How the economic situation when CFOs first enter labour market will affect corporates' tax avoidance --moral standards shift based on imprinting theory

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Abstract

While Schoar and Zuo (2017) documented the economic conditions under which CEOs begin their careers and how these conditions shape their management styles, influencing corporate behavior, they did not investigate the intermediate psychological factors that alter these styles when executives, particularly those early experience in small or private firms, encounter a recession early in their careers. Moreover, their research only addressed the role of CEOs. This proposal aims to empirically examine the impact of the macro-economic environment at the time CFOs first entered the labor market on their corporate tax avoidance strategies. We expect to demonstrate that CFOs who started their careers during recessions are likely to adopt more aggressive tax avoidance strategies than those who began during economic booms. Furthermore, drawing on evidence from psychology and organizational behavior provided by Sharma et al. (2014), we suggest that individuals who have experienced financial deprivation are more inclined to engage in immoral strategies to achieve financial gains, with a shift in moral standards acting as a mediating factor. We propose that CFOs may lower their moral standards during economic downturns, especially during the sensitive period when they first enter the labor market, a shift that is difficult to reverse according to imprinting theory. However, currently, we can only assume agency costs to proxy for shifts in moral standards, due to the lack of extensive evidence. We plan to investigate the mediating role of this factor. Incorporating moral standards into our analysis may enhance our understanding of the entire reasoning process among economic impact, CFO experiences, and tax avoidance strategies. This provides an explanation of why and how individual traits influence corporate behavior from a moral standpoint. We also posit that to predict financial decision-making behaviors like tax avoidance, it is crucial to focus on and emphasize the role of CFOs.

Keywords: imprinting theory; CFOs；economic situation; moral standards shifts; tax avoidance

Introduction

Tax avoidance & planning is important strategic decisions for corporates. The traditional view holds that tax avoidance transfers values from national economy and social welfare to shareholders in corporates (Huseynov and Klamm, 2012). But tax avoidance also brings substantial costs to the corporates: In addition to the direct cost of participating in tax avoidance, the executives must ensure that tax avoidance is not discovered by regulators. In this context, top executives tend to pursue self-interest instead of maximizing corporate profits (Hasseldine and Morris, 2013; Guenther et al., 2017), and therefore this situation will incur principal-agent problem, which increases agency costs. So far, no clear answer shows whether tax avoidance can increase corporate value in the long term. However, in the actual business world, tax avoidance is a common phenomenon. In the fierce market competition, taking tax avoidance strategy allows corporates to have more funds to investments, thus it increases their market status (Cai and Liu, 2009). Successful tax planning also reduces the cash outflow when making tax payments and help the business grow (Drake et al., 2019). So, corporates top executives should trade-off between the benefits and costs in tax avoidance. It’s also critical to know what criteria influence this trade-off and who will be a key role in tax avoidance.

Within top executives, chief financial officers (CFOs) are the key position that will dominantly influence financial reporting and tax strategy (Feng et al., 2011; Chen et al., 2019; Gupta et al., 2020). However, many research use top executives to predict corporate tax avoidance (Hjelstrom, 2019). Only small numbers of research focus on the relationship between CFOs and corporate tax avoidance, and their main focus is on CFOs’ personal demographic traits, such as gender and professional background (Francis et al., 2014; Chen et al., 2019). So, we may focus on the CFOs role. CFOs’ traits matter.

For factors that affect the trade-off in tax avoidance, recent research usually focus on executive characteristics and experience. Some scholars believe that these traits influence tax avoidance significantly and cannot be explained at corporate level (Dyreng, 2010). Although these traits extended from demographic characteristics (gender, place of birth, etc.) to irrational ones (over-confidence, narcissistic personality, etc.), most research just treat them as established factors and do not discuss further about individuals traits imprint what things and that things then change their behaviour. Few studies use economy situation as early experience. Therefore, the link between CFOs experience and tax avoidance is ambiguous, we need to seek evidence to support and fill in current possible gap.

So, how will the economic situation when CFOs first enter the labour market affect the degree of tax avoidance of their current companies? Evidence from Sharma et al.

(2014) shed light on it, they found that the effect of financial deprivation on cheating more financial gains is mediated by shifting moral standards and people feeling deprived tend to judge others who are deprived less harshly. Combined with imprinting theory, we infer that people who first entered labour market in economic-downturn will relax their moral standards and tolerate others to cheat. Since this period is a sensitive period for managers (Schoar and Zuo, 2017), the macroeconomic situation in this period will have a continuous impact on managers' management decision-making style. Dyreng (2010) found that CFOs will indirectly exert pressure on lower tiers departments or individuals to influence the taxation activities of the company. All of these may explain why and how CFOs who experienced economic-downtown in sensitive period will choose aggressive tax avoidance behaviour.

As discussion above, we will investigate how CFOs early economic situation experience when first entering labour market will have impact on corporate tax avoidance. We will collect the financial data of listed companies in China and the personal data of CFOs of listed companies. After controlling for other factors that affect the degree of corporate tax avoidance, we may expect to find that when CFOs entered labour market for the first time during the economic downturn, tax avoidance activities they implemented are higher.

For moral standards measurement, followed by Sharma et al.(2014), we try to use agency costs to proxy moral standards. When CFOs are feeling financial stress, their moral standard shifts may lead to pursue self-interest instead of maximizing corporate profits (Hasseldine and Morris, 2013; Guenther et al., 2017), and therefore this situation will lead to principal-agent problem, which increases agency costs(AC). AC may play the mediating role.

We may contribute to the current literature debate in the following ways. We explore and emphasize the CFOs key role in financial decision-making behaviour like tax avoidance. Using imprinting theory, we provide the whole process route clearly that external economics impact/experience will firstly affect CFOs moral/ethical standards for a long term and then this shifts may change the strategy or target CFOs take. We make the logical link more complete in a theoretical way.

But some issues remain: we may not proxy the moral standards appropriately and accurately in empirical study, since academia has not reached a consensus on how to define and measure it and most research methods are experimental studies; at now, moral standards shifts can just explain economics downturn experience, other experience still need more evidence; corporates that is less take tax-avoidance may tend to co-option CFOs with economic-upturn experience spontaneously, lead to endogenous problem.

Literature Review

(1) Tax avoidance and executive traits/experience

Tax avoidance is influenced by the characteristics of executives. Early studies show some corporate levels that affect corporate tax avoidance, including ownership structure (Khan et al., 2017), internal control weakness (Bauer, 2016), and customer concentration (Huang et al., 2016). Some studies further discuss that tax avoidance on individual traits. For example, Dyreng et al. (2010) use manager fixed effect regression to show the incremental impact of individual managers on tax avoidance. Armstrong et al. (2012) find a positive relationship between the incentive compensation of tax directors and their firms' tax avoidance. Robinson et al. (2012) show that directors with financial expertise can promote reasonable tax planning efficiency but reduce the aggressiveness of tax avoidance. Olsen and Stekelberg (2016) examine management overconfidence and find that overconfident managers increase tax avoidance aggressively. Francis et al. (2016) find that firms led by politically partisan CFOs are more aggressive in tax avoidance. As previously discussed, corporate executives will have an impact on the company's tax avoidance behaviour and these correlations are more significant in state-owned enterprises, and companies with a high degree of financial marketization and with good legal environment (Kong, 2017). Some scholars found that executives with military experience are less likely to engage in tax avoidance (Laws and Mills, 2017). They mainly focus on whole top executive's traits and experience to explain the tax avoidance behaviour.

(2) Imprinting theory

The concept of imprinting theory first appeared in the field of biology. German biologist Lorenz (1937) officially called this phenomenon "imprint", and subsequent biologists continued to summarize this phenomenon. They define imprinting as "in a short sensitive period, the subject develops outstanding characteristics reflecting the environment impact. Even if major environmental changes occur in the later period, these characteristics will still have continuous influences on the subject". Accordingly, using economic situation to explain the imprinting effect on CFOs' tax avoidance alone is rare.

When discussing experience, some research use following experience as sensitive period: Childhood and educational experience (Kish-Gephart and Campbell, 2015), first entry into the labour market experience (Schoar and Zuo, 2013), financial distress experience at work(Liu, 2016) and marriage experience (Nicolosi and Yore, 2015). Malmendier and Yan(2011) reported that CEOs who grew up during the Great Depression in the United States will be more sensitive to the risks of debt and loans. The research of Schoar and Zuo (2017) shows that the management style of CEOs who enter the labour market for the first time during the economic downturn will tend to be conservative and cautious. Xianjie He et al.(2018) indicate that auditors who enter the labour market for the first time during the economic downturn will publish more audit revision opinions. They often directly link these experiences to the corporate behaviour, but whole process of this link remains unclear.

(3) Review

From literature review, we learn that many scholars use experience as core variable to explain corporate's behaviour, but they often focus on whole executives or are just concerned about CEOs. But CFOs is the key role in tax avoidance as discussed above. Also, they stated unclearly that the early experience will first influence the individual's moral/ethical standards and then these changes will influence their coporate decision-making behaviour.

Hypothesis Development and Research Method

1. Assumption

Individuals will have a strong sense of anxiety when entering the labour market for the first time. To reduce this anxiety, individuals will actively learn common practices and customs that have been formed in the work environment (Marquis and Tilcsik, 2013). During the economic downturn, companies tend to adopt tighter financial strategies(such as high cash holdings) to cope with financial risks, and at the same time, they will also conduct more manipulation behaviours (such as more accrued earnings management) to maintain investors' confidence. Therefore, CFOs who first entered the labour market during this period will be affected by the company's tightening financial strategies and manipulation behaviours. As a result, they tend to avoid more cash outflow of the corporates, that is, early downturn may reduce CFO's moral standards, then CFOs may take aggressive tax strategy to maximize return. CFOs can be a key role indirectly to manipulate department incentive strategy to influence the financial decision-making of the corporates. Moral standards shifts may lead to more self-interest conduct that will increase agency costs, which may play the mediating role and increase tax avoidance degree.

Based on this, we formulate the hypothesis as follows:

H1: Compare to the upturn economic situation when CFOs first enter labour market, downturn situation will incur more tax avoidance undertaken by CFOs
H2: Agency costs has the mediating effect between CFOs experience and tax avoidance

2. Data selection

We select all listed companies in China's Shanghai and Shenzhen stock exchanges as the initial sample, and performs the following screening:

(1) Eliminate samples with missing related variables in the model;

(2) Eliminate samples with negative effective tax rates.

In the sample data, the financial data of listed companies, CFOs job information, and personal background information come from the CSMAR database, and the company’s nominal tax rate data comes from the WIND database.

3. Variable selection and model design

(1) Model design

Followed by Wen (2004), we construct:

Model 1 $DETR_{m,t} = \beta_0 + \beta_1 Recession_{m,t} + Control_{m,t} + \mu_{m,t}$

Model 2 $AC_{m,t} = \beta_0 + \beta_1 Recession_{m,t} + Control_{m,t} + \mu_{m,t}$

Model 3 $DETR_{m,t} = \beta_0 + \beta_1 AC_{m,t} + \beta_2 Recession_{m,t} + Control_{m,t} + \mu_{m,t}$

The test is mainly divided into three steps: the first step, as shown in Model 1, we regress DETR on Recession to test whether Recession coefficient is significant; the second step, as shown in Model 2, we regress AC on Recession to test whether the Recession coefficient is significant; the third step is to insert the AC into the Model 1. Based on the significant Model 1 and significant AC in Model 3, if Recession in Model 3 is not significant, it proves that the agency cost has a complete mediating effect; if it is still significant but the coefficient is lower than before, it proves that there is partially mediating effect.

(2) Tax avoidance

We follow the method of Chen et al. (2015) and use the current effective tax rate of corporates minus the corresponding statutory tax rate (DETR) to measure the tax avoidance. The effective tax rate is defined as income tax expense divided by the company's pre-tax profit for the current period. The higher the DETR in this setting, the fewer tax avoidance activities.

(3) CFO individual traits

CFO individual traits include Recession, Male, Education, and Oversea.

The Recession when entering the labour market for the first time is the core independent variable. If the CFO enters the labour market for the first time during the economic downturn, this variable will take the value 1, otherwise it will take the value 0. The CSMAR database does not directly record information about the year when the CFO of a listed company first entered the labour market. We refer to the practice of Schoar and Zuo (2017), using the CFO's birth year plus 24 as the year when the CFO first entered the labour market, which also avoids individuals self-selection job placement year due to fluctuations in the business cycle. For economic prosperity and economic downturn, we refer to the definition of Liu (2009) and defines the year when the actual GDP growth rate declines as the economic downturn, so the economic downturn years are: 1965, 1971, 1972, 1974, 1975, 1976, 1979, 1980, 1981, 1985, 1986, 1990, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2008, 2009.

Gender (Male) is also an important characteristic of executives. When making major corporate decisions, male executives tend to be overconfident and ignore some potential risks (Huang and Kisgen 2013). We expect that male executive will take more tax avoidance activities, and female executives will pay more attention to regulation and take less tax avoidance activities. If the CFO is male, the variable takes the value 1; if the CFO is female, the variable takes the value 0.

The education level (Education) reflects the CFO's tax avoidance skills to a certain extent. If the CFO's degree is a master's degree or above, the value of this variable is 1; otherwise, the value of this variable is 0.

Overseas background (Oversea) is also a dummy variable. In this article, if the CFO has worked overseas or studied overseas, the value of this variable is 1; otherwise, the value of this variable is 0.

(4) Agency cost

Followed by Ang (2000, JF), we use total asset turnover. Since it represents company's operating efficiency about turn assets to the earnings, the higher the turnover, the greater firm operating. Then, conflicts between shareholders and executives may be lower, so it means lower AC.

(5) Control variables

Corporate-characteristic variables are used as control variables to ensure that changes in tax avoidance behaviour are caused by differences in the individual traits of CFOs. We summarize Law and Mills (2017)'s and Hanwen Chen et al. (2015)'s method, select the company's return on assets (current net profit divided by the book value of the total assets at the end of the previous period, ROA), leverage ratio (long-term liabilities at the end of the current period divided by the total assets at the end of the previous period, Leverage), fixed asset intensity (the book value of fixed assets in the current period divided by the book value of total assets at the end of the previous period, PPE), investment income ratio (the current investment income divided by the book value of total assets at the end of the previous period, Equity), market-BV Ratio (total market value at the beginning of the period divided by book value of total assets at the beginning of the period, MBR), company size (natural logarithm of the total market value at the beginning of the period, Firm_Size)

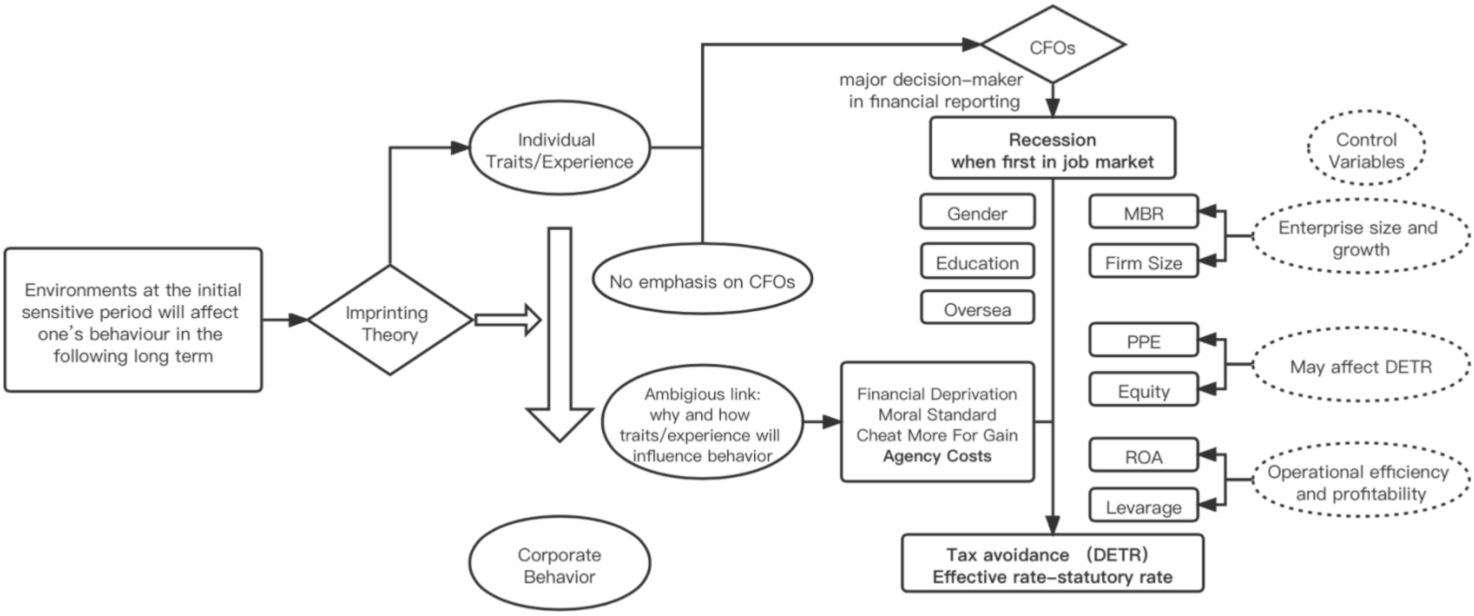

Figure 1 Economics Situation and Tax Avoidance

Reference

[1] Armstrong, C.S., Blouin, J.L., Larcker, D.F., 2012. The incentives for tax planning. J. Account. Econ. 53 (1–2), 391–411.

[2] Bauer, A.M., 2016. Tax avoidance and the implications of weak internal controls. Contemp. Account. Res. 33 (2), 449–486.

[3] Cai H. and Liu Q. 2009. Competition and Corporate Tax Avoidance: Evidence from Chinese Industrial Firms [J]. Economic Journal, 119(537):764-795.

[4] Chen, M.C., Chang, C.W., Lee, M.C., 2019. The effect of chief financial officers' accounting expertise on corporate tax avoidance: the role of compensation design. Rev. Quant. Financ. Acc. 54 (1), 1–24.

[5] Chen H., Tang S., Wu D., and Yang D. 2015. The Political Dynamics of Corporate Tax Avoidance: The Chinese Experience [J]

[6] Drake, K.D., Lusch, S.J., Stekelberg, J., 2019. Does tax risk affect investor valuation of tax avoidance? J. Acco. Audit. Finan. 34 (1), 151–176.

[7] Dyreng S. D., Hanlon M., and Maydew E L. 2010. The effects of executives on

corporate tax avoidance [J]. Accounting Review, 85(4):1163-1189.
[8] Feng, M., Ge, W., Luo, S., Shevlin, T., 2011. Why do CFOs become involved in material accounting manipulations? J. Acc. Econ. 51 (1-2), 21–36.
[9] Francis, B.B., Hasan, I., Wu, Q., Yan, M., 2014. Are female CFOs less tax aggressive? Evidence from tax aggressiveness. J. Am. Tax. Assoc. 36 (2), 171–202.
[10] Gephart J.K. and Campbell J. T. 2015. You don't forget your roots: The influence of CEO social class background on strategic risk taking [J]. The Academy of Management Journal, 58:1614-1636.
[11] Guenther, D.A., Matsunaga, S.R., Williams, B.M., 2017. Is tax avoidance related to firm risk? Acc. Rev. 92 (1), 115–136.
[12] Gupta, V.K., Mortal, S., Chakrabarty, B., Guo, X., Turban, D.B., 2020. CFO gender and financial statement irregularities. Acad. Manag. J. 63 (3), 802–831.
[13] Hasseldine, J., Morris, G., 2013. Corporate social responsibility and tax avoidance: A comment and reflection. Acc. Forum 37 (1), 1–14.
[14] Huang J. and Kisgen J. 2013. Gender and Corporate Finance:Are Male Executives Overconfident Relative to Female Executives?[J]. Social Science Electronic Publishing, 108(3):822-839.
[15] Huang, H.H., Lobo, G.J., Wang, C., Xie, H., 2016. Customer concentration and corporate tax avoidance. J. Bank. Financ. 72, 184–200.
[16] Huseynov, F., Klamm, B.K., 2012. Tax avoidance, tax management and corporate social responsibility. J. Corp. Finan. 18 (4), 804–827.
[17] Kale K P. 2006. The Impact of Socialist Imprinting and Search on Resource Change: A Study of Firms in Lithuania [J]. Strategic Management Journal, 27(7):659-679.
[18] Khan, M., Srinivasan, S., Tan, L., 2017. Institutional ownership and corporate tax avoidance: new evidence. Account. Rev. 92 (2), 101–122.
[19] Kong W. and Wang Q. 2017. Property of Ownership, Executive Characteristics and Corporate Tax avoidance from A-share Listed Companies [J]. North China Finance, (8): 10-18.
[20] Law K. F. and Mills L. F. Military experience and corporate tax avoidance[J]. Review of Accounting Studies, 2017, 22(1):141-184.
[21] Liu Y., Hu Y., and Wu. Does the management professional experience affect the company's cash holding level?--empirical evidence in 2006-2013 Economic Management, 2016.
[22] Liu Shucheng. 2009. Review and Outlook of New China 60 Year Growth [J]. Economic dynamics, (10): 3-10.
[23] Lorenz, K. (1937). On the formation of the concept of instinct. Natural Sciences, 25(19), 289–300.

[24] Malmendier U. and Yan G. T. 2011. Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies [J]. The Journal of Finance, 66(5):1687-1733.

[25] Marquis C, Tilcsik, Andras. 2013. Imprinting: Toward a Multilevel Theory [J]. The Academy of Management Annals, 7(1):195-245.

[26] Nicolosi G. and Yore A S. 2015.'I Do': Does Marital Status Affect How Much CEOs 'Do'? [J]. Social Science Electronic Publishing

[27] Olsen, K.J., Stekelberg, J., 2016. CEO Narcissism and corporate tax sheltering. J. Am. Tax. Assoc. 38 (1), 1–22.

[28] Robinson, J.R., Xue, Y., Zhang, M.H., 2012. Tax Planning and Financial Expertise in the Audit Committee. Working Paper. The University of Texas at Austin, George Washington University, Fordham University.

[29] Schoar A. and Zuo L. 2017. Shaped by Booms and Busts: How the Economy Impacts CEO Careers and Management Styles [J]. SSRN Electronic Journal, (49).

[30] Sharma E., Mazar N., Adam L. Dan A. 2014. Financial deprivation selectively shifts moral standards and compromises moral decisions, Organizational Behavior and Human Decision Processes, 123(2): 90-100

[12] Wen Z.L., Zhang L., Hou J. Liu H. 2004. "Mediating Effect Test Procedures and Their Applications", Acta Psychologica Sinica, Vol. 36 No. 5, pp. 614-620.

[31] Xianjie H.,Kothari S. P.,Tusheng X,Luo Z.. 2018. Long-Term Impact of Economic Conditions on Auditors' Judgment [J]. The Accounting Review, 93 (6): 203–22