Future economic professionals: development of practical skills and competencies in higher education from the point of view of international employers

Abstract. The authors aim to determine the importance of practical preparation of future accountants, auditors and entrepreneurs during the study both from the point of view of the companies with transnational scope of activity that belong to the group of the Czech Republic’s most attractive employers and from the point of view of the students of the University of Economics in Prague (Czech Republic) in the field of accounting and financial management, who very often gain positions in such companies. Another aim is to verify what emphasis the practice in the international context places on providing the students with knowledge of business and market laws in relation to the abovementioned professions. The research was conducted by using a questionnaire survey at the beginning of 2018. The chi-square test of independence was used in view of the categorical variables. Practical preparation is important for both groups of respondents (i.e. 139 students and 24 relevant companies-employers). During the study, it was established that most students are already employed (75% of the bachelor and 95% of the master programmes students), which shows that the students in the accounting and corporate financial management field of study have a very close contact with practice. Although most students at both levels of education are already employed (88%), only 52% of them work in the field which is identical to their educational programme. Satisfaction of companies with students is conditioned by their practical preparation during the studies, which, however, is most often non-existing. The companies’ representatives, as well as students, recommend that practical subjects be incorporated in the course of study. Also, emphasis should be placed on the development of professional competences of auditors and accountants, as well as on entrepreneurs’ training, which should be in the form of simulated professional environment during the classes. Taking into consideration the results of the new research and scientific studies, we consider the recommended procedures to be justified and relevant internationally.

Keywords: Professional Competence; Higher Education; Accountant; Auditor; Entrepreneur; Employer; Simulation Methods

JEL Classification: E24; J24

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Майбутні фахівці з економіки: розвиток практичних навичок і компетенцій у вищій освіті з погляду міжнародних компаній-роботодавців

Анотація. Статтю присвячено визначенню важливості практичної професійної підготовки бухгалтерів, аудиторів та підприємців з погляду транснаціональних компаній, які, на думку студентів Празького економічного університету, що спеціалізуються на вивченні бухгалтерського обліку та фінансового менеджменту, часто отримують пропозиції працевлаштування від названих вище компаній, належать до групи найпривабливіших для роботи компаній у Чеській Республіці. Авторами статті було досліджено вплив міжнародної практики на набуття студентами знань про застосування відповідної законодавчої бази та розвиток практичних навичок ведення бізнесу. У основу статті було покладено анкетне дослідження, проведене на початку 2018 року. Під час проведення дослідження його авторами було використано критерій хі-квадрат незалежності, а також було виявлено, що більшість студентів (73% студентів-бакалаврів і 95% студентів магістерських програмах навчання) вже працевлаштовані. Це вказує на то, що студенти, які вивчають бухгалтерський облік і корпоративне фінансове управління, мають значний практичний досвід. Разом із тим, попри той факт, що більшість студентів обходять напрями підготовки вже працевлаштовані (88%), тільки 52% від їхньої кількості працевлаштовані з напрямом діяльності, передбаченим їхньою навчальною програмою. Задоволення компаній співпрацею зі студентами обумовлене надійним рівнем практичної підготовки самих студентів. На думку як представників компаній, так і студентів, у відповідності з напрямами навчання відповідної законодавчої бази, студенти, які вивчають бухгалтерський облік і корпоративне фінансове управління, мають значний практичний досвід. Разом із тим, попри той факт, що більшість студентів обходять напрями підготовки вже працевлаштовані (88%), тільки 52% від їхньої кількості працевлаштовані з напрямом діяльності, передбаченим їхньою навчальною програмою. Задоволення компаній співпрацею зі студентами обумовлене надійним рівнем практичної підготовки самих студентів. На думку як представників компаній, так і студентів, у відповідності з напрямами навчання відповідної законодавчої бази, студенти, які вивчають бухгалтерський облік і корпоративне фінансове управління, мають значний практичний досвід. Разом із тим, попри той факт, що більшість студентів обходять напрями підготовки вже працевлаштовані (88%), тільки 52% від їхньої кількості працевлаштовані з напрямом діяльності, передбаченим їхньою навчальною програмою. Задоволення компаній співпрацею зі студентами обумовлене надійним рівнем практичної підготовки самих студентів. На думку як представників компаній, так і студентів, у відповідності з напри...
1. Introduction

In recent years, efforts have been made to strengthen the free relationship between the labour market and universities from the point of view of graduate training (Little & Archer, 2010) [9]. The necessity to develop human capital through closer cooperation of universities with the labour market to achieve a positive impact on the development of the whole economy is seen by the authors as the main reason for the establishment of such trends. In the field of professional competences of graduates, state interventions are developed to impact tertiary education to maximize the outputs of universities. The objective of the empirical study adopts two fundamental lines of thought, which are based on a common hypothesis, questioning whether or not the role and scope of integration of practical preparation of future professional accountants, auditors and entrepreneurs in higher education matches the requirements of the labour market, not only at the national level in the Czech Republic (Berková & Plevková, 2017) [3], but also internationally. According to the Entrepreneurship 2020 Action Plan elaborated by the European Commission, the need to implement entrepreneurial learning at all levels and in all sectors of education, including non-formal education (e.g. Bodea, Mogoş, Dascălu, Purnuş, & Ciobotar, 2015) [4], is strongly emphasized.

2. Brief Literature Review

In recent decades, interest in the concepts of economic growth and entrepreneurship has started to grow (Ács, Szerb, & Autio, 2013) [1]. This interest is empirically motivated by three aspects:

a) it promotes competition by increasing the number of businesses; as competition leads to the development of knowledge and new ideas, it can be said that entrepreneurship again supports entrepreneurship;

b) entrepreneurship is an essential mechanism enabling the transfer of knowledge and innovations, which is especially important for start-up entrepreneurs;

c) it creates diversity, dissimilarity and uniqueness of businesses, which influences economic growth (Grigore & Drăgan, 2015) [7].

Understanding business environment is essential in order to perform any economic profession. This competence becomes increasingly important for graduates of the economic field achieving higher education, as they must be proficient in the economic-interdisciplinary context. According to Garrido, Davids, Gonzales, and Soto (2017) [5], the current social, economic and work situation requires continuous acquisition of skills and knowledge. Obtaining general competences is the main task of professional training. The development of these competences forms an essential part of practical preparation. Students should undertake to be integrated into the professional world. Smith and Emerson (2017) [15] examined causes of the existing gap between accounting practice and academic community with a focus on accounting. The main cause of this problem is that the academic sphere is primarily focused on academic research but lacks significant practical experience or certification of academics. After completing their studies, the students may have a lack of practical skills required by the labour market. Pluzhnik, Ilnitskaya and Lucci (2018) [10] characterized and compared the processes and results of entrepreneurship education in the US and the UK. To develop entrepreneurship education, the authors consider it necessary to integrate elements of experiential learning, multidisciplinary, multicultural, and interactive student-centred learning approaches for the development of business models of behaviour, key and variable competencies, and «soft» skills. In their study, Griffin and Coelho (2019) [6] describe that students find the greatest importance in communication, teamwork and time management. Siriwardane, Kin Hoi Hu, & Low (2014) [13] focus on the level of competence of accountants and auditors in the area of information technology development in the environment of small- and medium-sized enterprises. Their findings include that the competences of accountants are still at a lower level than that required by professional accountancy organizations, such as IFAC (International Federation of Accountants) and AICPA (American Institute of Certified Public Accountants). Emphasis is placed on the development of human resources management and organizational and interpersonal skills in integration with information technologies. All of these skills are perceived as requirements for professional qualification of
accountants and auditors (Bahador & Haider, 2012) [2]. In the context of the development of professional competences of graduates and in view of the demand for high-quality qualification force, it is necessary to systematically optimize professional competence, which includes theoretical knowledge, practical skills, professional values and ethical aspects (Král & Šoljaková, 2016) [8]. Several European programs identified as best practices were presented at the Oslo Conference Entrepreneurship Education in Europe: Fostering Entrepreneurial Mindsets through Education and Learning. In general, the updated teaching programs encourage critical thinking, creative thinking, communication, research-questioning and problem solving (Rahman et al., 2015) [12] and frequently involve interactive and collaborative online tools (e-learning, mobile devices and learning networks) (Ventura & María José, 2013) [17]. This kind of entrepreneurial experience is also an effective way to teach financial education, as it provides the context and the possibility for the students to apply their knowledge in a particular case of interest to them. In order to develop the required professional competences of university students, a simulation method, which can be used to truly depict the activities of professional accountants and auditors, is used (Stephenson, 2017) [16]. Students are subject to a real-world audit with the integration of information technologies, taking into account the current IFAC (International Federation of Accountants) requirements. It is therefore desirable to invite experts from practice (practitioners) to lessons based on simulation of real-world practice. In Jakarta and in the West Province, Pratama (2015) [11] examined differences in professional competences of students in the field of accounting after the lessons, which were delivered by an academician, a university lecturer and a practitioner, respectively. From the point of view of the focus on the development of professional competences towards practice, the practitioners were more successful in teaching, as they were able to bring current hot topics into it. The advantage of the simulation method that acquires the elements of performance is that the students assume a certain professional role they have to identify themselves with and take responsibility for; by this, they form their professional competences. Zulfiqar, Sarwar, Aziz, Chandia, & Khan (2019) [19] concludes that simulation-based studies are a useful, easy and amusing way of learning, which helps students to think critically. Smeureanu and Isăilă (2017) [14] present a Learning Pyramid which depicts to what extent students retain new information, depending on the teaching method used. The most effective method is practice doing (75% of new information is retained), teach others/immediate use (90%). This shows that the methods supporting practical activities of students are the most effective ones. The following can be included among them: a) simulations; b) play-role scenarios; c) working group in competition; d) case studies.

3. Purpose
This study is based on the research of the Chinese authors Y. H. Zhao and D. M. Gao (2016) [18], who focused on the requirements of labour market in the area of preparation of students for accounting practice. The empirical study refers to tertiary education, namely the field of accounting and corporate financial management at the University of Economics in Prague, Czech Republic. The basic objectives are defined as follows:
- Verification of the importance of practical preparation of future professional accountants and auditors in terms of the role of employees in higher education to cater for their engagement in the financial sector, especially in senior management positions, through the eyes of representatives from practice and students of economic fields with a focus on finance and accounting;
- Verification of the importance of practical preparation of future entrepreneurs in higher education with a focus on finance and accounting as independent entrepreneurship. No doubt that from the point of view of the Code of Ethics, the auditor cannot be an employee of service users and should, therefore, understand not only his/her profession but also business laws and the development of the business environment.

4. Research Methodology
Two groups of respondents participated in the survey. The first sample consisted of employers representing the largest consultancy companies relating to transnational business. The research included 24 companies, including the employers who, according to the Universum Survey, were included in the category of the Czech Republic’s most attractive employers and with whom the University of Economics, Prague closely cooperated. In total, 60 consultancy companies were addressed. Those were primarily focused on the area of audit, accounting and taxes. In terms of the
size of the companies, the sample included 75% of respondents with more than 100 employees; the other respondents belonged to the category of small- and medium-sized companies. 75% of the sample were the companies with transnational, global reach. These companies employ the vast majority of graduates of the Faculty of Finance and Accounting of the University of Economics, Prague. The second sample consisted of students of the bachelor and follow-up master degree in accounting and corporate financial management of the Faculty of Finance and Accounting of the University of Economy in Prague. The total sample included 139 students, of whom 53 were bachelor-degree students, and 86 students represented the follow-up master study.

The sample includes more students of the follow-up master study at the Faculty of Finance and Accounting, who specialize in accounting and corporate financial management (62%). The representation of bachelor students (38%) is important to examine the permeability of the whole study at the University of Economics and to identify students’ preferences from the beginning until the end of the study. During the study, most students are already employed, including the bachelor students, of whom 75% are employed. The number of employed students of the follow-up master study is 95%. This shows that students of the Accounting and Corporate Financial Management field of study have a very close contact with practice. Although most of the students at both levels of education are employed (88%), only 52% of the students work in the field identical to that they study at the same time.

For the data collection, the questionnaire method was used. To conduct the research, we used a questionnaire of our own construction of the web design. Two questionnaires were prepared for each group of respondents. Prior to the research, pre-research was carried out. Before doing the pre-research, we developed a sample having the characteristics of the respondents participating in the main research. This increased the content validity and the reliability of the research tool. The questionnaire contained a combination of closed and open questions, using interval and Likert scales. The questionnaire for each group of respondents contained one open question, which asked about the opinion of the respondents on the professional focus of practically oriented subjects that should be reinforced in the field of study, with an emphasis on audit, taxes and accounting. Only this open question in each questionnaire was evaluated qualitatively; the other questions were evaluated using quantitative methods. To verify the hypotheses, the data were processed and evaluated by using the NCSS statistical program based on the chi-square independence test, at 5% of signification. This test enabled us to prove dependence (or independence) between two variables. It can be used to determine the relationship between two qualitative or consecutive variables which have several categories, called categorical variables. The null hypothesis claims that the monitored characters are independent; an alternative hypothesis is then the hypothesis of their dependence. Null hypotheses are formulated as follows:

1. There is no dependence between the employers’ satisfaction with graduates of the Faculty of Finance and Accounting of the University of Economics, Prague and the practical preparation of students during the studies.
2. The employers perceive practical students’ preparation in the area of audit and accounting as important as the ability to understand the business environment for their engagement in accounting and auditing professions.
3. From the point of view of the students specializing in accounting and corporate financial management, there is no dependence between the professional training quality and practical preparation during the study.
4. From the point of view of the students specializing in accounting and corporate financial management, there is no dependence between the significance of practical preparation during the study and their practical engagement in the role of employees.

5. Results
The results show that 75% of the companies representing transnational scope of business perceive the preparedness of the students specializing in accounting and corporate financial management to be insufficient.

At 95% of the test reliability, it was determined that long-term satisfaction of the addressed employers from the category of the Czech Republic’s most attractive employers is conditioned by the practical preparation of students. At 5% of the significance level, we reject hypothesis H₀₁ (Table 1). This means that the more the practical component is strengthened and supported by educators and academics, the higher the satisfaction of those addressed employers with the graduates from the given field is. The efforts to promote practical lessons are being stepped up abroad too. They have different forms, for example the involvement of practitioners in teaching. This form brings about a positive effect.
in the development of professional competences (Pratama, 2015) [11]. These facts are also published in the article by Smith and Emerson (2017) [15] who address the main causes of the gap between accounting practice and academic community. According to the authors, educators focus too much on academic research and point to the lack of practical experience. This causes students to feel less competent after completing their studies.

In connection with the development of professional competences, we were also interested in whether the employers perceive the practical preparation of students in the field of audit and accounting to be a more important element than understanding the business environment for their employment in accounting and auditing professions. This idea is based on the fact arising from professional practice in the international context, where it is desirable that an expert in the accounting and auditing profession, which is an independent business, should understand not only his/her profession, but also the development of the business environment. Thus, the hypothesis was being verified as to whether the employers perceive these two aspects differently or in the same way, or which aspect they prefer. At 95% of the test reliability, it was found that employers perceived these two aspects in the same way. At 5% of the significance level, we do not reject hypothesis $H_{0-2}$ (Table 1). Practical preparation of future professional auditors and accountants should be focused not only on professional profiles closely connected to these professions, but also on the development of the ability to understand business rules and the development of business environment and the market in relation to the accounting and auditing profession as an independent entrepreneurship. The representatives of the companies also expressed their views regarding the question of overall preparedness of the students (not only from the point of view of practical preparation) and presented the competences the graduates lacked most when entering the labour market. Most of the graduates lack practical experience (such is the opinion of 70.8% of all the respondents), knowledge of foreign languages (41.7%), willingness to work and flexibility (25%). Theoretical knowledge of the graduates in the field of accounting and corporate financial management is at a very good level; the respondents put this competence to the last place in terms of the most-often lacking skills. The respondents’ answers to the open question inquiring about the opinions on the professional focus of practical subjects that should be strengthened in the field of study with an emphasis on audit and accounting were evaluated qualitatively. In most cases, the companies’ representatives suggested a practical subject in the following forms:

a) real simulations of projects in cooperation with potential employers;

b) internships or practical training according to student preferences;

c) applications of accounting and tax laws and their interpretation in practice;

d) fictitious companies that strengthen the education to entrepreneurship and understating the business market.

Again, these results were in line with the examples of good practice at the international level. The students’ views of practical preparation in accounting and auditing profession are very similar to those of the practitioners. In terms of the percentage of responses, out of the total sample $(n = 139)$, 57% was dissatisfied with practical preparation in the accounting and corporate financial management. A higher level of dissatisfaction was determined with regard to the students of the follow-up master study: 67% of respondents. Either the situation was better with respect to the bachelor study, or the students did not feel the absence of a practical component - only 40% of students were dissatisfied with the practical preparation.

Further results of the analysis focus on exact evaluation of the dependence between the responses of the students of both degrees of study $(n = 139)$. Of course, we need to be cautious in terms of any statements explaining the proven results, as our sample is representative of one branch within one university, but which - on the other hand - closely cooperates with the largest consulting companies in the market. At first, hypothesis $H_{0-3}$ was tested, which claimed that from the point of view of the students, there was no relationship between the quality of professional training and practical preparation during the study. At 95% of the test reliability, it is possible to claim at the level of $n = 139$ that there is a dependence between the quality of professional training and the practical preparation of the students.
during the study (Table 2). At 5% of the significance level, we reject hypothesis H$_{0-3}$. This means that the better students perceive the higher quality of professional training, the more the practical component of the lessons is strengthened. Here, the correlation with the opinions of practitioners is also obvious, where it was proven that the more the practical preparation of students is strengthened, the more companies are satisfied with the graduates. However, it has to be noted that the majority of the students agree to the fact that a practical component is missing in the professional training in accounting and corporate financial management, which is in line with the views of the practitioners who respond that practical experience is the most commonly lacking competence of students and graduates (Griffin & Coelho So, 2019; Ilinskaya & Lucci, 2018) [6; 10]. We were also interested in whether the group of students who were already actively engaged in practice considered practical preparation during the study as a necessary educational aspect. At 95% of the test reliability, dependence was found between the significance of practical preparation during the study from the point of view of the students specialising in accounting and corporate financial management and their practical role as employees (Table 2). At 5% of the significance level, we reject hypothesis H$_{0-4}$.

Given that the proportion of such students in the sample is 88%, this fact is significant for the examples of good practice and relevant recommendations for sustainable development of education. The students also expressed their opinion on the necessity to include a practically oriented subject, with 90% of all the students recommending inclusion of such subjects in the curriculum. Interestingly, 60% of the bachelor-degree students were satisfied with the practical preparation in the accounting and corporate financial management field of study. Yet, 94% of the same group of respondents required strengthening of the practical component. Their recommendation may be connected with the emphasis on the diversity and the interesting nature of the study, as well as on clear meaning and usability of the theoretical basis. The respondents’ answers to the open question (the same as with the employers) inquiring about the opinions on the professional focus of practical subjects with an emphasis on audit and accounting were evaluated qualitatively. Most often they mention the establishment of an enterprise from the beginning to the liquidation, i.e. a fictitious company; accounting in real economic software (e.g. SAP); an audit project (comprehensive activities related to closing operations or auditor’s report); working with real data related to the processing of tax return or control reports, working with case law or other legal regulations, tax administration; practical accounting with emphasis on dealing with demanding and unusual accounting cases, case studies: Due Diligence, Business Modelling, case management according to IFRS and US GAAP.

The requirements regarding practical training are identical to the tendencies evolving in the area of the development of professional competences at the international level. Worldwide, there is a growing tendency to develop professional competences for these fields in the area of human resources management or organizational and interpersonal aspects using IT. Attention is also paid to ethical aspects (Bahador & Haider, 2012; Siriwardane et al., 2014) [2; 13]. The integration of IT in the development of professional competences is particularly desirable, because it changes the way of working with the information and relevant data of the participating companies. Students are guided to the true depicting of the activities of professional accountants, auditors and other professions. The basic idea of such training is to simulate a real professional environment and develop professional competence, which is also required by IFAC or AICPA. These competences are effectively developed by means of a game as a staging method based on the simulation of practical activities (Smeureanu & Isăilă, 2017) [14].

Table 2:

<table>
<thead>
<tr>
<th>Null hypothesis</th>
<th>Chi-Square Value</th>
<th>Degrees of Freedom</th>
<th>P-Level (p)</th>
<th>Accept/Reject</th>
</tr>
</thead>
<tbody>
<tr>
<td>H$_{0-3}$</td>
<td>38.603011</td>
<td>9</td>
<td>.000027</td>
<td>Reject H$_{0-3}$ (P &lt; .05)</td>
</tr>
<tr>
<td>H$_{0-4}$</td>
<td>20.437264</td>
<td>9</td>
<td>.019398</td>
<td>Reject H$_{0-4}$ (P &lt; .05)</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

6. Conclusion

In spite of the findings including insufficient practical experience of students and graduates and the need to strengthen practical preparation during the study, for example through simulations, stage games or involvement of practitioners who help create real professional environment in the lessons, the students of the University of Economics in Prague still have very good chances to become employed in the professions such as an accountant, an assistant auditor, a financial analyst or a tax adviser with employers with the transnational scope of business. Taking into consideration the results
of the new research and scientific studies underlying the article, we consider the procedures recommended by the companies representing transnational business, as well as by students, to be justified and relevant internationally. Finally, taking into account international and national development tendencies, it can be concluded that it is currently increasingly desirable to incorporate practice into education in the form of game simulations, stage performances, project activities or internships.

References


