CHAPTER II

LITERATURE REVIEW

A. Theoretical Framework

1. Social Exchange Theory

The concept of social exchange has been already developed by Blau (1964) in his famous book entitled *Exchange and Power in Social Life*. Blau (1964) suggests that the basis of any exchange relationship can be described in terms of either social or economic principles (Settoon et al., 1996). According to Setton et al. (1996), some prior research findings have proposed that positive and beneficial actions directed at employees by the organization and/or its representatives which contribute to the establishment of high-quality exchange relationships will also create obligations for employees to repay in positive and beneficial ways also. Thus, an organization can take positive action on employees and hope that with these actions, it will get a response in terms of employees' loyalty to the organization, so it can reduce employees' turnover intentions.

The social exchange theory explains about sharing a mutual relationship between the employees and their employers. The relationship between two parties becomes stronger when they try to meet the needs of each other (Karavardar, 2014). As cited in Cannon and Herda (2016), social exchange relationships have been described as subjective, relationship-oriented contracts between employees and organizations characterized by

mutual trust, a long-term focus, and unspecified open-ended commitments (Lavelle et al., 2007). Social exchange is based on an implicit agreement between employee and the employer, referred to as a psychological contract (Rose, 2001). Psychological contract gives the most important effect to employee behavior. According to Karavardar (2014), some experts defined psychological contracts as contracts in the form of employees' expectations of their organization as a form in return for the obligation of their contribution. Psychological contracts in an organization are important to produce good commitment between employee and employer.

From several explanation above, it can be concluded that social exchange is an exchange interaction between at least two parties where they meet each other's needs. Social exchange is also related to the reward and cost concept whereas the reward will be given after someone does the good task. Cost concept is related to something which is issued as a consequence to fulfill the task. In this research social exchange is applied between auditors and public accounting firms. An auditor demands high professionalism with a competition. The professional auditor needs lie in self-development and continuous learning because the accounting and auditing sciences that guide the developing auditor are very dynamic in following business issues (Pamungkas, 2016). Thus, public accounting firm should give the auditor the opportunity to continue to develop their career to maintain their professionalism and treat them well for all the services they have provided. Therefore, based on social exchange, the auditor would

enhance their sense to settle the organization longer. Auditors will be wholeheartedly committed to the public accounting firm and not think more about resign if the organization provide satisfaction regarding a favorable career growth opportunity for them.

2. Auditor Turnover Intention

When compared with actual turnover, turnover intention has a complex meaning because it relates to people's attitude. According to Omar and Ahmad (2014), turnover intention can be defined as employees' estimated probability that they will leave their organizations. As cited in Cho et al. (2009), turnover intentions express a person's intention to leave the organization that show a violation in the relationship between employees and the organization. Dess and Shaw (2001) have proposed two types of turnover namely voluntary turnover and involuntary turnover. Voluntary turnover is the condition when the firm fires their employees while involuntary turnover means that employees quit their job because of their willingness.

Turnover intentions are common especially in auditor environment which is famous with strict working hour. According to Parker et al. (2011), auditors' turnover can give positive or negative effect to accounting firms, depending upon who is leaving the firms. Turnover can bring positive impact to the firm if auditors who have bad performance leave the firm because the organizational productivity will be better. However, most of the turnovers have brought unfavorable impact for the firm, both in financial

terms (such as training cost, recruitment cost, etc.) and non-financial terms (such as time and opportunity loss, low motivation for other employee, and bad company image).

3. Organizational Commitment

Organizational commitment is a condition when employees take sides with the organizations including with the organizations' goals and they express their loyalty to the organization by intending to stay in the organizations (Robbins and Judge, 2008). Organizational commitment is as an attitude that reflects employees' loyalty to their organization and it is also defined as an ongoing process in which employee express their concern for the success and well-being of the organization (Luthans, 2011). Luthans (2011) in his book also mention some determination of organizational commitment attitude through a number of personal aspects such as someone's age, job tenure, career adaptability, and positive or negative affectivity dispositions, or internal or external control attributions; and also organizational variables such as the support, procedural fairness, job design, values and the leadership style of supervisor.

Organizational commitment becomes one of the most accepted concepts that have been done by some practitioners and researchers. One of the multidimensional concepts is developed by Allen and Meyer (1990) called three-component model of commitment, which classifies organizational commitment into three categories:

a. Affective Commitment

Affective commitment refers to the employees' emotional attachment to, identification with, and involvement in the organization (Meyer and Allen, 1991). As cited in Solís and Monroy (2015), affective commitment is defined as the sense of belonging which not only an individual feels for their organization but also as the pride, understanding and empathy that they have for organizational goals and values. According to Mowday et al. (1982), affective commitment has been related to four categories: personal characteristics, organizational structure, job-related characteristics, and work experiences. Affective components are related to emotional, identification, and employee involvement in an organization (Suharno et al., 2017).

b. Continuance Commitment

Continuance commitment refers to an awareness of the costs associated with leaving the organization (Meyer and Allen, 1991). Continuance commitment refers to the someone's strong desire to keep working for the organization because they believe that if they leave the organization they will suffer a loss. This commitment is related to profit or loss and also the choices that must be sacrificed (Suharno et al., 2017). The loss that is felt by members of the organization may be because of losing seniority, promotion or benefits received (Luthans, 2011). Organizational commitment is related to the desire that is owned by the individual to survive in the organization because the individual feels he

has given an investment in the organization and realizes that it is impossible to find it instead (Rahmawati, 2015)

c. Normative Commitment

Normative commitment reflects a feeling of obligation to continue employment (Meyer and Allen, 1991). In other words, normative commitment can be defined as an obligation to stay in an organization. According to Susilo et al. (2016) normative commitment is defined as a feeling that requires employees to stay in the organization due to obligations and responsibilities for the organization based on consideration of employees' norms, values and beliefs.

4. Career Growth Opportunity

Career growth can be defined as individual perception of advancement and development opportunity within the organization (Biswakarma, 2016). According to Bloomsbury Business and Management Dictionary (cited in Nouri and Parker, 2013), career growth opportunity is defined as a progress through a sequence of works, involving more advanced and diversity in activities, resulting in wider or improved skills, greater responsibility and prestige, and higher income. In other words, career growth opportunity can be described as the degree of employees' career ladder in achieving higher level in the organization. Furthermore, Vande Griek et al. (2018) also argue that the organization which provide career growth opportunity will create an investment relationship with their employees and result in the outcomes such as employees' higher

organizational commitment and lower turnover level. The employee who expect opportunity of career growth and progress will prefer to stay longer, meaning that it will reduce employees' intention to leave the firm.

In determining the career growth opportunity, Weng and Hu (2009) have developed four dimensions of career growth opportunity. The multi-dimensions of career growth have simultaneously motivated the employees to achieve their best progress towards their career goals and make the organization reward their employees' effort by job promotion or any financial terms. The multi-dimensions of career growth opportunity proposed by Weng and Hu (2009) are as follows:

a. Career Goal Progress

Career goal progress refers to the degree of organization which provides an opportunity for employees to connect with career goal achievement when executing their jobs (Weng and McElroy, 2012).

b. Professional Ability Development

Professional ability development can be defined as a chance for employee to acquire some skills and new knowledge from their present job by formal training or lifelong learning (Weng and McElroy, 2012).

c. Promotion Speed

Promotion speed indicates the pace of employees' probability to be able to climb the career ladder from their average tenure (Dries et al., 2008). In other words, promotion speed refers to the probability of an employee to be promoted in organization.

d. Remuneration Growth

Remuneration growth refers to the increasing amount of compensation which includes fringe benefits, salaries and annual bonuses (Weng and McElroy, 2012).

5. Generation Theory

The theory of generations was first stated in 1923 by a Hungarian sociologist named Karl Mannheim. In his essay entitled "The Problem of Generations", Mannheim defines that generation is a group consisting of individuals who have similarities in the age range, and experience following important historical events in the same time period. Prabowo and Putranta (2017) define a generation as a group of people born in a specified period of time and as a population that shares a similar history and life event. Many researchers agree to classify the three generations that currently dominate the workplace, although the age range for labeling each generation varies among researchers. Lancaster and Stillman (2002) classify the three generations as follows:

a. Baby Boomers

Baby boomers are those who were born in between 1946 to 1964 (Lancaster & Stillman, 2002). This generation has been forced to compete for resources and opportunities because they were born after the economic recovery due to World War II. According to Anantatmula (2012), baby boomers belong to a generation that is very loyal to both leaders and their organizations, as well as hard workers like their

predecessor's generation. They are known as workaholics and always appreciate their careers as they are looking for the meaningful life from their career work (Hansen and Leuty, 2012). Gargiulo (2012) states that the baby boomers will leave their jobs so that generation Y will occupy the largest proportion of the workforce in the next 10 years.

b. Generation X

According to Lancaster & Stillman (2002), Generation X, Gen X, or Generation Xers was born between 1965 and 1980. This generation becomes the first generation that knows the technological revolution, such as the development of technology and information such as the use of PC (personal computers), video games, cable tv, and the internet (Putra, 2016). Gen X witnessed many negative events as they grew up, such as the uncertainty of the country's economy, inflation, high levels of crime, and most of them felt the high divorce cases in their families (Hansen and Leuty, 2012; Becton et al., 2014). Perhaps by growing up with negative events around them, Gen X become more independent and adaptable generation than the other generation. Moreover, this generation have several characteristics such as being able to adapt in changes properly, becoming independent and loyal, belonging to a type of hard worker, and prioritizing fame and money because they always consider what they get from their work (Putra, 2016).

c. Millennials

Generation Y (known also as Millennials) is a generation who was born between 1981 to 1999 (Lancaster & Stillman, 2002). This generation was born in the era of technological development and the world of education which has diverse characteristics and ethnics from the previous generation. Millennials have a large impact in the era of globalization and marketplace value (Becton et al., 2014). Millennials are the generation that currently dominates workplaces throughout the world, including Indonesia. In 2014, millennials had 36% proportion in the workplace. Furthermore, in 2020 the possibility of millennials to dominate the workplaces is 46% (Chandra et al., 2017). Millennials have different characteristics from previous generations. Here are some characteristics of millennials according to Prabowo and Putranta, 2017:

1) Cultural Acceptance

Millennials are more tolerant of race, religion, culture, sexual orientation, and economic status than previous generations, so they will tend to withstand a sense of cultural superiority.

2) Volunteering

Generation Y has a greater tendency to be more actively involved in community service and social volunteer activities than generation X (Cole et al., 2002).

3) Impact of Technology

Millennials are considered as a generation with easy technological accessibility, making it easier for them to communicate and access information quickly. This has a positive impact on them related to work so that they can do everything easily both at work and at home. However apparently, there is a negative impact of technological development. During the 1990s, digital divide had occurred between minority groups such as low income families which created inequalities in access to the internet and new technology. Thus, the good impact of technology does not apply to all millennials.

4) Work attitude

Besides influencing the performance, technology also influences millennials' work attitudes. Generation Y defines themselves with whom they work, not with work. They think they are not connected to long working hours in terms of work, or service to their employer (Lloyd, 2007). Lloyd (2007) and Felix (2007) describe the attitude of this generation towards work and career: a) desire for flexibility b) desire for continuous learning and c) preference for teamwork oriented.

5) Flexibility

Millennials tend to be more flexible in working hours because they think that they can still work efficiently and produce quality results even if far from the office. Millennials highly value highly flexible working arrangements, as well as the trust shown by their employers in providing that flexibility (Deloitte Millennial Survey, 2018).

6) Team Orientation and Individualism

Different from baby boomers which show teamwork to complete group assignments, millennials prefer to work as a team to achieve independent tasks because they will take the advantage of team members' skills, knowledge, and resources to meet individual needs (Cole et al., 2002)

From the explanation above, it explained us that every generation its own different characteristics. The following table mentioned the differences of each generation:

Table 2.1
The Comparison of Characters between Generations

Factors	Baby Boomers	Gen X	Gen Y
	(1946-1964)	(1965-1980)	(1981-1999)
Attitude	Optimistic	Realistic	Skeptical
Overview	Believing in	Introverted	Highly
	opportunities,	generation, who	appreciating
	idealists to make	is very	differences,
	positive changes	independent	preferring to work
	in the world,	with some	together rather
	being competitive	potential, not	than taking
	and always	depending on	orders, and being
	finding ways to		very pragmatic

Factors	Baby Boomers	Gen X	Gen Y
	(1946-1964)	(1965-1980)	(1981-1999)
	make changes	others to help	when solving
	from existing	them	problems
	systems		
Workplace	Being team	Being practical,	Being ambitious,
Traits	oriented,	pessimistic,	confident,
	optimistic, loyal,	work life	multitasking,
	hard working	balanced,	independent
		technical,	
		independent,	
		adaptable	
Leadership	Influencing,	Being practical,	Being flexible,
Style	mentoring	goal-oriented	lack social grace
Motivation	Ability, bonuses,	Time-off as	Higher position,
	incentives,	incentive	monetary gains,
	contributions		lower need for
			social approval
Learning	Clasroom,	Technology	Creative thinking,
Style	instructure-	focus, mentors	Visual
	focused		

Source: Anantatmula (2012) and Putra (2016)

B. Literature Review and Hypotheses Development

1. The Influence of Affective Commitment towards Auditors' Turnover Intention

Organizational commitment theory explains about the bonds held between individuals and organizations so that the individual feels that he becomes the most important part of the organization. The first dimension theory of organizational commitment developed by Allen and Meyer is affective commitment. According to Meyer et al. (1993), employees who have strong affective commitment stay within the organization because they want to. There is a tendency that employees with strong affective commitment will always be loyal to their organization because the desire to survive comes from within their hearts (Han et al, 2012).

Ahmad (2018) found a negative association between affective commitment and employee turnover intentions. Moreover, Mehmood et al. (2016) has also found that affective commitment has negative relationship with turnover intention. Suharno's (2017) research shows that affective commitment has negative influence on turnover intention. It means that higher affective commitment can trigger to lower turnover.

Affective commitment arises within an auditor himself because it is directly related to emotion. Therefore, an auditor who has strong affective commitment will make the auditor survives within the firm longer. From the explanation above, some hypotheses can be formulated as follows:

H_{1a}: Affective commitment has negative influence towards auditors' turnover intention on millennial generation.

H_{1b}: Affective commitment has negative influence towards auditors' turnover intention on non-millennial generation.

2. The Influence of Continuance Commitment towards Auditors' Turnover Intention

The second dimension of 3-component model organization commitment developed by Allen and Meyer is continuance commitment. The theory says that employees with a strong continuance commitment remain to stay in the organization because they need to (Meyer et al., 1993). When employees are committed to the organization on continuance basis, they consider benefit and loss. If employees perceive that they will lose something when they change their job or organization, they will definitely prefer to settle in the organization (Bhatti et al., 2016)

A previous study which has been done by Satwari et al. (2016) has found that continuance commitment has negative effect to turnover intention. Furthermore, Suharno (2017) has also proved that continuance commitment has negative influence on turnover intention. Auditors with continuance commitment will likely to consider about decisions they make to stay in public accounting firms or leave public accounting firms. They consider what benefits they will receive if they stay in their firm and what consequences will be obtained if they leave their current firm. Based on the explanation above, the hypotheses can be formulated as follows:

H_{2a}: Continuance commitment has negative influence towards auditors' turnover intention on millennial generation.

H_{2b}: Continuance commitment has negative influence towards auditors' turnover intention on non-millennial generation.

3. The Influence of Normative Commitment towards Auditors' Turnover Intention

Normative commitment is one of the approaches to measure organizational commitment developed by Allen and Meyer in 1990. According to Meyer et al. (1993), every employee with strong normative commitment would stay within the organization because they feel that they have to do it (ought to). Employees who are committed to the organization on normative basis become faithful and feel their moral duty to stay in the organization (Bhatti et al., 2016).

The study done by Mensah and Kosi (2016) has found that normative commitment negatively predicts turnover intention. Furthermore, Pamungkas (2016) has also got the same result that normative organizational commitment has negative effect on turnover intentions. Normative commitment emphasizes the obligation that must be given to be loyal to their current organization (Sukamto et al., 2014). Normative commitment arises inside an auditor to obey their superiors or make auditors obliged to repay for what the public accounting firm has given to them, such as professional training. Auditors who feel they have high moral obligation commitment will repay the firm's kindness, for instance, by choosing to stay within the firm because they have responsibilities to do it. Thus, normative commitment can lower the turnover level within the firms. Based on the explanation above, the hypotheses can be formulated as follows:

H_{3a}: Normative commitment has negative influence towards auditors' turnover intention on millennial generation.

H_{3b}: Normative commitment has negative influence towards auditors' turnover intention on non-millennial generation.

4. The Influence of Career Goal Progress towards Auditors' Turnover Intention

Social exchange theory asserts that there is an exchange relationship between employees and employers. An exchange relationship arises when employers support the progress of the career goals of workers so that they will feel satisfied and repay it by increasing their performance and commitment to the firm. Employee who perceive little progress when reaching their career goals in the current jobs will only feel a slight loss when leaving the organization (Weng and McElroy, 2012).

Biswakarma (2016) has found that career goal progress has negative effect on turnover intentions having the highest association with turnover intention. Furthermore, Ohunakin et al. (2018) have also revealed that career goal progress has the highest level of direct inverse effect on employees' turnover intention, and the organization must be consistent in providing career goals growth if they want to retain employees' high performance.

Auditors, as professional experts, need some support from their public accounting firm to support their progress in achieving career goals. On the other hand, Karavardar (2014) argues that if an organization provides satisfactory service for their employees by supporting and providing a

seamless way to achieve employee's career goals, these employees will become more loyal to the organization and reduce their intention to resign. When auditors feel that the firm has already provided and supported their career goal progress, they will prefer staying within their current firm to seeking the other jobs. Based on the explanation above, the hypotheses can be formulated as follows:

H_{4a}: Career goal progress has negative influence towards auditors' turnover intention on millennial generation

H_{4b}: Career goal progress has negative influence towards auditors' turnover intention on non-millennial generation.

5. The Influence of Professional Ability Development towards Auditors' Turnover Intention

The social exchange theory explains about a mutual interaction between two parties. Providing opportunity for employees to develop their skill and ability helps to find out their potentials. Furthermore, it can also bring benefit to an organization because the organization will have competent employees with high productivity to ensure the optimal growth of the firm. Organizations which provide some opportunity for their employee to improve their ability in developing their skills will provide satisfaction for employees and motivate them to grow within the organization (Chen et al., 2016). Hence, it will increase mutual exchange relationship between employers and employees and lower the intention to leave the organization.

Karavardar (2014) has found that greater professional ability development provided by organization will make lower level of turnover intention. In another study, Ohunakin et al. (2018) has also indicated that professional ability development is negatively associated with employees' turnover intention, which shows that this outcome also supports the previous research.

Being auditors is a competitive profession which requires them to always develop their professional skills with long life learning. Public accounting firms which provide professional ability development for auditors are expected to reduce turnover intention level within the firm. Based on the explanation above, some hypotheses can be formulated as follows:

 H_{5a} : Professional ability development has negative influence towards auditors' turnover intention on millennial generation.

 H_{5b} : Professional ability development has negative influence towards auditors' turnover intention on non-millennial generation.

6. The Influence of Promotion Speed towards Auditors' Turnover Intention

According to Yustina and Putri (2017), public accounting firm has different and unique characteristics of promotion path called "up or out" promotion path (Kalbers and Cenker, 2007). "Up" means that auditor will get promotion within the accounting firm and "out" means that auditor will resign voluntarily from the firms. Weng and McElroy (2012) have revealed

that the organizations which reward their employees with promotions offer emotional incentives to remain and become a large opportunity cost associated with leaving the organization. Nawaz and Panggil (2016) assumed that the promotion speed has potential to decrease employees' intention to leave the organization and increase their sense of belonging.

The previous research conducted by Biswakarma (2016) has found that promotion speed negatively affects turnover intentions. In Ohunakin's study (2018), promotion speed has also revealed a direct negative influence on employees' turnover intention. This relationship between promotion speed and turnover intention is also supported by Nawaz and Panggil (2016) who state that promotion speed is found to become one of the good predictors for determining turnover intentions. Auditors will feel happy and appreciated if the superior provides promotional opportunity for them because of the best achievement that they have already done. Hence, auditors will choose to continue their career in the current firms because of the promotion speed provided by the firm. Otherwise, the auditors tend to leave the organization if the firm does not appreciate their work accomplishment. Based on the explanation above, the hypotheses can be formulated as follows:

 H_{6a} : Promotion speed has negative influence towards auditors' turnover intention on millennial generation.

H_{6b}: Promotion speed has negative influence towards auditors' turnover intention on non-millennial generation.

7. The Influence of Remuneration Growth towards Auditors' Turnover Intention

Social-exchange theory is related to the obligation that demands reciprocation. Employers must pay remuneration to employees completing a job. In terms of career growth theory developed by Weng and Hu (2009), remuneration growth is likely to be correlated with promotion speed. Remuneration growth is related to employees' perception in increasing reward. According to Nawaz and Pangil (2016), employee become more attached to the organization if they receive higher salary and it will reduce the possibility of their leaving the organization.

The several previous researches conducted by Karavardar (2014), Biswakarma (2016), Nawaz and Pangil (2016), and Ohunakin (2018) show the similarity and consistency of findings in which remuneration growth was found to have a negative effect on turnover intention. remuneration growth will turn out one of good predictors in determining turnover intention because some previous researches have already had consistency in their results.

Public accounting firms which reward their employees by increasing in the amount of remuneration will provide satisfaction for auditors and increase their sense of moral obligation to the firm. Therefore, the auditors feel their hard work has been appreciated by their firms and there will be lower intention to leave the organization. Based on the explanation above, the hypotheses can be formulated as follows:

H_{7a}: Remuneration growth has negative influence towards auditors' turnover intention on millennial generation.

H_{7b}: Remuneration growth has negative influence towards auditors' turnover intention on non-millennial generation.

8. Auditors' Turnover Intention of Millennial Generation and Non-Millennial Generation

Based on generation theory, some people who are grouped based on the similar age, in the same location sharing similar social, historical, and life events together are called generations. The generation theory asserts that a group of people are classified according to similarity in birth years and historical events (Putra, 2016). Each of group generations has different characteristics, different attitudes, and different skills that will result in different behavior as well.

Auditors' turnover intention can be defined as the desire of auditors to leave from their current firm. Auditors in different generations can have different intention to move, although with different tendencies. Brown et al. (2015) stated that millennials consider loyalty based on their sincerity, not on the length of work, but it is conditional as long as they achieve their personal goals. In addition, they are willing to find new jobs if they do not meet the condition based on their expectation. Millennials consider that it is normal to change, so high turnover rates and dissatisfaction at work often occur. It is common that millennials are often called job hopper who are not

loyal to one company because of their short tenure with high company moving frequency.

Otherwise, non-millennials (Baby Boomers and Gen X) are considered loyal and highly dedicated employees of their company. According to Benson and Brown (2011), baby boomers are described as a group of people who value teamwork and see work from a process-oriented perspective. Furthermore, baby boomers are an optimistic generation, respecting the authority of their superiors, loyal, attached to their organization, and very diligent in their work. The description of the characteristics of the baby boomers reflects their loyalty and have a high commitment to the organization.

Nindyati (2017) states that the concept of loyalty has been embedded in Gen X because of the experience of earning a steady income in the difficult years of the economy in the late 1970s and early 1980s, especially with the many unemployment phenomena arising either due to layoffs or unavailability of jobs. Thus, it is often found that non-millennials' intention to leave from the firm is low because of the high dedication and loyalty that they have for the firm.

As cited in Frian and Mulyani (2018), millennials have dominated the workplace nowadays and they also have high turnover intention. The high level of turnover intention on millennial employees become a new problem in this era, because they have different characteristics compared to their predecessors. Cruz (2007) explains that millennials have shown a

willingness to change organizations when they see new opportunities that offer a greater level than what they have achieved. DiPietro and Pizam (2008) and Twenge (2010) have revealed that millennials believe that high turnover rates and dissatisfaction with work are normal conditions and they have the ability to work hard but they are not loyal to their organizations. Employees in Generation Y have an average tenure of 18 months, compared to employees in the other generations who have an average tenure of four years (Asih and Zamralita, 2017).

Millennial generation is known as a flexible and an opportunistic generation. Otherwise, the generation before them is known as the generation that is bound and always obedient to their superiors. Therefore, auditors in millennial age will be more likely to switch jobs influenced by several related factors depending on their condition. Otherwise, non-millennial auditor will be more tied to the firms and loyal to their seniors. In PwC study 2013 asserts Millennial accountants leave the company higher than the firm had ever experienced (George and Wallio, 2017). Based on the explanation above, the hypothesis can be formulated as follows:

H₈: There is a difference in auditors' turnover intention of millennial generation and non-millennial generation.

C. Research Model

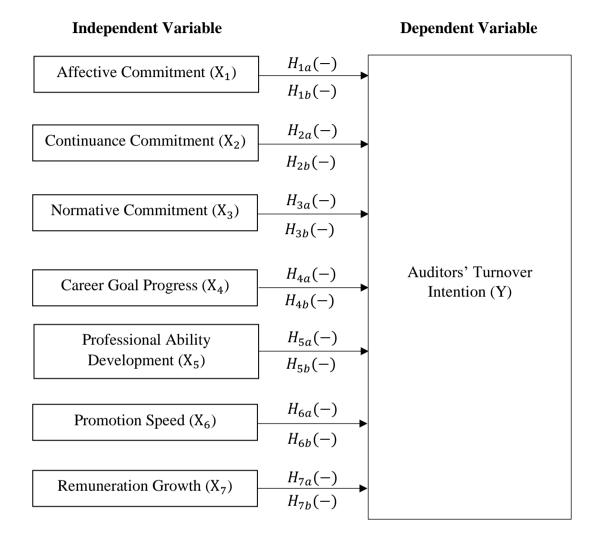


Figure 2.1 Research Model for Hypothesis 1-7



Figure 2.2 Research Model for Hypothesis 8