

# Research on the Coordination of Accounting Degree Education and Vocational Qualification Examination

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## ABSTRACT

The rapid development of accounting vocational qualification certification system and accounting professional degree education has played a positive role in promoting the construction of China's accounting talent team, but the problem that the two can't be effectively combined in the development process needs to be solved. This paper mainly explores the coordination of accounting degree education and vocational qualification. First, based on the construction of accounting degree and the development of accounting vocational qualification examination in China, discusses the background and significance of the combination of this two. Then, combined with the analysis of the coordination of accounting professional degree and professional qualification in the United States, Japan and Britain, drawing lessons from foreign relevant professional qualification certification modes. Finally, put forward some suggestions on how to realize the coordination in China, so as to promote the continuous optimization of accounting talent team and better serve the development of China's economy and society.

**Keywords:** *accounting professional degree, vocational qualification, coordination.*

## 1. INTRODUCTION

In the process of development, talent is an important indicator to measure a country's comprehensive national strength. It's also a source of power to promote civilization and progress and a country's prosperity. The world today is undergoing a period of great development and adjustment, talent resources will be an indispensable factor for China's dominance in the world.

With the rise of the new economy and the deepening of economic globalization, the role of accountants has gradually become prominent. And the more the economy develops, the more important accounting becomes. Accounting talents is an important force to maintain market order and promote the steady progress of society. Therefore, the quality and professional competence of accounting talent have become one of the important contents of the overall national power competition in the world today. However, the overall situation is not optimistic from the perspectives of the proportion of accounting talents, accounting degree education and the development of vocational qualification examination in China. By learning from foreign mature experience, promoting the combination of the latter two will

effectively optimize the domestic accounting talent structure.

## 2. LITERATURE REVIEW

### 2.1. quality of accounting talents in China

#### 2.1.1. The level and proportion of accounting talents

China's accounting talent resources have absolute advantages in quantity, but this doesn't mean it also has advantage in quality. As of April 2021, there are 9.3279 million accountants with vocational and technical qualifications in China, of which 205,700 have advanced vocational and technical qualifications, only accounting for 2.21% [1]. In addition, people who are familiar with Chinese and foreign accounting standards are even rarer. It can be seen that there is still a shortage of high-level accounting talents in China, and the task of achieving the goal of becoming a strong country with accounting talents is still very arduous. How to develop and tap the "gold mine" of China's accounting talent resources to enhance the overall competitiveness of the accounting

industry, assist corporate innovation and value creation, and thus promote the high-quality development of China's economy, will be an important issue for China's accounting industry during the 14th Five-Year Plan task.

### *2.1.2. The development status of accounting degree education*

As an important branch, accounting degree education has played an irreplaceable role in promoting the advancement of accounting career. Since the reform and opening up in 1978, accounting has undergone a gradual reform process. The huge achievements in the construction and implementation of accounting standards, degree education reform and many other aspects have made outstanding contributions to social progress and economic rise. As of June 30, 2020, there are 2688 universities (including independent colleges) in China [2], with a total of 703 undergraduate majors [3]. Among them, there are 639, 703 and 180 universities with accounting, financial management and audit majors respectively. In addition, 162 universities with master's degree in accounting (Academic Research), 268 universities with MPAcc (accounting professional degree), and 72 universities with doctor's degree in accounting.

### *2.1.3. The development status of accounting vocational qualification examination*

The "Fourteenth Five-Year Plan for Accounting Reform and Development (Draft for Comment)" issued by the Ministry of Finance regards "cultivating a high-level accounting talent team" as one of the main tasks of accounting reform and development during the "14th Five-Year Plan" period. In order to optimize the structure of accounting talents, should under the guidance of economic development needs and industry development trends, give full play to the leading and guiding role of accounting vocational and technical qualifications in the selection and training of accounting talents in China. The prerequisite of achieving this goal is that the relevant mechanism of accounting vocational qualification examination must be transformed and upgraded, so as to provide accounting talents guarantee for the high-quality development of social economy in the "fourteenth five-year plan" period.

Since the implementation of accounting vocational and technical qualification examination in 1992, the number of candidates has been increasing continuously. It is the largest vocational and technical qualification examination in China. In recent years, the accounting qualification evaluation centre of the Ministry of finance has been committed to promoting the development of the accounting vocational and technical qualification examination and the reform of the accounting professional title system. The number of applicants for

the vocational and technical qualification examination of junior, middle and senior accounting has repeatedly reached new heights. During the 13th Five Year Plan period, the total number of applicants nationwide has reached more than 22.62 million, an increase of 130% compared with the 12th Five Year Plan period. The number of senior applicants was 15.85 million, 6.51 million and 0.26million respectively [4]. In the past three years, 6.05 million people signed up for the examination in 2019, 6.589 million people signed up in 2020 and 6.82 million people signed up in 2021, showing a growing trend. However, behind the popularity of the registration examination, the low attendance rate and pass rate can't be ignored. During the 13th Five Year Plan period, only 3.85 million of the 22.62 million applicants passed the examination, accounting for 17.02%. The passing rate of primary examination in 2019 is 22.89%, which is 1.88 percentage points lower than that in 2018 (24.77%) [5]. According to the data released by local finance bureaus over the years, the attendance rate of accounting qualification examination has been around 50%, which directly leads to the low pass rate of the examination. How to cultivate more high-level accounting talents, how to lay a good foundation for the realization of the talent goal of the 14th five year plan, how to effectively improve the examination rate and pass rate of accounting vocational and technical qualification examination and other issues have become the urgent problems to be solved on the road of current professional title reform.

## ***2.2. The background of the connection between accounting degree education and vocational qualification examination***

With the refinement of social division of labour, the professional degree and technical content of occupation also increase. The development of the industry also puts forward the demand for senior vocational talents, which requires them to have strong practical ability and the ability to work independently in a certain occupation. However, the extensive and not in-depth training mode of undergraduate accounting major and the academic training mode of academic postgraduates and doctoral students can't meet the needs of the society for high-level accounting talents. In view of China's current system, accounting vocational and technical qualification certificate has become an effective tool for labour quality inspection. It has become an entry point for application-oriented talents to meet the social requirements and embodiment of employees' own competitiveness.

At present, China's accounting professional degree and technical qualification certificate are independent of each other and lack of communication and combination. The students who meet the requirements of vocational qualification in accounting major cannot obtain the accounting qualification certificate when they graduate, they can only obtain the diploma. The lack of

qualification certificate will hit the enthusiasm of students' employment, which can't meet the demand of social and economic development for high-quality practical talents, also is not conducive to the improvement of vocational quality of social specific professional talents [6]. The future development of accounting profession is inseparable from high-level application-oriented professionals with practical ability. However, with the cancellation of accounting qualification certificate, the employer and post demand also put forward requirements for accounting technical qualification certificate. There is no doubt that China's economic development, changes in relevant policies and social development promote the convergence of accounting vocational and technical qualification examination and professional degree education.

### ***2.3. The necessity of the connection between accounting degree education and vocational qualification examination***

At present, the academic community has basically reached a consensus on the trend of convergence between vocational qualification examination and degree education. The related research mainly focuses on the analysis of the status quo and problems of degree and vocational qualification, and then from the commonness of the two to discuss the premise, foundation, way and goal of combination or convergence [7-9]. Generally speaking, the degree of analysis is relatively not deep, and the practical problems involved are relatively few.

In 2002, the Ministry of Education issued 《the opinions on further deepening the reform of the graduate employment system in Colleges and universities》, which pointed out: "In order to meet the needs of employment, it is necessary to strengthen the vocational skills training for college students and encourage them to obtain corresponding vocational qualification certificates. We will deepen the reform of the employment system, and gradually implement the system of attaching equal importance to academic certificates and vocational qualification certificates in the whole society." Although accounting professional degree education and accounting vocational technical qualification belong to two different institutional arrangements, there is a strong internal correlation between them. The purpose of developing accounting professional degree education is to train and be competent for high-level accounting professional talents for the society. Accounting vocational and technical qualification is a fair and standardized appraisal of the qualification of talents to hold the corresponding level of accounting positions. Both serve the needs of accounting talents in the accounting industry, and have the same requirements on the quality of talents. If we can realize the organic connection between the two, on the one hand, it can effectively reduce the government's repeated

investment in education manpower, material resources and financial resources, improving the efficiency of resource utilization; On the other hand, it can reduce the burden of students, avoid repeated enrollment, reduce the repeated investment of students' time, energy and economy, so that students can put more energy into the improvement of practical ability and comprehensive quality, ensuring the quality of education [14].

In conclusion, the current education mode and quality of accounting degree education need to be improved. Under the premise of some commonness (vocational and professional) to explore the current situation, necessity and feasibility of the connection between accounting professional degree education and technical qualification examination. Then combined with the construction of accounting degree in domestic colleges and universities, absorbing and learning from the relevant foreign vocational qualification certification mode. Finally, put forward policies and suggestions on the connection between the two, so as to promote the continuous improvement and efficient development of education and qualification certification. This will be a practical research topic worthy of exploring.

## **3. COMPARISON AND ANALYSIS**

### ***3.1. International experience of collaborative connection between professional degree education and vocational qualification***

The undergraduate education of practical disciplines in foreign countries focuses on the cultivation of practical ability, and the graduate students are divided into academic research type and practical application type, mainly cultivating theoretical research and discussion. In recent years, domestic colleges and universities have learned from the experience of foreign degree education, set up a new professional master's degree, and implemented the "dual" training goal for graduate education. With the concept of universal education and lifelong education being put forward and valued, more and more people join the ranks of academic education and enter the human resource market, the competition for employment is increasingly fierce. In the human resource market, especially in enterprises, the employment "pass" function of vocational qualification certificate is widely recognized. Therefore, in order to get a better job, those who have received academic education have to take the examination again to obtain the vocational qualification certificate. Repeated learning of the same knowledge, resulting in a waste of resources.

Aware of this problem, many foreign experts began to explore how to link vocational qualification certificate with degree education. The system of some foreign colleges and universities is relatively flexible, through the corresponding university courses and accounting practice qualification certificate of a specific course for

mutual exemption certification, make accounting degree education and practice qualification certification combined [10]. For example, the undergraduate education of accounting in Curtin University of science and technology in Australia connects the content of accounting courses with the requirements of accounting qualification examination. Oxford Brooks University and ACCA have reached an agreement that any student who has completed the first nine courses of ACCA (F1-F9) will receive his Bachelor of Science Degree (honorary degree) in accounting after completing a bachelor's thesis required by Oxford Brooks University. In order to ensure the quality, the six major accounting professional bodies in the UK has set up a special agency to identify the accounting professional courses in colleges and universities, and audit courses which can be exempted from the accounting professional qualification examination.

China also began to realize the necessity and importance of the connection between technical qualification certificate and degree education. Therefore, this report selects the United States, the United Kingdom and Japan to analyse and study the connection mode of vocational and technical qualification certificate and academic education, hoping to provide reference and suggestions for the connection of vocational qualification certificate and academic education in China.

### ***3.2. Certification based on professional background — market-led American model***

The development of the American mechanisms are more mature. The American institute of public accountants has offered a common accounting exam since 1917, professional degrees also began to develop in the early 20th century. As early as 1948, the University of Texas - Austin opened the world's first master's degree program in accounting. After decades of development, the training mode of undergraduate and master degree of accounting major in the United States has been very mature, which plays a significant role in leading the development of education and meeting the market demand.

The premise of realizing the connection between the vocational qualification examination and the professional degree in the United States is that in the course system setting of undergraduate accounting education, colleges and universities have fully considered the requirements of vocational qualification examination, emphasis should be placed on the cultivation of students' vocational ability in the aspects of curriculum setting, training direction and career development, in order to better complete the match with the qualification certificate[11]. Moreover, the important premise for the connection of American vocational qualification and professional degrees is the vocational certification of the educational background. On the one hand, the emphasis on the educational

background ensures that the vocational qualification applicants have the theoretical literacy in the relevant fields. On the other hand, it also lays a solid foundation for the effective connection between the vocational qualification and the professional degree education. Taking the American Certified Public Accountant Qualification Examination (AICPA), the educational requirements include: (1) Accounting or equivalent major recognized by the state education department as relevant to the application for a CPA license; (2) Certified accounting major by the Association for the Advancement of Business Schools; (3) 15 years of public accounting experience recognized by the State Board of Public Accounting, etc. The accounting courses specified in the above educational requirements may be graduate or undergraduate courses. If it is a graduate accounting course, the average score must be above "B"; if an undergraduate accounting course, the average score must be above "C". In addition, AICPA rules enter oneself for the certified public accountant (CPA) exam to take 150 credits, and American accounting undergraduate education generally control credit in 125 credits or so, so a lot of people choose accounting major master program for further study, to improve my professional knowledge, ability and quality while meeting the threshold requirements of CPA examination. In addition, some universities, such as University of Champagne, Indian University Bloomington, provide training courses quickly passed by certified public accountants, indicating that the master's degree in accounting is highly related to vocational qualification certification [12]. This feature is also reflected in the field of law. Only college graduates who pass vocational certification can more successfully enter the selection stage of professional qualification access.

The connection between American vocational qualification access and the construction of professional degree is completely promoted by the market, among which the main representative force of the market is the industry association. The industry association has played a decisive leading role in promoting the connection between the two according to the needs of the industry [13]. On the one hand, the leading role of the industry association, as the spokesperson of the interests of the industry, is to provide the basic quality standards of professional degree education according to the requirements of the industry professional ability, to ensure the professional development orientation of professional degree education. On the other hand, it directly participates in the recruitment and training process of professional talents, monitor and guide the development of professional degree education. As the spokesperson of the industry interests, the industry organization is the maker and gatekeeper of the vocational access standards.

From the above, the United States requires strict certification of professional background in the connection between vocational qualification and degree education. This benefits from the developed market economy in the United States, the perfect industry association system, and the high authority and credibility. It plays a leading role in the qualification of industry admission and the certification and guidance of professional degree education, to ensure that the two can establish a cohesive relationship.

### ***3.3. Equal subjects exchange — the British model of diversity and openness***

Similar to the United States, the UK mechanisms are also more mature, and industry associations play a positive role. However, Britain is the birthplace of a free market economy, and its higher education system is relatively open. Different from the United States, in addition to vigorously developing the degree education from universities, but also actively develop vocational education provided by vocational schools, in the industry talent training formed the industry association vocational training and university degree education coexist pattern. This makes the British industry association in professional degree matching vocational qualification access unlike the American industry association to take the direct corresponding strong way, just the university professional education and vocational subject training as one of the choices of vocational qualification access, and establish degree education and vocational education certificate equivalent and exchange mechanism, make vocational education and academic education enjoy equal rights.

At present, the UK implements the unified "National Vocational Qualification (NVQ)" and "General National Vocational Qualification (GNVQ)" systems. The two types of certificate systems are closely related and have covered the vast majority of the national labour market. The National Vocational Qualification Certificate (NVQ) currently has over 700 vocational standards, and the Level 14 national vocational qualification certificate has covered more than 80% of the national labour market. The General National Vocational Qualification Certificate (GNVQ) consists of primary, middle and high levels with 15 occupations. The implementation of NVQ and GNVQ, excluded society's contempt and prejudice towards vocational education, with equal rights to academic and vocational education, allowing graduates after 11 years of compulsory education to freely choose the path to continuing education according to their own conditions, interests and aspirations. The training of qualification certificates at all levels has the most basic academic requirements. After obtaining the certificate, they can be inserted into the corresponding school to receive academic education. In this way, the equivalent and exchange mechanism of general education and

vocational education certificates is established, which is both conducive to the continuous education of students and provides convenience for the phased continuing education. Vocational education and general education are developing towards the direction of integration.

Therefore, different from the strong direct correspondence of the Industry Association of the United States, the UK takes professional degree education and professional subject training as the conditions for vocational qualification access, so that the connection mode of vocational qualification and professional degree presents the characteristics of free, open and diversified [14]. On the surface, professional degree courses and vocational subject training are two systems, but the exemption policy closely connects vocational subject training, degree education and vocational qualification, This system design switches the roles of vocational qualification trainees and college professional students, thus realizing the effective connection between professional degree education and vocational qualification access [15]. In addition, the vocational qualification in the UK has the following advantages: (1) Unified certification and management of vocational qualifications. (2) Realize the transformation and connection between vocational education and general education. [16].

From the docking vocational access degree level, compared with the American undergraduate education focus on general education, British university undergraduate education specialization, professional degree is higher, so in the British vocational qualification access system, undergraduate education is likely to achieve docking with vocational qualifications, the advantage of graduate level of professional degree is not obvious [17]. Take the British Certified Public Accountants Qualification Examination (ACCA) as an example, the examination is divided into three stages: basic, certificate and major. The examination qualification is relatively loose, generally meeting the entry requirements of a UK university can be registered as a trainee of ACCA, and you can take the examination after completing the prescribed professional credits. ACCA's exam exemption policy stipulates that undergraduate accounting graduates are automatically free from eight courses. On the other hand, unlike the one-way matching between professional degrees and vocational qualifications in the United States, the match between British vocational qualifications and university degrees is two-way. Under ACCA and related universities, ACCA students may apply for a bachelor's degree from Oxford Brook University after passing both stages of foundation and certificate exams. And you can also apply for a Master's degree after completing all three stages of the ACCA. But not all accounting courses can obtain the exemption of vocational qualification examination, in order to ensure the quality of professional degree training, six accounting professional groups

jointly established the accounting group advisory committee has a special agency responsible for the college accounting courses, to review whether its graduates meet the requirements of exemption examination.

To sum up, it can be seen that the two-way connection between British vocational qualifications and professional degrees has formed a close combination between the access requirements of vocational qualifications and degree education.

### ***3.4. Multi-mode coexistence——the government-led Japanese model***

Japan Vocational Qualification Examination has become a vocational qualification framework system with full types of examinations, clear management subjects and sound legal system. In the end of 1990 s, the integration of the world economy and the development of professional society put forward new requirements for the talent training of higher education. Due to the austere employment situation of Japanese humanities and social science graduate students after enrolment expansion, Japan also started the establishment and reform of professional degree education. The development dilemma of professional graduate schools and the reform of judicial qualification examination have made the liberal arts provinces realize the necessity of linking professional degree education with vocational qualification.

Compared with the characteristics of the market economy of the UK and the United States, the capitalist colour of Japanese officials and commerce is more prominent. The industry association lacks authority and social recognition, and is not separated from the colour of semi-official organizations, the development mechanism is relatively backward. In terms of vocational certification and training process monitoring and guidance, although the industry association has some participation, its role is not absolute and exclusive as in Britain and the United States [18]. In terms of vocational certification, the external evaluation institutions of legal graduate school mainly have three categories: industry organization of the institute of Japan law association, university benchmark association and semi-official organization of university evaluation and degree awarding institutions, respectively from different perspectives of legal graduate school evaluation, each university decides on its own which institution to choose for accreditation. Because there are other options outside the industry association, this weakens the supervisory and guiding role of the trade association in the training of professional talents [19]. Therefore, the government plays a direct driving force to play a substantive role. This mode has its rationality in the stage when the authority and social recognition of trade associations are lacking, and it plays a positive role in rapidly promoting the

development of professional degrees and building a match with vocational qualifications.

The establishment of Japanese professional degrees began in the late 1990s. The Ministry of Culture, Culture, Science and Technology and relevant government departments plan and lead the vocational certification, supervision and guidance of the training process, and the areas and directions of the connection between professional degree education and vocational qualifications. At present, in the majors connecting Japanese vocational qualification and degree education, the legal majors are well implemented, and the connection of other majors is not close enough and the process is slow [20]. Take the law profession for example, on the one hand, the Japanese government promulgated the Law on the Coordination of Legal Graduate School Education and Judicial Examination, clarifying the development direction of professional degree and vocational qualification; on the other hand, The interests of educational institutions and trade associations should be coordinated from the institutional level to ensure that the teaching content of professional degree meets the requirements of vocational admission, and that the connection between vocational qualification examination and professional degree education can be realized [21].

Among the majors that have achieved the connection of vocational qualification and professional degree education, Japan has two different modes. Different majors adopt different modes, and which mode to choose mainly depends on the degree of specialization of the subject field. However, no matter which model is adopted, the connection between the two has promoted the healthy and sustainable development of the vocational qualification examination and the continuous clear direction of the application-oriented talent training of professional degrees.

The two connection modes are specific as follows. The first, professional degree education is a necessary condition to take the vocational qualification examination. This model is simple and direct. The premise of taking the vocational qualification examination is to obtain a professional degree in the relevant field. People who do not obtain the professional degree have to take the preparatory examination to apply for the qualification examination. Their typical representative is the legal major. The establishment of the Graduate School of Justice is closely related to the reform of the judicial examination system. The new judicial examination system formulated in 2004 stipulates that from 2011, the qualification must be in principle from the graduate school of law. Graduates of the graduate school of Illegal Affairs who want to take the judicial examination must first pass the preparatory examination and prove that they have the same ability and quality as the graduate school of the law graduates. The

qualification of judicial examination is valid three times within 5 years. Those who still fail the examination must be returned back to the Graduate School of Justice for re-examination. During the transition period from 2004 to 2011, the judicial examination adopted a dual-track system of both old and new examination mechanisms, that is, the new judicial examination only applied for by graduate school graduates and the old judicial examination open to all personnel coexist. However, the general trend is to stabilize the qualified rate of the new judicial examination, and gradually reduce the pass rate of the old judicial examination.

The second kind, the professional degree is the priority of the vocational qualification examination. This model is mainly the identification of exempt subjects. Candidates of professional degree enjoy certain preferential treatment when taking the vocational qualification examination, exempt from the examination of some subjects, and adopt the graduate school of accounting and the graduate school of intellectual property. According to the Accounting Law, those who have obtained a degree in accounting can be exempted from financial accounting, management accounting and audit when taking the accounting qualification examination. The Graduate School of Intellectual Property is a professional institution for training professionals engaged in patent, trademark and copyright protection. Its corresponding national qualification examination is the defence science examination (which is specialized in intellectual property protection in Japan and Britain and Germany). According to the Debates' Law amended in 2007, the intellectual property graduate students admitted after 2008 who take the Debates' Qualification Examination within two years after obtaining their professional degrees can be exempted from the industrial ownership examination.

To sum up, the development of the connection between vocational qualifications and professional degrees in Japan is relatively backward, but the problems encountered in the development process, corresponding measures taken and learned experience and lessons are still worth learning from. For example, in terms of entrance management, qualified students are selected according to the industry access requirements. In terms of process management, strengthen the construction of rules and regulations, and clarify the basic teaching content and quality guarantee bottom line according to the industry access requirements. In terms of export management, strengthen the leverage of external evaluation to ensure the quality standards of talent training.

#### **4. CONCLUSION**

Throughout the United States, Britain, Japan, the three in advance degree with vocational qualification match pattern and strategy of experience, can be thought

of in a market economy is not fully mature, the authority of industry association and the social recognition unformed phase, power of moderate government intervention to quickly build effective connection degree with vocational qualification, promote the development of professional degree. However, after the matching relationship is established, it is necessary to gradually strengthen the leading role of industry associations and weaken the intervention degree of administrative forces, so as to form a long-term development mechanism of professional degrees and ensure the sustained and stable matching between professional degrees and vocational qualifications.

At present, China's accounting professional and technical qualification examination is directly responsible by the Ministry of Finance and the Ministry of Personnel, and the role of the government occupies the leading position. The realization of the coordinated connection between accounting degree and vocational qualification will greatly optimize the structure of accounting talents, which is consistent with the goals of the 14th Five-Year Plan. Under this vision, the attention and support of the government will become the greatest help.

#### **AUTHORS' CONTRIBUTIONS**

This article is a joint work of all authors. L.H. and N.M.J. contributed to the development of the research idea, literature review and the analysis, ZH.G.Y. and Y.Y.L. contributed to writing the manuscript. All authors read and approved the published version of the manuscript.

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