



The impact of auditors' identity on the commercialization of auditing firms with a focus on the mediating role of auditors' creativity

Hamid Malek Asgar

Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran. Hrma1356@yahoo.com

Zahra Pourzamani

Department of Accounting, Central Tehran Branch, Islamic Azad University, Tehran, Iran

(Correspond author)

zahra.pourzamani@yahoo.com

Submit: 01/12/2021 Accept: 04/12/2021

ABSTRACT

This study investigated the effect of auditors' identity on the commercialization of auditing firms with a focus on the mediating role of auditors' creativity. This study is an applied study in terms of its objectives and a descriptive survey in terms of the method of data collection. The research population included certified public accountants and professional managers in auditing firms ($n = 1300$) as members of the Iranian Society of Certified Public Accountants. The sample size was estimated at 297 persons using Cochran's formula. The data were collected using questionnaires. The validity of the questionnaire was assessed using convergent validity and divergent validity. Moreover, the reliability of the variables was assessed using Cronbach's alpha coefficient and the composite reliability, and the corresponding values were greater than 0.7 for all variables. The collected data were analyzed using SPSS and Smart PLS3 software. The results of the study indicated that auditor identity has a positive and significant effect on auditor creativity as well as the commercialization of auditing firms. It was also shown that auditor creativity has a positive and significant effect on the commercialization of auditing firms. Thus, it can be concluded that auditor creativity plays a mediating role in the impact of auditors' identity on the commercialization of auditing firms.

Keywords:

Auditors' identity, Commercialization of Audit Institutions, Auditors' Creativity



1. Introduction

Individual identity refers to a person's deep understanding of himself/herself, the integration and coordination of internal and external conditions, and the construction of personal identity. Identity is both knowing oneself and introducing oneself to others. It is knowing oneself in relation to something and introducing oneself to others based on that thing (Gong, 2015). Professional identity is defined as an individual's perception of the profession based on attitudes, beliefs, feelings, values, motivations, and experiences (Slay & Smith, 2011). Professional identity aligns auditors' norms, goals, and values with their professional commitments (Warren and Alzola, 2009). Professional norms or values can include adherence to public duties, professional principles, and ethical principles (Bauer, 2015).

Professional identity is a deep-rooted concept because, with extensive practice and training, the auditor reinforces and internalizes the norms and beliefs of the profession over time (Rousseau, 1998; Warren & Elzola, 2009). Moral identity is also a concept in moral psychology that shows the importance of morality in defining an individual's personality (Hardy & Carlo 2011) and guides moral performance (Aquino et al., 2009). However, the moral identity of the auditor seems to have been so far ignored in the literature as an individual variable that can be very important in the moral decisions made by the auditor. (Arrami & QingXiang, 2021)

The concept of corporatization, which is related to the concepts of commercialization and business management, states that auditors with organizational identity will outperform the auditors with professional identity working for these companies because they have a better performance in line with the requirements of these auditing firms compared to auditors for whom professional identities are paramount (Broberg, 2013; Pantland, 1993). In other words, according to other existing hypotheses, it is believed that auditors with a stronger professional identity are less involved and less responsive to the audit firm's cyclical process than other auditors (Valian et al., 2020). The phenomenon of commercialization should be considered a desirable and pleasant event in auditing firms (Sweeney & McGray, 2011). Thus, the issue of commercialization of auditing firms and changing the type of operational approaches of firms is one of the strategic issues in the

macro areas of auditing firms that require changes in the plans and policies of firms. It is important to note that this issue has received less attention due to the explanations detailed above (Broberg et al., 2018: 377). Research conducted after the Enron scandal also shows that the commercialization of the auditing profession is one of the factors facilitating the occurrence of unethical behavior and reducing the quality and independence of the auditor (Sharma & Sidhu, 2001; Citron, 2003; Suddaby et al., 2009: 412; Sori et al., 2010: 214; Carter et al., 2015: 1199). They believe that commercialization will lead to the destruction of auditing as a profession.

On the other hand, entering a specialized profession that involves decision-making requires distinct characteristics and features, the most important of which is the ability to commercialize auditing firms. Recent studies, however, have shown that auditors currently face challenges in commercializing auditing firms in the accounting and auditing environment (Glover et al., 2018).

Research approaches to commercialization have not been studied much and most previous studies have examined the auditor criteria as an expert in the field of institutions and have paid less attention to the effective role of individual and internal characteristics of auditors in facilitating the commercialization process of auditing firms. Accordingly, the present study aims to contribute to advancing and developing research in this field by introducing the professional and organizational identities of auditors as effective factors in the commercialization of the auditing industry. In fact, these identities are manifestations of the forces of the internal and external environment, indicating that these individual identities are created by interaction with, or even in opposition to, the internal and external forces of auditing firms, so that the individual can be introduced as committed or indifferent to the goals of the organization (Pratt & Foreman, 2000: 20; Lui et al., 2001: 469).

Individual identity or personality traits can affect the atmosphere of the organization and the creativity of employees (Gong, 2015). Psychological studies have shown that individual creativity and thinking styles are different in individuals. Individual creativity and thinking style of individuals are important factors in information processing. Thus, individual creativity and thinking style is not an ability in itself but refers to how abilities are used (Malik et al., 2019). Individual

thinking and creativity style can affect the commercialization of auditing firms (Aiste et al., 2013). Thus, it is essential to recognize individual creativity and its impact on the commercialization of auditing firms, and the failure to pay attention to it leads to ignoring the auditors' ability to commercialize auditing. The purpose of this study is to identify the effect of auditors' identity on the commercialization of auditing firms with a focus on the mediating role of auditors' creativity. It also aims to develop the theoretical framework of individual auditors' creativity and behavioral research in the auditing profession. In recent years, with the expansion of accounting in universities and the development of the auditing market, the active role of the auditing profession in a dynamic economic environment is undeniable.

Using creative performance components, Hurtt (2010) introduced a new approach to conceptualizing and operationalizing social identity subsets. Their work serves as a basis for the development of a set of social identity theories. These components of creativity (team identity, inspirational motivation, thought leadership, creative endeavor, and creative performance) can help the researcher to find out whether the placement of auditors in different social identity categories will be able to measure the measures of creativity and if these measures affect the commercialization of auditing firms or not.

Accordingly, creativity can be considered an effective factor in the commercialization of auditing firms. Thus, it is essential to address its impact on the commercialization of auditing firms. Since the concept of creativity is related to the field of psychology and behavioral sciences, identifying its variables and making connections with accounting and auditing issues is of great importance. To this end, the present study aims at the effect of auditors' identity on the commercialization of auditing firms. In particular, it examines the mechanism by which individual creativity affects the relationship between auditor identity and the commercialization of auditing firms in Iran. This study also explores if individual creativity directly affects the relationship between auditors' identities and the commercialization of auditing firms. The findings of this study can expand the theoretical foundations of individual creativity in the business of independent auditors and examine its relationship with auditor identity and the commercialization of auditing firms.

2. Theoretical framework of the study

Guo-lin (2007) states that individual identity reflects self-knowledge and self-confidence as well as the relationship between the individual and others. Yin (2017) argues that individual identity refers to the recognition of individual characteristics and status. Individual identity is a degree of understanding and acceptance of one's identity and role. It is the process by which individuals think about internal incompatibility and the crisis of self-confidence. Minuchin believes that identity relies on two elements: a sense of belonging and a sense of distinction (Yin, 2017). Identity brings the employees' perspectives closer to the goals and values of the organization and the employees develop an emotional commitment to the organization (Schneider & Neigren, 1970). Identity emphasizes learning and gaining professional experience by the employees of the organization. In a profession, a sense of identity is an important issue for people working in that profession. Auditors who are seriously involved in their profession recognize the audit profession as an important part of their identity. In other words, dependence on the auditing profession is high among auditors. Professional identity can shape organizational identity, and these two identities influence decision-making (Aranya et al., 1981). The socio-cognitive concept of moral identity considers the situational factor as a variable that can positively or negatively affect access to the structure related to moral identity (Shao et al. 2008).

All organizations need new and creative ideas to survive. Creating new ideas and processes helps organizations adapt to the turbulent external environment and gain a competitive advantage (Lawal et al., 2018). Creativity means using the abilities of the mind to create a new thought. Amabile (1979) defines creativity as the production of new and valuable ideas by an individual or group of people working together. Creativity is the emergence of new ideas (Beesley & Cooper, 2008). Creativity means the ability to combine ideas uniquely or to create a connection between them. However, innovation is the process of taking a creative idea and turning it into a new product, service, and method of operation (Westlund et al., 2014). From a psychological point of view, creativity means creating something from something else in a special way. In other words, creativity means increasing or decreasing a phenomenon and transforming or combining it with other phenomena, objects, or things. Creativity is the

use of mental abilities to create a new idea or concept (Farmer & Tierney, 2002). Creativity is the ability to generate new ideas and combine existing ideas into new forms to find new solutions. Creative problem solving is an essential life and learning skill that is suitable for a wide range of thought processes. Guilford (1967) lists four elements for individual creativity that include:

- 1) Fluidity: The ability to establish a meaningful relationship between thought, idea, and expression
- 2) Flexibility: The ability to think in different ways to solve a new problem
- 3) Initiative: The ability to think unconventionally and contrary to the common habit
- 4) Expansion of details: The ability to pay attention to details while performing an activity (Turnbull et al., 2010).

To describe the process of commercialization of auditing firms, the literature on commercialization uses terms such as "profitability", "effectiveness", "market strategy", "customer orientation", "corporatization", "business process", "financialization", "market orientation" (Sweeney & McGray, 2011; Alves & Spicer, 2012; Broberg et al., 2013; Go Berg, 2013; Broberg et al., 2018). Accordingly, it should be noted that there is no study to date to directly addresses this issue. Thus, the present study seeks to provide a review of similar studies in the literature as detailed below:

Arrami and QingXiang (2021) examined the role of moral identity in the auditor's judgment and decisions and concluded that the effect of the auditor's perceived morality on his/her moral judgment is completely mediated by the moral identity. Besides, understanding the intensity of the auditor's ethics leads to access to a moral identity, which in turn has a positive effect on moral judgment. Broberg et al. (2018) examined the professional identity and organizational identity of auditors and the commercialization process in auditing firms. The results indicated a positive and significant relationship between organizational identity and three aspects of commercialization. There was also a significant relationship between the auditor's professional identity and the commercialization process. This indicates a change in the role of professional identity concerning

the commercialization of auditing firms, and the positive relationship between professional identity and commercialism has led to the emergence of a new phenomenon called professionalization. Herda Valavel (2015) examined how identity building with the client and the client's commitment affect the auditor's impartiality and how the auditors' identification with the client privately and their commitment affect the auditor's impartiality. The results indicated that identifying with the client impairs the auditor's impartiality. Johnson (2014) examined the simultaneous impact of professional identity and consequential thinking on professional judgment. The results of this study showed that professional judgment is not separate from professional identity. It was also shown that consequential thinking influences professional judgment. The results also showed that the degree of organizational identity building of experts and members' self-esteem affect professional judgment. Svanberg and Öhman (2014) examined the impact of client identity on audit quality and concluded that auditors tend to identify with their clients. Moreover, auditors who create identities prefer client behavior and will not pay attention to the quality of the audit. Ekradloo et al. (2021) examined the effect of leadership styles on employee innovation and creativity with a focus on the moderating role of creative self-efficacy and the mediating role of trust and individual identity in the Tax Administration and concluded that identifying and exploiting existing opportunities is the basis for developing and promoting employee creativity through effective prerequisites. Moreover, by using transformational and interactive leadership styles, as well as giving identity to employees, it is possible to create innovation in the organization, and thus the indicators of employee creativity will be improved. Safarzadeh and Hooshmand Kashani (2020) examined auditors' characteristics and their professional and commercial tendencies, and their impact on audit quality and concluded that the level of knowledge and awareness, adaptability, and communication skills of auditors have a positive and significant relationship with their professional orientation but their marketing skills are negatively related to their professional orientation. Moreover, the creativity and innovation of auditors have no significant relationship with their professional orientation. On the other hand, auditors' marketing and communication skills have a positive and significant

relationship with their business orientation, but auditors' knowledge and awareness, adaptability, and creativity do not have a significant relationship with their business orientation. Salmani et al. (1999) developed a model for predicting the professional judgment of auditors and concluded that the professional and occupational dimension has the greatest impact on predicting the professional judgment of auditors followed by the individual dimension. Besides, the environmental dimension has the least effect on the prediction of auditors' professional judgment compared to the other two dimensions. Rezaei et al. (2015) examined the effect of organizational and professional identity on the professional skepticism of independent auditors. The results showed that organizational identity and professional identity have a significant and positive effect on all six dimensions of professional skepticism including knowledge-seeking, interruption in judgment, self-assertion, interpersonal understanding, self-confidence, and questioning mind. Hirani et al. (2017) examined the effect of auditors' social characteristics on their judgment in resolving the conflict between the auditor and management. The results showed that auditors' overconfidence and their Machiavellian personality affect professional judgment. Professional judgment also affects the conflict between the auditor and management, and

overconfidence has a significant effect on it. Furthermore, professional judgment has a moderating role in the effect of overconfidence and Machiavellian personality on the conflict between the auditor and management. Eliassi et al. (2016) addressed the concept of commercialization of financial services. The results revealed six dimensions including creation and screening of service ideas, service analysis, service plan and processes, identification and management of service delivery system for stakeholders, and total supply and service performance improvement. Abdollahi and Mofrad (2015) examined auditor identity-building towards customers. The results show that issues related to customer identity building also apply to small auditors.

Following the research objectives, the following hypotheses were developed and tested in this study:

- **Hypothesis 1:** Auditor identity affects the commercialization of auditing firms.
- **Hypothesis 2:** Auditor identity affects auditor creativity.
- **Hypothesis 3:** Auditors' creativity affects the commercialization of auditing firms.
- **Hypothesis 4:** Auditors' creativity plays a mediating role in the impact of auditors' identity on the commercialization of auditing firms.

Figure 1 shows the conceptual model of the study:

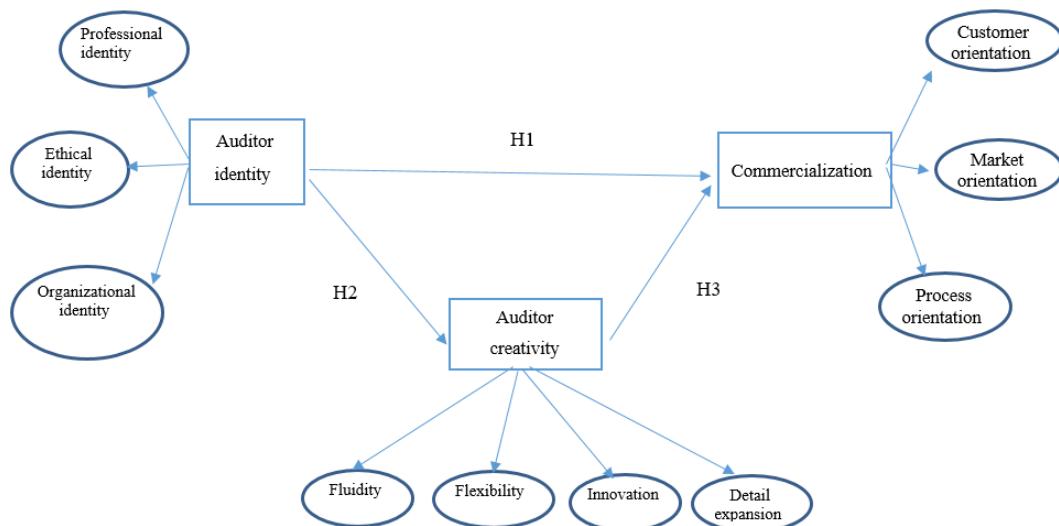


Figure 1: The conceptual model of the study

3. Research methodology

The present study is an applied study in terms of its objectives and a descriptive survey based on structural equation modeling in terms of the method of data collection. The data in this study were collected using library techniques and field methods such as reviewing articles, interviews, and questionnaires. Thus, it can be said that the present study is a cross-sectional study based on the data collection method. The research population in this study included certified public accountants and professional managers working in

auditing firms (n = 1300 persons) as members of the Iranian Society of Certified Public Accountants. The sample size was estimated as 297 persons using Cochran's formula. The participants were selected using stratified random sampling. For this purpose, about 320 questionnaires were distributed and then 297 questionnaires were collected and analyzed. The Portrait Values Questionnaire (PVQ) (Torrance, 1979) was used to measure individual creativity (fluidity, flexibility, initiative, and detail expansion).

Table 1: The variables in the Portrait Values Questionnaire (PVQ)

Variable	Components	Symbol	Operational definition
Creativity	Fluidity	FLD	The ability to establish a meaningful relationship between thought, idea, and expression to provide numerous solutions to a problem.
	Flexibility	FLB	The ability to think in different ways to solve a new problem
	Innovation	INV	The ability to think unconventionally and contrary to the common habit
	Detail expansion	DEX	The ability to pay attention to details while performing an activity

To measure the auditor's identity, the Professional and Organizational Identity Questionnaire (Broberg et al., 2018). Besides, the Moral identity Scale (Arrami & QingXiang, 2021) was used to measure auditors' moral identity. Finally, the Commercialization Questionnaire (Broberg et al., 2018) was administered to measure commercialization (customer orientation, market orientation, and process orientation).

The validity of the questionnaire was assessed using convergent and divergent validity or average variance extracted. Moreover, the reliability of the variables was estimated by calculating Cronbach's alpha coefficient and composite reliability and the corresponding values for all variables were greater than 0.7. Since the data followed an abnormal distribution, data analysis was performed using structural equation modeling and partial least square method with SPSS and Smart PLS software.

4. Results

4.1 Descriptive findings

Table 2 shows the participants' demographic characteristics. As can be seen, a majority of the participants were male (265), aged 31 to 40 years, had a master's degree, and were working for 10 to 15 years.

Table 2: The participants' demographic characteristics

Variable	Category	Value
Gender	Male	265
	Female	32
Age (year)	20-30	7
	31-40	128
	41-50	113
	50 and older	49
Education	Diploma and lower education	12
	Bachelor's degree	86
	Master's degree	140
	Ph.D.	50
Job experience (year)	< 5	21
	5-10	108
	10-15	129
	> 15	39

4.2 Inferential findings

As shown in Table 3, the distribution of data at a 95% confidence level is not normal for the constructs of auditor identity, commercialization, and creativity. Thus, non-parametric tests were used for data analysis in Smart PLS software.

Table 3: The normality of data distribution assessed using the Kolmogorov-Smirnov and Shapiro-Wilk tests

Variable		Kolmogorov-Smirnov test			Shapiro-Wilk test		
		Statistic	df	Sig.	Statistic	df	Sig.
Auditor identity	AI	0.285	265	0.000	0.772	265	0.000
Commercialization	COM	0.309	265	0.000	0.843	265	0.000
	PRC	0.280	265	0.000	0.843	265	0.000

To examine the model fit, we used the measurement model fit, the structural model fit, and the overall model fit. The reliability of the research measurement model was assessed using the factor loads, Cronbach's alpha coefficients, and composite reliability. The criterion for the suitability of the factor load coefficients is 0.4. In the table below, all factor load coefficients in the questions are greater than 0.4, indicating that this criterion is appropriate: Following the data analysis algorithm in PLS, after measuring the factor loads of the items, Cronbach's alpha coefficients and composite reliability were measured. The second criterion for examining the fit of measurement models is convergent validity, which examines the degree of correlation of each structure with its items (indicators) as shown in Table 5:

Given that the values for Cronbach's alpha and combined reliability is 0.7 and following the findings of the table above, these criteria have adopted a suitable value for latent variables, confirming the reliability of the variables. Considering that the acceptable value for AVE is 0.5 and following the data of the table above, this criterion has been adopted as a suitable value for latent variables, thus confirming the convergent validity of the variables. The Fornell-Larcker criterion was used to measure divergent validity as shown in Table 6. Because the values of the original diameter (square root) for each latent variable are greater than the correlation of that variable with other latent variables in the model, the divergent validity of the model is also confirmed.

Table 4: Factor loads

Variable/indicator	Symbol	Auditor identity (AI)	Personal creativity (PRC)	Commercialization (COM)
Detail expansion	DEX		0.852	
Flexibility	FLB		0.566	
Fluidity	FLD		0.534	
Innovation	INV		0.857	
Customer orientation	CO			0.804
Market orientation	MO			0.651
Process orientation	PO			0.696
Moral identity	MOI	0.579		
Organizational identity	OI	0.846		
Professional identity	PI	0.881		

Table 5. Cronbach's alpha and composite reliability for latent variables

Latent variables	Symbol	Alpha > 0.7	CR > 0.7	AVE > 0.5
Auditor identity	AI	0.754	0.819	0.609
Commercialization	COM	0.780	0.762	0.518
Creativity	PRC	0.790	0.803	0.517

Table 6: Estimating divergent validity

Latent variables	Symbol	Auditor identity (AI)	Personal creativity (PRC)	Commercialization (COM)
Auditor identity	AI	0.780		
Commercialization	COM	0.431	0.720	
Creativity	PRC	0.441	0.633	0.719

As shown in Figures 2 and 3, since t-values are greater than 1.96, the research hypotheses are confirmed at a 95% confidence level.

The second criterion for examining the fit of a structural model is the R² values related to the endogenous (dependent) latent variables of the model. R² shows the effect of an exogenous variable on an endogenous variable and three values of 0.19, 0.33, and 0.67 are considered as weak, medium, and strong values of R². As can be seen in Figure 3, the R² values calculated for the endogenous structures confirm the fit of the structural model. To evaluate the fit of the overall model, the GOF index is used, with three values of 0.01, 0.25, and 0.36 show the weak, medium, and strong values for GOF. This index is calculated using the following formula:

$$GOF = \sqrt{\text{communalities} \times R^2}$$

Where $\overline{\text{Communalities}}$ is estimated as the average commonality of the latent variables.

Table 7: Commuality and R² values for the research variables

Latent variables	Symbol	R ²	Commuality
Auditor identity	AI		0.562
Commercialization	COM	0.430	0.569
Creativity	PRC	0.195	0.661
Commuality	R ²		GOF
0.579	0.3125		0.432

Since GOF is equal to 0.432, the goodness of fit of the overall model is confirmed. The following section presents the results of testing the research hypotheses using PLS software. Figure 2 shows the structural model of the study and the factor loads and Figure 3 presents the structural model of the study and the significant coefficients:

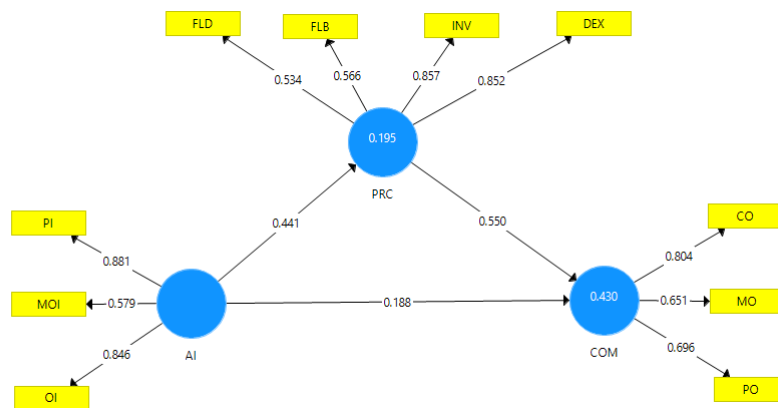


Figure 2: The structural model of the study and the factor loads

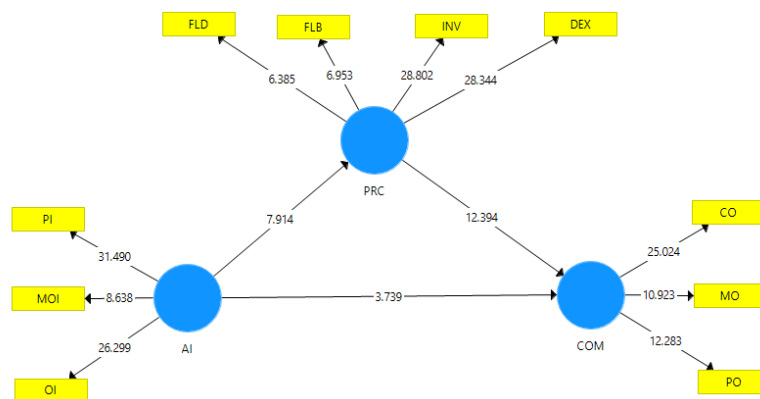


Figure 3: The structural model of the study and the significant coefficients

Table 8 shows the direct relationships and path coefficients between the variables:

Table 8: The direct relationships and path coefficients between the variables

Path	Symbol	t	β	Sig.	Result
Auditor identity → Commercialization	AL → COM	3.739	0.188	0.000	Confirmed
Auditor identity → Creativity	AL → PRC	7.914	0.441	0.000	Confirmed
Creativity → Commercialization	PRC → COM	12.394	0.550	0.000	Confirmed

Testing hypotheses

Hypothesis 1: Auditor identity has a positive and significant effect on the commercialization of auditing firms.

As shown in Figures 2 and 3, the standardized coefficient between the two variables (auditors' identity and commercialization of auditing firms) is equal to $\beta = 0.188$. and the t-value is equal to $t = 3.739$ (greater than the absolute value of 1.96), confirming that there is a significant relationship between the two variables. Thus, it can be concluded that auditor identity has a positive and significant effect on the commercialization of auditing firms.

Hypothesis 2: Auditor identity has a positive and significant effect on auditor creativity.

As shown in Figures 2 and 3, the standardized coefficient between the two variables (auditors' identity and auditor creativity) is equal to $\beta = 0.441$. and the t-value is equal to $t = 7.914$ (greater than the absolute value of 1.96), confirming that there is a significant relationship between the two variables. Thus, it can be concluded that auditor identity has a positive and significant effect on auditor creativity.

Hypothesis 3: Auditors' creativity has a positive and significant effect on the commercialization of auditing firms.

As shown in Figures 2 and 3, the standardized coefficient between the two variables (auditor creativity and commercialization of auditing firms) is equal to $\beta = 0.550$. and the t-value is equal to $t = 12.394$ (greater than the absolute value of 1.96), confirming that there is a significant relationship between the two variables. Thus, it can be concluded that auditor creativity has a positive and significant effect on the commercialization of auditing firms.

Hypothesis 4: Auditor creativity plays a mediating role in the impact of auditors' identity on the commercialization of auditing firms.

Following Subell's theory and considering the results presented above, the mediating relationships between the variables are shown in Figure 4:

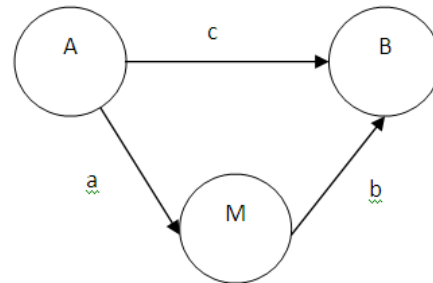


Figure 4: The mediating relationships between the variables

Table 9: The path coefficients for the mediating relationships between the variables

Variables	a	b	c
β	0.441	0.550	0.188
Sig.	0.000	0.000	0.000
Indirect impact		Direct impact	Total impact
$a \times b$		c	$(a \times b) + c$
0.243		0.188	0.431

According to Subell's (1996) theory, there are three possible scenarios:

- 1) If c is not significant but a and b are significant, m is a full mediator.
- 2) If c is not significant but either a or b or both are not significant, m is not a mediator.
- 3) If c , a , and b are significant, m is a partial mediator.

Following the beta values and significance levels presented in Table 7, the third scenario is established. Therefore, it can be suggested that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is confirmed. Thus, it can be concluded that auditor creativity plays a partially mediating role in the impact of auditors' identity on the commercialization of auditing firms, and the fourth hypothesis is confirmed.

5. Discussion and conclusion

The results of the study indicated that auditor identity has a positive and significant effect on auditor creativity as well as the commercialization of auditing firms. Besides, auditor creativity has a positive and

significant effect on the commercialization of auditing firms. Thus, it can be concluded that auditor creativity plays a mediating role in the impact of auditors' identity on the commercialization of auditing firms. However, some researchers believe that both internal and external forces influence the commercialization process in auditing firms and auditors' identities are create these forces (Settles, 2004; Johnson et al., 2014). In fact, it should be stated that the identities of auditors are formed based on the commercialization strategies of auditing firms, and auditors in a competitive market try to leave a higher level of satisfaction with their performance and professional qualities through their professional, moral, and organizational identities to more confidence and trust. In other words, auditor identity focuses on the service activities of auditing firms while emphasizing their active participation in interactions and collective activities with a special emphasis on organizational prosperity and survival. Auditor identity increases the level of auditors' awareness of the institution's further commercialization measures. Therefore, auditors with strong identities are believed to be more involved in business activities (such as consulting services).

Moreover, the impact of the auditor's professional identity on the commercialization process indicates a change in the role of professional identity in the commercialization of auditing firms, and the relationship between professional identity and commercialism has led to the emergence of a new phenomenon called professionalization. A look at the website of the Society of Certified Public Accountants shows that various auditors have been suspended due to non-compliance with the principles and rules of professional conduct. This indicates that some auditors have not received proper professional training and are succumbing to the client's wishes. It seems that we have to look for new ways to solve new problems and issues that are the missing link in our current auditing profession. One of these links is identity. Previous studies have shown that multiple auditor identities are important but distinct identities in the audit environment (Bamber & Iyer, 2007) that have different effects on auditors' characteristics. This is also true for experienced accountants, such as auditing firm partners (Suddaby et al., 2009). If auditors have a strong identity, their characteristics are strengthened (Kinney, 1999).

It can be stated that auditors are more creative than other auditors willing to participate in corporatization, and as a result, more participation in the activities of the auditing firm promotes a higher level of commercialization of auditing firms. However, people with multiple identities are more likely to increase the power of one identity than others, which of course depends on different environmental or technical factors that can make one identity more active and bolder than others (Haslem & Alimers, 2005). The impact of auditors' identities on the commercialization of auditing firms is simultaneous in these four areas. The auditor's characteristics emphasize the impact of identity on creativity and commercialization in various areas such as moral characteristics, religious beliefs, personality traits, attitudes, and insights (Ding et al., 2017). The auditor's knowledge dimension emphasizes the impact of identity on creativity in both general knowledge and specialized knowledge. This dimension introduces auditors as experts who must have general knowledge and information on issues such as economics and law, as well as a high level of specialized knowledge in the field of accounting and auditing and their latest developments and changes in these domains. Expert knowledge is a set of technical and specialized information related to the auditor (Slay & Smith, 2011) The dimension of auditor skills and experience highlights the impact of audit creativity on the impact of identity on commercialization in issues such as personal skills, professional skills, and quality of experience. Besides, the characteristics of the auditing firm emphasize the role of audit creativity in the impact of identity on commercialization in various domains such as general characteristics, cultural infrastructure, and auditor recruitment strategy (Barzideh et al., 2018).

Finally, psychological studies have shown that individual creativity and thinking style are different in individuals (Wengopal et al. 2007), and individual creativity and thinking style are important factors in information processing. According to Aiste (2013), the effective use of auditors' creativity leads to the correct commercialization process. A review of the literature in Iran showed that so far no study has addressed the effect of individual creativity on commercialization in the field of auditing.

Following the finding of the present, it can be stated that individual creativity plays a mediating role in the impact of identity on commercialization. Thus,

individual creativity or thinking style is not an ability in itself but refers to how abilities are used (Alissa et al., 2014). Individual creativity is also a mediating factor in the impact of identity on the commercialization of auditors. Individual thinking and creativity style can affect the creativity and commercialization of auditors (Aiste, 2013), so it is essential to recognize individual creativity and its impact on the commercialization of auditors, and the failure to pay attention to it leads to ignoring the auditors' ability to commercialize auditing.

5. Suggestions

Following the results of the present study, the following suggestions are offered:

The findings of this study showed is a positive and significant relationship between auditor creativity and commercialization. Accordingly, it is suggested that the partners of auditing firms try to appoint at least one auditor with high multiple identities in each working team to improve the commercialization process.

One of the strategies to be adopted by firms when hiring auditors is to pay attention to the components of multiple identities and the auditor's creativity. In addition, after hiring to increase their efficiency and effectiveness, an effective reward system should be designed to promote organizational culture, improve auditors' knowledge and skills, and encourage them to improve the components of their multiple identities.

Moreover, it is suggested that the partners of auditing firms periodically ask the auditors of the firm to fill in the creativity checklist (developed based on the questionnaire used in the present study). This helps to identify creative auditors and their degree of creativity. Besides, reforming the rules related to the selection of trusted auditors of the Exchange Organization, improving the process of selecting and hiring chartered accountants, and amending the rules related to the rotation of the auditors should be seriously considered by relevant authorities. Moreover, merging small auditing firms into several large auditing firms (taking into account the experiences of other countries and its efficient and effective implementation) can significantly improve the multiple identities of auditors in auditing firms.

Auditing firms are also recommended to apply the test of identity and creativity to their employees so that auditors with high identity and creativity are selected and properly assigned to audit teams so that each audit

team can use services offered by creative auditors. This process can improve team planning because some members of the audit team must have high identity and creativity and some can have low identity and creativity.

Moreover, legislators and managers of auditing firms should be aware that "professionalization" is a variable phenomenon that depends on changes in internal and external environments. That is why possible changes in the rules, as well as the organizational management structure, should be made in consultation with the auditors, and their role in formulating the marketing and future strategies of the audit firms should not be overlooked.

Finally, some elements of creativity and issues related to identity should be incorporated into the auditing courses of accounting students, and accounting professors should make students familiar with different indicators of identity and creativity.

References

- 1) Akradlu, M., Hossein, S., & Mehrdad Khamseh, A. (1400). The effect of leadership styles on the atmosphere of innovation and creativity of employees with a focus on the moderating role of creative self-efficacy and the mediating role of trust and individual identity (Case study: Tax Admonition). *Sustainable Human Resource Management*, 3(4), 7-38.
- 2) Eliassi, N., Kordaniy Asadaleh, Kh., Hosseini, H., & Ahmadi, P. (2016) Conceptualization of commercialization of financial services. *Auditing Knowledge*, 16 (65): 121-142.
- 3) Bakhtiari, A., Hejazi, R., & Jarjarzadeh, A. (2021). Factors affecting the psychological characteristics of auditors in audit judgment. *Management Accounting and Auditing Knowledge*, 10(37), 143-158.
- 4) Khoshtinat, M. & Bostanian, J. (2007). Professional judgment in auditing. *Empirical Studies in Financial Accounting*, 5(18), 25-57.
- 5) Barzideh, F., Babajani, J., & Abdollahi, A. (2018) Designing an identity model in auditing judgment with a grounded-theory approach. *Auditing Knowledge*, 18(71): 5-36
- 6) Heirani, F., Vakilifard, H., Bani,ahd, B., Rahnamaei Roodpashti, F. (2017). *Auditing Knowledge*, 17(67): 71-98.

- 7) Rezaei, N., Banimahd, B., & Hosseini, S. H. (2018). The effect of organizational identity and professions on the professional skepticism of independent auditors. *Auditing knowledge*, 18(71): 175-199.
- 8) Salmani, C., Jabbarzadeh Kangarloui, S., Bahrisales, J., & Pakmaram, A. (2020). A model for predicting the professional judgment of auditors. *Financial Accounting and Auditing Research*, 12(48), 179-202.
- 9) Safarzadeh, M. H. & Hooshmand Kashani, A. (2020) Auditor characteristics, professional and business trends, and their impact on audit quality. *Journal of Experimental Studies in Financial Accounting*, 17(68), 145-165.
- 10) Valian H., Safari Graili, M., & Hassanpour, D. (2020) Professional and organizational identity of auditors and commercialization in auditing firms. *Auditing Knowledge*, 20(78): 356-391.
- 11) Alissa, W., Capkun, V., Jeanjean, T., & Suca, N. (2014). An empirical investigation of the impact of audit and auditor characteristics on auditor performance. *Accounting, organizations and Society*, 39(7), 495-510.
- 12) Amabile, T. M. (1979). Effects of external evaluation on artistic creativity. *Journal of Personality and Social Psychology*, 37(2), 221–233.
- 13) Arrami, N., & QingXiang, Y (2021). The role of moral identity in auditor's ethical decision-making. *International Journal of Research in Business and Social Science* (2147- 4478), 10(2), 157–169. <https://doi.org/10.20525/ijrbs.v10i2.1051>
- 14) Aranya, N., Pollock, J., & Amerinic, J (1981). An examination of professional commitment in public accounting. *Accounting, Organization and Society*, 6(4), 271- 280.
- 15) Aquino, K., Freeman, D., Reed, A. I. I., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, 97(1), 123–141. <https://doi.org/10.1037/a0015406>
- 16) Bamber, E.M. and V.M. Iyer. (2007). Auditors' Identification with Their Clients and its Effect on Auditors' Objectivity. *Auditing: A Journal of Practice and Theory* 26 (2): 1-24.
- 17) Bauer, Tim D. (2015), The Effects of Client Identity Strength and Professional Identity Saliency on Auditor Judgments, *The Accounting Review*, January, Vol. 90, Issue 1, pp. 95-114
- 18) Beesley, L. G., & Cooper, C. (2008) Defining knowledge management activities: towards consensus. *Journal of knowledge management*. 12 (3). 48–62.
- 19) Broberg, P., Umans, T., Skog, P., Theodorsson, E. (2018). “Auditors' professional and organizational identities and commercialization in audit firms”, *Accounting, Auditing & Accountability Journal*, Vol. 31 Issue: 2, pp.374-399, <https://doi.org/10.1108/AAAJ-02-2014-1607>.
- 20) Broberg, P., Umans, T. and Gerlofsig, C. (2013), “Balance between auditing and marketing: an explorative study”, *Journal of International Accounting, Auditing and Taxation*, Vol. 22 No. 1, pp. 57-70.
- 21) Carter, C., Spence, C. and Muzio, D. (2015), “Scoping an agenda for future research into the professions”, *Accounting, Auditing & Accountability Journal*, Vol. 28 No. 8, pp. 1198-1216.
- 22) Citron, D.B. (2003), “The UK’s framework approach to auditor independence and the commercialization of the accounting profession”, *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 2, pp. 244-274.
- 23) Ding, Y., Hellmann, A., De Mello, L. 2017. Factors driving memory fallibility: A conceptual framework for accounting and finance studies. *Journal of Behavioral and Experimental Finance*, Volume 14, June, pp. 14-22.
- 24) Guilford, J. P. (1967). *The nature of human intelligence*. New York NY: McGrawhill.
- 25) Gong, S.Y. (2015). *Study on Influence Mechanism of Enterprise Knowledge Workers in New Generation Self-Identity over Organizational Behavior*. Northwestern Polytechnical University.
- 26) Guo-lin, J. I. A. O. (2007). *The Plight and Reconstruction of Individual Identification in the Context of Globalization*. *Journal of Hubei University of Economics*, 06, 120-123.
- 27) Hardy, S. A., & Carlo, G. (2011). Moral identity: What is it, how does it develop, and is it linked to moral action? *Child Development Perspectives*, 5(3), 212–218. <https://doi.org/10.1111/j.1750-8606.2011.00189.x>

- 28) Hurtt, R. K. 2010. Development of a scale to measure professional skepticism. *Auditing: A Journal of Practice & Theory* 29 (1):149-171.
- 29) Johnson, M.D., Morgeson, F.P., Ilgen, D.R., Meyer, C.J. and Lloyd, J.W. (2014), "Multiple professional identities: examining differences in identification across work-related targets", *Journal of Applied Psychology*, Vol. 91 No. 2, pp. 498-506.
- 30) Lawal, F. A., Iyiola, O. O., Adegbuyi, O. A., Ogunnaike, O. O., & Taiwo, A. A (2018) Modelling the relationship between entrepreneurial climate and venture performance: The moderating role of Entrepreneurial competencies. *Academy of Entrepreneurship Journal*, 24(1), 1-16.
- 31) Lui, S.S., Ngo, H.Y. and Tsang, A.W. (2001), "Interrole conflict as a predictor of job satisfaction and propensity to leave: a study of professional accountants", *Journal of Managerial Psychology*, Vol. 16 No. 6, pp. 469-484.
- 32) Malik, O., Shahzad, A., Raziq, M.M., Khan, M.M., Yusaf, S., & Khan, A. (2019). Perceptions of organizational politics, knowledge hiding, and employee creativity: The moderating role of professional commitment. *Personality and Individual Differences*, 142, 232-237.
- 33) Rousseau, D.M. (1998). Why Workers Still Identify with Organizations. *Journal of Organizational Behavior*, 19 (3): 217-233
- 34) Pentland, B.T. (1993), "Getting comfortable with the numbers: auditing and the micro-production of macro-order", *Accounting, Organizations and Society*, Vol. 18 No. 7, pp. 605-620
- 35) Pratt, M.G. and Foreman, P.O. (2000), "Classifying managerial responses to multiple organizational identities", *Academy of Management Review*, Vol. 25 No. 1, pp. 18-42
- 36) Settles, I.H. (2004), "When multiple identities interfere: the role of identity centrality", *Personality and Social Psychology Bulletin*, Vol. 30 No. 4, pp. 487-500.
- 37) Shao, R., Aquino, K., & Freeman, D. (2008). Beyond Moral Reasoning: A Review of Moral Identity Research and Its Implications for Business Ethics. *Business Ethics Quarterly*, 18(4), 513-540. <https://doi.org/10.5840/beq200818436>
- 38) Sharma, D.S. and Sidhu, J. (2001), "Professionalism vs commercialism: the association between non-audit services (NAS) and audit independence", *Journal of Business Finance and Accounting*, Vol. 28 Nos 5/6, pp. 595-629.
- 39) Sori, Z.M., Karbhari, Y. and Mohamad, S. (2010), "Commercialization of accounting profession: the case of non-audit services", *International Journal of Economics and Management*, Vol. 4 No. 2, pp. 212-242.
- 40) Suddaby, R. Y. Gendron, and H. Lam. (2009). The Organizational Context of Professionalism in Accounting, *Accounting, Organizations and Society* 34 (3/4). 409-427.
- 41) Slay HS, Smith DA. (2011), Professional identity construction: using narrative to understand the negotiation of professional and stigmatized cultural identities. *Human Relation*, 64 (1) - 85-107
- 42) Sweeney, B. and McGarry, C. (2011), "Commercial and professional audit goals: the inculcation of audit seniors", *International Journal of Auditing*, Vol. 15 No. 3, pp. 316-332.
- 43) Turnbull, M., Littlei, A., & Allan, M. (2010). Creativity and collaborative learning and teaching strategies in the design disripling Induction. *Arts Education Policy Review*, 111, 52-62.
- 44) Warren, D.E. and M. Alzola. (2009). Ensuring Independent Auditors: Increasing
- 45) the Saliency of the Professional Identity. *Group Decision and Negotiation* 18 (1): 41-56.
- 46) Westlund, H., Andersson, M., & Karlsson, C. (2014). Creativity is an integral element of social capital and its role in economic performance. In *Handbook of research on entrepreneurship and creativity*. Edward Elgar Publishing.
- 47) Yin, Y. (2015). In a trust society: the social foundation, mechanism, and enlightenment for individual identification. *Journal of Zhejiang Provincial Party School* 3, 84-90

