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Doctoral accounting education. Evidence from Russia

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Abstract

This paper provides evidence about current practices in accounting Ph.D. programs in Russia as well as gives a retrospective description of them. Focusing on the doctoral sector, this paper aims to provide an overview of the "Accounting, statistics" PhD training programs within the several major Russian Universities with the prospect of the overall attitude to accounting post-graduate trainings. In the paper we gather data from several major Universities in Russia and survey of doctoral students in accounting Ph.D. programs in Russia. The paper describes the content and evaluation of such programs as well as some employability and accreditation aspects. By discussing these issues and providing comparative information on accounting and statistics doctorate programs taught in Russia the contribution of this paper is to help to understand what should be done for improving the process of the internationalization of doctorate education.

The paper briefly considers the Situational-matrix context of accounting education within the doctoral accounting program in one of the major Russian Universities. It is suggested that such approach allows to analyze and to predict the impact of the financial situation of an institutional unit in the future.

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Keywords

Accounting PhD programs, academic careers, accounting education, doctoral education, internationalization, forecasting, accounting, matrix modelling.

Introduction

According to the AACSB website information, there is no Russian Universities accredited internationally [AACSB-Accredited Universities…, www]. At the same time both academics and practitioners confirm that lack of academically qualified accounting programs can lead to the certain lack of accounting professionals, auditors and staff [ACAP, 2008, Bishop et al., 2012]. And there is a serious threat that no Russian Accounting programs will suite the international perspective in the near future due to the fact that there are no international standards used while designing the curricula of exiting phD programs from the one side. And that most of the doctoral education programs are provided only in Russian that makes international students confused – from the other.

In the light of declared shortage of accounting professors holding doctoral degrees internationally [Brink et al., 2012; Demski, FitzGerald, 2008; Plumlee et al., 2006], we can make the same conclusions for Russian case as well, but with the extend that we seriously lack international phD accounting students.

Since Russia's active participation in the Bologna process, the need of the national education integration to the international academic community has increased along with the implementation of international standards into different fields of activity. In order not to follow the situation when "lessons not learned" [Plumlee et al., 2014] the question "do we need any changes to be undertaken in programs of accounting education in accordance with the international level, or not", depends on the desire of the university community to follow the world trends of globalization and internationalization.

In the first section we begin with the short history of accounting education in Russia. The second section considers description of the description of doctoral education program based on situational matrix accounting. The third section turns to the analysis of the student's feedback.

For understanding the structure and effects of phD accounting programs, we address two related questions. The first concerns the statements about the "Accounting, statistics" program, as the perceptions of the students supposed to show their expected demand in the labor market. The second question concerns the determinants of the steps that are needed to be undertaken in order to internationalize PhD accounting programs.

We believe that our interest in understanding the developing of post-graduate education in accounting in Russia will be a serious input to the internationalization of post-graduate accounting education. Through our description of accounting phD programs, we invite discussion among accounting educators about the opportunities for, and barriers to, programs' improvement.

Many Russian and foreign publications have been devoted to matrix accounting. Since the matrix methods are known and worldwide spread, works by Demski [2008, etc.] prove such approach to be understandable in every country of the world, as is presented in mathematics language.

Professional accounting education in Russia: a retrospective

Since accounting in Russia was formed under the influence of different circumstances, but often, especially in post-Peter's I era, under the European accounting thought, accounting education suffered the same fate. The main stages of accounting education emergence fall to the 17-18 centuries. The history of accounting education in Russia begins with the decrees by Peter the Ist. Three consecutively issued Decrees (from 1715, 1720, 1721) by Peter the Ist concerned the appearing of the first bookkeeping ("tcifirnih") schools. Thus, in the second half of the 18th century, commercial schools began to appear, admitting the necessity of accounting education development for children [Be Betskoi, 1774]. However, by 1903 there was still a lack of special education that harmfully affected commercial activities in Russia [Matveev, 1903]. For the period from 1883 to 1903 there were opened about 160 vocational commercial schools with the number of students over 30 thousand [ibid.]. S. Petersburg was first Russian city to spread the commercial education by establishing in 1880 the first Merchant School named by Peter Ist.

The importance of accounting education has been particularly appreciated by the end of 19th century, when the society began to understand that without knowledge of accounting specifics there cannot be fair courts. This is obvious from the articles [Kolumbus, 1884; Chizhov, 1904].

By the April 1895, commercial education in Russia developed considerably, partly due to the Regulations on commercial education. Ten years after the approval of the "Regulations on commercial education" in Russia, there existed already more than 70 commercial schools (Table 1).

Table 1. Commercial educational establishments in Russia at 1910/11 schooling years

	Commercial schools	Trade		Courses of commercial knowledge	Total
		schools	courses		
Quantity of establishments	202	100	23	69	394

By 1913 the quantity of educational establishments and commercial courses rose greatly. This was the logical consequence of accounting profession popularity.

Table 2. Commercial educational establishments in Russia at 1913 schooling years

	Commercial schools	Trade		Courses of commercial knowledge	Total
		schools	courses		
Quantity of establishments	486	135	> 600	224	> 1445

This period consisted from the first serious steps for accounting education development in Russia (1895-1913 years). After the Great October Revolution (1917) Russian accounting along with accounting education changed under the influence of V. Lenin decrees. Thus the period of Planned economy began. On February 15, 1920 a special commission consisting of 18 people was set up in order to create a decree "The Scientific Development and Consistent Implementation of the State Plan for the Entire National Economy." During this period, the main role of accounting education was to follow Marxism-Leninism philosophy, rather than to develop the acquisition of knowledge and skills for preparation of financial information for broad categories of users. Russia

has been taking steps to restructure accounting education from 2012. However, it was decided to refuse from special bachelors educational programs in accounting and to introduce the common educational stream named "Economics". Masters and PhD programs in accounting are continuing to be delivered. As for today, according to the number and structure of the delivered programs, higher educational establishments are divided into: Universities, Academies and Institutes. Before the system of Federal Universities had appeared, volume and structure of student's admission for the 1st year of the University were dictated by the quotas, which had been set annually by the relevant federal authority. To exceed the quotas, Universities had to prepare specialists under accordant contracts, on the terms of payment.

Reforms in the national higher education began in 1992 with the adoption of the Federal Law "On Education". All this was made for one purpose: increasing the quality and value of Russian education, its competitiveness and demand on the international market of education.

The transmission to the new educational system was twice delayed. Finally, those universities that were ready, could have begun their practice in 2010 year already, and those, who were not – may start at September, 2011. The development of higher education in Russia for the 1996-2001 period is represented in the Table 3.

Table 3. Higher education in Russia 1996-2001[1]

Indicator	Year					
	1996	**1997**	**1998**	**1999**	**2000**	**2001**
1. Number of higher establishments						
Total	817	880	914	939	965	1008
State sector	573	578	580	590	607	621
Nonstate sector	244	302	334	349	358	387
2. Number of students (thousands of people)						
2.1. State sector						
Total	2802*[1]	3046*	3347*	3728*	4271*	4797*
2.2. Nonstate sector						
Total	162*	202*	251*	348*	4714,0*	1263,4*
3. Enrollment to the higher establishments (thousands of people)						
3.1. State sector						
Total	674,3*	748,3*	831,8*	946,4*	1140,3*	1263,4*
3.2. Nonstate sector						
Total	54,9*	66,9*	81,1*	515,7*	152,2*	198,2*
4. Competition for entrance examinations to public universities						
Applications for 100 seats	187	188	194	190	190	180
5. Graduates (thousands of people)						
5.1. State sector						
Total	415,1*	436,2*	470,6*	514,6*	578,9*	647,8*
5.2. Nonstate sector						
Total	13,1*	21,5*	30,2*	40,2*	56,2*	72,4*

[1] with external students.

1 http://government.ru/department/33/events/

The Situational Matrix Accounting Case used in doctoral accounting program

Mathematical approach in accounting is not a novation. It has been used in business practice as early as the thirteenth century and then cultivated by accounting community including, L.Pacioli [Sangster et al., 2007], A. Cayley, etc. [Ellerman, 2014]. Maths in accounting was developing along with accounting practices, when information technologies lead to appearance of Situational Matrix approach based on widespread usage of spreadsheets [Mattesich, Galassi, 2001].

As far as the main feature of the historical accounting system lays in its procedural nature, consisting of that there is no other way than using a strict sequence of steps set out accounting procedures to view the results of accounting reports. Verified accounting practices are built so that they always lead to balance invariants – numeric identities, known as the postulates of Pacioli and Pisani.

At the same time, the matrix image is fundamentally different from the usual image of the accounting procedures so that the considered algorithm is presented in a very compact form – in the form of a matrix. Here we describe a specific course in the doctoral accounting program run in Southern Federal University, Russia. The course aims to solve the offered case and to teach students to implement situational matrix accounting in planning activities. In this case we consider the example where the mathematical description of the technology of forming balance sheets on the basis of initial entries drives from the Ledger. It uses next 5 accounts. Here and elsewhere, for the purposes of illustrating how to build a matrix accounting model, we will be using the system of 3 groups of accounts: A – assets accounts, C – Capital accounts, L – Liabilities accounts. This example allows to avoid cumbersome constructions in developing mathematical formulae and equations for balance sheets forming. But in this case all formulae illustrated this way will be valid for all kinds of initial data which can be presented in the form of the journal.

For instance, the corresponding entry matrix for the entries, mentioned in the Ledger (Table 4) will be as it is shown below.

Table 4. The Ledger in the system of 3 groups of accounts

№	Sum, in CU	Correspondence of accounts		The entry content
		Debit	Credit	
1	100	*L*	*C*	The contribution into charter capital has been declared
2	100	*A*	*L*	Contribution fees into charter capital has been entered
3	50	*L*	*A*	The supplier's invoice for assets acquisition has been paid
4	50	*A*	*L*	The assets from the supplier on the paid invoice entered for consumption
5	50	*C*	*A*	The cost price of the assets given to the buyer charged off as reduction of capital
6	80	*A*	*C*	The buyer's payment for the delivered assets entered as capital increase
7	10	*C*	*L*	Accrued taxes as reduction of capital

The Ledger can be presented in the form of a matrix formula which is equivalent to it.

$$\mathbf{MT} = 100\cdot\mathbf{E}(L, C) +100\cdot\mathbf{E}(A, L) +50\cdot\mathbf{E}(L, A)+50\cdot\mathbf{E}(A, L)+50\cdot\mathbf{E}(C, A)+80\cdot\mathbf{E}(A, C)+10\cdot\mathbf{E}(C, L).$$

After combining of similar terms in the matrix of transactions we get chess balance which will be called, here and elsewhere, the matrix of debit turnovers (**MDT**):

MDT = 100·**E**(L, C) + 150·**E**(A, L) + 50·**E**(L, A) + 50·**E**(C, A) + 80·**E**(A, C) + 10·**E**(C, L) =

Into the debit account	Into the credit of accounts			Total:
	A	C	L	
A		80	150	230
C	50		10	60
L	50	100		150
Total:	100	180	160	440

The matrix of credit turnovers (**MCT**) can be transposed from the matrix of debit turnovers **(MDT): MCT = MDT ′.** The transposition can be carried out directly by changing the position of the rows and columns in the matrix of debit turnovers, but it is also possible to transform the formula of the matrix of debit turnovers and as a result to get the formula of the matrix of credit turnovers[2].

MCT = (**MDT**)′ = [100·**E**(L, C) + 150·**E** (A, L) + 50·**E**(L, A) + 50·**E**(C, A) + 80·**E**(A, C) + + 10·**E**(C, L)] ′ = 100·**E**(C, L) + 150·**E**(L, A) + 50·**E**(A, L) + 50·**E**(A, C) + 80·**E**(C, A) + 10·**E**(L, C) =

Into the debit of account	Into the credit accounts			Total:
	A	C	L	
A		50	50	100
C	80		100	180
L	150	10		160
Total:	230	60	150	440

Through the use of situation-matrix modeling it becomes possible to deliver and solve the above raised problem fundamentally, because in terms of matrix accounting it has specific content and is as follows: primary accounting data always in a unique way can be represented as a matrix summary postings or matrix of debit turnovers (**MDT**).

$$\mathbf{MDT} = \sum_{\mathbf{x,y}\in SA} S_{x,y} \cdot \mathbf{E}(X,Y).$$

Here $S_{X,Y}$ – is a summary wiring defined by correspondence: debit X, credited Y. E (X, Y) – is the matrix – correspondence, in which the intersection of debit accounts X and credit accounts Y is one, and the other elements are zero SA – is a set of accounts, which are defined by accounting operations. Matrix of debit turnovers **MDT** is a main matrix which contains all information necessary to obtain the balance sheets information.

Situational-matrix modeling system (SMM) developed by Kolvakh (1996) is based on the notion of primary records in the form of the next basic equation of the matrix of accounting:

$$\mathbf{MR_{t-1} + MDT - MCT = MR_t},$$

Where **MCT = MDT′** – matrix credit turnover (matrix of credit turnovers), the transpose of the matrix debit turnovers.

We investigate a modification of situation-matrix model that can be used for financial analysis and tax planning as well and is based on the transformation of the initial situation-matrix model in its invariant form (IF), which is called for brevity, IF SMM.

2 In transposing the correspondence matrix its indexes are inverted like this: E′(X, Y) = E(Y,X).

$$\mathbf{MDT^*} = \sum_{\mathbf{x,y}\in SA} \beta_{x,y} \cdot \mathbf{E(X,Y)}\,.$$

Where $\beta_{X,Y} = S_{X,Y}/Q$ – are conditionally constant coefficients of linear expansion.

Thus, one can use a matrix of debit turnovers – MDT *, elements of which are semi-fixed quantities $\beta_{X,Y}$, calculated on the basis of the rates of taxes and fees, as well as regulations with respect to some basic value Q, that may be any quantity depending on the enterprise competences [Vysotskaya, 2009].

Multiplying IF SMM (template balance sheet) with the planned base variable Q in the spreadsheet one will be able to get the balance sheets of options in a single action, depending on the variable parameters: entering basic variable and semi-fixed parameters.

Since in each case stated above is achieved situational, it is best to consider the idea of the approach – the concept of situation-matrix model – in an example where, for greater clarity a simplified model of situational payroll is used.

Let planned for the upcoming quarter sales of Q = 7500000 conventional unit (CU). The ratio of unit labor costs d 20,70 = 4, or 0.04% of our sales. Hence the set amount of accrued wages S(20, 70) = d20, 70 Q = 0,04 · 7500000 = 300000 CU, where S(20, 70) symbolic posting record: Debit 20 – "Production", Credit 70 – "Payroll" = 300000 CU. Next, taking the unit accrued payroll (β20, 70 = 1), in relation to it using the established rates of taxes and contributions: β20, 70 = 0.13 (13%), β20, 70 = 0.34 (34%).

Based on this, we form a Ledger on a payment in accordance with the formula or, substituting the values, we have MDT * = 1 · E (20,70) + 0, 34 · E (20,69) + 0,13 · E (70,68). This formula corresponds to the following pattern filling the transaction log:

Ledger for recording payment

№	Transaction	Correspondence – E (X,Y)		Conversion coefficient ($\beta_{X,Y}$)
		Debit	Credit	
1.	The wages to employees	20	70	1
2.	Assessed on pension and social security (34%)	20	69	0,34
3.	Income tax withheld from wages (13%)	70	68	0,13
Total:				1,47

The matrix formula of payroll procedures in the following, quite compact form – in the form of IF SMM will be the next:

MDT= S20,70• MDT*

MDT* = λ20,70•E(20,70) + λ70,68 •E(70,68) + λ20,69 •E(20,69)

To the debit	From the credit									Total	e
	01	…	20	…	68	69	70	…	99		
01											0
…											0
20						л20,69	л20,70			л20,69+ л20,70	0
…											0
68											0
69											0

To the debit	From the credit									Total		e
	01	…	20	…	68	69	70	…	99			
70					л70,68					л70,68	x	0
…												0
99												0
Total					л70,68	л20,69	л20,70			л70,68 + л20,69 + л20,70		1

Here, the unit conversion factor adopted by the independent quantities – wages: λ20, 70 = 1. According to it tax and contributions payments of wages shall be as follows:

λ 70,68 = 0.13 (13%) – the rate of income tax from natural persons;

λ20, 69 = 0.34 (34%) – the rate of social contributions to the payroll.

The reduced matrix revolutions debit payment of wages determined by the specific numerical values of the rates of taxes and contributions

MDT* = 1•E(20,70)+ 0,13 •E(70,68) + 0,34 •E(20,69)=

To the debit	From the credit									Total
	01	…	20	…	68	69	70	…	99	
01										
…										
20						0,34	1			1,34
…										
68										
69										
70					0,13					0,13
…										
99										
Total					0,13	0,34	1			1,47

Now it suffices only the amount of gross wages and salaries, for example, its value S20, 70 = 10,000 CU, to multiply by the reduced matrix debit turnover, as once you receive the chess balance – the reverse ledger transactions of payroll, which is presented below:

Chess balance – reverse ledger of wages payment determined by the specific numerical values of the rates of taxes and contributions:

MDT = S20,70 •MDT* = 10000• [1•E(20,70)+ 0,13 •E(70,68) + 0,34 •E(20,69)]

MDT =10000·

To the debit	From the credit									Total
	01	…	20	…	68	69	70	…	99	
01										
…										
20						0,34	1			1,34
…										
68										
69										
70					0,13					0,13
…										
99										
Total					0,13	0,34	1			1,47

=

=

To the debit	From the credit									Total
	01	…	20	…	68	69	70	…	99	
01										
…										
20						3400	10000			13400
…										
68										
69										
70					1300					1300
…										
99										
Total					1300	3400	10000			14700

Based on this, the left-sided pattern of the Ledger by the next vector-matrix equation can be filled:$(\mathbf{VDR^* - VCR^*})_{t-1} + \mathbf{MDT^* \cdot e - VCT^*} = (\mathbf{VDR^* - VCR^*})\,t$

Ledger left-sided pattern at a conversion ratio

Accounts	Balance		From the Credit to the Debit of the accounts – MDT*				Total debit MDT*· e	Total credit VCT*	Balance	
	Debit VDR*	Credit VCR*	20	68	69	70			Debit VDR*	Credit VCR*
20	**0**	**0**			0,34	1	1,34	0	1,34	
68	**0**	**0**					0	0,13		0,13
69	**0**	**0**					0	0,34		0,34
70	**0**	**0**		0,13			0,13	1		0,87
Total	**0**	**0**		0,13	0,34	1	1,47	1,47	1,34	1,34

By multiplying all the elements of this template to the amount of accrued wages S(20, 70) = = 300000 CU, we may obtain in a single step by filling out the following Excel Ledger in absolute terms:

Left-sided ledger payroll to staff in absolute terms

Accounts	Balance	From the credit to the debit of the accounts	Total debit	Total credit	Balance					
	Debit	Credit	20	68	69	70			Debit	Credit
20	0	0			102000	300000	402000	0	402000	0
68	0	0					0	39000	0	39000
69	0	0					0	102000	0	102000
70	0	0		39000			39000	300000	0	261000
Total	0	0		39000	102000	300000	441000	441000	402000	402000

The pattern left-sided ledger in notation relative units

Accounts	Rests		From the credit									Total debit	Total credit	Total	
	debit	credit	01	…	20	…	68	69	70	…	99			Debit	Credit
01															
…															
20								л20,69	л20,70			л20,69+ л20,70		л20,69+ л20,70	
…															
68													л70,68		л70,68
69													л20,69		л20,69

Accounts	Rests		From the credit									Total debit	Total credit	Total	
	debit	credit	01	…	20	…	68	69	70	…	99			Debit	Credit
70							л70,68					л70,68	л20,70		л20,70-л70,68
…															
99															
Total							л70,68	л20,69	л20,70			л70,68 + л20,69 + л20,70	л70,68 + л20,69 + л20,70	л20,69+ л20,70	л20,69+ л20,70

The pattern left-sided ledger at specific values of relative units

Accounts	Rests		From the credit									Total debit	Accounts	Rests	
	debit	credit	01	…	20	…	68	69	70	…	99			debit	credit
01															
…															
20								0,34	1			1,34		1,34	
…															
68													0,13		0,13
69													0,34		0,34
70							0,13					0,13	1		0,87
…															
99															
Total							0,13	0,34	1			1,47	1,47	1,34	1,34

Template turnover balance in the balance of the specific values of relative units

Accounts	Rests		Turnovers		Rests	
	Debit	Credit	Debit		Debit	Credit
01						
…						
20			1,34		1,34	
…						
68				0,13		0,13
69				0,34		0,34
70			0,13	1		0,87
…						
99						
Total			1,47	1,47	1,34	1,34

The following below are obtained by multiplying the accrued salary = 15,000 CU.

Accounts	Rests		From the credit									Total debit	Accounts	Rests	
	Debit	Credit	01	…	20	…	68	69	70	…	99			Debit	Credit
01															
…															
20								3900	15000			18900		18900	
…															
68													1950		1950
69													3900		3900
70							1950					1950	15000		13050
…															
99															
Total							1950	3900	15000			20850	20850	18900	18900

Turnover balance

Accounts	Rests		Turnovers		Rests	
	Debit	Credit	Debit		Debit	Credit
01						
…						
20			18900		18900	
…						
68				1950		1950
69				3900		3900
70			1950	15000		13050
…						
99						
Total			20850	20850	18900	18900

In this example the constant Q represents cost of goods purchased, but the model can easily be converted for other parameters, e.g., based on the volume of sales of goods, the amount of the salary, etc. Taking into account the fact that the conversion of the model when the primary end point, change the whole matrix at once.

Development of the ideas contained in such approach prepares students for modeling in various accounting situations, analyzing them and predicting the impact of the financial position of an institutional unit in the future in the form of the respective balance sheets, ie this can be used in business – planning. In this special technique of the initial situation – the matrix model (SMM) are converted to the SMM with a minimum number of incoming parameters – the amount of operations by eliminating their linear dependence.

Doctoral accounting programs in Russia

The curriculum of doctoral accounting programs in various universities in Russia consists of the several same courses: Compulsory courses, Specialized courses[3], Compulsory courses, Elective courses section, Pedagogical practice section, Research component section.

When forming doctoral program curricula importance is given to subjects of choice, i.e. alternative subjects. Optional (elective) courses aimed to expanding horizons of doctoral student, the formation of his research and teaching skills, allowing the student to disclose potential and deepen the previously obtained knowledge.

Apparently, the situation with accounting doctorate programs is not especially bad, moreover, their originality and quality of several programs are extremely high, but what we have discovered by interviewing our doctoral students and discussing the curricula revealed a great deal about the situation within the doctorate educational programs. And made us think about the accreditation and internationalization issues.

3 It should be noted that special courses in most cases reflect the direction of scientific schools, on the basis of which are open doctoral programs.

An evaluation

In order to complement the existing literature, we provide a current assessment of some Russian PhD accounting programs. We understand that views expressed by the 30 interviewees in this study may (and will) not show the attitude of the entire population, but most of the views expressed are very informative and make quite a sense of existing problems.

We collected student opinions using a questionnaire designed to elicit student judgments on the program and their attitudes to it. The process of evaluation was carried out in the second quarter of 2016 providing the survey of the views of students from different Russian Doctoral Accounting programs who had recently completed the program and students who are continuing their education.

The survey instrument asked students to provide views on 5 items on a five-point scale (strongly agree to strongly disagree; plus not applicable) and to provide text answers to 5 other questions, most of which were open questions.

Table 5. Statements about the Accounting, Statistics program

Mean score on 5 point scale: strongly agree = 5 to strongly disagree = 1			
		n	**Mean**
1	I believe that the Accounting and statistics program has provided a sound foundation for my further research in accounting.	30	4,3
2	The Accounting and statistics program was more interesting than expected.	30	3
3	After studying for the Accounting and statistics program I am now more motivated to pursue a degree in accounting./	30	3,6
4	After studying for the Accounting and statistics program I am now more motivated to pursue a future career in accounting.	30	4
9	After obtaining the degree in Accounting I plan to apply for professional Accounting qualification (provided by ACCA, CPA, etc.)	30	4,3
10	A career in accounting with a research degree will be well paid.	30	4

As the tabled means show the overall rating of the program is behind 4 (3,8) that gives us an insight of the overall picture of the programs. The highest single mean score shows that students agree that the program motivates them to pursue a future career in accounting and to applying for professional Accounting qualification.

The lowest degree (3) was given to the statement that the Accounting and statistics program was more interesting than expected.

Among the respondent answers we should note that what they liked mostly of the program were the next issues:

– outstanding approaches to the educational process by the lecturers,

– opportunities for driving personal research, free choice of the research direction,

– opportunities for practical knowledge and deep studying of theoretical fundamental of accounting.

The worst aspects of the programs are (as follows):

– poor choice of special programs, lack of motivation to obtain professional qualifications. The program is not accredited at the international level,

– studying of subjects that are not related to the program (macro (micro) economy, the fundamentals of pedagogy and so on.

It is extremely interesting that the respondents suggested various changes in order to improve the program. For example, students are looking for more practical classes, the diversity in special courses and internationalizing of teaching methods. In this regard, we can see the proof of such attitude of students while ranging the sections of the program that were most useful for the educational process (Table 6).

Table 6. Ratings of the sections of the program

Courses	1	2	3	4	5	Total	Average
Compulsory courses	0	0	100,00%	0	0	30	3
The specific field of science courses	0	0	0	0	100,00%	30	5
The elective courses section	0	0,	33,33%	66,67%	0	30	3,67
The pedagogical practice section	0	33,33%	33,33%	33,33%	0	30	3
The research component section	0	0	0	66,67%	33,33%	30	4,33

Thus it is clear that in Russia todays' doctoral students in accounting appreciate the specific field of science courses and research component sections more than other parts of the programs. This can be judged as an evidence that doctoral students intend to specify their activity in professional field, as well as in research direction. However, the pedagogical practice is not highly appreciated that contrasts with the results of Pathway Commission Report (2014), where most of the respondents indicated that they are interested in teaching or in transitioning to an academic career.

Conclusion

The history of accounting education development in Russia shows that regardless of political and social changes, the accounting education is of persistent demand. Moreover, special and doctoral accounting education becomes more and more popular. The doctoral students admit that most interesting aspects of programs are special courses that differ from University to University in Russia and depend on the scientific school that is cultivated in the University. We believe that experience on delivering special course based on situational matrix accounting will be useful for rising interest in other Universities. As the analysis of the student's feedback shows that we need a new, more flexible and international model for doctoral education. We hope that the question roused will be useful to current practitioners not only in Russia, as well as for academic careers and faculty.

We also hope that Russian Universities will come to the conclusion that it is necessary to attract international students and provide such instrument that will make the accounting doctoral programs widespread over the world. Beyond the main scope of this article, there is a room for a discussion of accreditation issues and accreditation standards on the delivery of doctoral accounting education in Russia.

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Appendix. Practical calculation of the tax burden of the small enterprise

Balance at beginning of period, CU.:

01 (fixed assets)	100000	80 (capital assets)	150000
41 (goods)	60000	60 (payable to suppliers)	60000
51 (liquid assets)	60000	68.2 (taxes)	20000
62 (receivable)	30000	66 (loans)	20000
Balance	**250000**	**Balance**	**250000**

Balance at beginning of the period in coefficients:

01	1,97	80	2,95
41	1,18	60	1,18
51	1,18	68.2	0,4
62	0,6	66	0,4
Balance	**4,93**	**Balance**	**4,93**

Ledger with S41,60=50847.

№	Transaction	Correspondence		Coefficients	Sum, CU
		Debit	Credit		
1	Expense paid to the supplier	60	51	$\lambda_{60,51}$=1,18	60000 (VAT 9153)
2	Goods received from the supplier	41	60	$\lambda_{41,60}$=1	50847
3	Vat on goods purchased	19	60	$\lambda_{19,60}$=0,18	9153
4	Goods sold at a net cost	90	41	$\lambda_{90,41}$=1	50847
5	Revenue from the sale of goods (25% margin)	51	62	$\lambda_{51,62}$=1,25·1,18=1,475	75000
6	Income from sales of goods	62	90	$\lambda_{62,90}$=1,25	63559
7	Vat on the saled goods	62	68.2	$\lambda_{62,68.2}$=1,25·0,18=0,225	11441
8	Charged VAT	68.2	19	$\lambda_{68.2,19}$=0,18	9153
9	VAT payable	68.2	76.2 (ТВ68)	$\lambda_{68.2,76.2}=\lambda_{62,68.2}-\lambda_{68.2,19}$=0,225-0,18 = 0,045	2288
10	Accrued salary (5% of revenue)	44	70	$\lambda_{44,70}$ = 0,0735	3750
11	Personal income tax withheld	70	68.1	$\lambda_{70,68.1}$ = 0,13*0,0735= 0,0095	487,5
12	Assessed fees for non-budgetary funds, including PI = 26% FHIF = 3.1% THIF = 2%	44	69.1	$\lambda_{44,69.1}$ = *0.34·0,0735=0,025*	1275
13	Assessed fees for SIF (2,9%)	44	*69.2*	$\lambda_{44,69.2}$ = *0,029*0,0735=0,0021*	109
14	Fees payable to non-budgetary funds, total	69.1	76.3 (ТВ69.1)	$\Lambda_{69.1,76.3}$ = *0,025*	1275
15	Fees payable to SIF, total	69.2	76.4 (ТВ69.2)	$\Lambda_{69.2,76.4}$ = *0,0021*	109
16	Depreciation ((100000*20)/100)/12	44	02	0,032	1667
17	Property tax (90831*2,2%)	44	68.3	$\lambda_{44.68.3}$ = $\lambda_{44.02}$ 1,211*0,032=0,038	1998
18	Property tax payable	68.3	76.5 (ТВ68.3)	$\lambda_{44,68.3}$ = 0,038	1998
19	Decommissioned selling costs	90	44	$\lambda_{90,44}$ = 0,0735+0,025+ 0,0021+0,032=0,14	7132
20	Retained earnings	90	84	$\Lambda_{99.90}=\lambda_{62.90}-\lambda_{90.44}-\lambda_{90.41}$ = 0,11	5580
21	Income taxes (20%)	84	68.4П	$\Lambda_{99,68П}$ = 0,114*0,2=0,022	1116
22	Income taxes payable	68.4П	76.6 (ТВ68.4)	$\Lambda_{99,68П}$ = 0,022	1116
23	Financial result (profit)	84	99	$\Lambda_{84,99}$= 0,11-0,022=0,088	4464

Turnover balance sheet in coefficients.

№	Accounts	Total		Revs		Total	
		Debit	Credit	Debit	Credit	Debit	Credit
1	01 – fixed assets	1,97	0	0	0	1,97	0
2	02 – depreciation	0	0	0	0,032	0	0,032
3	10 – materials	0	0	0	0	0	0
4	19 – VAT on goods purchased	0	0	0,18	0,18	0	0
5	41 – goods	1,18	0	1	1	1,18	0
6	44 – selling costs	0	0	0,159242	0,14	0,0192	0
7	51 – liquid assets	1,18	0	1,475	1,18	1,475	0
8	60 – payable to suppliers	0	1,18	1,18	1,18	0	1,18
9	62 – receivable	0,6	0	1,475	1,475	0,6	0
10	66 – loans	0	0,4	0	0	0	0,4
11	68.1 – personal income tax	0	0	0	0,0095	0	0,0095
12	68.2 – VAT	0	0,4	0,225	0,225	0	0,4
13	68.3 – property tax	0	0	0,026642	0,026642	0	0
14	68.4 – income tax	0	0	0,022	0,022	0	0
15	69.1 – Pension Fund	0	0	0,025	0,025	0	0
16	69.2 – Social Insurance Fund	0	0	0,0021	0,0021	0	0
17	70 – payroll	0	0	0,0095	0,0735	0	0,064
18	76.2 – VAT to pay	0	0	0	0,045	0	0,045
19	76.3 – fees to PF	0	0	0	0,025	0	0,025
20	76.4 – fees to SIF	0	0	0	0,0021	0	0,0021
21	76.5 – personal tax payable	0	0	0	0,026642	0	0,026642
22	76.6 – income tax payable	0	0	0	0,022	0	0,022
23	80 – capital assets	0	2,95	0	0	0	2,95
24	84 – retained earnings	0	0	0,11	0,11	0	0
25	90 – revenues and expenses	0	0	1,25	1,25	0	0
26	99 – profit and loss	0	0	0	0,088	0	0,088
Total		4,93	4,93	7,13948	7,13948	5,2442	5,24424

Turnover balance sheet in CU

№	Accounts	Total		Revs		Total	
		Debit	Credit	Debit	Credit	Debit	Credit
1	01 – fixed assets	100169	0	0	0	100168,6	0
2	02 – depreciation	0	0	0	1627,104	0	1627,1
3	10 – materials	0	0	0	0	0	0
4	19 – VAT on goods purchased	0	0	9152,46	9152,46	0	0
5	41 – goods	59999	0	50847	50847	59999,46	0
6	44 – selling costs	0	0	8096,978	7118,58	978,398	0
7	51 – liquid assets	59999	0	74999,325	59999,46	74999,33	0
8	60 – payable to suppliers	0	59999	59999,46	59999,46	0	59999,5
9	62 – receivable	30508	0	74999,325	74999,33	30508,2	0
10	66 – loans	0	20339	0	0	0	20338,8
11	68.1 – personal income tax	0	0	0	483,0465	0	483,047
12	68.2 – VAT	0	20339	11440,575	11440,58	0	20338,8
13	68.3 – property tax	0	0	1354,6658	1354,666	0	0
14	68.4 – income tax	0	0	1118,634	1118,634	0	0
15	69.1 – Pension Fund	0	0	1271,175	1271,175	0	0
16	69.2 – Social Insurance Fund	0	0	106,7787	106,7787	0	0
17	70 – payroll	0	0	483,0465	3737,255	0	3254,21
18	76.2 – VAT to pay	0	0	0	2288,115	0	2288,12
19	76.3 – fees to PF	0	0	0	1271,175	0	1271,18
20	76.4 – fees to SIF	0	0	0	106,7787	0	106,779
21	76.5 – personal tax payable	0	0	0	1354,666	0	1354,67
22	76.6 – income tax payable	0	0	0	1118,634	0	1118,63

№	Accounts	Total		Revs		Total	
		Debit	Credit	Debit	Credit	Debit	Credit
23	80 – capital assets	0	149999	0	0	0	149999
24	84 – retained earnings	0	0	5593,17	5593,17	0	0
25	90 – revenues and expenses	0	0	63558,75	63558,75	0	0
26	99 – profit and loss	0	0	0	4474,536	0	4474,54
Total		4,93	250676	250676	363021,34	363021,3	266654

Высшее бухгалтерское образование в России

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Аннотация

В статье рассматривается существующая практика в области высшего бухгалтерского учета в России, а также дано ретроспективное описание вопроса. В работе собраны данные из нескольких крупных университетов в России. В статье описывается содержание обучение и оцениваются такие программы, а также некоторые аспекты трудоустройства. Статья нацелена на совершенствование процесса интернационализации образования.

Для цитирования в научных исследованиях

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Программы PhD для бухгалтеров, научная карьера, бухгалтерское образование, докторская степень, интернационализация, прогнозирование, бухгалтерский учет, матрица моделирования.