Mo. 2006. A Political-economic Analysis of Auditor Reporting and Auditor Switches. *Review of Accounting Studies* 11 (1):21-48.
- Chen, C. J. P., S. Chen, and X. Su. 2001. Profitability Regulation, Earnings Management, and Modified Audit Opinions: Evidence from China. *Auditing: A Journal of Practice & Theory* 20 (2):9.
- Chen, F., O. K. Hope, Q. Li, and X. Wang. 2011. Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets. *The Accounting Review* 86 (4):1255-1288.

- Chen, S., S. Y. J. Sun, and D. Wu. 2010. Client Importance, Institutional Improvements, and Audit Quality in China: An Office and Individual Auditor Level Analysis. *The Accounting Review* 85 (1):127-158.
- Chen, Y., and S. X. Li. 2009. Group Identity and Social Preferences. *The American Economic Review* 99 (1):431-457.
- Chew, S. H., J. Yi, J. Zhang, and S. Zhong. 2018. Risk Aversion and Son Preference: Experimental Evidence from Chinese Twin Parents. *Management Science* 64 (8):3896-3910.
- Chi, W., and H. Huang. 2005. Discretionary Accruals, Audit-Firm Tenure and Audit-Partner Tenure: Empirical Evidence from Taiwan. *Journal of Contemporary Accounting & Economics* 1 (1):65-92.
- Chi, W., L. A. Myers, T. C. Omer, and H. Xie. 2017. The effects of audit partner pre-client and client-specific experience on audit quality and on perceptions of audit quality. *Review of Accounting Studies* 22 (1):361-391.
- Chin, C. L., and H. Y. Chi. 2009. Reducing Restatements with Increased Industry Expertise. *Contemporary Accounting Research* 26 (3):729-765.
- Chin, C. L., and H. Y. Chi. 2010. Gender Differences in Audit Quality. Available at SSRN: <https://ssrn.com/abstract=1149405>.
- Chou, T. K., J. Pittman, and Z. Zhuang. 2018. The Importance of Partner Narcissism to Audit Quality. Available at SSRN: <https://ssrn.com/abstract=3185866>.
- Chu, J., Florou, A. and Pope, P.F., 2020. Auditor University Education: Does it Matter?.
- Chung, R., M. Firth, and J. B. Kim. 2002. Institutional monitoring and opportunistic earnings management. *Journal of Corporate Finance* 8 (1):29-48.
- Church, B. K., S. M. Davis, and S. A. McCracken. 2008. The Auditor's Reporting Model: A Literature Overview and Research Synthesis. *Accounting Horizons* 22 (1):69-90.
- Clearfield, M.W. and Nelson, N.M., 2006. Sex differences in mothers' speech and play behavior with 6-, 9-, and 14-month-old infants. *Sex roles*, 54(1), pp.127-137.
- Condry, S. M., J. C. Condry, and L. W. Pogatshnik. 1983. Sex Differences: A Study of the Ear of the Beholder. *Sex Roles* 9 (6):697-704.
- Conley, D., and E. Rauscher. 2013. The Effect of Daughters on Partisanship and Social Attitudes Toward Women. *Sociological Forum* 28 (4):700-718.
- Connell, R. W., and J. W. Messerschmidt. 2005. Hegemonic Masculinity: Rethinking the Concept. *Gender & Society* 19 (6):829-859.
- Cronqvist, H., and F. Yu. 2017. Shaped by their daughters: Executives, female socialization, and corporate social responsibility. *Journal of Financial Economics* 126:543-562.
- Cronqvist, H., S. Siegel, and F. Yu. 2015. Value versus growth investing: Why do different investors have different styles? *Journal of Financial Economics* 117 (2):333-349.
- Cunningham, L. M., C. Li, S. E. Stein, and N. S. Wright. 2019. What's in a Name? Initial Evidence of U.S. Audit Partner Identification Using Difference-in-Differences Analyses. *The Accounting Review* 94 (5):139-163.
- Dahl, E., M. Beutel, B. Brosig, and K. D. Hinsch. 2003. Preconception sex selection for non-medical reasons: a representative survey from Germany. *Human reproduction* 18 (10):2231-2234.
- Dahl, E., R. S. Gupta, M. Beutel, Y. Stoebel-Richter, B. Brosig, H. R. Tinneberg, and T. Jain. 2006. Preconception sex selection demand and preferences in the United States. *Fertility and Sterility* 85 (2):468-473.
- Dahl, G. B., and E. Moretti. 2008. The Demand for Sons. *The Review of Economic Studies* 75 (4):1085-1120.
- Dahl, M. S., C. L. Dezső, and D. G. Ross. 2012. Fatherhood and Managerial Style: How a Male CEO's Children Affect the Wages of His Employees. *Administrative Science Quarterly* 57 (4):669-693.

- Dao, M., Raghunandan, K. and Rama, D.V., 2012. Shareholder voting on auditor selection, audit fees, and audit quality. *The Accounting Review*, 87(1), pp.149-171.
- Dasgupta, A., L. Ha, S. Jonnalagadda, S. Schmeiser, and H. Youngerman. 2018. The daughter effect: do CEOs with daughters hire more women to their board? *Applied Economics Letters* 25 (13):891-894.
- Davis, L. R., B. S. Soo, and G. M. Trompeter. 2009. Auditor Tenure and the Ability to Meet or Beat Earnings Forecasts. *Contemporary Accounting Research* 26 (2):517-548.
- Deave, T., and D. Johnson. 2008. The transition to parenthood: what does it mean for fathers? *Journal of Advanced Nursing* 63 (6):626-633.
- Dechow, P. M. 1994. Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics* 18 (1):3-42.
- Dechow, P. M., and I. D. Dichev. 2002. The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review* 77 (Supplement 1):35-59.
- Dechow, P. M., R. G. Sloan, and A. P. Sweeney. 1995. Detecting Earnings Management. *The Accounting Review* 70 (2):193-225.
- Dechow, P. M., W. Ge, and C. Schrand. 2010. Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics* 50 (2-3):344-401.
- DeFond, M. L., and C. W. Park. 2001. The Reversal of Abnormal Accruals and the Market Valuation of Earnings Surprises. *The Accounting Review* 76 (3):375-404.
- DeFond, M. L., and J. Jiambalvo. 1994. Debt covenant violation and manipulation of accruals. *Journal of Accounting and Economics* 17 (1-2):145-176.
- DeFond, M. L., and J. R. Francis. 2005. Audit Research after Sarbanes-Oxley. *Auditing: A Journal of Practice & Theory* 24 (Supplement):5-30.
- DeFond, M. L., and J. Zhang. 2014. A review of archival auditing research. *Journal of Accounting and Economics* 58 (2):275-326.
- DeFond, M. L., J. R. Francis, and T. J. Wong. 2000. Auditor Industry Specialization and Market Segmentation: Evidence from Hong Kong. *Auditing: A Journal of Practice & Theory* 19 (1):49-66.
- DeFond, M. L., K. Raghunandan, and K. R. Subramanyam. 2002. Do Non-Audit Service Fees Impair Auditor Independence? Evidence from Going Concern Audit Opinions. *Journal of Accounting Research* 40 (4):1247-1274.
Demographic Research 19(28):1105-1144.
- Deutsch, F. M., J. B. Lussier, and L. J. Servis. 1993. Husbands at home: Predictors of paternal participation in childcare and housework. *Journal of personality and social psychology* 65 (6):1154-1166.
- DeZoort, F. T., and A. T. Lord. 1994. An investigation of obedience pressure effects on auditors' judgments. *Behavioral Research in Accounting* 6 (Supplement):1-30.
- Dinas, E. 2013. Opening "Openness to Change": Political Events and the Increased Sensitivity of Young Adults. *Political Research Quarterly* 66 (4):868-882.
- Dopuch, N., R. R. King, and R. Schwartz. 2003. Independence in Appearance and in Fact: An Experimental Investigation. *Contemporary Accounting Research* 20 (1):79-114.
- Doucet, A. 2009. Dad and Baby in the First Year: Gendered Responsibilities and Embodiment. *The Annals of the American Academy of Political and Social Science* 624:78-98.
- Downey, D. B., P. B. Jackson, and B. Powell. 1994. Sons versus Daughters: Sex Composition of Children and Maternal Views on Socialization. *The Sociological Quarterly* 35 (1):33-50.

- Duh, R-R., W.R. Knechel, and C-C. Lin. 2020. The Effects of Audit Firms' Knowledge Sharing on Audit Quality and Efficiency. *AUDITING: A Journal of Practice & Theory* 39 (2): 51–79
- Elder, G. H., M. K. Johnson, and R. Crosnoe. 2003. The emergence and development of life course theory. In *Handbook of the life course*: Springer, 3-19.
- Epps, K.K. and Messier Jr, W.F., 2007. Engagement quality reviews: A comparison of audit firm practices. *Auditing: A Journal of Practice & Theory*, 26(2), pp.167-181.
- Ettredge, M., Huang, Y. and Zhang, W., 2012. Earnings restatements and differential timeliness of accounting conservatism. *Journal of Accounting and Economics*, 53(3), pp.489-503.
- Eynon, G., N. T. Hills, and K. T. Stevens. 1997. Factors that Influence the Moral Reasoning Abilities of Accountants: Implications for Universities and the Profession. *Journal of Business Ethics* 16 (12):1297-1309.
- Fargher, N., H. Y. Lee, and V. Mande. 2008. The effect of audit partner tenure on client managers' accounting discretion. *Managerial Auditing Journal* 23 (2):161-186.
- Farmer, T. A. 1993. Testing the Effect of Risk Attitude on Auditor Judgment Using Multiattribute Utility Theory. *Journal of Accounting, Auditing & Finance* 8 (1):91-110.
- Feroz, E. H., P. Kyungjoo, and V. S. Pastena. 1991. The Financial and Market Effects of the SEC's Accounting and Auditing Enforcement Releases. *Journal of Accounting Research* 29 (3):107-142.
- Francis, B., I. Hasan, J. C. Park, and Q. Wu. 2015. Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research* 32 (3):1285-1318.
- Francis, J. R. 2011. A Framework for Understanding and Researching Audit Quality. *Auditing: A Journal of Practice & Theory* 30 (2):125-152.
- Francis, J. R., and J. Krishnan. 1999. Accounting Accruals and Auditor Reporting Conservatism. *Contemporary Accounting Research* 16 (1):135-165.
- Francis, J. R., and M. D. Yu. 2009. Big 4 Office Size and Audit Quality. *The Accounting Review* 84 (5):1521-1552.
- Francis, J. R., E. L. Maydew, and H. C. Sparks. 1999. The role of Big 6 auditors in the credible reporting of accruals. *Auditing: A Journal of Practice & Theory* 18 (2):17-34.
- Francis, J., LaFond, R., Olsson, P. and Schipper, K., 2005. The market pricing of accruals quality. *Journal of accounting and economics*, 39(2), pp.295-327.
- Freese, J., and B. Powell. 1999. Sociobiology, Status, and Parental Investment in Sons and Daughters: Testing the Trivers-Willard Hypothesis. *American Journal of Sociology* 104 (6):1704-1743.
- Fung, S.Y.K., Gul, F.A. and Krishnan, J., 2012. City-level auditor industry specialization, economies of scale, and audit pricing. *The Accounting Review*, 87(4), pp.1281-1307.
- Ge, W., D. Matsumoto, and J. L. Zhang. 2011. Do CFOs Have Style? An Empirical Investigation of the Effect of Individual CFOs on Accounting Practices. *Contemporary Accounting Research* 28 (4):1141-1179.
- Geiger, M. A., and K. Raghunandan. 2002. Auditor Tenure and Audit Reporting Failures. *Auditing: A Journal of Practice & Theory* 21 (1):67.
- Gibbins, M., S. A. McCracken, and S. E. Salterio. 2007. The Chief Financial Officer's Perspective on Auditor-Client Negotiations. *Contemporary Accounting Research* 24 (2):387-422.
- Gibbins, M., S. Salterio, and A. Webb. 2001. Evidence about Auditor-Client Management Negotiation Concerning Client's Financial Reporting. *Journal of Accounting Research* 39 (3):535-563.
- Giuliano, P., and A. Spilimbergo. 2014. Growing up in a Recession. *The Review of Economic Studies* 81 (2 (287)):787-817.

- Glendening, M., Mauldin, E.G. and Shaw, K.W., 2019. Determinants and consequences of quantitative critical accounting estimate disclosures. *The Accounting Review*, 94(5), pp.189-218.
- Glynn, A. N., and M. Sen. 2015. Identifying Judicial Empathy: Does Having Daughters Cause Judges to Rule for Women's Issues? *American Journal of Political Science* 59 (1):37-54.
- Goldin, C. 2014. A Grand Gender Convergence: Its Last Chapter. *The American Economic Review* 104 (4):1091-1119.
- Gompers, P. A., and S. Q. Wang. 2017. And the Children Shall Lead: Gender Diversity and Performance in Venture Capital. *Harvard Business School Working Paper No. 17-103*.
- Grech, V., C. Savona-Ventura, and P. Vassallo-Agius. 2002. Unexplained differences in sex ratios at birth in Europe and North America. *BMJ: British Medical Journal* 324 (7344):1010.
- Grossman, F. K., W. S. Pollack, and E. Golding. 1988. Fathers and children: Predicting the quality and quantity of fathering. *Developmental Psychology* 24 (1):82-91.
- Grossman, F. K., W. S. Pollack, E. R. Golding, and N. M. Fedele. 1987. Affiliation and Autonomy in the Transition to Parenthood. *Family Relations* 36 (3):263-269.
- Gul, F. A., D. Wu, and Z. Yang. 2013. Do individual auditors affect audit quality? Evidence from archival data. *The Accounting Review* 88 (6):1993-2023.
- Gul, F.A. and Goodwin, J., 2010. Short-term debt maturity structures, credit ratings, and the pricing of audit services. *The Accounting Review*, 85(3), pp.877-909.
- Gunny, K., and T.C. Zhang. 2013 PCAOB Inspection Reports and Audit Quality. *Journal of Accounting and Public Policy* 32(2): 136-160.
- Hackenbrack, K., and W. R. Knechel 1997. Resource Allocation Decisions in Audit Engagements. *Contemporary Accounting Research* 14 (3):481-499.
- Hainmueller, J., 2012. Entropy balancing for causal effects: A multivariate reweighting method to produce balanced samples in observational studies. *Political analysis*, pp.25-46.
- Hambrick, D. C. 2007. Upper echelons theory: An update. *The Academy of Management Review* 32 (2):334-343.
- Hardies, K., D. Breesch, and J. Branson 2015. The Female Audit Fee Premium. *Auditing: A Journal of Practice & Theory* 34 (4):171-195.
- Hardies, K., D. Breesch, and J. Branson 2016. Do (Fe)Male Auditors Impair Audit Quality? Evidence from Going-Concern Opinions. *European Accounting Review* 25 (1):7-34.
- Hardies, K., D. Breesch, and J. Branson. 2013. Gender differences in overconfidence and risk taking: Do self-selection and socialization matter? *Economics Letters* 118 (3):442-444.
- Harris, K. M., and S. P. Morgan. 1991. Fathers, Sons, and Daughters: Differential Paternal Involvement in Parenting. *Journal of Marriage and Family* 53 (3):531-544.
- He, X., S. P. Kothari, T. Xiao, and L. Zuo. 2018. Long-Term Impact of Economic Conditions on Auditors' Judgment. *The Accounting Review* 93 (6):203-229.
- Hennes, K.M., Leone, A.J. and Miller, B.P., 2014. Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review*, 89(3), pp.1051-1082.
- Ho, J. L., and R. Waymond. 1993. A review of accounting research on cognitive characteristics. *Journal of Accounting Literature* 12:101-130.
- Hodge, F. D., S. Rajgopal, and T. Shevlin. 2009. Do Managers Value Stock Options and Restricted Stock Consistent with Economic Theory? *Contemporary Accounting Research* 26 (3):899-932.
- Hsieh, Y. T., and C. J. Lin. 2016. Audit Firms' Client Acceptance Decisions: Does Partner-Level Industry Expertise Matter? *Auditing: A Journal of Practice & Theory* 35 (2):97-120.

- Huang, J., and D. J. Kisgen. 2013. Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics* 108 (3):822-839.
- Ittonen, K., E. Vähämaa, and S. Vähämaa. 2013. Female Auditors and Accruals Quality. *Accounting Horizons* 27 (2):205-228.
- Ittonen, K., K. Johnstone, and E. R. Myllymäki. 2015. Audit Partner Public-Client Specialisation and Client Abnormal Accruals. *European Accounting Review* 24 (3):607-633.
- Jessner, L., E. Weigert, and J. L. Foy. 1970. The development of parental attitudes during pregnancy. In *Parenthood: Its psychology psychopathology*, 209-244.
- Johnson, E., I. K. Khurana, and J. K. Reynolds. 2002. Audit-Firm Tenure and the Quality of Financial Reports. *Contemporary Accounting Research* 19 (4):637-660.
- Jones, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research* 29 (2):193-228.
- Jones, J., D. W. Massey, and L. Thorne. 2003. Auditors' ethical reasoning: Insights from past research and implications for the future. *Journal of Accounting Literature* 22:45-103.
- Kallunki, J., J. P. Kallunki, L. Niemi, and H. Nilsson. 2019. IQ and Audit Quality: Do Smarter Auditors Deliver Better Audits? *Contemporary Accounting Research* 36 (3):1373-1416.
- Kanagaretnam, K., C. Y. Lim, and G. J. Lobo. 2010. Auditor reputation and earnings management: International evidence from the banking industry. *Journal of Banking & Finance* 34 (10):2318-2327.
- Kane, E.W., 2012. *The gender trap: Parents and the pitfalls of raising boys and girls*. NYU Press.
- Kaplan, S. E., and A. T. Lord. 2001. An Examination of the Effects of Accountability when Auditors are Uncertain about the Views of Superior Partners. *International Journal of Auditing* 5 (2):141-155.
- Katzev, A. R., Warner, R. L., and Acock, A. C. (1994). Girls or boys? Relationship of child gender to marital instability. *Journal of Marriage and the Family*, 89-100.
- Kennedy, J., and M. E. Peecher. 1997. Judging Auditors' Technical Knowledge. *Journal of Accounting Research* 35 (2):279-293.
- Knechel, R. W., A. Vanstraelen, and M. Zerni. 2015. Does the Identity of Engagement Partners Matter? An Analysis of Audit Partner Reporting Decisions. *Contemporary Accounting Research* 32 (4):1443-1478.
- Knechel, W. R. 2000. Behavioral research in auditing and its impact on audit education. *Issues in Accounting Education* 15 (4):695-712.
- Knechel, W. R., G. V. Krishnan, M. Pevzner, L. B. Shefchik, and U. K. Velury. 2013. Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory* 32 (1): 385-421.
- Knoester, C., and D. J. Eggebeen. 2006. The Effects of the Transition to Parenthood and Subsequent Children on Men's Well-Being and Social Participation. 27 (11):1532-1560.
- Kothari, S. P., A. J. Leone, and C. E. Wasley. 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39 (1):163-197.
- Krishnan, G. V., and L. M. Parsons. 2008. Getting to the Bottom Line: An Exploration of Gender and Earnings Quality. *Journal of Business Ethics* 78 (1):65-76.
- Krishnan, J., 2005. Audit committee quality and internal control: An empirical analysis. *The accounting review*, 80(2), pp.649-675.
- Landsman, W.R., Nelson, K.K. and Rountree, B.R., 2009. Auditor switches in the pre-and post-Enron eras: Risk or realignment?. *The accounting review*, 84(2), pp.531-558.
- Larbeer, M. 1995. The Story of the Dalits of India. In *God, Christ & God's People in Asia*.

- Laurion, H., A. Lawrence, and J. P. Ryans. 2017. U.S. Audit Partner Rotations. *The Accounting Review* 92 (3):209-237.
- Lawrence, A., M. Minutti-Meza, and P. Zhang. 2011. Can Big 4 versus Non-Big 4 Differences in Audit-Quality Proxies Be Attributed to Client Characteristics? *The Accounting Review* 86 (1):259-286.
- Lennox, C. S., and X. Wu. 2018. A Review of the Archival Literature on Audit Partners. *Accounting Horizons* 32 (2):1-35.
- Lennox, C. S., W. Xi, and T. Zhang. 2014. Does Mandatory Rotation of Audit Partners Improve Audit Quality? *The Accounting Review* 89 (5):1775-1803.
- Lennox, C., and J. A. Pittman. 2010. Big Five Audits and Accounting Fraud. *Contemporary Accounting Research* 27 (1):209-247.
- Li, L., B. Qi, G. Tian, and G. Zhang. 2017. The Contagion Effect of Low-Quality Audits at the Level of Individual Auditors. *The Accounting Review* 92 (1):137-163.
- Lips, H. M. 2013. The Gender Pay Gap: Challenging the Rationalizations. Perceived Equity, Discrimination, and the Limits of Human Capital Models. *Sex Roles* 68 (3):169-185.
- Lord, A. T., and T. F. DeZoort. 2001. The impact of commitment and moral reasoning on auditors' responses to social influence pressure. *Accounting, Organizations and Society* 26 (3):215-235.
- Lundberg, S. 2005. Sons, Daughters, and Parental Behaviour. *Oxford Review of Economic Policy* 21 (3):340-356.
- Lundberg, S., and E. Rose. 2003. Child gender and the transition to marriage. *Demography* 40 (2):333-349.
- Lytton, H., and D. M. Romney. 1991. Parents' differential socialization of boys and girls: A meta-analysis. *Psychological bulletin* 109 (2):267-296.
- Mammen, K. (2003). The effect of children's gender on divorce and child support. *Unpublished Paper, Barnard College*.
- Manry, D. L., T. J. Mock, and J. L. Turner. 2008. Does Increased Audit Partner Tenure Reduce Audit Quality? *Journal of Accounting, Auditing & Finance* 23 (4):553-572.
- Marquis, C., and A. Tilcsik. 2013. Imprinting: Toward a Multilevel Theory. *The Academy of Management Annals* 7 (1):193-243.
- McManus, L., and N. Subramaniam. 2009. Ethical evaluations and behavioural intentions of early career accountants: the impact of mentors, peers and individual attributes. *Accounting & Finance* 49 (3):619-643.
- McNichols, M. F. 2002. Discussion of The Quality of Accruals and Earnings: The Role of Accrual Estimation Errors. *The Accounting Review* 77 (4):61-69.
- McNichols, M. F., and S. R. Stubben. 2008. Does Earnings Management Affect Firms' Investment Decisions? *The Accounting Review* 83 (6):1571-1603.
- Messier Jr, W.F., Kozloski, T.M. and Kochetova-Kozloski, N., 2010. An analysis of SEC and PCAOB enforcement actions against engagement quality reviewers. *Auditing: A Journal of Practice & Theory*, 29(2), pp.233-252.
- Messier, J. W. F., V. Owhoso, and C. Rakovski. 2008. Can Audit Partners Predict Subordinates' Ability to Detect Errors? *Journal of Accounting Research* 46 (5):1241-1264.
- Moreno-Vozmediano, R., Montero, R.S., Huedo, E. and Llorente, I.M., 2017. Cross-site virtual network in cloud and fog computing. *IEEE Cloud Computing*, 4(2), pp.46-53.
- Morgan, S. P., D. N. Lye, and G. A. Condran. 1988. Sons, Daughters, and the Risk of Marital Disruption. *American Journal of Sociology* 94 (1):110-129.
- Myers, J. N., L. A. Myers, and T. C. Omer. 2003. Exploring the Term of the Auditor-Client Relationship and the Quality of Earnings: A Case for Mandatory Auditor Rotation? *The Accounting Review* 78 (3):779-799.
- Nelson, M. W. 2009. A Model and Literature Review of Professional Skepticism in Auditing. *Auditing: A Journal of Practice & Theory* 28 (2):1-34.

- Nelson, M. W., J. A. Elliott, and R. L. Tarpley. 2002. Evidence from Auditors about Managers' and Auditors' Earnings Management Decisions. *The Accounting Review* 77 (4):175.
- Nelson, M., and H. T. Tan. 2005. Judgment and Decision Making Research in Auditing: A Task, Person, and Interpersonal Interaction Perspective. *Auditing: A Journal of Practice & Theory* 24:41-71.
- Nigrini, M.J., 1996. A taxpayer compliance application of Benford's law. *The Journal of the American Taxation Association*, 18(1), p.72.
- Nigrini, M.J., 2011. Forensic analytics. Hoboken. NJ: John Wiley & Sons, 10, p.9781118386798.
- Nigrini, M.J., 2012. Benford's Law: Applications for forensic accounting, auditing, and fraud detection (Vol. 586). John Wiley & Sons.
- Niskanen, J., J. Karjalainen, M. Niskanen, and J. Karjalainen. 2011. Auditor gender and corporate earnings management behavior in private Finnish firms. *Managerial Auditing Journal* 26 (9):778-793.
- Nteta, T. M., and J. S. Greenlee. 2013. A Change is Gonna Come: Generational Membership and White Racial Attitudes in the 21st Century. *Political Psychology* 34 (6):877-897.
- Nyström, K., and K. Öhrling. 2004. Parenthood experiences during the child's first year: literature review. *Journal of Advanced Nursing* 46 (3):319-330.
- O'Fallon, M. J., and K. D. Butterfield. 2005. A Review of The Empirical Ethical Decision-Making Literature: 1996-2003. *Journal of Business Ethics* 59 (4):375-413.
- O'Keefe, T. B., D. A. Simunic, and M. T. Stein. 1994. The Production of Audit Services: Evidence from a Major Public Accounting Firm. *Journal of Accounting Research* 32 (2):241-261.
- Oláh, L., and E. Bernhardt. 2008. Sweden: Combining childbearing and gender equality.
- Olivetti, C., and B. Petrongolo. 2016. The Evolution of Gender Gaps in Industrialized Countries. *Annual Review of Economics* 8 (1):405-434.
- Oswald, A. J., and N. Powdthavee. 2010. Daughters and Left-Wing Voting. *The Review of Economics and Statistics* 92 (2):213-227.
- Palkovitz, R., and G. Palm. 2009. Transitions within Fathering. *Fathering* 7 (1):3-22.
- Parish, W. L., and R. J. Willis. 1993. Daughters, Education, and Family Budgets: Taiwan Experiences. *Journal of Human Resources* 28 (4):863-898.
- Patatoukas, P.N. and Thomas, J.K., 2011. More evidence of bias in the differential timeliness measure of conditional conservatism. *The Accounting Review*, 86(5), pp.1765-1793.
- Patatoukas, P.N. and Thomas, J.K., 2016. Placebo tests of conditional conservatism. *The Accounting Review*, 91(2), pp.625-648.
- PCAOB (2013) Fact Sheet: Improving Transparency Through Disclosure of Engagement Partner and Certain Other Participants in Audits, 4 December. https://pcaobus.org/news-events/news-releases/12042013_factsheet_transparency.
- Perales, F., Y. Jarallah, and J. Baxter. 2018. Men's and Women's Gender-Role Attitudes across the Transition to Parenthood: Accounting for Child's Gender. *Social Forces* 97 (1):251-276.
- Pittman, J., S. E. Stein, and D. Valentine. 2021. Audit partners' risk tolerance and the impact on audit quality. Available at SSRN: <https://ssrn.com/abstract=3311682> or <http://dx.doi.org/10.2139/ssrn.3311682>.
- Pogrebna, G., A. J. Oswald, and D. Haig. 2018. Female babies and risk-aversion: Causal evidence from hospital wards. *Journal of Health Economics* 58:10-17.
- Pollard, M. S., and S. P. Morgan. 2002. Emerging Parental Gender Indifference? Sex Composition of Children and the Third Birth. *American Sociological Review* 67 (4):600-613.
- Pollmann-Schult, M. 2015. Sons, Daughters, and the Parental Division of Paid Work and Housework. *Journal of Family Issues* 38 (1):100-123.

- Porumb, V. A., A. De Jong, C. Huijgen, T. A. Marra, and J. Van Dalen. 2017. Individual Auditor Style and Audit Quality in a High Reputation Risk Setting. *Available at SSRN: <https://ssrn.com/abstract=3048713> or <http://dx.doi.org/10.2139/ssrn.3048713>*
- Powdthavee, N., S. Wu, and A. Oswald. 2009. The effects of daughters on health choices and risk behaviour. *Discussion Papers in Economics, University of York* 10 (3).
- Prokos, A. H., C. L. Baird, and J. R. Keene. 2010. Attitudes about Affirmative Action for Women: The Role of Children in Shaping Parents' Interests. *Sex Roles* 62 (5):347-360.
- Raley, S., and S. Bianchi. 2006. Sons, Daughters, and Family Processes: Does Gender of Children Matter? *Annual Review of Sociology* 32 (1):401-421.
- Roxas, M. L., and J. Y. Stoneback. 2004. The Importance of gender Across Cultures in Ethical Decision-making. *Journal of Business Ethics* 50 (2):149-165.
- Ruble, D. N., J. Brooks-Gunn, A. S. Fleming, G. Fitzmaurice, C. Stangor, and F. Deutsch. 1990. Transition to motherhood and the self: Measurement, stability, and change. *Journal of personality and social psychology* 58 (3):450-463.
- Ruegger, D., and E. W. King. 1992. A Study of the Effect of Age and Gender upon Student Business Ethics. *Journal of Business Ethics* 11 (3):179.
- Ryan, J., 2006. Inclusive leadership and social justice for schools. *Leadership and Policy in schools*, 5(1), pp.3-17.
- Schoar, A., and L. Zuo. 2016. Does the Market Value CEO Styles? *The American Economic Review* 106 (5):262-266.
- Schoar, A., and L. Zuo. 2017. Shaped by booms and busts: How the economy impacts CEO careers and management styles. *The Review of Financial Studies* 30 (5):1425-1456.
- Schrock, D. and Schwalbe, M., 2009. Men, masculinity, and manhood acts. *Annual review of sociology*, 35, pp.277-295.
- Schubert, R. 2006. Analyzing and managing risks – on the importance of gender differences in risk attitudes. *Managerial Finance* 32(9): 706-715.
- Sears, D. O. 1981. Life Stage Effects upon Attitude Change, Especially among the Elderly. In *Aging: Social Change*, edited by S. B. Kiesler, J. N. Morgan and V. K. Oppenheimer. New York: Academic Press, 183-204.
- Sears, D. O., and N. A. Valentino. 1997. Politics Matters: Political Events as Catalysts for Preadult Socialization. *The American Political Science Review* 91 (1):45-65.
- Shafer, E. F., and N. Malhotra. 2011. The Effect of a Child's Sex on Support for Traditional Gender Roles. *Social Forces* 90 (1):209-222.
- Sharrow, E. A., J. H. Rhodes, T. M. Nteta, and J. S. Greenlee. 2018. The First-Daughter Effect: The Impact of Fathering Daughters on Men's Preferences for Gender-Equality Policies. *Public Opinion Quarterly* 82 (3):493-523.
- Sidorowicz, L. S., and G. S. Lunney. 1980. Baby X Revisited. *Sex Roles* 6 (1):67-73.
- Simmel, G. 1950. *The Sociology of Georg Simmel (Translated and Edited by Kurt H. Wolff)*. Edited by H. W. Kurt. New York: The Free Press.
- Skinner, D.J., 1997. Earnings disclosures and stockholder lawsuits. *Journal of accounting and economics*, 23(3), pp.249-282.
- Stewart, A. J. .1982. The Course of Individual Adaptation to Life Changes. *Journal of Personality and Social Psychology* 42:1100-13.
- Stewart, A. J., M. Sokol, J. M. Healy and N. L. Chester. 1986. Longitudinal Studies of Psychological Consequences of Life Changes in Children and Adults. *Journal of Personality and Social Psychology* 50:143-51.
- Stubben, S. R. 2010. Discretionary Revenues as a Measure of Earnings Management. *The Accounting Review* 85 (2):695-717.
- Subramanyam, K. R. 1996. The pricing of discretionary accruals. *Journal of Accounting and Economics* 22 (1):249-281.

- Takaku, R. 2018. First daughter effects in Japan. *Journal of the Japanese and International Economies* 50:48-59.
- Tan, H. T., and K. Jamal. 2001. Do Auditors Objectively Evaluate Their Subordinates' Work? *The Accounting Review* 76 (1):99-110.
- Tenenbaum, H.R. and May, D., 2014. Gender in parent-child relationships. *Gender and development*, pp.1-19.
- Teoh, S. H., and T. J. Wong. 1993. Perceived Auditor Quality and the Earnings Response Coefficient. *The Accounting Review* 68 (2):346-366.
- Umberson, D., T. Pudrovska, and C. Reczek. 2010. Parenthood, Childlessness, and Well-Being: A Life Course Perspective. *Journal of Marriage and Family* 72 (3):612-629.
- Wang, X., C. Gao, and M. Feng. 2019. CEOs raising daughters and female executives. *Asia-Pacific Journal of Accounting & Economics*:1-19.
- Wang, X., Y. Wang, L. Yu, Y. Zhao and Z. Zhang. 2015. Engagement audit partner experience and audit quality, *China Journal of Accounting Studies*, 3(3): 230-253.
- Wang, Y., Basu, S. and Wang, C.Y., 2008. Modeling two-phase flow in PEM fuel cell channels. *Journal of Power Sources*, 179(2), pp.603-617.
- Wang, Y., L. Yu, and Y. Zhao. 2015. The Association between Audit-Partner Quality and Engagement Quality: Evidence from Financial Report Misstatements. *Auditing: A Journal of Practice & Theory* 34 (3):81-111.
- Warner, R. L. 1991. Does the Sex of Your Children Matter? Support for Feminism among Women and Men in the United States and Canada. *Journal of Marriage and Family* 53 (4):1051-1056.
- Warner, R. L., and B. S. Steel. 1999. Child Rearing as a Mechanism for Social Change: The Relationship of Child Gender to Parents' Commitment to Gender Equity. *Gender & Society* 13 (4):503-517.
- Warr, M. and Ellison, C.G., 2000. Rethinking social reactions to crime: Personal and altruistic fear in family households. *American Journal of Sociology*, 106(3), pp.551-578.
- Washington, E. L. 2008. Female Socialization: How Daughters Affect Their Legislator Fathers. *American Economic Review* 98 (1):311-332.
- Watts, R.L., 2003. Conservatism in accounting part I: Explanations and implications. *Accounting horizons*, 17(3), pp.207-221.
- Wilde, J.H., 2017. The deterrent effect of employee whistleblowing on firms' financial misreporting and tax aggressiveness. *The Accounting Review*, 92(5), pp.247-280.
- Wysocki, P. D. 2004. Discussion of Ultimate Ownership, Income Management, and Legal and Extra-Legal Institutions. *Journal of Accounting Research* 42 (2):463-474.
- Xiao, T., Geng, C. and Yuan, C., 2020. How audit effort affects audit quality: An audit process and audit output perspective. *China Journal of Accounting Research*, 13(1), pp.109-127.
- Zerni, M. 2012. Audit Partner Specialization and Audit Fees: Some Evidence from Sweden. *Contemporary Accounting Research* 29 (1):312-340.

Appendix 1: Variable Definitions

| Variable name | Definition ²⁵ |
|----------------------------------|---|
| Dependent variables | |
| <i>AAWCA</i> | <p>The absolute value of abnormal working capital accruals (<i>AWCA</i>) (DeFond and Park, 2001) of client firm <i>j</i> in year <i>t</i> scaled by total assets. It is determined as a function of working capital (<i>WC</i>), and current and lagged sales (<i>Sales</i>):</p> $AAWCA_{j,t} = \left WC_{j,t} - WC_{j,t-1} * \frac{Sales_{j,t}}{Sales_{j,t-1}} \right $ <p>Working capital (<i>WC</i>) is defined as current assets [DS: WC02201] excluding cash and short-term investments [DS: WC02001], less current liabilities [DS: WC03101] excluding short-term debt [DS: WC03051]. The DS code for <i>Sales</i> is WC01001 and for total assets is WC02999</p> |
| <i>ADDT</i> | <p>The absolute value of the residuals from the Dechow and Dichev (2002) model, as modified by McNichols (2002), of client firm <i>j</i> in year <i>t</i>:</p> $TCA_{j,t} = \beta_0 + \beta_1 OCF_{j,t-1} + \beta_2 OCF_{j,t} + \beta_3 OCF_{j,t+1} + \beta_4 \Delta Rec_{j,t} + \beta_5 PPEG_{j,t} + \epsilon_{j,t}$ <p>Where, <i>TCA</i> is defined as the annual change in current assets [DS: WC02201] less the annual change in current liabilities [DS: WC03101] less the annual change in cash and equivalents [DS: WC02001] plus the annual change in short-term debt [DS: WC03051] (Francis et al., 2005), <i>OCF</i> is the operating cash flows [DS: WC04860], <i>ΔRec</i> is the annual change in accounts receivables [DS: WC02051] and <i>PPEG</i> is the gross property, plant and equipment [DS: WC02301]. All variables are scaled by beginning of year <i>t</i> total assets [DS: WC02999].</p> |
| <i>ARESREV</i> | <p>The absolute discretionary revenues (McNichols and Stubben, 2008; Stubben, 2010; Chen et al., 2011) of client firm <i>j</i> in year <i>t</i>, defined as the absolute value of the residuals from a regression model that relates the annual change in accounts receivables to the annual change in revenues:</p> $\Delta Rec_{j,t} = \beta_0 + \beta_1 \Delta Rev_{j,t} + \epsilon_{j,t}$ <p>Where, <i>ΔRec</i> is the annual change in accounts receivables [DS: WC02051] and <i>ΔRev</i> is the annual change in revenues [DS: WC01001]. Both variables are scaled by beginning of year <i>t</i> total assets [DS: WC02999].</p> |
| <i>TOTACC</i> | <p>The absolute value of total accruals of client firm <i>j</i> in year <i>t</i> defined as the annual change in current assets [DS: WC02201] less the annual change in current liabilities [DS: WC03101] less the annual change in cash and equivalents [DS: WC02001] plus the annual change in short-term debt [DS: WC03051] less depreciation and amortization expenses [DS: WC01151], scaled by beginning of year <i>t</i> total assets (Francis et al., 2005).</p> |
| <i>Adj_MAD_Score</i> | <p>The mean of the absolute value of the difference between the frequency of each first digit within the sample, and the frequency as determined by Benford Law.</p> $Raw_MAD_Score = \frac{\sum_{i=1}^K AF - EF }{K}$ <p>Where AF is the actual frequency of the leading digit observed, EF is the expected frequency as determined by Benford Law, and K is the number of leading digit bins (equal to 9 for the first leading digit).</p> <p>The absolute difference of <i>Raw_MAD_Score</i> and yearly(t) coefficient of variation (average/standard deviation) of pool of digits for industry(i) excluding the firm (j). <i>Adj_MAD_Score</i> = Abs(<i>Raw_MAD_Score</i>_j - [Average Pool of digits_{i,j}/Standard Deviation Pool of Digits_{i,j}])</p> |
| <i>AUDFEE</i> | <p>The natural logarithm of total audit fees for firm <i>j</i> in year <i>t</i> [Audit Analytics: AUDIT FEES NATIVE and hand collected from 2005 to 2009].</p> |
| <i>EP</i> | <p>Earnings per share of client firm <i>j</i> in year <i>t</i> divided by beginning-of-the-year share price of client firm <i>j</i> in year <i>t</i>.</p> <p>Earnings per share is net income before extraordinary items [DS: WC01551] divided by the number of shares outstanding (Market value [DS: WC08005]/share price at the end of year [DS:P]) (Amir et al., 2014)</p> |
| Main variable of interest | |
| <i>First_Daughter</i> | <p>An indicator variable which equals 1 if the first-born child of audit partner <i>i</i> is a daughter, and 0 if it is a son, given that a partner has children. [Swedish Tax Agency]</p> |

²⁵ Where possible Thomson Reuters Datastream Worldscope, codes are included in brackets [DS:'code']

| Audit partner characteristics | |
|--------------------------------------|---|
| <i>Num_Children</i> | The number of total children of audit partner <i>i</i> in year <i>t</i> , given that a partner has children. [Swedish Tax Agency] |
| <i>Married</i> | An indicator variable which equals 1 if audit partner <i>i</i> is married in year <i>t</i> , and 0 otherwise. [Swedish Tax Agency] |
| <i>Single</i> | An indicator variable which equals 1 if audit partner <i>i</i> is single in year <i>t</i> , and 0 otherwise. [Swedish Tax Agency] |
| <i>Divorced</i> | An indicator variable which equals 1 if audit partner <i>i</i> is divorced in year <i>t</i> , and 0 otherwise. [Swedish Tax Agency] |
| <i>Age</i> | The age of audit partner <i>i</i> in year <i>t</i> . [Swedish Tax Agency] |
| <i>Tenure</i> | The tenure of partner <i>i</i> in year <i>t</i> for firm <i>j</i> . [Annual Reports] |
| <i>Busy</i> | The size of the audit partner's <i>i</i> total client portfolio measured by the aggregate number of engagements in fiscal year <i>t</i> (Zerni, 2012). [Swedish Companies Registration Office] |
| <i>Ind_Exp</i> | Zerni (2012) proxy for audit partner industry expertise. It is an indicator variable that is equal 1 if the individual audit partner is ranked among the top two auditors in industry <i>k</i> in fiscal year <i>t</i> based on the amount of audited total assets. The industry classification is based on the Industry Classification Benchmark (ICB) Sector code [DS: ICBSC] |
| <i>Client_Impt</i> | Client importance at the audit partner level, measured as the natural logarithm of client firm's <i>j</i> total assets audited by audit partner <i>i</i> in year <i>t</i> , divided by the natural logarithm of the sum of audited total assets of all client firms of audit partner <i>i</i> in year <i>t</i> (Gul et al., 2013). [DS: WC02999] |
| <i>Female</i> | An indicator variable which equals 1 if audit partner <i>i</i> is female, and 0 otherwise. [Swedish Tax Agency] |
| <i>Big_4</i> | An indicator variable which equals 1 if audit partner <i>i</i> works for one of the Big 4 firms (PwC, Deloitte, KPMG or EY) in year <i>t</i> , and 0 otherwise. [Swedish Companies Registration Office] |
| <i>P_Rotation</i> | An indicator variable which equals 1 if the client firm <i>j</i> changes audit partner in year <i>t</i> , and 0 otherwise. [Swedish Companies Registration Office] |
| Client firm characteristics | |
| <i>Size</i> | The natural logarithm of total assets of firm <i>j</i> in year <i>t</i> . [DS: WC02999] |
| <i>OCF</i> | The operating cash flows [DS: WC04860] of firm <i>j</i> in year <i>t</i> , scaled by beginning total assets [DS: WC02999]. |
| <i>Loss</i> | An indicator variable which equals 1 if the net income of firm <i>j</i> in year <i>t</i> is negative, and 0 otherwise. [DS: WC01706] |
| <i>Lev</i> | Leverage of client firm <i>j</i> in year <i>t</i> defined as long-term debt [DS: WC03251] plus short-term debt [DS: WC03051] scaled by total assets [DS: WC02999]. |
| <i>Growth</i> | The natural logarithm of change in net sales of client firm <i>j</i> from year <i>t</i> to <i>t-1</i> , divided by net sales in year <i>t-1</i> . [DS: WC01001] |
| <i>ROA</i> | The natural logarithm of return on Assets of client firm <i>j</i> in year <i>t</i> measured as net income before extraordinary items [DS: WC01551] divided by total assets [DS: WC02999]. |
| <i>MTB</i> | The natural logarithm of Market-to-Book ratio of client firm <i>j</i> in year <i>t</i> , measured as the market value [DS: WC08005] over common equity [DS: WC03501]. |
| <i>Firm_Age</i> | Number of years passed since the client firm's IPO. [Swedish Tax Agency and Stockholm Stock Exchange] (For firms listed before 1982 we use the Datastream's base date as the IPO year). |
| <i>Cross_Listed</i> | An indicator variable which equals 1 if a client firm <i>j</i> is cross-listed, and 0 otherwise. [DS: WC05427] |
| <i>December_FY</i> | An indicator variable which equals 1 if the fiscal year end of client firm <i>j</i> is the 31st of December, and 0 otherwise. [DS: WC05350] |
| <i>RECINV</i> | Ratio of the sum of accounts receivable [DS: WC02051] and inventories [DS: WC02101] to total assets [DS: WC02999] |
| <i>CA_TA</i> | Total current assets [DS: WC02201] divided by total assets [DS: WC02999]. |
| <i>Quick</i> | The natural logarithm of current assets [DS: WC02201] excluding inventories [DS: WC02101] divided by current liabilities [DS: WC03101] |
| <i>Segments</i> | The natural logarithm of 1 plus the number of product segments with an asset value [DS: WC19503; DS: WC19513; DS: WC19523; DS: WC19533; DS: WC19543; DS: WC19553; DS: WC19563; DS: WC19573; DS: WC19583; DS: WC19593] |

| | |
|----------------|---|
| <i>Foreign</i> | An indicator variable which equals 1 if percentage of foreign sales to total sales [DS: WC08731] is greater than zero |
| <i>RET</i> | Annual Stock return [DS:P] |
| <i>NEG</i> | An indicator variable which equals 1 if $Ret_{i,t}$ is negative, and 0 otherwise |

TABLE 1
Sample Selection

| | Unique Audit Partner | Unique Client Firm | Client-Firm Years |
|--------------------------------------|-------------------------|-----------------------|----------------------|
| Initial Sample | 302 | 380 | 2,904 |
| Less: | | | |
| Firms in Financial Sector | (16) | (35) | (258) |
| Firms with missing financial data | (6) | (13) | (131) |
| | 280 | 332 | 2,515 |
| Audit Partners without children | (23) | (9) | (163) |
| Audit Partners with Adopted children | (7) | (1) | (42) |
| Audit Partners with Twins | (1) | (1) | (17) |
| | 249 | 321 | 2,293 |
| Firms with two auditors | (39) | (23) | (341) |
| Final Sample | 210 | 298 | 1,952 |

TABLE 2
Audit Partner Characteristics

This table reports descriptive statistics for our audit partner sample who audited Swedish non-financial firms listed on Nasdaq Stockholm during the period January 1, 2005 to December 31, 2016. The audit partner characteristics are first-born daughter (*First_Daughter*), the number of children (*Num_Children*), marital status (*Married*, *Single*, *Divorced*), Gender (*Female*), Age (*Age*), Tenure (*Tenure*), number of clients (*Busy*), whether they are industry experts (*Ind_Exp*), importance of their client (*Client_Impt*), if they work for a Big_4 auditing firm (*Big_4*), total accounts receivable and inventories divided by total assets (*RECINV*), current asset to total asset ratio (*CA_TA*), current asset excluding inventories to current liabilities (*Quick*), number of product segments (*Segments*) and whether they have any foreign sales (*Foreign*).

| | <i>Full Sample</i> | | | | | | <i>First_Daughter=1</i> | | | <i>First_Daughter=0</i> | | | <i>Difference</i> | |
|-----------------------|--------------------|--------|-------|--------|--------|--------|-------------------------|--------|-------|-------------------------|--------|-------|-------------------|----------|
| | Obs. | Mean | SD | Q1 | Median | Q4 | Obs. | Mean | SD | Obs. | Mean | SD | t-test | Wilcoxon |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| <i>First_Daughter</i> | 210 | 0.467 | 0.500 | 0.000 | 0.000 | 1.000 | 98 | 1.000 | 0.000 | 112 | 0.000 | 0.000 | | |
| <i>Num_Children</i> | 210 | 2.199 | 0.756 | 2.000 | 2.000 | 3.000 | 98 | 2.210 | 0.791 | 112 | 2.190 | 0.728 | 0.189 | 0.190 |
| <i>Married</i> | 210 | 0.792 | 0.394 | 1.000 | 1.000 | 1.000 | 98 | 0.802 | 0.384 | 112 | 0.782 | 0.405 | 0.365 | 0.204 |
| <i>Single</i> | 210 | 0.095 | 0.294 | 0.000 | 0.000 | 0.000 | 98 | 0.071 | 0.259 | 112 | 0.116 | 0.322 | -1.097 | -1.097 |
| <i>Divorced</i> | 210 | 0.113 | 0.301 | 0.000 | 0.000 | 0.000 | 98 | 0.126 | 0.314 | 112 | 0.102 | 0.290 | 0.593 | 0.760 |
| <i>Age</i> | 210 | 50.653 | 6.511 | 45.455 | 50.633 | 56.000 | 98 | 50.300 | 6.584 | 112 | 50.962 | 6.460 | -0.734 | -0.595 |
| <i>Tenure</i> | 210 | 3.922 | 2.806 | 2.200 | 3.413 | 4.583 | 98 | 3.747 | 2.928 | 112 | 4.075 | 2.698 | -0.845 | -1.546 |
| <i>Female</i> | 210 | 0.157 | 0.365 | 0.000 | 0.000 | 0.000 | 98 | 0.173 | 0.381 | 112 | 0.143 | 0.351 | 0.606 | 0.607 |
| <i>Busy</i> | 210 | 1.681 | 0.958 | 1.000 | 1.000 | 2.000 | 98 | 1.594 | 0.969 | 112 | 1.757 | 0.946 | -1.229 | -1.609 |
| <i>Ind_Exp</i> | 210 | 0.285 | 0.353 | 0.000 | 0.123 | 0.500 | 98 | 0.276 | 0.351 | 112 | 0.294 | 0.357 | -0.370 | -0.373 |
| <i>Client_Impt</i> | 210 | 0.776 | 0.260 | 0.538 | 1.000 | 1.000 | 98 | 0.808 | 0.252 | 112 | 0.749 | 0.266 | 1.636 | 1.629 |
| <i>Big_4</i> | 210 | 0.903 | 0.272 | 1.000 | 1.000 | 1.000 | 98 | 0.893 | 0.284 | 112 | 0.912 | 0.261 | -0.493 | -0.300 |
| <i>RECINV</i> | 210 | 0.315 | 0.161 | 0.217 | 0.320 | 0.398 | 98 | 0.323 | 0.155 | 112 | 0.308 | 0.167 | 0.683 | 0.697 |
| <i>CA_TA</i> | 198 | 0.542 | 0.190 | 0.424 | 0.529 | 0.663 | 94 | 0.536 | 0.186 | 104 | 0.547 | 0.195 | -0.416 | 0.045 |
| <i>Quick</i> | 198 | 0.232 | 0.534 | -0.101 | 0.153 | 0.426 | 94 | 0.236 | 0.598 | 104 | 0.228 | 0.471 | 0.104 | -0.335 |
| <i>Segments</i> | 210 | 0.735 | 0.530 | 0.347 | 0.693 | 1.099 | 98 | 0.739 | 0.538 | 112 | 0.731 | 0.526 | 0.109 | 0.027 |
| <i>Foreign</i> | 210 | 0.594 | 0.387 | 0.286 | 0.667 | 1.000 | 98 | 0.602 | 0.390 | 112 | 0.587 | 0.386 | 0.296 | 0.289 |

Table 3

Descriptive statistics on audit partner and firm characteristics

This table reports descriptive statistics for Swedish non-financial firms listed on Nasdaq Stockholm during the period January 1, 2005 to December 31, 2016. The audit quality proxies are: absolute abnormal working capital accruals (*AAWCA*), absolute value of the residuals (*ADDT*) from the Dechow and Dichev (2002) model as modified by McNichols (2002), absolute value of discretionary revenues (*ARESREV*), absolute value of total accruals (*ATOTACC*), adjusted mean absolute deviation (*Adj_MAD_Score*), abnormal audit fees as Blankley et al.,(2012), natural logarithm of audit fees (*AUDFEE*) and earnings per share scaled by lagged market price per share (*EP*). The audit partner characteristics are first-born daughter (*First_Daughter*), the number of children (*Num_Children*), marital status (*Single, Divorced*), Age (*Age*), Tenure (*Tenure*), number of clients (*Busy*), whether they are industry experts (*Ind_Exp*), importance of their client (*Client_Impt*), gender (*Female*), if they work for a Big_4 auditing firm (*Big_4*) and whether they rotated in a year (*P_Rotation*). The firm characteristics are size (*Size*); Operating Cashflows (*OCF*), whether the firm reported a loss (*Loss*), the leverage of the firm (*Lev*), the growth of the firm (*Growth*), return-on-assets (*ROA*), market-to-book (*MTB*), the age of the firm (*Firm_Age*), whether it is cross-listed (*Cross_Listed*), whether it has a December year-end (*December_FY*), total accounts receivable and inventories divided by total assets (*RECINV*), current asset to total asset ratio (*CA_TA*), current asset excluding inventories to current liabilities (*Quick*), number of product segments (*Segments*), whether they have any foreign sales (*Foreign*), their annual stock return (*RET*) and whether they have a negative stock return (*NEG*). Panel A reports the descriptive statistics for all variables measuring the audit quality for the full sample and separately for the sample of audit partners with first-born daughters and audit partners with first-born sons. Panel B reports both the descriptive statistics for the audit partner control variables and client control variables. Panel C reports correlations among each characteristic. Below the diagonal we present the Pearson correlation coefficients and Spearman correlation above the diagonal. All variable definitions are reported in Appendix 1. Bold face indicates a correlation coefficient that is significantly different from zero at a 5% level or better.

Panel A: Dependent Variables

| | <i>Full Sample</i> | | | | | | <i>First Daughter=1</i> | | | <i>First Daughter=0</i> | | | <i>Difference</i> | |
|----------------------|--------------------|--------|-------|--------|--------|--------|-------------------------|--------|-------|-------------------------|--------|-------|-------------------|-----------|
| | Obs. | Mean | SD | Q1 | Median | Q4 | Obs. | Mean | SD | Obs. | Mean | SD | t-test | Wilcoxon |
| <i>AAWCA</i> | 1787 | 0.045 | 0.054 | 0.012 | 0.027 | 0.058 | 763 | 0.045 | 0.053 | 1024 | 0.045 | 0.054 | 0.238 | 0.658 |
| <i>ADDT</i> | 1679 | 0.047 | 0.058 | 0.014 | 0.029 | 0.056 | 714 | 0.047 | 0.056 | 965 | 0.047 | 0.059 | -0.056 | 0.399 |
| <i>ARESREV</i> | 1941 | 0.038 | 0.047 | 0.010 | 0.022 | 0.047 | 818 | 0.040 | 0.047 | 1123 | 0.037 | 0.047 | 1.225 | 2.014** |
| <i>TOTACC</i> | 1787 | 0.064 | 0.065 | 0.021 | 0.046 | 0.082 | 763 | 0.062 | 0.064 | 1024 | 0.065 | 0.067 | -1.183 | -1.636 |
| <i>Adj_MAD_Score</i> | 1729 | 6.497 | 2.568 | 4.688 | 6.003 | 7.060 | 737 | 6.601 | 2.664 | 992 | 6.419 | 2.492 | 1.453* | 1.311 |
| <i>AUDFEES</i> | 1948 | 13.723 | 3.128 | 13.122 | 14.037 | 15.202 | 823 | 13.464 | 3.389 | 1125 | 13.913 | 2.910 | -3.136*** | -2.855*** |
| <i>EP</i> | 1629 | 0.025 | 0.151 | 0.012 | 0.056 | 0.087 | 675 | 0.012 | 0.165 | 954 | 0.034 | 0.139 | 2.836*** | 1.396 |

Panel B: Independent Variables

| | <i>Full Sample</i> | | | | | | <i>First_Daughter=1</i> | | | <i>First_Daughter=0</i> | | |
|-----------------------|--------------------|-------------|-----------|-----------|---------------|-----------|-------------------------|-------------|-----------|-------------------------|-------------|-----------|
| | Obs. | Mean | SD | Q1 | Median | Q4 | Obs. | Mean | SD | Obs. | Mean | SD |
| <i>First_Daughter</i> | 1952 | 0.423 | 0.494 | 0.000 | 0.000 | 1.000 | 825 | 1.000 | 0.000 | 1127 | 0.000 | 0.000 |
| <i>Num_Children</i> | 1952 | 2.223 | 0.729 | 2.000 | 2.000 | 3.000 | 825 | 2.296 | 0.779 | 1127 | 2.169 | 0.686 |
| <i>Married</i> | 1952 | 0.777 | 0.416 | 1.000 | 1.000 | 1.000 | 825 | 0.788 | 0.409 | 1127 | 0.769 | 0.421 |
| <i>Single</i> | 1952 | 0.075 | 0.264 | 0.000 | 0.000 | 0.000 | 825 | 0.061 | 0.239 | 1127 | 0.086 | 0.281 |
| <i>Divorced</i> | 1952 | 0.148 | 0.355 | 0.000 | 0.000 | 0.000 | 825 | 0.150 | 0.358 | 1127 | 0.146 | 0.353 |
| <i>Age</i> | 1952 | 51.008 | 6.423 | 46.000 | 51.000 | 56.000 | 825 | 50.834 | 6.247 | 1127 | 51.136 | 6.549 |
| <i>Tenure</i> | 1952 | 2.957 | 2.888 | 1.000 | 2.000 | 4.500 | 825 | 2.995 | 3.173 | 1127 | 2.929 | 2.662 |
| <i>Busy</i> | 1952 | 2.799 | 1.702 | 1.000 | 2.000 | 4.000 | 825 | 2.787 | 1.874 | 1127 | 2.808 | 1.564 |
| <i>Ind_Exp</i> | 1952 | 0.353 | 0.478 | 0.000 | 0.000 | 1.000 | 825 | 0.332 | 0.471 | 1127 | 0.368 | 0.483 |
| <i>Client_Impt</i> | 1952 | 0.525 | 0.316 | 0.263 | 0.437 | 1.000 | 825 | 0.550 | 0.330 | 1127 | 0.507 | 0.304 |
| <i>Female</i> | 1952 | 0.105 | 0.306 | 0.000 | 0.000 | 0.000 | 825 | 0.099 | 0.299 | 1127 | 0.108 | 0.311 |
| <i>Big_4</i> | 1952 | 0.934 | 0.248 | 1.000 | 1.000 | 1.000 | 825 | 0.921 | 0.270 | 1127 | 0.944 | 0.230 |
| <i>P_Rotation</i> | 1952 | 0.199 | 0.399 | 0.000 | 0.000 | 0.000 | 825 | 0.223 | 0.417 | 1127 | 0.181 | 0.385 |
| <i>Size</i> | 1952 | 14.568 | 1.967 | 13.084 | 14.311 | 15.873 | 825 | 14.323 | 1.956 | 1127 | 14.747 | 1.957 |
| <i>OCF</i> | 1952 | 0.067 | 0.149 | 0.025 | 0.079 | 0.133 | 825 | 0.061 | 0.153 | 1127 | 0.071 | 0.147 |
| <i>Loss</i> | 1952 | 0.223 | 0.416 | 0.000 | 0.000 | 0.000 | 825 | 0.240 | 0.427 | 1127 | 0.210 | 0.408 |
| <i>Lev</i> | 1952 | 0.207 | 0.183 | 0.039 | 0.175 | 0.327 | 825 | 0.184 | 0.172 | 1127 | 0.224 | 0.189 |
| <i>Growth</i> | 1952 | 0.077 | 0.302 | -0.019 | 0.068 | 0.164 | 825 | 0.067 | 0.302 | 1127 | 0.085 | 0.301 |
| <i>ROA</i> | 1952 | 0.699 | 0.092 | 0.697 | 0.718 | 0.737 | 825 | 0.693 | 0.103 | 1127 | 0.703 | 0.084 |
| <i>MTB</i> | 1952 | 1.19 | 0.557 | 0.785 | 1.129 | 1.512 | 825 | 1.196 | 0.562 | 1127 | 1.186 | 0.553 |
| <i>Firm_Age</i> | 1952 | 12.282 | 7.881 | 7.000 | 11.000 | 17.000 | 825 | 11.533 | 7.129 | 1127 | 12.830 | 8.349 |
| <i>Cross_Listed</i> | 1952 | 0.111 | 0.314 | 0.000 | 0.000 | 0.000 | 825 | 0.107 | 0.309 | 1127 | 0.114 | 0.317 |
| <i>December_FY</i> | 1952 | 0.93 | 0.255 | 1.000 | 1.000 | 1.000 | 825 | 0.939 | 0.239 | 1127 | 0.924 | 0.266 |
| <i>RECINV</i> | 1923 | 0.316 | 0.188 | 0.178 | 0.314 | 0.442 | 811 | 0.316 | 0.183 | 1112 | 0.316 | 0.192 |
| <i>CA_TA</i> | 1805 | 0.523 | 0.22 | 0.351 | 0.521 | 0.665 | 769 | 0.527 | 0.216 | 1036 | 0.520 | 0.222 |
| <i>Quick</i> | 1794 | 0.16 | 0.677 | -0.248 | 0.099 | 0.472 | 763 | 0.191 | 0.696 | 1031 | 0.137 | 0.662 |
| <i>Segments</i> | 1952 | 0.783 | 0.756 | 0.000 | 0.693 | 1.609 | 825 | 0.812 | 0.771 | 1127 | 0.761 | 0.745 |
| <i>Foreign</i> | 1952 | 0.642 | 0.479 | 0.000 | 1.000 | 1.000 | 825 | 0.634 | 0.482 | 1127 | 0.649 | 0.478 |
| <i>RET</i> | 1765 | 0.199 | 0.91 | -0.216 | 0.063 | 0.379 | 739 | 0.218 | 1.047 | 1026 | 0.185 | 0.798 |
| <i>NEG</i> | 1765 | 0.43 | 0.495 | 0.000 | 0.000 | 1.000 | 739 | 0.449 | 0.498 | 1026 | 0.416 | 0.493 |

Panel C: Correlations among audit quality proxies, audit partner characteristics and firm characteristics

| No. | Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) | (18) |
|------|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| (1) | <i>AAWCA</i> | | 0.361 | 0.323 | 0.412 | -0.054 | -0.268 | -0.092 | -0.003 | 0.014 | -0.019 | -0.031 | -0.066 | 0.018 | -0.160 | -0.158 | 0.138 | 0.021 | 0.032 |
| (2) | <i>ADDT</i> | 0.453 | | 0.290 | 0.135 | -0.017 | -0.249 | -0.047 | 0.014 | 0.016 | -0.018 | -0.041 | -0.031 | 0.044 | -0.030 | -0.145 | 0.006 | -0.004 | 0.011 |
| (3) | <i>ARESREV</i> | 0.342 | 0.436 | | 0.246 | -0.032 | -0.235 | -0.028 | 0.009 | 0.026 | -0.005 | -0.062 | -0.053 | 0.036 | -0.057 | -0.164 | 0.041 | -0.045 | 0.057 |
| (4) | <i>TOTACC</i> | 0.568 | 0.453 | 0.369 | | -0.088 | -0.113 | -0.126 | -0.049 | -0.027 | 0.013 | -0.006 | 0.010 | -0.008 | 0.003 | -0.038 | -0.006 | 0.018 | 0.016 |
| (5) | <i>Adj_MAD_Score</i> | -0.073 | -0.069 | -0.032 | -0.100 | | 0.122 | 0.066 | 0.030 | -0.075 | 0.073 | 0.004 | 0.014 | 0.000 | 0.073 | -0.011 | -0.072 | 0.004 | -0.034 |
| (6) | <i>AUDFEE</i> | -0.199 | -0.167 | -0.127 | -0.134 | 0.088 | | 0.145 | -0.074 | 0.007 | -0.087 | 0.133 | 0.147 | -0.002 | 0.127 | 0.532 | -0.067 | 0.001 | -0.123 |
| (7) | <i>EP</i> | -0.152 | -0.046 | -0.073 | -0.158 | 0.060 | 0.144 | | -0.021 | -0.014 | -0.066 | 0.024 | 0.012 | 0.020 | 0.030 | 0.086 | -0.007 | -0.023 | -0.050 |
| (8) | <i>First_Daughter</i> | 0.006 | -0.001 | 0.028 | -0.028 | 0.035 | -0.071 | -0.070 | | 0.108 | -0.050 | 0.024 | -0.010 | -0.030 | -0.051 | -0.049 | 0.042 | 0.033 | -0.064 |
| (9) | <i>Num_Children</i> | 0.017 | -0.001 | 0.001 | -0.024 | -0.065 | 0.057 | -0.011 | 0.086 | | -0.277 | -0.115 | 0.070 | 0.012 | -0.018 | -0.039 | 0.018 | -0.012 | -0.125 |
| (10) | <i>Single</i> | -0.015 | -0.023 | 0.004 | 0.015 | 0.079 | -0.176 | -0.036 | -0.048 | -0.268 | | -0.110 | -0.066 | -0.098 | -0.081 | -0.025 | 0.080 | 0.038 | 0.032 |
| (11) | <i>Divorced</i> | -0.015 | -0.036 | -0.064 | -0.042 | -0.015 | 0.064 | 0.020 | 0.007 | -0.099 | -0.119 | | 0.146 | 0.094 | 0.166 | 0.076 | -0.162 | -0.069 | 0.021 |
| (12) | <i>Age</i> | -0.060 | -0.028 | -0.057 | -0.039 | 0.005 | 0.072 | 0.012 | -0.023 | 0.087 | -0.028 | 0.089 | | 0.235 | 0.060 | 0.051 | -0.061 | -0.145 | -0.127 |
| (13) | <i>Tenure</i> | -0.040 | -0.003 | 0.014 | -0.032 | -0.013 | -0.016 | 0.052 | 0.011 | 0.040 | -0.002 | 0.040 | 0.235 | | 0.039 | 0.003 | -0.058 | -0.670 | -0.067 |
| (14) | <i>Busy</i> | -0.125 | -0.069 | -0.053 | -0.040 | 0.075 | 0.081 | -0.049 | -0.006 | -0.001 | -0.085 | 0.131 | 0.050 | 0.002 | | 0.120 | -0.986 | -0.030 | -0.244 |
| (15) | <i>Ind_Exp</i> | -0.136 | -0.138 | -0.157 | -0.108 | 0.011 | 0.312 | 0.099 | -0.037 | -0.049 | -0.036 | 0.089 | 0.040 | -0.008 | 0.133 | | -0.082 | 0.005 | -0.153 |
| (16) | <i>Client_Impt</i> | 0.108 | 0.068 | 0.047 | 0.030 | -0.062 | -0.054 | 0.065 | 0.066 | -0.016 | 0.071 | -0.121 | -0.089 | 0.031 | -0.853 | -0.125 | | 0.042 | 0.238 |
| (17) | <i>P_Rotation</i> | 0.056 | 0.013 | 0.007 | 0.032 | 0.008 | -0.023 | -0.050 | 0.052 | 0.004 | 0.023 | -0.055 | -0.153 | -0.489 | 0.007 | -0.019 | 0.006 | | 0.060 |
| (18) | <i>Female</i> | 0.048 | 0.035 | 0.034 | 0.055 | -0.037 | -0.009 | -0.009 | -0.014 | -0.141 | 0.010 | 0.000 | -0.146 | -0.066 | -0.190 | -0.112 | 0.203 | 0.061 | |
| (19) | <i>Big_4</i> | -0.082 | -0.087 | -0.063 | -0.069 | 0.048 | 0.480 | 0.108 | -0.046 | -0.033 | -0.199 | 0.093 | -0.030 | -0.076 | 0.112 | 0.113 | -0.127 | -0.003 | 0.003 |
| (20) | <i>Size</i> | -0.281 | -0.223 | -0.296 | -0.192 | 0.145 | 0.484 | 0.252 | -0.106 | -0.044 | -0.064 | 0.115 | 0.201 | -0.054 | 0.111 | 0.532 | -0.096 | -0.006 | -0.113 |
| (21) | <i>OCF</i> | -0.213 | -0.129 | -0.064 | -0.022 | 0.083 | 0.085 | 0.424 | -0.035 | 0.003 | -0.014 | -0.015 | -0.054 | 0.017 | 0.033 | 0.118 | -0.010 | 0.000 | 0.033 |
| (22) | <i>Loss</i> | 0.216 | 0.131 | 0.115 | 0.189 | -0.121 | -0.140 | -0.731 | 0.035 | -0.010 | 0.029 | -0.042 | -0.024 | -0.046 | -0.015 | -0.138 | 0.004 | 0.020 | 0.046 |
| (23) | <i>Lev</i> | -0.144 | -0.142 | -0.205 | -0.094 | -0.035 | 0.186 | -0.021 | -0.107 | 0.005 | -0.084 | 0.008 | 0.148 | -0.061 | 0.017 | 0.188 | -0.003 | 0.019 | -0.108 |
| (24) | <i>Growth</i> | 0.130 | 0.168 | 0.225 | 0.101 | -0.013 | 0.014 | 0.259 | -0.030 | -0.025 | 0.021 | -0.003 | 0.002 | 0.011 | -0.050 | -0.017 | 0.070 | 0.007 | 0.003 |
| (25) | <i>ROA</i> | -0.221 | -0.095 | -0.066 | -0.154 | 0.085 | 0.111 | 0.701 | -0.051 | -0.019 | -0.020 | 0.000 | -0.026 | 0.022 | -0.032 | 0.117 | 0.069 | -0.014 | 0.021 |
| (26) | <i>MTB</i> | 0.141 | 0.132 | 0.173 | 0.125 | -0.007 | -0.054 | 0.123 | 0.009 | 0.085 | 0.051 | -0.017 | -0.014 | 0.048 | -0.053 | -0.046 | 0.020 | -0.016 | 0.064 |
| (27) | <i>Firm_Age</i> | -0.062 | -0.130 | -0.113 | -0.084 | 0.082 | 0.201 | 0.060 | -0.081 | -0.049 | -0.036 | 0.010 | 0.062 | -0.046 | 0.031 | 0.192 | -0.030 | 0.007 | -0.075 |
| (28) | <i>Cross_Listed</i> | -0.019 | -0.032 | -0.072 | 0.002 | -0.051 | 0.116 | -0.024 | -0.011 | 0.009 | -0.008 | 0.111 | 0.086 | -0.012 | 0.007 | 0.150 | -0.029 | -0.020 | 0.050 |
| (29) | <i>December_FY</i> | 0.019 | 0.023 | 0.042 | 0.038 | -0.132 | -0.042 | 0.009 | 0.030 | 0.001 | -0.036 | -0.017 | 0.048 | 0.018 | -0.041 | -0.038 | 0.054 | -0.025 | -0.058 |
| (30) | <i>Rec_Inv</i> | 0.075 | 0.041 | 0.155 | -0.063 | 0.153 | 0.000 | 0.067 | 0.000 | 0.001 | -0.017 | -0.015 | -0.053 | -0.007 | 0.003 | -0.029 | -0.033 | -0.001 | 0.002 |
| (31) | <i>CA_TA</i> | 0.298 | 0.235 | 0.234 | 0.111 | 0.022 | -0.167 | 0.051 | 0.015 | 0.024 | 0.023 | -0.035 | -0.093 | 0.033 | -0.150 | -0.242 | 0.123 | -0.016 | 0.022 |
| (32) | <i>Quick Ratio</i> | 0.163 | 0.134 | 0.126 | 0.045 | -0.153 | -0.134 | 0.013 | 0.040 | 0.055 | 0.009 | -0.045 | -0.116 | 0.064 | -0.169 | -0.194 | 0.168 | -0.028 | 0.075 |
| (33) | <i>Segment</i> | -0.114 | -0.088 | -0.113 | -0.125 | 0.065 | 0.327 | 0.079 | 0.034 | 0.012 | -0.085 | 0.043 | 0.068 | 0.011 | 0.089 | 0.204 | -0.064 | -0.009 | -0.081 |
| (34) | <i>Foreign</i> | -0.149 | -0.145 | -0.091 | -0.100 | 0.123 | 0.382 | 0.034 | -0.015 | -0.020 | -0.034 | -0.015 | -0.025 | -0.084 | 0.106 | 0.231 | -0.109 | 0.023 | -0.032 |
| (35) | <i>Ret</i> | 0.059 | 0.068 | 0.125 | 0.145 | -0.033 | -0.050 | 0.086 | 0.018 | 0.039 | -0.007 | -0.001 | -0.012 | -0.014 | -0.022 | -0.033 | 0.004 | -0.017 | -0.021 |
| (36) | <i>Neg</i> | 0.060 | 0.016 | -0.045 | 0.018 | 0.009 | -0.016 | -0.245 | 0.033 | -0.040 | 0.026 | -0.017 | -0.007 | -0.039 | 0.003 | 0.016 | -0.002 | 0.032 | 0.020 |

Panel C Cont'

| No. | Variables | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) | (27) | (28) | (29) | (30) | (31) | (32) | (33) | (34) | (35) | (36) |
|------|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| (1) | <i>AAWCA</i> | -0.135 | -0.315 | -0.154 | 0.168 | -0.185 | 0.089 | -0.078 | 0.113 | -0.071 | -0.010 | 0.029 | 0.189 | 0.337 | 0.150 | -0.129 | -0.193 | 0.009 | 0.039 |
| (2) | <i>ADDT</i> | -0.118 | -0.256 | -0.092 | 0.102 | -0.168 | 0.076 | -0.020 | 0.065 | -0.099 | -0.060 | -0.007 | 0.116 | 0.241 | 0.088 | -0.085 | -0.167 | -0.046 | 0.028 |
| (3) | <i>ARESREV</i> | -0.091 | -0.281 | -0.012 | 0.101 | -0.181 | 0.136 | -0.041 | 0.091 | -0.106 | -0.068 | 0.068 | 0.135 | 0.218 | 0.105 | -0.152 | -0.135 | 0.080 | -0.054 |
| (4) | <i>TOTACC</i> | -0.091 | -0.112 | 0.087 | 0.164 | -0.044 | 0.009 | -0.119 | 0.050 | -0.026 | 0.023 | 0.031 | -0.078 | 0.035 | -0.046 | -0.125 | -0.090 | 0.034 | 0.017 |
| (5) | <i>Adj_MAD_Score</i> | 0.042 | 0.155 | 0.049 | -0.099 | -0.042 | -0.026 | 0.054 | 0.010 | 0.109 | -0.052 | -0.104 | 0.181 | 0.061 | -0.142 | 0.059 | 0.100 | -0.028 | 0.015 |
| (6) | <i>AUDFEE</i> | 0.315 | 0.807 | 0.109 | -0.214 | 0.376 | -0.079 | 0.041 | -0.033 | 0.284 | 0.215 | -0.085 | 0.048 | -0.242 | -0.365 | 0.372 | 0.411 | -0.031 | 0.009 |
| (7) | <i>EP</i> | 0.085 | 0.215 | 0.529 | -0.736 | -0.025 | 0.196 | 0.750 | 0.107 | 0.146 | -0.048 | 0.005 | 0.209 | 0.067 | -0.026 | 0.131 | 0.101 | 0.365 | -0.326 |
| (8) | <i>First_Daughter</i> | -0.073 | -0.107 | -0.042 | 0.027 | -0.096 | -0.032 | -0.014 | -0.037 | -0.081 | -0.042 | 0.047 | 0.012 | 0.035 | 0.033 | 0.003 | -0.010 | -0.024 | 0.024 |
| (9) | <i>Num_Children</i> | -0.001 | -0.047 | -0.012 | 0.025 | -0.020 | -0.041 | 0.004 | 0.098 | -0.121 | 0.016 | 0.014 | 0.010 | 0.048 | 0.064 | -0.040 | -0.042 | 0.039 | -0.021 |
| (10) | <i>Single</i> | -0.210 | -0.044 | 0.003 | 0.011 | -0.096 | 0.070 | 0.005 | 0.015 | -0.054 | 0.003 | -0.080 | -0.057 | -0.012 | 0.016 | -0.083 | -0.082 | -0.019 | 0.019 |
| (11) | <i>Divorced</i> | 0.086 | 0.126 | -0.039 | -0.020 | 0.032 | 0.000 | -0.035 | -0.049 | -0.035 | 0.161 | -0.033 | 0.005 | -0.025 | -0.074 | 0.081 | 0.006 | -0.017 | 0.017 |
| (12) | <i>Age</i> | -0.041 | 0.194 | -0.017 | -0.050 | 0.171 | 0.003 | -0.040 | 0.005 | 0.037 | 0.138 | 0.038 | -0.041 | -0.084 | -0.154 | 0.067 | -0.023 | -0.027 | 0.018 |
| (13) | <i>Tenure</i> | -0.020 | -0.025 | 0.015 | -0.029 | -0.040 | -0.007 | 0.018 | 0.057 | -0.052 | 0.004 | 0.011 | 0.013 | 0.012 | 0.006 | 0.026 | -0.070 | 0.002 | -0.001 |
| (14) | <i>Busy</i> | 0.104 | 0.137 | 0.034 | -0.061 | 0.054 | -0.055 | -0.019 | -0.091 | 0.011 | 0.025 | -0.050 | -0.022 | -0.096 | -0.147 | 0.133 | 0.115 | -0.010 | -0.015 |
| (15) | <i>Ind_Exp</i> | 0.109 | 0.592 | 0.100 | -0.145 | 0.273 | -0.040 | 0.024 | 0.000 | 0.215 | 0.187 | -0.023 | 0.003 | -0.175 | -0.201 | 0.235 | 0.249 | -0.004 | 0.017 |
| (16) | <i>Client_Impt</i> | -0.099 | -0.064 | -0.011 | 0.035 | -0.018 | 0.052 | 0.036 | 0.084 | 0.008 | -0.011 | 0.029 | 0.024 | 0.064 | 0.109 | -0.108 | -0.076 | 0.013 | 0.012 |
| (17) | <i>P_Rotation</i> | 0.015 | 0.031 | -0.035 | 0.014 | 0.026 | -0.015 | -0.025 | -0.035 | 0.050 | -0.011 | -0.004 | -0.022 | -0.014 | -0.016 | 0.010 | 0.029 | -0.028 | 0.011 |
| (18) | <i>Female</i> | -0.029 | -0.114 | 0.008 | 0.016 | -0.127 | 0.041 | 0.056 | 0.020 | -0.070 | 0.035 | -0.067 | -0.011 | 0.033 | 0.107 | -0.080 | -0.090 | -0.001 | -0.001 |
| (19) | <i>Big_4</i> | | 0.257 | 0.039 | -0.084 | 0.095 | -0.021 | -0.008 | -0.117 | 0.125 | 0.099 | -0.041 | -0.052 | -0.170 | -0.064 | 0.192 | 0.276 | 0.031 | -0.042 |
| (20) | <i>Size</i> | 0.217 | | 0.156 | -0.277 | 0.461 | -0.070 | 0.092 | -0.037 | 0.352 | 0.228 | -0.097 | -0.025 | -0.350 | -0.399 | 0.320 | 0.454 | 0.019 | -0.038 |
| (21) | <i>OCF</i> | 0.055 | 0.208 | | -0.571 | -0.125 | 0.268 | 0.726 | 0.388 | 0.029 | 0.003 | -0.018 | 0.032 | 0.023 | 0.045 | 0.045 | 0.136 | 0.293 | -0.247 |
| (22) | <i>Loss</i> | -0.062 | -0.306 | -0.576 | | 0.017 | -0.233 | -0.736 | -0.228 | -0.126 | -0.009 | 0.019 | -0.200 | -0.044 | 0.033 | -0.172 | -0.151 | -0.222 | 0.212 |
| (23) | <i>Lev</i> | 0.087 | 0.424 | -0.084 | 0.007 | | -0.067 | -0.234 | -0.188 | 0.103 | 0.028 | -0.061 | -0.106 | -0.498 | -0.511 | 0.163 | 0.164 | -0.086 | 0.086 |
| (24) | <i>Growth</i> | 0.029 | -0.012 | 0.146 | -0.160 | 0.015 | | 0.311 | 0.322 | -0.092 | -0.044 | 0.003 | 0.016 | 0.048 | 0.083 | -0.093 | -0.083 | 0.129 | -0.092 |
| (25) | <i>ROA</i> | 0.093 | 0.275 | 0.713 | -0.682 | -0.043 | 0.218 | | 0.421 | 0.047 | -0.034 | -0.038 | 0.207 | 0.188 | 0.139 | 0.053 | 0.051 | 0.235 | -0.219 |
| (26) | <i>MTB</i> | -0.122 | -0.138 | 0.137 | -0.111 | -0.244 | 0.167 | 0.066 | | -0.089 | 0.035 | -0.070 | 0.122 | 0.309 | 0.189 | -0.136 | -0.035 | 0.288 | -0.263 |
| (27) | <i>Firm_Age</i> | 0.096 | 0.373 | 0.051 | -0.099 | 0.031 | -0.101 | 0.078 | -0.087 | | 0.001 | -0.004 | 0.163 | 0.048 | -0.092 | 0.135 | 0.260 | 0.038 | -0.026 |
| (28) | <i>Cross_Listed</i> | 0.093 | 0.197 | 0.001 | 0.003 | -0.037 | -0.033 | 0.004 | 0.028 | 0.040 | | -0.008 | -0.037 | -0.017 | -0.022 | 0.107 | 0.082 | 0.000 | 0.003 |
| (29) | <i>December_FY</i> | 0.058 | -0.027 | -0.041 | 0.030 | 0.007 | -0.006 | -0.031 | -0.086 | 0.015 | -0.019 | | -0.009 | 0.035 | 0.222 | -0.034 | -0.083 | 0.026 | -0.012 |
| (30) | <i>Rec_Inv</i> | -0.068 | -0.122 | 0.099 | -0.157 | -0.283 | -0.019 | 0.146 | 0.159 | 0.168 | 0.021 | -0.025 | | 0.685 | -0.043 | 0.111 | 0.048 | 0.008 | -0.024 |
| (31) | <i>CA_TA</i> | -0.164 | -0.367 | -0.058 | -0.021 | -0.495 | 0.016 | -0.016 | 0.343 | 0.021 | -0.017 | 0.030 | 0.633 | | 0.449 | -0.065 | -0.132 | 0.030 | -0.033 |
| (32) | <i>Quick Ratio</i> | -0.080 | -0.354 | -0.123 | 0.083 | -0.445 | 0.016 | -0.076 | 0.208 | -0.122 | 0.005 | 0.207 | -0.158 | 0.451 | | -0.122 | -0.145 | 0.079 | -0.081 |
| (33) | <i>Segment</i> | 0.111 | 0.291 | 0.095 | -0.139 | 0.052 | -0.055 | 0.104 | -0.099 | 0.161 | 0.092 | -0.072 | 0.109 | -0.059 | -0.097 | | 0.253 | -0.027 | -0.007 |
| (34) | <i>Foreign</i> | 0.174 | 0.332 | 0.166 | -0.135 | -0.051 | -0.045 | 0.126 | 0.066 | 0.242 | 0.103 | -0.087 | 0.166 | -0.090 | -0.123 | 0.304 | | 0.090 | -0.087 |
| (35) | <i>Ret</i> | -0.003 | -0.074 | 0.055 | -0.044 | -0.070 | 0.072 | 0.069 | 0.162 | -0.015 | 0.004 | 0.003 | 0.000 | 0.033 | 0.053 | -0.068 | -0.001 | | -0.862 |
| (36) | <i>Neg</i> | -0.034 | -0.031 | -0.190 | 0.225 | 0.067 | -0.077 | -0.199 | -0.234 | -0.040 | -0.001 | -0.025 | -0.030 | -0.043 | -0.051 | 0.008 | -0.038 | -0.503 | |

Table 4

Audit partners with first-born daughters and audit quality

This table reports the ordinary least squares estimation results using eight alternative measures of audit quality (*AQ*) for the period 2005-2016. Panel A reports the absolute abnormal working capital accruals (*AAWCA*), absolute value of the residuals (*ADDT*) from the Dechow and Dichev (2002) model as modified by McNichols (2002) and absolute value of discretionary revenues (*ARESREV*) absolute value of total accruals (*ATOTACC*). Panel B reports adjusted mean absolute deviation (*Adj_MAD_Score*), abnormal audit fees as Blankley et al.,(2012) and natural log of audit fees (*AUDFEE*) measures of audit quality. Panel C reports the conditional conservatism analysis from Basu (1997), dependent variable measures the earnings per share scaled by lagged market price per share (*EP*). Standard error in parentheses for Panel C. Heteroskedasticity-robust standard errors are clustered by client firm. *, **, and *** represent significance level of 10%, 5%, and 1%, respectively. The significance of the *First_Daughter* coefficient is based on a one-tailed test consistent with our directional hypothesis, while the control variables are based on a two-tailed test. All variable definitions are as reported in Appendix 1.

Panel A: Accruals

| | <i>AAWCA</i> | | <i>ADDT</i> | | <i>ARESREV</i> | | <i>ATOTACC</i> | |
|-------------------------|------------------|--------------|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Coeff. | S.E. | Coeff. | S.E. | Coeff. | S.E. | Coeff. | S.E. |
| <i>First_Daughter</i> | -0.010*** | 0.004 | -0.011** | 0.006 | -0.007** | 0.003 | -0.012** | 0.005 |
| <i>Num_Children</i> | 0.004 | 0.003 | 0.001 | 0.004 | -0.000 | 0.003 | 0.001 | 0.003 |
| <i>Single</i> | -0.009 | 0.007 | -0.016 | 0.011 | -0.004 | 0.008 | -0.013 | 0.011 |
| <i>Divorced</i> | 0.008* | 0.004 | 0.001 | 0.005 | -0.004 | 0.004 | 0.002 | 0.006 |
| <i>Age</i> | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| <i>Tenure</i> | 0.000 | 0.001 | 0.000 | 0.001 | -0.000 | 0.001 | 0.000 | 0.001 |
| <i>Female</i> | 0.007 | 0.006 | -0.001 | 0.008 | -0.003 | 0.007 | 0.007 | 0.007 |
| <i>Busy</i> | -0.002 | 0.002 | 0.001 | 0.002 | -0.002 | 0.002 | -0.001 | 0.002 |
| <i>Ind_Exp</i> | 0.007 | 0.007 | -0.007 | 0.006 | -0.002 | 0.004 | -0.003 | 0.008 |
| <i>Client_Impt</i> | -0.006 | 0.010 | 0.013 | 0.011 | -0.001 | 0.008 | 0.005 | 0.013 |
| <i>P_Rotation</i> | 0.010** | 0.004 | 0.004 | 0.004 | -0.002 | 0.003 | 0.007* | 0.004 |
| <i>Big4</i> | -0.005 | 0.010 | -0.013 | 0.014 | -0.018 | 0.018 | -0.011 | 0.014 |
| <i>Size</i> | -0.005 | 0.008 | 0.002 | 0.008 | 0.003 | 0.005 | 0.003 | 0.008 |
| <i>OCF</i> | 0.007 | 0.030 | -0.015 | 0.044 | -0.018 | 0.026 | 0.089* | 0.048 |
| <i>Loss</i> | -0.002 | 0.006 | 0.006 | 0.006 | -0.000 | 0.005 | 0.013* | 0.007 |
| <i>Lev</i> | 0.008 | 0.015 | 0.005 | 0.019 | 0.017 | 0.015 | 0.036 | 0.023 |
| <i>Growth</i> | 0.026** | 0.010 | 0.027** | 0.011 | 0.025*** | 0.008 | 0.009 | 0.013 |
| <i>ROA</i> | -0.033 | 0.042 | 0.074 | 0.047 | 0.012 | 0.032 | -0.023 | 0.063 |
| <i>MTB</i> | 0.005 | 0.006 | 0.015* | 0.007 | 0.014** | 0.006 | 0.009 | 0.008 |
| <i>Firm_Age</i> | -0.010** | 0.004 | -0.002 | 0.003 | 0.001 | 0.001 | -0.012*** | 0.004 |
| <i>Cross_Listed</i> | -0.194** | 0.092 | -0.019 | 0.079 | 0.042* | 0.021 | -0.252*** | 0.087 |
| <i>December_FY</i> | -0.036* | 0.020 | -0.013** | 0.006 | -0.009 | 0.016 | -0.036** | 0.018 |
| Constant | 0.320*** | 0.109 | -0.031 | 0.061 | -0.060 | 0.089 | 0.255** | 0.114 |
| Observations | 1,787 | | 1,679 | | 1,941 | | 1,787 | |
| Year F.E. | Yes | | Yes | | Yes | | Yes | |
| Client F.E. | Yes | | Yes | | Yes | | Yes | |
| Adjusted R ² | 0.310 | | 0.207 | | 0.304 | | 0.268 | |

Panel B: Other Variables

| | <i>Adj_MAD_Score</i> | | <i>AUDFEE</i> | |
|-------------------------|----------------------|--------------|----------------|--------------|
| | (1) | (2) | (3) | (4) |
| | Coeff. | S.E. | Coeff. | S.E. |
| <i>First_Daughter</i> | -0.436** | 0.236 | 0.192** | 0.089 |
| <i>Num_Children</i> | -0.214* | 0.123 | 0.037 | 0.054 |
| <i>Single</i> | 0.284 | 0.344 | 0.196 | 0.143 |
| <i>Divorced</i> | -0.067 | 0.232 | 0.129 | 0.108 |
| <i>Age</i> | 0.007 | 0.018 | -0.001 | 0.006 |
| <i>Tenure</i> | 0.022 | 0.031 | -0.009 | 0.012 |
| <i>Female</i> | -0.162 | 0.224 | -0.081 | 0.131 |
| <i>Busy</i> | 0.100 | 0.083 | 0.003 | 0.032 |
| <i>Ind_Exp</i> | -0.154 | 0.161 | 0.026 | 0.087 |
| <i>Client_Impt</i> | 0.643 | 0.441 | 0.088 | 0.169 |
| <i>P_Rotation</i> | 0.069 | 0.123 | -0.060 | 0.068 |
| <i>Big4</i> | -0.323 | 0.384 | 0.032 | 0.195 |
| <i>Size</i> | -0.242 | 0.274 | 0.460*** | 0.081 |
| <i>OCF</i> | -0.043 | 0.494 | 0.011 | 0.250 |
| <i>Loss</i> | -0.125 | 0.152 | 0.080 | 0.095 |
| <i>Lev</i> | 0.013 | 0.803 | 0.208 | 0.356 |
| <i>Growth</i> | 0.042 | 0.103 | 0.001 | 0.077 |
| <i>ROA</i> | -0.624 | 0.868 | -0.699 | 0.447 |
| <i>MTB</i> | -0.056 | 0.161 | 0.005 | 0.075 |
| <i>Firm_Age</i> | -0.093 | 0.137 | 0.297*** | 0.048 |
| <i>Cross_Listed</i> | 1.348 | 1.789 | 5.452*** | 1.036 |
| <i>December_FY</i> | -1.123 | 1.614 | 0.288 | 0.189 |
| <i>RECINV</i> | | | 0.166 | 0.406 |
| <i>CA_TA</i> | | | -0.075 | 0.471 |
| <i>Quick</i> | | | -0.011 | 0.131 |
| <i>Segments</i> | | | 0.026 | 0.048 |
| <i>Foreign</i> | | | -0.046 | 0.101 |
| Constant | 10.641** | 4.314 | 1.651 | 1.164 |
| Observations | | 1,729 | | 1,789 |
| Year F.E. | | Yes | | Yes |
| Client F.E. | | Yes | | Yes |
| Adjusted R ² | | 0.638 | | 0.938 |

Panel C: Basu Conditional Conservatism

| | EP |
|---------------------------------------|----------------------------------|
| <i>RET</i> | -0.238*** (0.070) |
| <i>NEG</i> | -0.227** (0.092) |
| <i>RET*NEG</i> | 0.594** (0.246) |
| <i>First_Daughter</i> | -0.007 (0.013) |
| <i>RET* First_Daughter</i> | 0.002 (0.016) |
| <i>NEG* First_Daughter</i> | 0.009 (0.019) |
| <i>RET*NEG* First_Daughter</i> | 0.093** (0.051) |
| <i>Size</i> | -0.024 (0.016) |
| <i>RET* Size</i> | 0.019*** (0.005) |
| <i>NEG* Size</i> | 0.014** (0.007) |
| <i>RET*NEG* Size</i> | -0.046** (0.018) |
| <i>Lev</i> | 0.094 (0.058) |
| <i>RET* Lev</i> | -0.152*** (0.033) |
| <i>NEG* Lev</i> | -0.176 (0.117) |
| <i>RET*NEG* Lev</i> | 0.404 (0.246) |
| <i>MTB</i> | -0.017 (0.015) |
| <i>RET* MTB</i> | 0.017*** (0.006) |
| <i>NEG* MTB</i> | 0.034* (0.018) |
| <i>RET*NEG* MTB</i> | -0.054 (0.048) |
| Constant | 0.469** (0.236) |
| Observations | 1,517 |
| Year F.E. | Yes |
| Client F.E. | Yes |
| Adjusted R ² | 0.427 |

TABLE 5

Segmenting audit quality measures between income-increasing accruals (positive) and income-decreasing accruals (negative)

This table reports the ordinary least squares estimation results segmenting the four alternative measures of audit quality (*AQ*) into positive and negative for the period 2005-2016. Absolute abnormal working capital accruals (*AAWCA*), absolute value of the residuals (*ADDT*) from the Dechow and Dichev (2002) model as modified by McNichols (2002), absolute value of discretionary revenues (*ARESREV*) and absolute value of total accruals (*ATOTACC*). Heteroskedasticity-robust standard errors are clustered by client firm and are reported in the parentheses. *, **, and *** represent significance level of 10%, 5%, and 1%, respectively. The significance of the *First_Daughter* coefficient is based on a one-tailed test consistent with our directional hypothesis, while the control variables are based on a two-tailed test. All variable definitions are as reported in Appendix 1.

| | <i>AAWCA</i> | | <i>ADDT</i> | | <i>ARESREV</i> | | <i>ATOTACC</i> | |
|-------------------------|---------------------------|-------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | Positive (1) | Negative (2) | Positive (3) | Negative (4) | Positive (5) | Negative (6) | Positive (7) | Negative (8) |
| <i>First_Daughter</i> | -0.010* (0.007) | -0.005 (0.006) | -0.011** (0.006) | -0.012 (0.013) | -0.003 (0.007) | -0.004 (0.005) | -0.015 (0.016) | -0.001 (0.005) |
| <i>Num_Children</i> | 0.003 (0.004) | 0.004 (0.004) | -0.001 (0.003) | 0.001 (0.008) | -0.007 (0.005) | 0.002 (0.003) | -0.003 (0.011) | 0.003 (0.003) |
| <i>Single</i> | -0.011 (0.013) | -0.003 (0.013) | -0.007 (0.014) | -0.028 (0.024) | -0.007 (0.014) | -0.003 (0.008) | -0.032 (0.033) | -0.010 (0.009) |
| <i>Divorced</i> | 0.012* (0.007) | 0.001 (0.007) | 0.005 (0.006) | -0.014 (0.016) | -0.007 (0.008) | -0.004 (0.004) | 0.018 (0.018) | 0.004 (0.006) |
| <i>Female</i> | -0.004 (0.007) | 0.009 (0.010) | -0.002 (0.006) | -0.002 (0.022) | -0.018 (0.014) | -0.000 (0.007) | -0.030 (0.027) | 0.012 (0.008) |
| <i>Partner</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| <i>Controls</i> | | | | | | | | |
| <i>Firm Controls</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Observations | 901 | 886 | 1,104 | 575 | 772 | 1,169 | 499 | 1,288 |
| Year F.E. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Client F.E. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Adjusted R ² | 0.364 | 0.399 | 0.235 | 0.288 | 0.316 | 0.334 | 0.384 | 0.440 |

TABLE 6
Propensity Score Matching Results

This table reports the mean difference in covariate values for the *AAWCA* sample in Panel A and the ordinary least squares estimation results, following the propensity score matching process in Panel B for each of the accrual measures and Panel C for other alternative measures of audit quality (*AQ*) for the period 2005-2016. Absolute abnormal working capital accruals (*AAWCA*), absolute value of the residuals (*ADDT*) from the Dechow and Dichev (2002) model as modified by McNichols (2002), absolute value of discretionary revenues (*ARESREV*), absolute value of total accruals (*ATOTACC*), adjusted mean absolute deviation (*Adj_MAD_Score*), abnormal audit fees (*ABNFEE*) and natural logarithm of audit fees (*AUDFEE*). Panel D reports the conditional conservatism analysis from Basu (1997). Standard error in parentheses for Panel D. Heteroskedasticity-robust standard errors are clustered by client firm. *, **, and *** represent significance level of 10%, 5%, and 1%, respectively. The significance of the *First_Daughter* coefficient is based on a one-tailed test consistent with our directional hypothesis, while the control variables are based on a two-tailed test. All variable definitions are as reported in Appendix 1.

Panel A: Effects of Propensity Score Matching: *AAWCA* Sample

| | Unmatched | | | | Matched | | | |
|---------------------|-----------------------|--------|-------|----------|-----------------------|--------|-------|--------|
| | <i>First_Daughter</i> | | %Bias | t-test | <i>First_Daughter</i> | | %Bias | t-test |
| | =1 | =0 | | | =1 | =0 | | |
| Mean | Mean | (3) | (4) | Mean | Mean | (7) | (8) | |
| | (1) | (2) | | | (5) | (6) | | |
| <i>Num_Children</i> | 2.320 | 2.150 | 23.0 | 4.83*** | 2.221 | 2.239 | -2.4 | -0.44 |
| <i>Married</i> | 0.785 | 0.766 | 4.6 | 0.95 | 0.766 | 0.756 | 2.4 | 0.40 |
| <i>Age</i> | 50.758 | 51.057 | -4.7 | -0.97 | 50.639 | 50.813 | -2.7 | -0.47 |
| <i>Busy</i> | 2.826 | 2.861 | -2.0 | -0.43 | 2.810 | 2.789 | 1.2 | 0.22 |
| <i>Ind_Exp</i> | 0.334 | 0.373 | -8.0 | -1.67* | 0.320 | 0.323 | -0.7 | -0.12 |
| <i>Female</i> | 0.096 | 0.117 | -6.8 | -1.40 | 0.108 | 0.125 | -5.3 | -0.89 |
| <i>Big_4</i> | 0.917 | 0.939 | -8.5 | -1.78* | 0.918 | 0.928 | -3.8 | -0.64 |
| <i>Size</i> | 14.227 | 14.626 | -20.3 | -4.22*** | 14.264 | 14.263 | 0.1 | 0.01 |
| <i>OCF</i> | 0.064 | 0.072 | -5.3 | -1.11 | 0.061 | 0.061 | 0.1 | 0.01 |
| <i>Lev</i> | 0.170 | 0.192 | -14.1 | -2.94*** | 0.169 | 0.173 | -2.4 | -0.43 |
| <i>Growth</i> | 0.069 | 0.071 | -0.7 | -0.14 | 0.065 | 0.072 | -2.4 | -0.41 |
| <i>ROA</i> | 0.692 | 0.700 | -9.0 | -1.90* | 0.694 | 0.695 | -1.3 | -0.22 |
| <i>MTB</i> | 1.226 | 1.217 | 1.6 | 0.34 | 1.224 | 1.240 | -3.0 | -0.51 |
| <i>Firm Age</i> | 11.533 | 13.192 | -21.2 | -4.36*** | 12.330 | 12.067 | 3.3 | 0.60 |

Panel B: Accruals

| | <i>AAWCA</i> | | <i>ADDT</i> | | <i>ARESREV</i> | | <i>ATOTACC</i> | |
|-------------------------|-----------------|--------------|---------------|--------------|----------------|--------------|-----------------|--------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| | Coeff. | S.E. | Coeff. | S.E. | Coeff. | S.E. | Coeff. | S.E. |
| <i>First_Daughter</i> | -0.014** | 0.005 | -0.008 | 0.006 | -0.008* | 0.004 | -0.014** | 0.006 |
| <i>Num_Children</i> | 0.002 | 0.003 | -0.004 | 0.004 | 0.000 | 0.004 | -0.005 | 0.004 |
| <i>Single</i> | -0.000 | 0.010 | -0.012 | 0.013 | -0.009 | 0.008 | -0.015* | 0.009 |
| <i>Divorced</i> | 0.012** | 0.005 | 0.002 | 0.007 | -0.007 | 0.005 | 0.001 | 0.007 |
| <i>Age</i> | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| <i>Tenure</i> | 0.000 | 0.001 | 0.001 | 0.001 | -0.001 | 0.001 | 0.001 | 0.001 |
| <i>Female</i> | 0.009 | 0.009 | -0.008 | 0.009 | -0.015 | 0.009 | -0.005 | 0.010 |
| <i>Busy</i> | -0.002 | 0.002 | 0.002 | 0.002 | -0.003 | 0.002 | -0.002 | 0.002 |
| <i>Ind_Exp</i> | 0.012 | 0.008 | -0.004 | 0.007 | -0.002 | 0.005 | 0.001 | 0.009 |
| <i>Client_Impt</i> | 0.008 | 0.014 | 0.027** | 0.013 | 0.001 | 0.010 | 0.011 | 0.016 |
| <i>P_Rotation</i> | 0.008* | 0.005 | 0.006 | 0.006 | -0.005 | 0.004 | 0.009* | 0.005 |
| <i>Big4</i> | 0.007 | 0.011 | -0.012 | 0.017 | -0.021 | 0.022 | -0.014 | 0.015 |
| <i>Size</i> | -0.010 | 0.011 | 0.006 | 0.011 | 0.009 | 0.008 | 0.010 | 0.011 |
| <i>OCF</i> | 0.001 | 0.031 | -0.015 | 0.042 | -0.037 | 0.033 | 0.070 | 0.051 |
| <i>Loss</i> | -0.000 | 0.007 | 0.000 | 0.008 | -0.004 | 0.007 | 0.004 | 0.009 |
| <i>Lev</i> | 0.012 | 0.023 | -0.008 | 0.027 | 0.018 | 0.022 | 0.021 | 0.028 |
| <i>Growth</i> | 0.013 | 0.012 | 0.030** | 0.013 | 0.018* | 0.010 | 0.009 | 0.015 |
| <i>ROA</i> | 0.024 | 0.058 | 0.005 | 0.058 | 0.005 | 0.039 | -0.082 | 0.080 |
| <i>MTB</i> | 0.014 | 0.008 | 0.022** | 0.010 | 0.022*** | 0.007 | 0.018* | 0.009 |
| <i>Firm_Age</i> | -0.016** | 0.008 | 0.001 | 0.006 | 0.006*** | 0.001 | -0.010 | 0.008 |
| <i>Cross_Listed</i> | -0.314** | 0.158 | 0.017 | 0.125 | 0.089*** | 0.027 | -0.220 | 0.150 |
| <i>December_FY</i> | -0.076* | 0.039 | 0.015 | 0.031 | 0.039*** | 0.014 | -0.019 | 0.041 |
| Constant | 0.450** | 0.191 | -0.112 | 0.150 | -0.241** | 0.120 | 0.140 | 0.205 |
| Observations | 1,220 | | 1,126 | | 1,318 | | 1,216 | |
| Year F.E. | Yes | | Yes | | Yes | | Yes | |
| Client F.E. | Yes | | Yes | | Yes | | Yes | |
| Adjusted R ² | 0.345 | | 0.167 | | 0.261 | | 0.264 | |

Panel C: Other Variables

| | <i>Adj_MAD_Score</i> | | <i>AUDFEE</i> | |
|-------------------------|----------------------|--------------|----------------|--------------|
| | (1) Coeff. | (2) S.E. | (3) Coeff. | (4) S.E. |
| <i>First_Daughter</i> | -0.413 | 0.293 | 0.198** | 0.098 |
| <i>Num_Children</i> | -0.251* | 0.133 | 0.010 | 0.069 |
| <i>Single</i> | 0.132 | 0.345 | 0.229 | 0.165 |
| <i>Divorced</i> | 0.061 | 0.281 | 0.065 | 0.111 |
| <i>Age</i> | 0.024 | 0.023 | -0.002 | 0.008 |
| <i>Tenure</i> | -0.005 | 0.034 | -0.000 | 0.014 |
| <i>Female</i> | -0.464 | 0.306 | -0.148 | 0.138 |
| <i>Busy</i> | 0.049 | 0.088 | -0.006 | 0.044 |
| <i>Ind_Exp</i> | -0.201 | 0.178 | 0.119 | 0.124 |
| <i>Client_Impt</i> | 0.416 | 0.462 | 0.186 | 0.227 |
| <i>P_Rotation</i> | 0.113 | 0.187 | -0.029 | 0.088 |
| <i>Big4</i> | -0.522* | 0.273 | -0.026 | 0.238 |
| <i>Size</i> | -0.210 | 0.202 | 0.363*** | 0.099 |
| <i>OCF</i> | -0.295 | 0.552 | 0.101 | 0.314 |
| <i>Loss</i> | 0.097 | 0.194 | 0.190 | 0.134 |
| <i>Lev</i> | -0.719 | 0.949 | 0.059 | 0.405 |
| <i>Growth</i> | -0.045 | 0.134 | 0.076 | 0.096 |
| <i>ROA</i> | -0.947 | 1.245 | -0.800 | 0.585 |
| <i>MTB</i> | -0.106 | 0.180 | 0.015 | 0.132 |
| <i>Firm_Age</i> | -0.224 | 0.226 | 0.268*** | 0.046 |
| <i>Cross_Listed</i> | -0.522 | 2.822 | 5.371*** | 1.072 |
| <i>December_FY</i> | -2.331 | 2.714 | -0.054 | 0.152 |
| <i>RECINV</i> | | | 0.091 | 0.490 |
| <i>CA_TA</i> | | | -0.257 | 0.654 |
| <i>Quick</i> | | | 0.039 | 0.205 |
| <i>Segments</i> | | | 0.056 | 0.063 |
| <i>Foreign</i> | | | -0.067 | 0.130 |
| Constant | 13.417** | 5.536 | 4.067*** | 1.493 |
| Observations | | 1,186 | | 1,230 |
| Year F.E. | | Yes | | Yes |
| Client F.E. | | Yes | | Yes |
| Adjusted R ² | | 0.665 | | 0.936 |

Panel C: Basu Conditional Conservatism

| | EP |
|---------------------------------------|----------------------------------|
| <i>RET</i> | -0.213*** (0.053) |
| <i>NEG</i> | -0.218** (0.106) |
| <i>RET*NEG</i> | 0.589*** (0.217) |
| <i>First_Daughter</i> | 0.009 (0.015) |
| <i>RET* First_Daughter</i> | -0.000 (0.017) |
| <i>NEG* First_Daughter</i> | 0.031 (0.024) |
| <i>RET*NEG* First_Daughter</i> | 0.130** (0.073) |
| <i>Size</i> | -0.015 (0.019) |
| <i>RET* Size</i> | 0.018*** (0.004) |
| <i>NEG* Size</i> | 0.012* (0.007) |
| <i>RET*NEG* Size</i> | -0.047*** (0.016) |
| <i>Lev</i> | 0.064 (0.080) |
| <i>RET* Lev</i> | -0.177*** (0.039) |
| <i>NEG* Lev</i> | -0.148 (0.100) |
| <i>RET*NEG* Lev</i> | 0.369 (0.231) |
| <i>MTB</i> | -0.016 (0.014) |
| <i>RET* MTB</i> | 0.013** (0.006) |
| <i>NEG* MTB</i> | 0.032 (0.021) |
| <i>RET*NEG* MTB</i> | -0.042 (0.057) |
| Constant | 0.320 (0.282) |
| Observations | 1,028 |
| Year F.E. | Yes |
| Client F.E. | Yes |
| Adjusted R ² | 0.456 |

TABLE 7
Difference-In-Difference Analysis

This table compares the audit quality and conditional conservatism measures following the rotation of audit partners holding constant the client and audit firm. The rotation contains a transition from an audit partner with a first-born Daughter (Son) to one with a first-born son (Daughter) – *Daughter-to-Son* or *Son-to-Daughter*. *POST* is a dummy variable which takes the value of one following an audit partner rotation and 0 otherwise. Panel A includes the different accrual measures and Panel B includes all other audit quality measures. Heteroskedasticity-robust standard errors are clustered by client firm and audit partner pair and are reported in the parentheses. *, **, and *** represent significance level of 10%, 5%, and 1%, respectively. The significance of the *Daughter-to-Son* and *Son-to-Daughter* coefficients is based on a one-tailed test consistent with our directional hypothesis, while the control variables are based on a two-tailed test. All variable definitions are as reported in Appendix 1.

Panel A: Accruals Measures

| | <i>AAWCA</i> | <i>ADDT</i> | <i>ARESREV</i> | <i>ATOTACC</i> | <i>AAWCA</i> | <i>ADDT</i> | <i>ARESREV</i> | <i>ATOTACC</i> |
|-----------------------------|----------------------|-------------------|----------------------|----------------------|---------------------|-------------------|---------------------|---------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <i>Son-to-Daughter*POST</i> | -0.034*** (0.007) | -0.009 (0.010) | -0.035*** (0.013) | -0.025*** (0.010) | | | | |
| <i>Daughter-to-Son*POST</i> | | | | | 0.053*** (0.017) | 0.021* (0.011) | -0.015 (0.012) | 0.068*** (0.023) |
| <i>POST</i> | 0.017* (0.009) | 0.015* (0.009) | 0.031** (0.015) | 0.021* (0.011) | 0.012 (0.013) | 0.004 (0.012) | 0.051*** (0.019) | 0.025 (0.015) |
| <i>Control Variables</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Year F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Client Firm F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Audit Firm F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Observations | 382 | 345 | 392 | 382 | 340 | 301 | 340 | 340 |
| Adjusted R ² | 0.360 | 0.292 | 0.282 | 0.426 | 0.493 | 0.245 | 0.299 | 0.429 |

Panel B: Other Measures

| | <i>Adj_MAD_Score</i> | <i>AUDFEE</i> | <i>EP</i> | <i>IMPAIR</i> | <i>Adj_MAD_Score</i> | <i>AUDFEE</i> | <i>EP</i> | <i>IMPAIR</i> |
|---------------------------------------|----------------------|-------------------|------------------|--------------------|----------------------|---------------------|------------------|-------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| <i>Son-to-Daughter*POST</i> | -1.800** (0.773) | 0.243* (0.156) | | 1.158** (0.688) | | | | |
| <i>RET*NEG* Son-to-Daughter*POST</i> | | | 0.185 (0.193) | | | | | |
| <i>Daughter-to-Son*POST</i> | | | | | -0.065 (0.339) | -0.684** (0.331) | | -0.959 (0.849) |
| <i>RET*NEG* Daughter-to-Son *POST</i> | | | | | | | 0.231 (0.206) | |
| <i>POST</i> | 1.144 (0.694) | 0.359 (0.223) | 0.034 (0.028) | -0.164 (1.516) | -0.194 (0.453) | 0.496* (0.272) | 0.020 (0.034) | 3.158* (1.758) |
| <i>Control Variables</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Year F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Client Firm F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Audit Firm F.E. | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> | <i>Yes</i> |
| Observations | 365 | 378 | 300 | 269 | 303 | 336 | 261 | 231 |
| Adjusted R ² | 0.684 | 0.842 | 0.232 | 0.319 | 0.795 | 0.848 | 0.379 | 0.371 |