HRVATSKI RAČUNOVOĐA

ACCOUNTING AND MANAGEMENT A&M

13th International Scientific and Professional Conference

Conference Proceedings Volume III

Zagreb 2012

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ACCOUNTING AND MANAGEMENT A&M

13th International Scientific and Professional Conference

Proceedings from the International Scientific and Professional Conference

Volume III

Zagreb 2012

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"Croatian Accountant"
Independent Association of Accountants,
Tax Advisors and Experts in Finance
10 000 Zagreb, Vlaška 68, tel.: 01/4699-700, fax: 01/4699-703

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UDK 657.3/657.6/336.2/658.1/658.8

ISBN 978-953-7828-03-5

Prepress:
EDIT d.o.o., Zagreb, Vlaška 64/III

Print:
"M.A.K. GOLDEN" d.o.o.
Zagreb, Augusta Prosenika 11

A CIP catalogue record for this book is available from
the National and University Library in Zagreb under **808349**

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Foreword

After the successful first Conference on Accounting and Management, these Proceedings present the papers from the second Conference.

We are grateful to you to have made this Conference possible and contributed to the realization of its goals – improvement of the professional and scientific achievements in the field of accounting and management, especially in our region and in a wider context too. Therefore, the participation of all the experts and scientists in the region is valuable. This year we have tried to improve the quality of the Conference by inviting the scientists from distant countries, which has made us particularly pleased.

We wish that all the participants of the Conference on Accounting and Management feel as co-organizers. We should be proud that these Proceedings of the papers represent the result of our joint work.

Editorial

In Zagreb, on 4 June 2012

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PRODUCTIVITY AND CORPORATE TAXES IN HUNGARY[1]

Klára Katona
Faculty of Law, Pázmány Péter Catholic University, Budapest, Hungary

ABSTRACT

Tax competition, supported by most of the governments, results in the reduction of tax revenues evidently, but it does not contribute considerably to the attractiveness of the domestic market in (foreign) investors' eyes. The transfer prices make it possible for firms to replace capital mobility with profit mobility.

The main target of the analysis is to reveal the effectiveness of the taxation policy on the competitiveness and productivity of corporations in Hungary.

The study reviews those effects of the Hungarian taxation policy which had direct influences on corporate costs. From this aspect, the relevant common charges are corporate tax -in connection with tax allowances and different modifications of rateable value - and social security contribution as a special type of tax burden. The base of the investigation is the Cobb-Douglass production function and the examined period is from 1992 to 2009.

1. INTRODUCTION

The desirable tax system should be economically efficient, administratively simple, flexible, politically accountable and fair (Stiglitz, 2000. pp 401). The tax system is economically efficient if it does not distort the economic decisions which are made by individuals. The system has to be neutral. That is the system should allow the collection of funds required by the government with the minimum impact on economic life and the allocation of resources. In a good tax system it should be easy to access information, so every individual would know what they are paying and when they are expected to pay. A properly designed system of tax has to be flexible in a way that it changes or can be

[1] The paper supported by TÁMOP-4.2.1.B-11/2/KMR-2011-0002.

changed easily in response to economic changes. If the system of taxation is politically accountable, it means that individuals know what they are paying. Without this character some politicians would simply confuse the tax payers and lead them to vote for a smaller budget, which would lead to a reduction of important public services. The tax system should be equitable. A fair tax system should not benefit or harm some groups at the expense of others. The Pareto effective tax system maximizes the social welfare of individuals and it provides the required tax revenue for the government.

Under multiple-goal theory, goals must be traded off. Elkins (2009) proposes a taxonomy of taxation.

Table 1 Purpose of the Tax

Taxpayer's actions are considered	Restore the Market Distribution	Change the Market Distribution
Legitimate	Commutative taxation	Distributive taxation
Illegitimate	Restitutive taxation	Punitive taxation

(Elkins 2009)

Commutative taxation serves the purpose of overcoming market failures. Distributive taxation modifies the market distribution, restitutive taxation confiscates ill-gotten wealth, and punitive taxation discourages unwanted behaviour.

The fact that the market is operating in a highly efficient manner does not mean that the need for redistribution is any less. (Elkins 2009, pp105). The market cannot provide public goods, but public goods would contribute to the efficient allocation of resources and increase the general welfare.

The main argument for corporate taxes is that the companies have resort to public goods, consequently the government can require the price of them (Brown-Jackson 1996). At the same time governments try to make the economy attractive for capital investments, which is fundamental for GDP growth. Governments offer an attractive package of public goods and taxes to companies, because it has an influence on spatial decision of firms. This competition for the investments among governments results in lower tax rates than it would be desirable from the aspect of the social welfare.

The analysis studies the economic significance of tax revenues starting on a macro-level, then studying their impacts on micro-level points out the economic political relevance of the question. The two selected categories (revenues from a macroeconomic aspect and expenditures from microeconomic aspect) are corporate tax and social security contribution.

The structure of the paper is as follows: Section 2 summarizes the empirical and theoretical evidences concerning the effects of taxation on competitiveness and investments, Section 3 presents taxation policy in Hungary. Section 4 interprets methodology and regression model. Section 5 provides the results on the productivity of Hungarian firms during 1993-2009. Section 6 contains conclusions.

2. EMPIRICAL EVIDENCES

Some empirical studies proved that the tax elasticity of foreign direct investment (FDI) is negative in general. Since other conditions of investment are more similar in different countries, the role of tax incentives increases. Tax competition has a positive effect on the allocation of capital, but it has a negative effect on tax revenues, because it contributes to tax erosion. (Gropp, R.- Kostial, K. 2000)

As a consequence of tax competition, the tax burden shifts from mobile tax base (capital) into immobile tax base (labour force, consuming), meaning that residents have to finance the cost of those public goods which foreign investors use. The governments with larger tax base can finance their public expenditures by low tax rates. (Mike 2003).

Other experts say that the perfect capital mobility does not necessarily mean high sensitivity of capital movements (and especially FDI) to tax differentials. (Bénassy-Quéré et al 2003) The tax base relocation is proportionally more important in small countries than in large ones, and small countries have stronger incentives than large ones to cut taxes. (However, results of the cross-country studies appear to be very sensitive to the exact assumptions and methodology used.)

The impact is not symmetric to the signs of tax discrepancies. While lower tax rates in the host countries fail to significantly attract FDI, higher taxes tend to discourage new FDI inflows. The impact of positive tax differentials is not homogeneous regarding the tax scheme in operation in the investing country. In total, while narrow tax differentials do not discourage inward FDI, large tax discrepancies produce proportionally more important FDI outflows.

The transfer pricing and intra-firm debt contracting allow firms to locate profits where taxation is lowest, and to disconnect the location of activity and profit Firms can replace capital mobility with profit mobility. It means that tax differentials do not play a serious role in spatial decisions.

In post-socialist countries empirical researches on the effectiveness of introduced incentives for the attraction of FDI failed to prove any significant relationship between tax incentives and the level of FDI. (Beyer 2002, Feld-Heckemeyer, 2009) The importance of cost reduction was observable mainly at

export oriented companies. Tax preferences *per se* could not be effective tools to motivate foreign direct investors in CEE

In the case of inward FDI in the Czech Republic the result of the researches proved that tax incentives could not attract relevant investors into the country (J.S. Mallya et al 2002). The proper infrastructure, geopolitical reasons, transparent regulation, investment into education and R&D had priority over taxation policy.

In Hungary (Katona 2007) the explanatory power of corporate tax rate was robust concerning FDI inflow in short time but its long-term effect on FDI stock was irrelevant.

The host country has to have a well-developed administrative system as well, that can help the investors to realise their projects without additional administrative costs. On the other hand, the inflow of FDI contributed to the growth of GDP and to the successful restructuring of the economies in Central-Eastern Europe. (Khac- Sedmihradsky 2001). Ramcharran (2000) drew the attention to the importance of the legal system and country risk in the region.

Edmiston et al(2003) raised the question of taxation in an initiative way in Central Eastern Europe. The study tried to find the connection between the tax system, the law of tax and thevolume of FDI in the region examining the effects of the changes in tax rates (increasing or decreasing), the changes in the definitions of taxes, the range of exceptions, the modifications of the tax base, and the amount of adverse direction of changes. The research involved 25 countries and a six year long period. The authors concluded that the inconsequential changes, the incalculable legal system, the ambiguous legal concepts had a significant negative effect on foreign direct investors.

Tax policy involves - beyond the level of tax rates -, different tax advantages, tax incentives, international tax treaties, (*e.g.* avoidance of double taxation) as well. Tax policy has an effect also on the cost of capital and consequently on returns of investments. From the several types of taxes corporate tax, local business tax (HIPA) and social security contribution can be considered as the real costs for corporations. That is why it is evidential that competitiveness of a corporation is not independent from the tax policy of the host country.

3. TAXATION POLICY IN HUNGARY COMPARING TO ITS RIVALS

Although the literature failed to prove the existence of a significant correlation between the tax rate and capital inflow, CEE countries are running a tax race for investors and take turns in offering the highest benefits and tax cuts to them.

In competing countries, the legal frameworks has already been harmonised with EU legislation before EU accession. Foreign investors enjoyed the

same rights as their domestic peers. The freedom of capital inflows and capital and profit transfers were all provided for in Central and Eastern Europe. Consequently, it is the field of taxes where a significant difference can be captured in respect of competitiveness.

Comparatively, Hungary - and its regional rivals as well - is in the mid-course of OECD countries if the proportion of its total yield of taxation to the GDP is taken into consideration. This is due to the fact that CEE countries are below the OECD average regarding the share of income tax revenues in the GDP, but while the extent of the profit tax may be half of the European average, the proportion of consumption taxes considerably exceeds the average. (This does not deteriorate the competitiveness directly because its burden may be shifted onto the final user).

Table 2nd: Total tax revenue as a percentage of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Czech Republic	35,3	35,6	36,3	37,3	37,8	37,5	37	37,3	36	34,8
Hungary	38,5	37,9	37,8	37,8	37,4	37,4	37,2	39,7	40,2	39,1
Poland	32,8	32,6	33,1	32,6	31,7	33	34	34,8	34,3	..
Slovak Republic	34,1	33,1	33,3	33,1	31,7	31,5	29,4	29,4	29,3	29,3
Slovenia	37,5	37,7	38	38,2	38,3	38,6	38,3	37,8	37,2	37,9
OECD average	35,5	35	34,7	34,7	34,6	35,2	35,4	35,4	34,8	…

OECD statistics

In the early nineties, tax revenues as a percentage of the GDP were in line with the OECD average even in Hungary and Poland, but due to the tax competition among the countries, these indicators decreased significantly. Hungary, the country with the highest figure, reached two thirds of the OECD average while, the Slovak Republic, the country with the lowest tax revenues, failed to reach even half of that level.

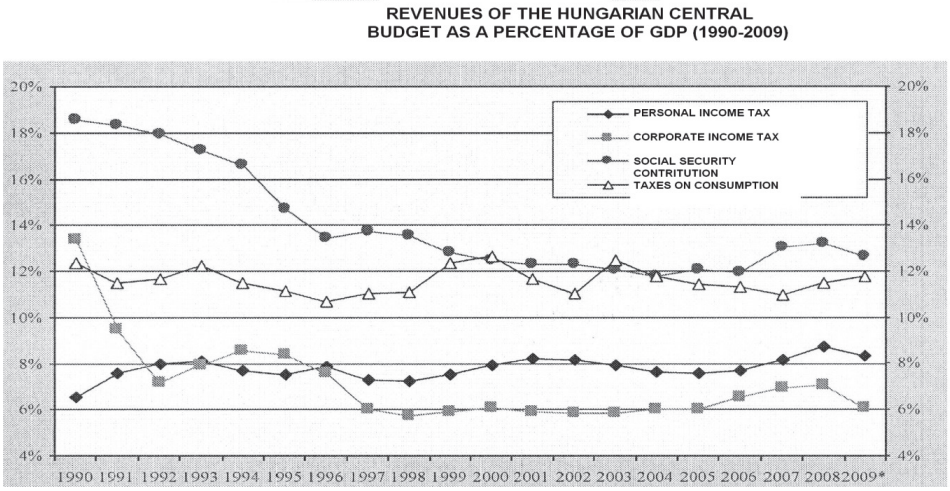
Table 3rd: Taxes on income and profits as a percentage of GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Czech Republic	8	8,6	9	9,5	9,5	9,1	9,1	9,4	7,9	7,4
Hungary	9,3	9,7	10	9,3	8,8	8,8	9,1	10	10,4	9,6
Poland	6,8	6,4	6,3	6	5,9	6,4	7	8	8,1	..
Slovak Republic	7	7,1	6,6	6,7	5,7	5,6	5,7	5,8	6,2	5,6
Slovenia	6,9	7,1	7,4	7,6	7,8	8,3	8,7	8,8	8,4	7,9
OECD average	12,7	12,4	12	11,8	11,9	12,4	12,7	12,9	12,5	…

OECD statistics

In Hungary, indirect taxes and/or social security contributions represent the greatest proportion of the major revenues in the budget. In the past, the revenues in the budget from the employers' contributions showed a continuous and relative decline. The revenues from personal income tax have been growing slightly. The share of the corporate tax in the revenues of the budget is very small. However, it should be noted that parallel to the steady growth of economic performance, the volume of these revenues is increasing dynamically, and its extent determines the willingness to venture.

Graph 1



Source: ECOSTAT

The Hungarian governments made serious efforts to motivate investors with tax reductions and control of wages increase. In the period before the EU accession, the magnitude and scope of tax allowances and subsidies also played an important role besides tax rates. In the competing countries, tax allowances were available to foreign investors on nearly identical terms (export oriented production, job creation, minimum investment – usually 5 to 10 million USD – for 10 years). The option to set up special economic zones was still availableafter the EU accession. These areas are intended to help the development of certain regions of a country by enticing foreign capital. The tax cuts produced a loss in fiscal revenue, and this loss needed to be compensated for by a welfare decrease.

3.1. CORPORATE TAX

Among the different types of taxes corporate tax has an outstanding importance for the investors because it is a real cost for them.

Hungary set a corporate tax rate that was extraordinarily low not only in comparison to the EU average (30–35 %) but compared to the tax rates of other Central and Eastern European countries as well. After the initial 40 % in the beginning of '90s, Hungary's corporate tax rate was reduced dramatically from 36 to 18 per cent in 1995. This rate was the lowest in the region in the late nineties. From 2004 business only paid a 16 % tax on their profits. In 2006 this tax rate became progressive; under 5 million HUF revenue it decreased to 10%, but 5 million HUF plus it remains 16%. This system remained until 2010, when the upper rate increased to 19%.

As shown in Table 4, Hungary retained its competitive advantage in respect of corporate tax in the 21st century as well, since Slovakia and Poland (and later Czech Republic) were the only rival countries that introduced a similarly low tax rate. (Just to compare, the corporate tax rate was 35 %t in the USA, 30 % in the UK and 26 % in Germany in 2007.)

After EU accession a new challenge emerged and the contest entered into a new phase as many countries introduced a flat tax. Although most of these countries are in Central and Eastern Europe, Hungary is not among them. (Estonia, Latvia, Lithuania, Romania and Slovakia introduced a flat tax, too.) As a flat tax regime is simple, easy to manage and last but not least involves a low rate, it provides the most attractive environment to companies.

Table 4t: Corporate tax rates in CEE (%)

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Czech Republic	31	31	31	31	28	26	24	24	21	20	19	19
Estonia	26	26	26	26	26	24	23	22	22	21	21	21
Hungary	18	18	18	18	16	16	17.33 (16.0)	20.0 (16.0)	20.0 (16.0)	20.0 (16.0)	19	19
Poland	30	28	28	27	19	19	19	19	19	19	19	19
Slovak Republic	29	29	25	25	19	19	19	19	19	19	19	20
Slovenia	25	25	25	25	25	25	25	23	23	21	20	20

www.oecd.hu

In Hungary, the legal environment and corporate law is harmonised with the EU norms, i.e. foreign investors are entitled to have the same rights as do-

mestic investors. However, at the beginning of the '90s, foreign companies were entitled to special advantages. Companies with at least 30 % foreign contribution, (the volume of the investment had to be over 50,000,000 HUF, about 500,000 USD) could reduce their tax liability by 60 % in the first 5 years of their operations and by 40 % in additional 5 years. This system was repealed in 1993. Yet, in the next year the government introduced for ten years an exemption from corporate tax for reinvestments exceeding 500 million HUF in Hungary. Since 1998 the investors who invest at least 10 billion HUF in less developed areas, are eligible for a 10-year-long tax holiday, if the investor creates 500 new jobs and the turnover grows annually by at least 5%. These incentives were available until 2011.

The Hungarian government also established a few special economic zones in regions with high unemployment, which grant 5-year-long tax holidays. These regions were attractive because of the low threshold of the investment to qualify for the advantages.

Hungary has a special law regarding offshore companies as well. Therefore, this form of harmful tax competition appeared on the OECD list. Such a company can tax its profit by a 3% rate, and should have the following characteristic:

- none of the owners is a Hungarian resident,
- its management members are mostly Hungarian residents,
- does not have interest in any other Hungarian companies,
- is audited by a Hungarian company,
- operational expenses are financed from a bank account in Hungary

This preferential system was for companies registered by 2000 until the end of 2005 and for companies registered later but meeting the requirements until the end of 2003.

The customs free zones, which were preferable for foreign enterprises, are special types of allowances because these fields treated as foreign territory, thus, they are not subject to the Hungarian taxation system. Therefore, foreign enterprises which were established in customs free zones did not take advantage from the low Hungarian corporate taxes and other tax allowances.

3.2. SOCIAL SECURITY CONTRIBUTION - COST OF LABOUR

In order to judge the capital market competitiveness of a country based on the cost of labour, changes of multiple factors must be taken into consideration simultaneously. These factors are as follows: net value of wages, changes

of income tax obligations and social security contribution levied on wages, other contributions payable by employers and last but not least the changes of labour productivity.

Gross wages are fundamentally determined by the rate of income tax and employee contributions charged on net wages. In the region, Hungary has the highest percentage marginal tax rate (personal income tax and social security contributions) of employees charged on average wages. In the 21st century, these rates have been consistently above 50 percent while counted at an average, the related burdens are 10 per cent lower in the other countries of the region. By introducing a flat tax, the Slovak Republic reduced the overall rate of taxes charged to employees to 38.5 per cent by 2007 which more or less harmonises with the OECD average (37.7 per cent).

From the employer's viewpoint, the rate of social security contribution and employer contribution are more important as these levies are payable exclusively by the employer. Social security contributions charged on wages are nearly identical in the countries under review and match the EU average (social security contributions in EU countries range from 25 to 35 per cent). The Slovak Republic continues to be an exception with reducing one of the highest rates, 38 per cent to less than 15 per cent over 10 years.

If we were to pass a judgement strictly on the basis of percentages, we could conclude that the overall personnel- related expenditures of businesses operating in Hungary is higher than that of their Western or Central European peers (Schlett, 2003). This approach can be especially damaging for a "superficially informed" foreign investor when making investment decisions.

It is a fact, however that the costs of wages, i.e. the calculation base of any income tax and other employer contributions charged on wages are far below the European level in the region. Average gross wages in the euro zone were 8 times higher than Hungarian wages. Then due to economic growth, this multiplier dropped to five (Eurostat).

In connection with the revenues of contributions, the considerable reduction of labour costs was a high priority in all governmental program in Hungary. The governments intended to reduce the employers' labour costs to increase competitiveness. The social security contribution an employer is liable to pay by wages is reduced gradually from 44% to 29 % in the '90s, which exceeds the EU average. The social security contribution in the EU ranges from 25 % to 30 %.

It is worth mentioning that the proportion of personal costs within the total operating costs at foreign enterprises decreased from 1996 to 2000. This fact indicates the declining relevance of this type of production cost.

The relevance of the labour cost cannot be analysed separately from the productivity of the enterprises. In the period indicated, the rate of the foreign enterprises did not exceed 12% of the whole venture sector. In spite of this, their revenues and contribution to the GDP are more than 50% of the total performance of the companies in Hungary. The productivity of the foreign enterprises increased to greater extent than labour costs in the same period. In the measure of the profitability, foreign enterprises also overshot the efficiency of the Hungarian firms.

4. METHOD, REGRESSION MODELL

This research is based upon a linear regression model. The methodology used a database of Hungarian enterprises made by ECOSTAT, which represents close to 90% of the firms in the country. The average number of firms in this database is close to 4800 for each year, but includes entries onto and exits from the market. The period covers 17 years between 1992 and 2009, 11,5 years before the date of EU integration (1st of May 2004) and 5,5 years after it. The records contain all relevant information from annual reports, e.g. balance sheets, profit and loss figures, etc.

In the regression model, the proxy for productivity was the total factor productivity (TFP), which was calculated on the basis of a standard Cobb-Douglas production function. This allowed for analysis of the interaction between TFP growth on the one hand, and corporate taxes, social security contribution, tax allowances and other possible determinants of productive efficiency on the other. The impact of taxes on total factor productivity in Hungary was assessed in all sectors and in the total period as a whole.

The following regression equation is estimated:

$$Yt = b0+b1Cijt+b2Lijt+b3CITijt+b4ALLOWijt+b5SSCijt+b6LCijt+b7ICijt+eijt$$

The definitions are as follows:

Y: the real output of firm *i* operating in sector *j* at time *t*, calculated by net sales

C: the capital of firm *i* operating in sector *j* at time *t* defined by the value of tangible fixed assets

L: the labour of firm *i* operating in sector *j* at time *t*, expressed by number of employees

CIT: the paid corporate income tax of firm *i* operating in sector *j* at time *t* determined as the difference between profit before tax

and profit after tax (this difference reflects the effect of possible modifications of tax base as well)

ALLOW: the resorted tax allowances of firm *i* operating in sector *j* at time *t*

SSC: the paid social security contribution of firm *i* operating in sector *j* at time *t*:

LC: the long term credits of firm *i* operating in sector *j* at time *t*

IC: credit for investments of firm I operating in sector j at time t

The model includes long-term credits, and investment credits as well, because these factors can modify the effect of taxation since paid interests of these credits reduce the tax base. Consequently those firms, which finance their investments from credits, will pay less corporate income tax and the decreasing tax rate won't have essential impact on them.

In order to examine the effects of the ownership we estimated the regression model on the base of domestic and foreign firms separately as well.

5. RESULTS

The aim of the regression model was to reveal the potential effect of corporate tax and social security contribution (as real costs) on Hungarian economy, productivity and competitiveness during the period of 1993-2009. In the framework of a microeconomic analysis, the model sought to verify or reject the following research hypotheses:

H1: The productivity of firms did not increase linearly with the decrease of corporate tax.

H2: The productivity of firms did not increase linearly with the decrease of social security contribution

H3: Tax allowances had more positive effect on foreign firms than on domestic companies, but corporate tax and social security contribution had neutral effect on the productivity of foreign enterprises.

Results of the regression are in Table 5 and 6.

Table 5: Coefficients (All firms)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	6066,013	268,888		22,560	,000
L	-5,603	,148	-,240	-37,846	,000
ALLOW	34,062	,406	,377	83,923	,000
IC	,196	,072	,014	2,711	,007
LC	-,643	,024	-,163	-26,444	,000
CIT	3,274	,061	,232	53,571	,000
SSC	23,764	,508	,435	46,790	,000
C	,601	,019	,260	31,945	,000

Table 6:

	Coefficients (Domestic firms)					**Coefficients (Foreign firms)**			
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta			B	Std. Error	Beta	
(Constant)	5578,115	157,444		35,429	,000	1476,204	649,541		2,273
L	-2,402	,079	-,297	-30,265	,000	-8,068	,599	-,123	-13,473
ALLOW	13,351	1,268	,067	10,533	,000	24,486	,613	,285	39,938
IC	,502	,085	,043	5,911	,000	-1,865	,125	-,125	-14,975
LC	-,410	,014	-,264	-28,305	,000	,250	,065	,038	3,865
CIT	1,733	,096	,122	18,090	,000	2,364	,096	,169	24,693
SSC	9,594	,311	,445	30,869	,000	51,113	1,163	,560	43,944
C	,495	,013	,493	39,495	,000	,474	,038	,144	12,629

The adjusted R square of the model is 0,530, which means a good explanatory power. According to their robustness the priority order of the variables are as follows: social security contribution (positive effect!), tax allowances, capital, labour (negative effect!), corporate income tax (positive effect!), long-term credits (negative effect), and investment credit.

The capital and labour input did not play a determining role in the performance of the enterprises in the total database. In all examined data, the robustness of these explanatory variables was low ($beta_C$= 0,26 $beta_I$= -0,24) and in the case of labour the effect was negative. The cause of this unexpected correlation is that the panel contains all sectors, and the different sector characteristics (industry is capital intensive, service is labour intensive) extinguish each other. Another possible explanation of this result is that in Hungary the

capital intensive manufacturing sector was dominant and productive in the investigated period. This means that in using more capital, and employing more workers, enterprises did not stand a better chance of increasing the volume of their sales, it depends on the sector characteristic.

From the point of view of the research, these traditional factors and their effects are not essential. The research focuses on the impact of taxation on the total factor productivity in Hungary. The robustness of these explanatory variables, and the whole model in the sampled period was appropriate, and the correlation of all factors with the volume of net sales was significant.

H1: The productivity of firms did not increase linearly with decrease of corporate tax.

Decreasing corporate tax rate did not generate growth in the volume of the sales of firms; the results support just the opposite of this expectation. The robustness of corporate income tax was low and it had a positive effect on productivity of the firms. This fact shows that corporate income tax did not have an essential impact on the productivity of the companies and the rate of it did not discourage the firms from their activity. Government's tax policy does not reach its goal. The investigation confirmed the first hypothesis.

H2: The productivity of firms did not increase linearly with the decrease of social security contribution

Similar conclusions to the corporate income tax have been made in case of social security contribution. Here the correlation between net sales and this tax burden shows a positive number and the explanatory power of it is strongest among the variables. It means that contrary to the general point of view the comparatively high social security contribution in Hungary doesn't reduce the productivity of the firms. Higher contribution reflects higher wages and it assumes higher qualification of the labour force. Consequently we can suppose that qualified human capital is much more important concerning productivity, than its cost.

H3: Tax allowances had more positive effect on foreign firms than on domestic companies, but corporate tax and social security contribution had neutral effect on the productivity of foreign enterprises.

As it was predictable the tax allowances had stronger correlation with net sales in the case of foreign firms than that of domestic corporations. Tax policy, as mentioned above, preferred foreign investors to domestic ones. The results verified this part of the hypothesis. Concerning the other statement of this hypothesis only the effect of corporate income tax proved irrelevant to the productivity of foreign firm. This fact is an evident consequence of tax preference which foreign corporations enjoyed before EU accession. At the same time the

result rejected the assumption that social security contribution is not essential to the productivity of foreign enterprises. The correlation of this factor is greater than in case of domestic firms, but the direction of this effect is positive. The explanation of this phenomenon is similar to the above mentioned reasons, qualified labour force was the relevant factor in the productivity of foreign companies.

We have to note that the effect of long-term credits was negative on productivity throughout the database, because the interest of Hungarian credits were so high which could eliminate the possible profits of the domestic firms.

6. CONCLUSIONS

In the last two decades Hungarian government - like its regional rivals - made serious efforts to develop the productiveness of the corporations by participating in tax competition. The empirical evidences did not prove that tax reductions and tax incentives *per se* could enhance the attractiveness of the capital market and motivated the foreign investors either in the region or in Hungary. At the same time tax competition contributed to the erosion of tax revenues in all countries in CEE.

This study tried to reveal whether tax policy had any positive impact on the productivity of the enterprises in Hungary. The microeconomic examination focused on the impact of corporate income tax, social security contribution, and tax advantages. The model investigated these effects separately on the domestic and foreign firms as well. The regression model proved all hypotheses concerning the impact factors. The result of the regression supports the assumptions that the productivity of the companies is independent from tax policy. But at the same time, it is very important to note that tax allowances contributed to the competitiveness of foreign firms in Hungary.

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THE IMPACT OF REVALUATION ON BEX INDEX CALCULATION FOR STOCKS LISTED ON BELGRADE STOCK EXCHANGE

Saša Muminović
Julon d.d. Ljubljana, Aquafil Group, Slovenia
Vladan Pavlović
Megatrend University, Graduate School of Business Studies Belgrade, Serbia

ABSTRACT

As use of BEX in the region increases, it has also become important to understand what could influence the calculated value and how that influence could be mitigated. In this paper it has been shown that there is a significant positive correlation between the changes in BEX index values and the changes in share of revaluation reserve in capital on the observed sample. However, the significance of excluding the revaluation is important only if the company's BEX value is close to the next, higher, rank. Also, if the company has negative values of BEX index the excluding of revaluation from calculation is irrelevant.

KEY WORDS: *BEX index, revalorisation, models for bankruptcy prediction, models for assessment of the creditworthiness, Belgrade Stock Exchange*

1. INTRODUCTION

The anticipation of a potential bankruptcy, i.e. signalization of potential business and financial difficulties has always been a subject of high interest. It also represents one of the basic tasks of financial analysts. Although BEX has been developed on the paradigm of the Croatian capital market, its use in the region is becoming increasingly important. Croatian capital market is in its characteristics much closer to the Serbian one than the capital market in the U.S. or in the UK where the majority of the models for predicting bankruptcy and assessment of creditworthiness were developed. Why is it important to

test the revaluation (hereinafter used as a synonym for revalorisation) impact on BEX index? The first reason lies in the fact that during the development of the BEX model impact of the revaluation of fixed assets on the ratios and the intensity of the impact were excluded before discriminant analysis has been used. (Belak, V. 2011, pp. 314). Secondly, BEX is an accounting based model. *Such models may require redevelopment from time to time to take into account changes in the economic environment to which they are being applied. As such, their performance needs to be carefully monitored to ensure their continuing operational utility*. (Mensah, 1984, pp. 380-395). And the third reason is connected to revaluation itself. Subsequent to initial recognition of an asset at cost, classes of property, plant and equipment may be carried at revalued amounts. The revalued amount should be the fair value - the market price determined by appraisal. If the allowed alternative treatment is used, revaluations should be made regularly so that the carrying amount of the asset does not differ materially from the fair value at the Balance Sheet date (IAS 16).

The importance of revaluation is not only connected to accounting issues. Several researches, for example, in Brazil and UK, have demonstrated that revaluations of fixed assets are positively related to changes in future performance measured by an operating income. Also, revaluations are also significantly positively related to stock prices showing that revaluation reserves are value relevant ((Lopes, A.B. & Walker, M., 2012) & (Aboody, D., et al. 1999)).

Although revaluation is not a change in the economic environment, it is a change in balance sheet without cash flow and it has impact on company's performance. For a new and widely-used model like BEX, this kind of analysis is important for further development.

2. DESIGN / METHODOLOGY / APPROACH

We have tested the sensitivity of BEX index on revaluation on a sample of Serbian companies. Calculations for stocks that represent the Serbian capital market are based on data published in prospectuses on the website of Belgrade Stock Exchange. Stocks of non-banking sector which entered into the composition of Belexline index during the period 2006-2010 were included in the calculation. 46 companies which have the revaluation in their financial statements were chosen this way, or 134 financial statements. As always, we have to emphasize that the lack of reliable data is a constant problem influencing all analyses on Serbian capital market. The original sample was divided into those with negative and those with positive BEX index. We have observed the degree of relationship between changes in BEX index due to the revaluation share in total assets, fixed assets and the revaluation share reserve in capital. The samples were tested on heteroskedasticity and the assumption was rejected.

Based od described problem, we have set out basic hypothesis that we have seek to prove in the empirical part of the research:

H1: Revaluation has a significant impact on the value of BEX index because of its role in the balance sheet to increase the value of revalued assets on the one hand and the increase of capital on the other.

The aim of this paper is to establish how significant the impact of revaluation on BEX index calculation is.

3. THEORETICAL BACKGROUND OF BUSINESS EXCELLENCE MODEL – BEX INDEX

The Business Excellence Model – BEX index – represents models based on balance indicators developed for the capital market in Croatia. The model tends to enable a fast and simple evaluation of a company's solvency. (Belak, V. & Aljinović-Barać, Ž. 2007, pp.17).

The BEX index is calculated according to the following formula:

$$BEX = 0.388\ ex_1 + 0.579\ ex_2 + 0.153\ ex_3 + 0.316\ ex_4,$$

Where:

ex_1 – Earnings before Interest and Taxes/Total Assets

ex_2 – Net Profit /Equity Capital x capital price

ex_3 – Net Working Capital /Total Assets

ex_4 – 5 x (Net Profit +Depreciation + Amortization) /Total Debt

Extended as:

BEX = 0.388 x EBIT / Total Assets + 0.579 x Net Operating Profit /Equity Capital x capital price + 0.153 x Net Working Capital /Total Assets + 0.316 x 5 x (Net Profit +Depreciation + Amortization) /Total Debt

Companies with the BEX index higher than 6.01 are classified as the world class companies, between 4.01 and 6.00 as excellent – a candidate for the world class, between 2.01 – 4.00 as very good, 1.01 – 2.00 as good, 0.00 – 1.00 are in the border area, and companies with the BEX index lower than 0 as companies whose existence is endangered.

The original formula was changed in 2008 (Belak, V. & Aljinović-Barać, Ž. 2008, pp. 31) when in parameter ex_2 – net profit was replaced with net operating profit. Further adjustment was made with correction for avoiding revaluation effect in 2011 (Belak, V. 2011, pp. 314):

BEX_R = 0.388 x (EBIT + Rp) / (Total Assets - Rr - Dt) + 0.579 x (Net Operating Profit + RAp) / (Equity Capital – Rr) x capital price + 0.153 x Net Working Capital / (Total Assets - Rr – Dt) + 0.316 x 5 x (Net Profit +Depreciation + Amortization) / (Total Debt – Dt)

Where:

Rp – revaluation reserves transformed into retained earnings

Rr - revaluation reserves

Dt – deferred taxes on profit

RAp – revaluation reserves from depreciation transformed into retained earnings

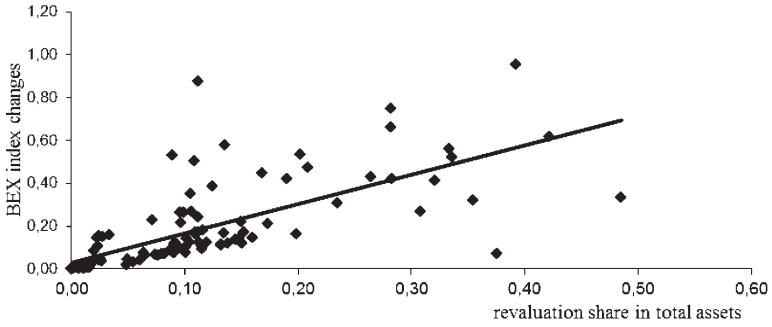
4. RESULTS OF THE RESEARCH

4.1. SAMPLE WITH POSITIVE VALUE OF BEX INDEX

First observing sample was stocks with positive BEX values – 42 stocks i.e. 110 financial statements. The average increase in values of BEX index after applying modified formula was 17.16%, (0.210 points) with standard deviation of 0.2.

The degree of relationship between changes in BEX index due to the revaluation share in total assets for a selected sample of balance sheets with positive value of BEX was 0.72, which shows medium positive correlation (Chart 1). The equation of regression line is Y= 0.029 + 1.368X. A statistical measure of how well the regression line approximates the real data points or **coefficient of determination was** 0.52. Values of t-tests and F-test are presented in Table 1.The average revaluation share in total assets for selected sample was 10.42% with standard deviation 0.106 and median value of 0.09081.

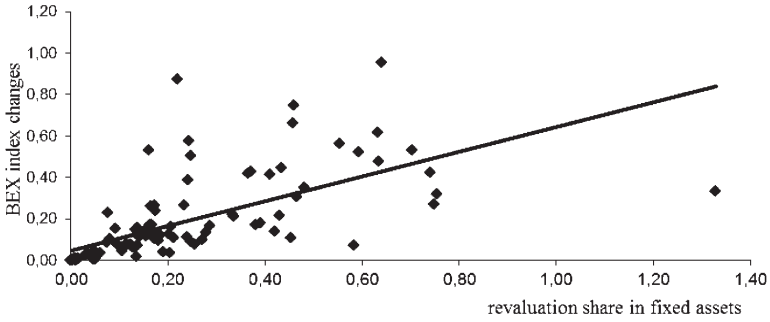
Chart 1: BEX index changes related to the revaluation share in total assets



Source: Authors` calculation

The relationship between changes in BEX index due to the revaluation share in fixed assets for a selected sample of balance sheets with positive value of BEX was 0.66, leading to the conclusion that there is medium positive correlation between them (Chart 2). **Coefficient of determination was** 0.43, menaning that the regression line approximates the real data points by only 43%. The average revaluation share in fixed assets for a selected sample was 21.12% with standard deviation 0.223 and median 0.1554.

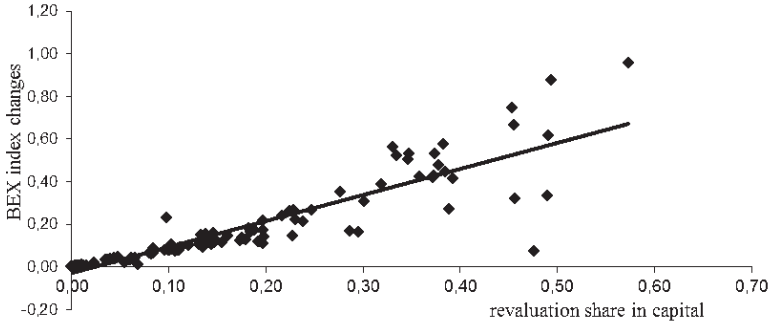
Chart 2: BEX index changes related to the revaluation share in fixed assets



Source: Authors' calculation

The relationship between changes in BEX index due to the revaluation share in capital for selected sample of balance sheets with positive value of BEX was 0.89 - the correlation was strongly positive (Chart 3). The equation of regression line is Y= -0.028 +1.220X. **Coefficient of determination was** 0.80 which means that the regression line approximates the real data points very well, and better then in the previous two cases. The average revaluation share in capital for selected sample was 16.35% with standard deviation 0.1478 and median 0.1359.

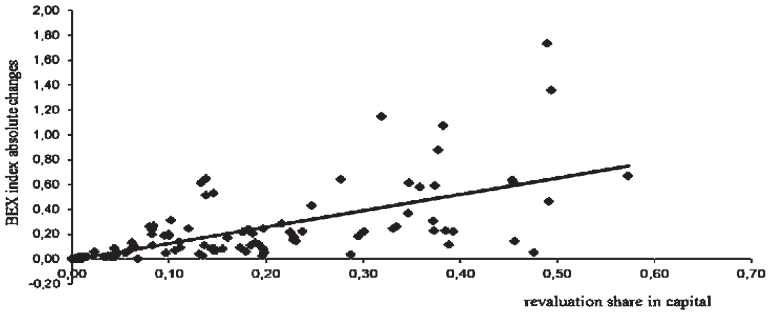
Chart 3: BEX index changes related to the revaluation share in capital



Source: Authors' calculation

The relationship between revaluation share in capital and absolute changes in BEX index was lower. The correlation was medium positive (0.66) with **coefficient of determination of** 0.44 (Chart 4).

Chart 4: BEX index absolute changes related to the revaluation share in capital

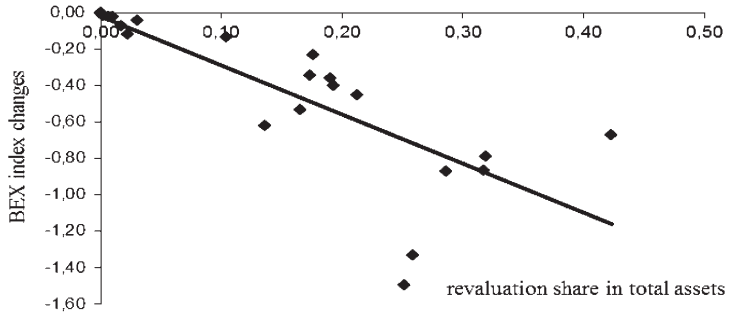


Source: Authors` calculation

4.2. SAMPLE WITH NEGATIVE VALUE OF BEX INDEX

Observing the sample of stocks with negative BEX values (14 stocks i.e. 24 financial statements) the relationship between changes in BEX index due to the revaluation share in total assets, fixed assets and share in capital, a very strong negative correlation in all three cases could be seen. The correlation coefficient for BEX index changes related to the revaluation share in total assets was -0.80 (coefficient of determination 0.65), whereas correlation coefficient for BEX index changes related to the revaluation share in capital was -0.86 (coefficient of determination 0.75) – Charts 4 and 6. Values of t-tests and F-test are presented in Table 2.

Chart 4: BEX index changes related to the revaluation share in total assets

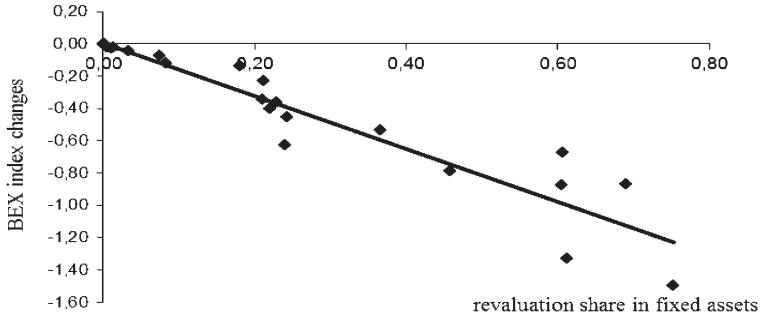


Source: Authors' calculation

The average revaluation share in total asssets for a selected sample was 13.75% with standard deviation 0.1284 and median value of 0.151, and the average revaluation share in fixed asssets for selected sample was 24.35% with standard deviation 0.2486 and median 0.2108 (Table 4).

However, the strongest connection can be seen between changes in BEX index due to the revaluation share in fixed assets. Correlation coefficient was -0.94 (coefficient of determination 0.89) – Charts 5. The average revaluation share in capital for selected sample was 19.43% with standard deviation 0.1718 and median 0.1977.

Chart 5: BEX index changes related to the revaluation share in fixed assets

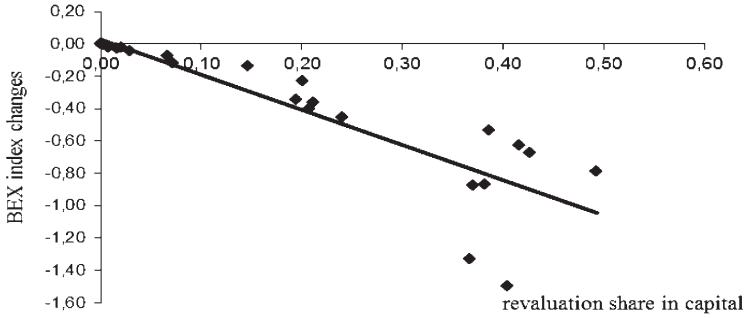


Source: Authors` calculation

It must be emphasized that elimination of revaluation from the BEX formula for the companies/stocks with negative BEX index would not improve/ increase the value of the index; on the contrary, it would only deteriorate it,

because there is strong negative correlation between them. The average decrease in values of BEX index after applying modified formula was -39.27%, (-0.272 points) with standard deviation of 0.42.

Chart 6: BEX index changes related to the revaluation share in capital



Source: Authors` calculation

5. DISCUSSION

Revaluation makes BEX index worse as a consequence of the fact that two of the Model's parameters are based on profitability (ex_1 and ex_2). The profitability always decreases if the value of the assets increases and the value of profit (gain) remains the same. On the other hand there is no debt to equity ratio in Model that would be improved with revaluation. For the presented sample the correlation between the share of revaluation in capital (as the highest value) and the changes in BEX index, is proven (Table 1).

But the real question is: *How significant is the impact of revaluation?* That impact is significant only if with elimination of the revaluation stock (company) could be put on the next level in the BEX index range (Table 3). The differences between BEX index ranks are 1, 2, 2 and 2, starting from zero.

Under the assumption of the equation of regression line Y= -0.028 +1.220X in Chart 4, for an average of 84% share of revaluation in capital company (stock) will gain an average of 100% increase of BEX index.

So, companies with high share of revaluation in the capital but low value of BEX index, with elimination of revaluation, will gain high percentage additional value but low absolute additional value. On the other hand, companies with high share of revaluation in capital and higher value of BEX index, with elimination of revaluation, will gain high percentage of additional value and higher absolute additional value. For both of them, absolute additional value is important only if BEX value is close to the next, higher, rank.

Table 1: Summary of relationship between changes in BEX index and the revaluation

	Sample of positive BEX values (110)					
BEX reaction on	**Multiple R (Correlation)**	**R Square (Determination)**	**t Stat**	**P-value***	**F test**	**Significance F**
Revaluation share in total assets	0.72	0.52	10,82	0,0000	117,27	0,0000
Revaluation share in fixed assets	0.66	0.43	9,15	0,0000	83,77	0,0000
Revaluation share in capital	**0.90**	**0.80**	**20,831**	**0,0000**	**433,95**	**0,0000**

** Significant at 1%*
Source: Authors' calculation

Table 2: Summary of the relationship between changes in BEX index and the revaluation

	Sample of negative BEX values (24)					
BEX reaction on	**Multiple R (Correlation)**	**R Square (Determination)**	**t Stat**	**P-value***	**F test**	**Significance F**
Revaluation share in total assets	-0.80	0.64	-6,31	0,0000	39,92	0,0000
Revaluation share in fixed assets	-0.94	0.89	-13,40	0,0000	179,60	0,0000
Revaluation share in capital	**-0.86**	**0.75**	**-8,11**	**0,0000**	**65,91**	**0,0000**

Source: Authors' calculation

Comparing balance sheets without negative value of BEX index, only 15 of the selected 110 or 13.6% was ranked better after elimination of revaluation impact (Table 3). For the second sample it was zero, and in totals 15 out of 134 – 11.2%. The average increase of BEX index was only 0.21 points, far from the requested number to make a difference.

Table 3: Changes in values of BEX index

BEX rank	BEX	BEXr	Delta
More then 6.01	0	1	+1;
4.01 – 6.00	8	8	+1; -1
2.01 – 4.00	23	27	+5: -1
1.01 – 2.00	32	35	+8; -5
0.00 – 1.00	47	39	-8
negative	24	24	0

Source: Authors' calculation

Table 4: Summary statistics

sample		Revaluation share in total assets	Revaluation share in fixed assets	Revaluation share in capital	BEX change in points	BEX change in %
110	Mean	10,42%	21,12%	16,35%	0,1635	17,16%
	Std. Error	0,0101	0,0213	0,0141	0,0141	0,0192
	Median	0,0908	0,1554	0,1359	0,1359	0,1079
	Std. deviation	0,1063	0,2233	0,1478	0,1478	0,2016
	Sam. variance	0,0113	0,0499	0,0219	0,0219	0,0406
	Minimum	0,0000	0,0001	0,0001	0,0001	0,0000
	Maximum	0,4853	1,3282	0,5733	0,5733	0,9557
24	Mean	13,75%	24,35%	19,43%	-0,2725	-39,27%
	Std. Error	0,0262	0,0507	0,0351	0,1331	0,0882
	Median	0,1510	0,2108	0,1977	-0,0729	-0,2866
	Std.Deviation	0,1284	0,2486	0,1718	0,6520	0,4320
	Sam. Variance	0,0165	0,0618	0,0295	0,4251	0,1867
	Minimum	0,0002	0,0003	0,0003	-3,1640	-1,4981
	Maximum	0,4232	0,7524	0,4928	-0,0001	-0,0003

Source: Authors' calculation

6. CONCLUSION

As the use of BEX index in the region is becoming increasingly important, it is also important to understand what could influence the calculated value and how that influence could be mitigated.

Although BEX was developed for Croatian market which is more similar to the Serbian than American or British, some problems may arise if bankruptcy prediction models are inappropriately applied. Study (Grice, J.S. & Dugan, M. T. 2001) has shown that *applying the models to time periods and industries other than those used to develop the models may result in a significant decline in the models' accuracies.*

And also, we must not forget Taffler's remark about z-score model which could be applied to all MDA - Multiple Discriminant Analysis models: Strictly speaking, what a z-score model asks is *does this firm have a financial profile more similar to the failed group of firms from which the model was developed or the solvent set?* (Taffler, R. 1983, pp. 296).

The hypothesis H1, of this research, was confirmed partly. Although there is a significant correlation between the changes in share of revaluation in capital on the observed sample, the significance of excluding the revaluation is important only if the company's BEX value is close to the next, higher, rank. Otherwise, there is no need for using the modified formula for elimination revaluation in the calculation of BEX index. Also, if the company has negative values of BEX index, the excluding the revaluation from calculation is completely irrelevant.

On the other hand, there are some remaining questions to be answered in the subsequent research. As two of the Model's parameters are based on profitability and the profitability always decreases if the value of the assets increases and the value of gain remains the same, the questions are: *What is the impact of investments (and how significant is this impact)? And how does the method of financing (debt or new capital increase) of those investments influence the value of BEX index?*

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MISREPRESENTATION OF FINANCIAL STATEMENTS; AN ACCOUNTING FRAUD CASE FROM TURKEY

Cenap Ilter
School of Business, Grant MacEwan University, Edmonton, Alberta, Canada

ABSTRACT

The objective of this paper is to show to the public in general and auditors in particular that in the absence of control there is always a risk of fraud. Fraud can be in various forms. Larceny may be the most obvious case of fraud, but fraud may be done in many other ways too. Balance sheet fraud or financial statements fraud is a broader issue, it is far fletched than a few hundred dollars of a larceny case. In financial statement fraud the deep down effect may be millions or billions of dollars. The paper has been designed based on a fraud theory. The author has observed the implications of a possible fraud in a real audit case. The fraud theory has been tested through on financial analysis and audit tests. The theory then been revised and the existence of a finacial statement fraud was proven. The paper explores that banks and group companies controlled by unreliable owners can lead to misuse of public`s funds in accordance with the directives of the owner. Public`s money can be transferred to other group companies in an illegal manner-in excessive amounts and never returned to the bank by means of applying different accounting fraud techniques. Auditors, who may audit group companies that include a bank or banks with deposit receiving and lending rights should pay attention to the transactions between the group`s bank and the other group companies. The lending may be excessive in amount and never paid back and the financial statements would be misrepresented covering various fraud schemes. The case that the paper deals with reflects the author`s own audit experiences. The names of the companies have been changed but not the essence of the events. From this perspective it sheds light onto the path of an auditor who happens to be in a similar situation.

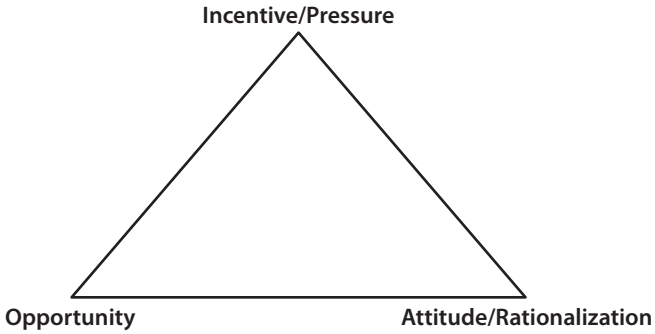
Keywords: *Interest capitalization, fraudulent representation.*

1. CONDITIONS OF FRAUD

Three conditions of fraud arising from fraudulent financial reporting and misappropriations of assets are described in Section 5135.012 of the Canadian

Institute of Chartered Accountants Assurance Handbook titled "The Auditor`s Responsibility to Consider Fraud and Error." As shown in Figure 1, these three conditions are referred to as the fraud triangle.

Figure 1



1. Incentives/Pressures. Management or other employees have incentives or pressures to commit fraud.
2. Opportunities. Circumstances provide opportunities for management or employees to commit fraud.
3. Attitudes/Rationalization. An attitude, character, or set of ethical values exists that allows management or employees to intentionally commit a dishonest act, or they are in an environment that imposes pressure sufficient to cause them to rationalize committing a dishonest act (Alvin A., Arens, Randal J., Elder, Mark S. Beasley, Ingrid B., Splettstoesser-Hoetgrep, 2005).

The cost of all frauds is extremely high. For example, when a company manipulates its financial statements, the market value of that company`s stock usually drops considerably, sometimes by as much as 500 times the amount of fraud. To further illustrate the cost of financial fraud, Table 1 lists the 10 largest corporate bankruptcies in U.S. history, the amount of each bankruptcy and the month and year each bankruptcy was declared.

Table 1 Largest Corporate Bankruptcies in U.S. History

Company	Assets (Billions)	When Filed
1.Worldcom	**$101.90**	**July, 2002**
2.Enron	**$63.40**	**Dec., 2001**
3.Texaco	$35.90	April, 1987
4.Financial Corp. of America	$33.90	Sept., 1988
5.Global Crossing	**$25.50**	**Jan., 2002**
6.Adelphia	**$24.40**	**June, 2002**
7.United Airlines	$22.70	Dec., 2002
8.PG&E	$21.50	June, 2002
9.Mcorp.	$20.20	March, 1989
10.Kmart	$17.00	Jan., 2002

The four companies whose names are bolded in Table 1, Worldcom, Enron, Global Crossing and Adelphia, were companies associated with massive financial statement frauds. In addition, six of the top ten bankruptcies in U.S. history occurred in 2002. In total, there was a record 186 companies with combined $369 billion in debt that filed for bankruptcy in 2002 (Albrecht et. al, 2007).

2. BACKGROUND INFORMATION

Before delving into the paper`s main story-Anetto Case, a brief background information will be given about the economic situation that Turkey was in in 2001 economic crises-the biggest crises that the country went through since the proclamation of the republic in 1923. The tensions that culminated in a crisis in late November 2000 were deeply rooted in Turkey's economic system, but the immediate cause was a combination of portfolio losses and liquidity problems in a few banks, which sparked a loss of confidence in the entire banking system. When the central bank decided to inject massive liquidity into the system in violation of its own quasi-currency board rules, it created fears that the program and currency peg were no longer sustainable, and the extra liquidity merely flowed out via the capital account and drained reserves. The situation seemed to stabilize in early 2001, as virtually all of the $6 billion in capital that had exited in the crisis flowed back and reserves were reconstituted. However, investors were demanding much higher interest rates than before, indicating an upward shift in the country risk premium. The result was record overnight interest rates, which peaked at close to 5,000% on February 21, 2001. The banking system, already greatly weakened by the first crisis, faced breakdown as the interbank payments system ceased to function altogether. The next day the government decided to float the lira, spelling the end of the

exchange rate-based stabilization program. Under the circumstances, floating the currency was probably the only solution available. The market confidence that would have been required to sustain the crawling peg strategy was not present (Alexandra Bibbee, 2001).

With regards to its commitment to IMF, the Government took action. After November 2000 and February 2001 crises, the total number of banks that either have been merged with other banks or liquidated by the semi governmental agency-Saving Deposits Insurance Fund (the Fund) has reached 24. The total number of branches closed was 1790.

3. LITERATURE REVIEW

Financial reporting fraud happened in many ways. Here are some examples from the literature review:

In the 1890s, Ham Huizenga, a Dutch immigrant, began hauling garbage at $1.25/wagon in Chicago. In 1968, Wayne Huizenga, Dean Buntrock, and Larry Beck founded Waste Management, Inc. and began aggressively purchasing many of the smaller garbage collection services across the country, as the descendant firm of Ham Huizenga. In 1971, Waste Management went public, and by 1972, the company had made 133 acquisitions with $82M in revenue. It had 60,000 commercial and industrial accounts and 600,000 residential customers in 19 states and the provinces of Ontario and Quebec.

In the 1980s, Waste Management acquired Service Corporation of America (SCA) to become the largest waste hauler in the country. In 1998, in a pivotal development point, Waste Management merged with USA Waste and moved its headquarters from Chicago to Houston. The merged companies retained the Waste Management brand. However, that year also brought trouble for the newly expanded company, in the form of an accounting scandal. Revelations of irregular accounting led to a major drop in stock price and to the replacement of top executives after a new CEO ordered a review of the company's accounting practices in 1998. The company had augmented the depreciation time length for their property, plant, and equipment, artificially inflating the company's after-tax profits by US$1.7 billion. Waste Management paid US$457 million to settle a shareholder class-action suit. The SEC fined Waste Management's independent auditor, Arthur Andersen, US$7 million for their role. (http://en.wikipedia.org/wiki/Waste_Management,_Inc.).

Bristol-Myers Squibb manufactures prescription pharmaceuticals in several therapeutic areas, including cancer, HIV/AIDS, cardiovascular disease, diabetes, hepatitis, rheumatoid arthritis and psychiatric disorders. Its mission is to "discover, develop and deliver innovative medicines that help patients pre-

vail over serious diseases." In 1999, President Clinton awarded Bristol-Myers Squibb the National Medal of Technology, the nation's highest recognition for technological achievement, "for extending and enhancing human life through innovative pharmaceutical research and development and for redefining the science of clinical study through groundbreaking and hugely complex clinical trials that are recognized models in the industry." In 2005, BMS was among 53 entities that contributed the maximum of $250,000 to the second inauguration of PresidentGeorge W. Bush. The company was involved in an accounting scandal in 2002 that resulted in a significant restatement of revenues from 1999–2001. The restatement was the result of an improper booking of sales related to "channel stuffing," or the practice of offering excess inventory to customers to create higher sales numbers. The company has since settled with the United States Department of Justice and Securities and Exchange Commission, agreeing to pay $150 million while neither admitting nor denying guilt. (http://en.wikipedia.org/wiki/Bristol-Myers_Squibb).

CIT, computer leasing group which is one of the Fortune 500 global commercial finance companies in US that provided financing and leasing to many indutries worldwide. Its 2004 net income was USD754 million. CIT had its name involved in a fraud scheme in 2004. Niakan, Director of Asset Management Division of the company hired in 2000 diverted the resale of 2,500 computers to his unauthorized associates outside the company causing a loss of USD637,000. A financial analyst revealed that checks were written Niakan personally to purchase CIT`s off lease computers (Michelman et al., 2011).

In some cases the non financial measures (NFM) may play an important role to capture fraudulent reporting. On the other hand, manipulating other NFMs can be difficult to conceal because (unlike oil and gas reserves) NFM verification is often straightforward. For example, auditors can effectively verify the number of facilities, retail outlets, or employees. Still, there are several examples, such as HealthSouth, where the reported finacial performance was not supported by NFM data and the inconsistency was not noted by auditors or regulators (Brazel et al., 2009).

In the case of management that want to inflate earnings, the fraudulent credit increases revenue or reduces expenses to overstate income. The fraudulent debit, which must be concealed, must be to a balance sheet account, typically an asset account. This is a dramatic difference from the concealment of the misappropriation of assets. The perpetrator has to put the debit in the balance sheet account to achieve the goal of overstating the income. This property of fraudulent debits has significance for fraud detection. One consequence is that the fraud will accumulate in the balance sheet, and each year the accumulated effcet will be larger, and hence more likely to be detected (Carmichael, 2010).

Another aspect of the fraudulent representation is that the government white collars in the regulatory offices like SEC in US and Capital Market Board (CMB) in Turkey who are to unravel possible reporting crimes are not well educated or experienced as their counterparts in the private companies.

The obstacles to creating a regulatory Delta Force are familiar ones: pay and prestige. "The law firms offer money and status," says Max Stier, president of the nonprofit Partnership for Public Service. "Even when good people come into government service, many soon leave through the revolving door." Stier's Washington group runs programs to enrich government careers and encourage corporate employees to try public service. He has held legal jobs in all three branches and practiced with a Washington law firm. Stier acknowledges that government salaries will never compete with private-sector compansation. He observes that at many key agencies, the revolving door has spun all the more swiftly for the past generation as a bipartisan consensus celebrated the notion that the financial markets effectively police themselves and regulators should get out of the way. If we didn't know already, the Valukas report reminds us once and for all to drop that delusion. Done right, regulation promotes capitalism by deterring excess and fraud."Political leaders need to prioritize talent at agencies like the SEC, which historically hasn't happened," says Stier (Barrett, 2010).

4. ANETTO CASE

Anetto (the real names have been changed) case is related to one of those banks who was taken into custody by the Fund, namely ABC Bank. Empowered by the law, the fund did not only take the banks in custody but also all related party companies within the same group that the Fund deemed necessary in the circumstances. The Fund assisgned two auditors to uncover irregularities that might have possibly occured in AAH Holding-group of companies that included both Anetto and ABC. Anetto was taken over by the Fund on July 5, 2002. The auditors first conducted interviews with the existing personnel of the companies and performed regular controls required by law. The following is a quote from an external audit partner:"....And often times you can find out... by sitting down, looking them-the client`s personnel in the eye, and asking them a question. If you get a blank stare that probably tells you you`ve got a control problem because they are not even aware of it....in such cases) I`ve really got to do a lot more work because you don`t have the right level of review and supervision in closing the books. So, I always start with the client inquiry, no matter what, because you can just corroborate your own expectations." (Trompeter & Wright, 2010).

After holding some interviews with the managers of the group companies, the auditors realized that there were many irregularities, fraudulent misrepre-

sentations of financial statements in the group. They, then decided what companies to start with. From public governance point of view it was also a case of "control fraud" as the group`s bank misappropriated the funds deposited to it by general public by means of transferring the funds to its group-satellite companies and used it inappropriately in its futile investments and purchase of personal assets for CEO`s own pleasures. They were two auditors being responsible for 59 companies in the group under the umbrella of AAH. These banks had liquidity problems and were taken over by the government in order to reestablish the public confidence in the system. The total loss caused by ABC in U.S. Dollar terms as at March 15, 2001 when the bank was taken over by the Fund was $721 million. The total loss of the banks that were taken over by the Fund as at the end of 2004 was $27.8 billion which excluded interest. This resource has been provided as a loan to the Fund by the Treasury. ABC`s case occupied a 2.5% of the total amount of principal losses in these crises.

The auditors` findings in Anetto was a known fraud in the extant literature. The case, as explained below, was one of the interesting cases that was completed in 2004 showing that how the public`s money was used in group companies and how the accounting rules and existing laws were either circumvented or violated.

Based on what is discovered during your analysis, a fraud examiner will develop a theory—always assuming a worst-case scenario—of what could have occurred. The theory addresses one of the three major classifications of occupational (internal) fraud: asset misappropriations, corruption or fraudulent financial statements (Wells, 2003).

The auditors` assumption-fraud theory in this specific audit case was triggered by the change in Board Of Directors (BOD) names. They had seen many examples of fraud in the group when the owner of the group-EKA stepped down from the BOD of any company and replaced by other name(s). The name(s) replacing him in the BOD would render the required "fraudulent misrepresentation" services. And the following case was not an exception. In this specific case, the auditors have observed two major accounting manipulations. One was the violation of the Turkish Commercial Code and the other was the violation of Financial Leasing Law, both led to the misrepresentation of financial statements. Anetto was formed as a partnership under the name of Alfenetto Communication and Information Systems on June 26, 1998 with a paid up capital of USD1,797 by SU (25%), AA (25%), ZHN (50%) to produce, buy and sell computer hardware, software, materials, maintenance, installations, their import, and export and establishing domestic or foreign representative offices on this subject, providing internet services to persons and companies. On January 12, 2000 partner AA sold part of his shares to YA and ZB and the

company`s total number of shareholders became five. The first violation was as follows: Anetto was taken over by AAH group in year 2000 after a paid up capital increase to USD326,052. After the capital increase the company became a subsidiary of AAH. AAH, by holding the 51% of the shares took the control of the company and founders ZHN, SU, AA became minority shareholders. Capital increases were paid in cash by the shareholders to the company`s account with ABC Bank in the determined payment period.

The new percentage of ownership on June 13, 2000 was as follows:

Table 2

AAH	51.00%
ZHN	24.50%
SA	12.25%
AA	12.20%
YA	0.03%
ZB	0.03%
EKA	0.000015%
HE	0.000015%
MFT	0.000015%
Total	100.0%

Between June 22 and October 16, 2000 (BOD) of the company is composed of the following people:

EKA	President (owner of AAH).
MS	Vice president
MFT	Member
HE	Member
ZHN	member

On August 31, 2000 BOD member HE resigned and IS was appointed as the new BOD member. EKA has resigned from his seat of presidency of BOD on October 16, 2000 and CS was assigned as the new member. Both names were known to auditors who were involved in other manipulations and accounting frauds in various occasions within the same group. On October 16, 2000 ZHN and SA has sold some of their shares to AAH. After the sale the new shareholding structure was as follows (in thousands shares):

Table 3

AAH	159,999,997	80%
ZHN	20,000,000	10%
SA	10,000,000	5%
AA	9,900,000	5%
YA	50,000	0.025%
ZB	50,000	0.025%
EKA	1	0.000001%
HE	1	0.000001%
MFT	1	0.000001%
Total	200,000,000	100.0%

Three days after the resignation of EKA from BOD, on October 19, 2000, AAH sold 75% its sahares to three group companies, namely MSM Consultation, EYACHT and VIVA Publishing in equal portions thus providing a 20% (75% X 80% / 3) of ownership of Anetto for each company. EYACHT that was also being audited by the same audit team took a BOD resolution on November 2, 2000 on buying the shares of Anetto for USD259,004 by borrowing the same amount from ABC. EYACHT has paid it back to ABC on December 31, 2000 with interest. This sale has meant the auditors the following: If 20% of Anetto`s shares has been valued at USD259,004 that would mean the 100% of shares would be worth of USD1,295,020.

In order to explain the situation auditors needed to analyse the Anetto`s balance sheet. Anetto`s balance sheet as at December 31, 2002 had the following assets and liabilities:

Table 4

Liabilities (USD)	
ABC Bank-principle	1,126,165
ABC Financial Leasing-group company	410,192
Other group companies	683,654
Suppliers	630,205
Total	2,850,216
Assets (USD)	
Machinery and equipment	735,860
Construction in progress	1,451,212
Capitalized incorporation expenses	490,988
Total	2,678,060

On the outset, it seemed that the company had a deficit of USD172,156 which could be covered by a capital injection and good management. When auditors dug down the numbers they have identified that in machinery and equipment account there was USD657,551 capitalized payroll and internet expenses. In auditors` opinion these expenses would not bring any benefit to the company neither in the short run nor in the long run. Anetto was not a manufacturing company, it was a service provider, there was no need to capitalize the white collar payroll expenses or internet expenses. Internet and employee expenses were to be incurred in order to generate the main revenue flow of the company. The company did not have any inventory of manufactured goods. As a service provider white collar payroll and internet expenses were its core business costs which enabled it to create revenue. As a consequence of matching principle these expenses should have been expensed in the period related with earnings. Likewise in construction in progress account the auditors have identified that there was USD768,800 capitalized interest expenses. Again based on International Accounting Standards 23-Borrowing costs, capitalization of interest is possible on qualified assets. A qualifying asset is an asset that takes a substantial period of time to get ready for its intended use or sale. [IAS 23.5] That could be property, plant, and equipment and investment property during the construction period, intangible assets during the development period, or "made-to-order" inventories. [IAS 23.6] (http://iasplus.com/standard/ias23.htm). Since Anetto was an internet service provider, it would not be appropriate to capitalize the interest on loans and leasing borrowed from group companies. When excluded from the assets the total capitalization of USD1,426,351

the Anetto`s deficit in real terms was USD1,508,507. This practice of transferring the expenses from income statement and capitalizing them on the balance sheet and thus presenting the bank a rosy but misrepresented picture of the financial statements is a common practice in accounting fraud literature.

But when the misreporting is less material, we find the likelihood of misreporting increases with firms` use of bank debt. This result is consistent with the "debt covenant hypothesis" and suggets managers use aggresive accounting techniques to avoid covenant violations or to lower borrowing costs (Stanley & Sharma, 2011).

Anetto was not a profitable company neither in 2000 nor later in 2001 and thereafter. It had a loss in year 2000 and its total shareholders`s equity was positive USD851,000 on its preaudited balance sheet, its equity was further down to USD155,542 as at December 31, 2001 due its continued loss in 2001. Considering the company policy imposed by the AAH group of capitalization of payroll, internet access and interest expense transactions, Anetto had never been a profitable company since its acquisition by AAH in year 2000. Despite the fact that its financial statements were showing a loss, what was the incentive that the management decided to manipulate the accounting rules and presented a balance sheet with positive shareholders` equity as at December 31, 2000 and 2001 and how the Anetto`s total shares were valued at USD1,295,020 in October 2000?

The answer to that question lies in the fraud triangle theory. According to the theory, there was a absence of both internal and external control on ABC Bank. The bank lent money to group companies without scrupulously analysing their financial statements (non arms length transactions), both ABC and Anetto`s BOD members were under the influence of EKA-the owner of the group. The controls were lacking both externally on the government side and external auditors and internally on the Bank`s side, in fact the internal controls were overridden by the management both in ABC and in Anetto.

External auditors assess the risk of fraud through warning signs. A study by American reserachers provides guidance on the issue:"The lack of awerness of the warning signs of fraud is frequently cited cause of audit failure. If auditors better understood the signs of applied professional skepticism, they would decrease their risk of not detecting fraud. Knowing the most important warning signs should help auditors do a better job of assessing fraud risk (Heiman-Hoffman et al., 1996).

This vacuum of control provided an opportunity for the owner of the group. The incentive was in the form of cash. The group`s bank ABC was providing the cash, to buy the companies for possible need of manupulations to drain the money out of the bank, and the top managers of the group were

well paid by EKA to realize the transactions for him. And their attitudes and rationalization was a simple one. Who`s going to catch us? In fact they were right, non of them were jailed because of their wrong doings. What they did was an economic crime and economic crimes would be punished by economic means. They were banned to travel abroad unless they were acquitted in the commercial courts. Their belongings were sequestrated by the Fund if any found as registered on their names. So to speak, from their point of view, the benefits were overwhelming the risks taken.

CEOs with low risk aversion may hold more incentives and may be more likely to commit fraud. Another is monitoring difficulty. Firms with greater monitoring difficulty may use more incentives, but their greater monitoring difficulty allows more accounting manipulation. Another possible link is CEO power. Suppose that powerful CEOs overpay themselves using equity, and have to hold this equity to camouflage their excess pay. Then if powerful CEOs are more likely to commit fraud, there may appear to be a link between equity incentives and fraud (Core, 2010).

The internal auditors of the group-appointed by the Fund were not strangers to this manipulation of selling the shares of one group company to another over and above its real worth and getting the cash from the group`s bank ABC. In this case the money was paid back to the bank by EYACHT but this did not mean that the manipulation did not occur. On May 11, 2001, CS resigned from his seat and was replaced by UFA-another known name to the auditors as who was involved in other manipulations in different cases. On May 21, 2001 BOD decided to organize an extraordinary shareholders` meeting to appoint a new auditor (appointment of internal an auditor is required by the Turkish Commercial Code). In their extraordinary shareholders` meeting on May 30, 2001, the shareholders decided to appoint EOA-another known name to the auditors as the auditor to analyse year 2000 financial statements and read his report in shareholders` meeting to approve (or disapprove) year 2000 operations. Year 2000 shareholders meeting was held on August 29, 2001 and EKA was appointed to BOD as chairperson, UFA was appointed as deputy chairperson and RG as the new member of BOD-a known name to the auditors with manipulations involved in another group company. In the shareholders` general meeting the minority shareholders opposed the approval of the balance sheet and asked more detailed information related with some assets and liabilities. EOA-the auditor read his report, said that all activities were in line with the 75th article of the Turkish Commercial Code (TCC) meaning that the financial statements were prepared based on truth and transparent information. Because of the said reasons above, this was not the case. Despite of the fact of minority opposition, the balance sheet, the BOD and the auditor was approved. The auditors never agreed with EOA-The company`s legal auditor`s

reports, neither for 2000 nor for the years thereafter. The major issue in this report was the violation of TCC. According to the article 324 of the TCC, if the balance sheet is not showing the true financial position of the company and there were signs of the illiquidity and a possible bankruptcy of the company, then the BOD would have acted in another way. I.e. BOD would have gathered the shareholders and asked their opinion about the going concern issue of the company and whether they would inject extra cash into the company for its survival. If there was not any cash to come then they would have decided to liquidate the company and informed the commercial courts about the situation. Anetto`s BOD met on September 15, 2003 and made a resolution to authorize its managers to transfer its internet services by a protocol to another group company called Apazzo. At the time of the protocol Apazzo was not under the control of the Fund. Based on the BOD resolution, the company`s customer portfolio was transferred and all its machinery and equipment including the company`s logo were subleased to Apazzo. The BOD`s decision was against the Financial Leasing Law`s-FLL (law number 3226) article numbers 15 and 18. In accordance with the Law the lessee would neither sell nor sublease the equipment to another party, the machinery and/or equipment can only be transferred to another lessee provided that the lease agreement allows the transfer. In order to understand the FLL case we need to touch upon the concept of the law. According to the concept of the law, financial leasing was an alternative borrowing. In order to make it attractive the Value Added Tax (VAT, the counterpart of Government Services Tax in Turkey) rate is 1% in leasing transactions. This lower than common VAT rate (which is 18% in Turkey) makes leasing an attractive business. The 17% lower rate paid to the government is reflected in leasing interest rates which makes it an attractive financial tool for the investors. In the sprit of the law this VAT advantage is utilized by genuine parties (a lessee and a lessor) and it does not allow any other party (unless it is another genuine lessee) to take the advantage of lower VAT rates.

The term "earnings management" is used to describe managers intervening in the reporting of their own financial performance. It encompases a range of practices including:

Practices that are legal, violate no accounting rules or principles, and are generally viewed as ethical-such as structuring transactions with regard to their effect on the financial statements (leasing being a prominant example);... (Ball, 2009).

By subleasing the its equipment and machinery to Apazzo, Anetto`s management violated the FLL. Apazzo was not another genuine lessee. It was another group company, not being controlled by the Fund at the time of the event. So again this was another fraud of the AAH management. It was done in order to foist the assets of Anetto from the control of the Fund.

5. CONCLUSION

The case explores that owners and managers can meet at the fraud triangle. Their aggressiveness and endless passion may lead them to commit different frauds. This individual case shows a manupulation of 1.4 million USD, only a small part of the total cost of USD721 million, a price to be paid by the Turkish public from the AAH group. Despite the fact the government intervened to protect the public interest and tried to liquidate as much of the assets left as it could from each bankruptcy case, the owners still tried to foist their properties from the government. In this specific audit case, in the audit report the auditors have accused the prior BOD members for their wrong doings and annul the prior acquittals of the BOD members and the auditor. They said that the BOD purported a wrong image of the company by issuing a balance sheet in each year between 2000 and 2002 by unlawfully concealing the expenses in the assets and illegally subleasing the machinery and equipment of the company to another group company that were against the GAAP and Turkish Laws.

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THE EFFECT OF CONTINGENCY FACTORS ON MANAGEMENT CONTROL SYSTEMS: FINDINGS FROM CONTINGENCY-BASED RESEARCH

Ivana Dropulić
Faculty of Economics, University of Split, Split, Croatia

ABSTRACT

This paper examines issues related to the definition and concept of management control systems (MCS) and the meaning and measurement of contextual variables. Contingency-based research has a long tradition in the study of MCS and has become a dominant paradigm in empirical management accounting research. Using the contingency approach as a theoretical framework, the goal of this article is to investigate various contextual factors that explain the design of MCS. This article provides a critical review of contingency-based MCS research and examines issues concerning theory development.

1. INTRODUCTION

MCS supports the creativity of employees, improving the operational efficiency and competitiveness of enterprises. However, there is no universally best MCS that applies to all situations in any organization, much less all organizations (Merchant and Van der Stede, 2007). Lack of knowledge about the development and design of MCS and the need for systematic empirical research in this thematic area are the main motivation for this research. What really makes a MCS is not precisely defined and further research is needed to examine the MCS. To improve the process of research on this subject, it is necessary to determine those influential internal and external variables that affect the development and design of MCS.

The paper is organized as follows. The next section provides a reference overview of the definitions of MCS and introduces the contingency approach as the theoretical framework for this study. In Section 3, various contextual factors that theoretically influence the design of MCS are provided. The con-

textual variables are business strategy, environmental uncertainty, firm size, leadership style and organizational life-cycle. Finally, Section 4 summarizes the theoretical findings and provides a brief outlook for further research.

2. DEFINITION OF MANAGEMENT CONTROL SYSTEMS (MCS)

Numerous definitions and descriptions of MCS exist. Some of those definitions contain overlaps, but others are quite different from each other (Malmi and Brown, 2008). Chenhall (2003) describes terms such as management accounting (MA), management accounting systems (MAS) and management control systems (MCS) and defines them in the following way: "MA refers to a collection of practices such as budgeting or product costing, while MAS refers to the systematic use of MA to achieve some goal. MCS is a broader term that encompasses MAS and also includes other controls such as personal or clan controls."

Otley's (1999) definition of MCS is that "management control systems provide information that is intended to be useful to managers in performing their jobs and to assist organizations in developing and maintaining viable patterns of behavior." According to Kimura and Mourdoukoutas (2000), conventional management control systems "refer to the deployment of various techniques in hierarchical organizations in order to monitor and measure employee performance against certain management targets." Simons (1995) argues that "MCS are the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities." Anthony (1965) defines management control as "the process by which managers ensure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives."

Thus, MCS has two main purposes. The first is providing information useful to management and the second is helping to ensure viable patterns of employee behavior in order to achieve organizational objectives (Asel, 2009). MCS helps organizations to motivate employees to make decisions and to take actions which are in the organization's best interest (Chow, Shields and Wu, 1999).

Therefore, "management control systems are used by managers to assist them in performing all of the control functions of planning, decision-making, motivating, coordinating, communicating objectives, providing feedback and integrating activities within complex organizations, indicating the broad nature of control, not limited to accounting and budgeting systems" (Kloot, 1997). "A management control system is a logical integration of techniques for gathering and using information to make planning and control decisions, for motivating employee behavior, and evaluating performance. A well designed MCS sup-

ports and coordinates the decision-making process and motivates individuals throughout the organization to act in concert" (Srivastava and Rastogi, 2008).

According to Chenhall (2003), the definition of MCS has evolved over the years from one focusing on the provision of more formal and financially quantifiable information to one that embraces a much broader scope of information. The current trend in management control research is to combine the use of formal and informal systems, to create a control package, because it is considered that through the sole use of cybernetic systems it is impossible to control the relevant variables for an organization to achieve its objectives (Carenys, 2010). The wide variation, lack of clarity and inconsistencies in the definition and concept of MCS have created a number of problems in MCS research in regards to the interpretation of research results and the design of MCS (Malmi and Brown, 2008).

According to Malmi and Brown (2008), management controls include all the devices systems managers use to ensure that the behaviors and decisions of their employees are consistent with the organization's objectives and strategies. Their observation of MCS is wider in scope and the strength of the typology lies in the broad scope of controls in MCS as a package, rather than the depth of its discussion of individual systems. Techniques of management accounting and control need to be studied as part of a wider organizational control system, not only individually within a restricted context (Otley, 1999).

The contingency theory claims that "there is no universally acceptable model of the organization that explains the diversity of organizational design", therefore, "organizational design depends on contingent factors relevant to the situation" (Hoque, 2003). The contingency theory has a long tradition in the study of MCS and has become a dominant paradigm in empirical research. Early contingency researchers identified environment, technology, structure and size as the influencing factors in MCS design (Chenhall, 2003). The latest contingency-based research suggests the relevance of additional contextual variables as strategy and its influence on MCS design (Chenhall, 2003; Langfield-Smith, 1997; Henri, 2006). Additionally, national culture has also been identified as a contextual factor following the development of multi-national operations in many companies (Chenhall, 2003; Harrison and McKinnon, 1999; Chow, Shields and Wu, 1999). Finally, multinationality has been identified as an important situation factor (Merchant and Van der Stede, 2007).

3. CONTEXTUAL VARIABLES

Contingency-based research has an important role in the identification of contextual variables that influence MCS design. Early accounting research-

ers investigated the importance of environment, technology, structure, size, strategy and national culture to MCS design (Chenhall, 20003). In this research, business strategy, environmental uncertainty, firm size, leadership style and organizational life-cycle will be proposed as the influencing contextual factors in MCS design.

3.1. BUSINESS STRATEGY

Business strategy has become increasingly important since it emerged in the 1950s, but strategy was not used explicitly as a variable in MCS research until the 1980s. The existing knowledge of the relationship between strategy and MCS is limited and provides a considerable scope for further research while a growing interest in this topic has been observed in recent years (Langfield-Smith, 1997). Kober, Ng and Byron (2003) examined the relationship between strategy and MCS over time using a public sector agency and the results showed that MCS changed as strategy changed. Additionally, the Kober, Ng and Byron (2007) research showed a two-way relationship between MCS and strategy, i.e. MCS both shapes and is shaped by strategy.

Strategy is operationalized and measured in many ways in the contingency research that studies the relationship between MCS and strategy and because of that research evidence is fragmentary and sometimes conflicting. Miles and Snow (1978) developed a typology, which categorized companies into four organization types - defenders, prospectors, analyzers and reactors. Using the extent of product innovation, Miller and Friesen (1982) categorized firms as conservative or entrepreneurial. Focusing on variations in strategic missions, Gupta and Govindarajan (1984) classified strategies as build, hold, harvest and divest strategies. Porter (1980) presented a model which suggested there were three different types of business strategies - cost leadership, differentiation and focus.

Porter's generic strategies of low cost and differentiation have remained the dominant typology used in MCS research because they have proven to be the empirically most tested ones and a relevant description of how successful organizations operate, while presenting a concept that participants can easily understand (Tsamenyi et al., 2011). One criticism towards this typology is that it was developed years ago and does not provide a realistic description of today's situation. In any case, Porter's typology is flexible and has room for adaptation (Marshall and Snygg, 2004). Although Porter also identifies broad focus as a strategy, it has been argued that broad focus is not an explicit strategy. Due to this confusion, researchers have inclined to examine only the cost leadership and differentiation strategies as the main strategic options.

3.2. ENVIRONMENTAL UNCERTAINTY

„The external environment is a powerful contextual variable that is at the foundation of contingency-based research" (Chenhall, 2003). Early contingency research focused on uncertainty as the most widely researched aspect of the environment, but uncertainty does not provide a comprehensive description of external environment because environment also includes turbulence, hostility, diversity and complexity (Khandwalla, 1977). Environmental uncertainty refers to the broad set of factors that make it difficult to predict the future in a given area (Merchant and Van der Stede, 2007). Numerous empirical studies have shown that the external environment or perceived environmental uncertainty (PEU) produce powerful effects in MCS design (Auzair, 2011), but the results have been inconsistent and conflicting because of variations in the measurement of PEU and because of the use of inappropriate measures or non-validation of the PEU construction (Sharma, 2002).

The environment of many companies has changed dramatically, which has led to a significant increase in uncertainty and risk for those firms. Thus, future research needs to investigate the influence of the increasing risk and uncertainty on the configuration and use of MCS (Asel, 2009). According to Milliken (1987), environmental uncertainty is "an individual's perceived inability to predict something accurately. PEU refers to an administrator's perceptual experience of the organization's external environment (Sharma, 2002).

3.3. FIRM SIZE

Only a few MCS studies have explicitly considered size as a contextual variable (Chenhall, 2003). Most studies have examined relatively large firms with the assumption that small firms do not tend to adopt more formal MCS. Still, the results of a Jänkälä research (2007) indicate that small firms use a wide range of practices and information incorporated within MCS.

The design and role of MCS in smaller or medium sized entities have received little attention in contingency-based MCS studies and thus many opportunities for future MCS research are likely to be found in the area of small and medium sized businesses. There are several ways of measuring size and these include profits, sales volumes, assets, share valuation and employees, but the majority of contingency-based MCS studies define and measure size as the number of employees. The precise measure of size could be important depending on the element of context and dimensions of an MCS being studied (Chenhall, 2003).

3.4. LEADERSHIP STYLE

Although leadership style has been found significant in some studies, it is generally unexplored and little attention has been given to its impact on the design of MCS. Previous accounting research on how leadership style influences the design and use of MCS is rare and the existing literature does not address the relationship between management accounting and management control change and the leadership styles of the managers (Jansen, 2011). Due to its significance and its importance for future studies, it will not be neglected in this study of MCS.

Yukl (2005) defines leadership as "the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives". Northouse (2007) defines leadership as "a process whereby an individual influences a group of individuals to achieve a common goal." According to Bahtijarević-Šiber and Sikavica (2001), leadership is "the process of influencing other people so they tend to readily achieve the common (group) goals."

Much of the management literature defines leadership in typologies that include at least two categories of leadership style. Stogdill and Coons (1957) typology classifies leadership style into consideration and initiating structure. Consideration is the degree to which a leader involves others in decision making, considers the opinions of subordinates, expresses appreciation and supports and shows concern and respect for followers and for their wellbeing. Initiating structure is the degree to which a leader structures the work environment by implementing uniform procedures and defines his role and the roles of followers, and is oriented toward goal attainment (Judge et al., 2004; Abernethy et al., 2010). This typology was given recent support for its construct validity (Judge et al., 2004) and these two dimensions have dominated leadership research.

3.5. ORGANIZATIONAL LIFE CYCLE

Organizational life cycle has been recently introduced as a contingent variable in the contingency-based research that influences management control systems (Auzair and Langfield-Smith, 2005). The varying use of MCS across organizational life cycle stages is a very limited and poorly explored area, with the exception of several studies: Moores and Yuen (2001), Auzair and Langfield-Smith (2005), Davila (2005) and Granlund and Taipaleenmäki (2005), which identified a significant impact of organizational life cycle on MCS design.

The potential impact of a life cycle stage on the MCS design and the lack of researchers' attention so far provide an opportunity for future research (Auzair and Langfield-Smith, 2005). Life cycle theories can be used to predict how MCS

vary across organizational life cycle stages and how these systems affect firms (Silvola, 2008). According to Auzair and Langfield-Smith (2005), the organizational life cycle variable is more widely researched in organizational studies than in MCS studies, and in the few MCS studies that do address lifecycle the approach is more conceptual and the stage in life cycle is not empirically linked to most of the MCS dimension.

There is a great number of multi-stage life cycle models that focus on a diverse array of characteristics to describe organizational development (Granlund and Taipaleenmäki, 2005). Perhaps the most widely applied model of organizational life cycle is Miller and Friesen's (1984) model. It is a natural "cradle-to-grave" life-cycle model basing the life-cycle classification mainly on the age, size and form of organization (Silova, 2008). Also, Miller and Friesen's model has a strong empirical background and it has also been tested in empirical accounting research (Davila, 2005; Moores and Yuen, 2001). Miller and Friesen's (1984) life cycle model includes five stages, i.e. birth, growth, maturity, revival and decline, after which an organization can try to renew itself and go back to basics or shut up shop (Silova, 2008).

4. CONCLUSION

The purpose of this paper is to provide a review of contingency-based research of MCS, to critically evaluate this work, to illuminate the above mentioned issues and lay foundations to enable researchers to continue developing MCS research. The first challenge in undertaking MCS research is the definition of MCS. A number of definitions and descriptions of MCS exist. Some authors have outlined very broad conceptions of what could be considered as MCS, but there are also narrower views of MCS. The lack of clarity and the inconsistencies in the definition of MCS have created a number of problems in MCS research in regard to the interpretation of research results. Future studies need to focus their attention on broad views of MCS and research MCS as a package of different control.

One of the fundamental questions that occupies scientists in the field of MCS is how to define and measure the influence of contingency factors on MCS design. Although there is a large number of studies of contingency factors and their impact on MCS design, the results of these studies are contradictory and largely incomparable. The reason for this lies primarily in different definitions and measurements of MCS and, finally, interpretations of results. The inconsistent definitions and measurements of variables used in research and the tendency of researchers to study the relationship between one contingency variable and one MCS control have led to poor understanding and knowledge of this issue in today's environment.

There is a considerable body of literature which has provided a basis for generalized propositions between the elements of MCS and contingency factors. As we mentioned earlier, accounting researchers investigate the importance of many contingency factors on the design of MCS, but in this research, business strategy, environmental uncertainty, firm size, leadership style and organizational life-cycle are proposed as influencing contextual factors in MCS design. It is also important not to assume that these five contingency factors are the only ones that influence MCS and that the existing configurations and linkages of MCS into a package are somehow optimal, as this is something which requires future study and research. Future studies need to focus their attention on MCS as a "package" of controls and explore the influence of multiple contingency factors on MCS design.

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CORPORATE IDENTITY AND THE REAL WORLD – THE THEORY AND THE PRACTICE AT SMALL AND MEDIUM SIZED COMPANIES

Anikó Almási
University of Szeged, Hungary

ABSTRACT

Corporate Identity (CI) is increasingly important for enterprises, because identification helps to building loyalty and differences mean competitve edge.

There is several CI model (Balmer, Birkigt-Stadler-Funck, Olins, etc), which are well implemented at MNCs. But small and medium sized companies often have own development in self-expression. The result of CI can be a synergistic or a dissonant image – but what is the key?

The presentation shows my survey's results based on Birkigt-Stadler-Funck model. I analysed 100 hungarian companies - from IT and building industry sector- and I made interviews with CEOs to understand how CI models work in deed.

A special survey was created to measure the synergistic CI (SPSS was used for data's evaluation). The qulitative analyse helped to understand the background and the process.

The results showed the idiosyncrasy of industrial sectors, size of companies and the role of owner and leader of the firm.

Keywords: *Corporate Identity, organisational culture, communication, corporate behaviour, corporate image*

„Identities situate the organization, group, and person."
(Ashfort, Dutton, 2000, 13. p.)

THE BACKGROUND OF THE RESEARCH

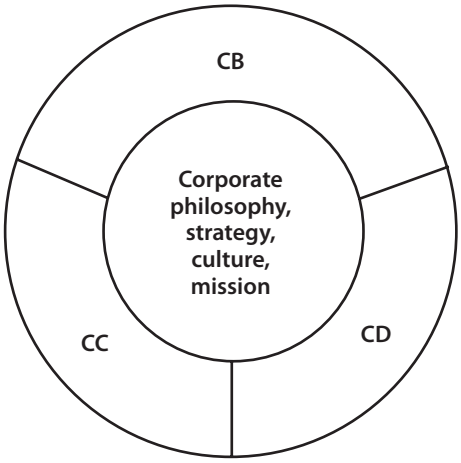
Several corporate identity models are known and these models give well defined methods to firms to answer these questions above. But on closer ex-

amination the case-studies of articles we primarily can meet are samples from the world of multinational (or at least big) companies. The small and medium-sized companies have their special situation and challenge to develop themselves without learning contemporary economic models. This survey analyses the background and reasons how these firms make their CI programme.

INTRODUCTION

According to Péter Szeles the corporate identity is a firm's inside and outside behaviour and self-design, which is planned and consciously, continually used: the momentous combination of corporate communication, behaviour and design which is based on the corporate personality and self-image (Szeles, 2001). For my research I used the model of Birkigt-Stadler-Funck because it contains every important part of the corporate identity and emphasizes the inside values of the company:

Diagram 1. The Corporate Identity model of Birkigt, Stadler and Funck:



Corporate Identity (CI):
CB: Corporate Behaviour
CC: Corporate Communication
CD: Corporate Design
The centre of the corporate identity: corporate philosophy, strategy, culture and mission

In Szeles, 2001, 141. p.

A synergic corporate identity programme should be based on the centre of CI (Olins, 1995).

„The concept of corporate identity grew out of a preoccupation in the design, marketing and corporate communications communities with the ways in which organizations present themselves to external audiences – e.g. in their visual images as well as through more elaborate forms of corporate advertising and communications" (Balmer, Cornelissen, Haslam, 2007).

EMPIRICAL WORK ON CORPORATE IDENTITY

A lot of theories emphasize the role of leaders and employees in the synergic CI (Balmer's ACID test in Csordás 2008 , Olins 1995, etc). The positive corporate culture has double influence on CI: first the employees can be more loyal or motivated and they build the positive image, but the HR policy uses this image too, when the corporate's reputation helps to magnetize new employees to the firm (MORI research in Csordás, 2008).

The company philosophy and culture has an interesting role too, and two converse situations and leader's motivation were experienced in my earlier research (Almási, 2007). One group of firm owners and leaders established the company only for profit, and in this case the culture and philosophy – the central idea of corporate identity – was one of the last created unit. In the case of the other group the leaders established their firm with a strong target, and they have a further vision about their firms. It helped to create the company culture, because they had an own philosophy, and this was made to be the inside value of the firm too. These leaders formed their corporate identity spontaneously – without knowledge of theories and models –, but they had a strong inner demand to escalate their own philosophy to their business environment. These companies had more synergic corporate identity, and they started building CI from the first day of the company.

Based on these data the hypotheses are:

1. The centre of corporate identity model (culture, mission, strategy and philosophy) is necessary to be created for synergic CI.
2. There is more synergic corporate identity at the IT sector than building industry, because the IT sector's activity is based on information technology, therefore it has higher level knowledge about contemporary IT channels.
3. The higher level of human resource (HR) management means more synergic corporate identity. HR strategy is based on corporate culture and philosophy and the change of corporate structure/hierarchy can be the indicator of a synergic CI programme.
4. There is more synergic CI at that firm, where the centre of the CI model (culture, mission, strategy and philosophy) is fundamental for the leader.

RESEARCH CONTEXT AND DATA COLLECTION

First a questionnaire was planned for objective data analysis. Both from IT and building industry sectors 50-50 companies were collected which cor-

responded to the conditions (being a small or medium-sized company, having a website, etc). First the websites of the companies were analysed on the basis of desk research questionnaire, and after the data evaluation 5-5 interviews were made with the leaders of the companies. The website test followed up the parts of CI model (culture, mission, design, communication, etc), and gave a static result about the company and its identity. The interview helped to reveal the dimension of time (which can show the development of CI) and cause an effect (the motivations and background of this CI development).

DESK RESEARCH

The evaluation based on two ways: one of them is about the concrete values, which measure the differences and importance factor of CI parts. The other evaluation is about the correlations between CI parts to detect the most relevant components of synergic CI.

As the evaluation the one of the corporate identity's substance is the philosophy: 36% of the building industry and 31% of the IT sector published the company philosophy on the website – so they have philosophy and they want to show it for the environment. The communication and behaviour parts of corporate identity were presented in five questions. The interactive communication and direct relationship possibilities (real time customer service on the website, newsletter, etc) are overrepresented in IT sector – as it was expected. The 'Career' menu was important because of the aspect of organisational culture. Many authors emphasize the role of HR management in synergic CI: „where is the „me" among the „us"?"-asked Kreiner, Hollensbee and Sheep (2006). Oliver and Roos think that the best CI programme will fall if the employees do not support it (2007).

According to the correlation, cross tabs, ANOVA and regression analysis the next results were received:

BUILDING TRADE COMPANIES:

The most important factors – which influenced primarily the synergic corporate identity – were in the building industry: slogan, contact facility for long time period (newsletter, consultant service, etc), published corporate philosophy, published corporate culture, Press Room on the website.

Table 1. Buliding sector: CI component's effect on synergic CI

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0,498	0,462		1,078	0,288
	slogan	0,078	0,318	0,037	0,244	**0,809**
	About Us menu	0,810	0,385	0,298	2,104	0,042
	philosophy / mission / vision	-0,109	0,378	-0,049	-0,287	**0,776**
	environment/quality police	0,743	0,437	0,287	1,703	0,096
	download menu	0,497	0,454	0,162	1,093	0,281
	Contact menu for direct relations	0,319	0,306	0,155	1,041	0,304
	Contact menus for long time period	-0,278	1,038	-0,039	-0,268	**0,790**
	Press room	0,205	0,309	0,100	0,662	**0,512**
	Career menu with corp culture infos	-0,260	0,548	-0,071	-0,474	**0,638**

a. Dependent Variable: synergic CI

According to the detailed crosstabs analysis (with Phi and Cramer's V, Lambda and Chi-Square Tests) there is cause and effect relationship between synergic CI and detailed Career menu (information about corporate culture, etc):

Table 2. Synergic CI and Career menu

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,113	,889
	Cramer's V	,113	,889
N of Valid Cases		50	

In the building industry there is softer connection between synergic CI and other factors, but the reason can be that these companies use more parts of CI models, but they do not update the published information. Therefore more factors influenced the CI than int he IT sector, but there are a few strong correlations. For example:

Table 3. Contact facility for long time period * Synergic CI

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,864	1	0,864	0,849	0,361
	Residual	48,816	48	1,017		
	Total	49,680	49			

a. Predictors: (Constant), contact facility for long time period

Table 4. There is structured 'Career' menu with company values * Synergic CI

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,473	1	0,473	0,462	0,500
	Residual	49,207	48	1,025		
	Total	49,680	49			

a. Predictors: (Constant), structured Career menu with company values
b. Dependent Variable: synergic CI

IT COMPANIES:

The most important factors – which influenced primarily the synergic corporate identity – were in the IT sector: published corporate philosophy, published environmental policy, contact menu for direct relations, contact facility for long time period (newsletter, consultant service, etc), particular 'About Us' menu on the website.

Table 5: IT sector: CI component's effect on synergic CI

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,049	0,490		2,142	0,039
	slogan	0,248	0,225	0,160	1,104	**0,276**
	About Us menu	0,116	0,082	0,195	1,413	0,166
	philosophy / mission / vision	0,493	0,436	0,151	1,131	**0,265**
	environment/quality police	-0,076	0,191	-0,047	-0,396	0,694
	download menu	0,218	0,309	0,084	0,705	**0,485**
	Contact menu for direct relations	0,381	0,276	0,180	1,383	0,175
	Contact menus for long time period	0,232	0,259	0,149	0,893	0,377
	Press room	-0,276	0,268	-0,166	-1,033	**0,308**
	Career menu with corp culture infos	0,496	0,233	0,320	2,135	**0,039**
	(Constant)	0,267	0,205	0,168	1,304	**0,200**

a. Dependent Variable: synergic CI

In the IT sector the classical main parts of CI model have a stronger influence for synergic corporate identity, and the results verified my 2nd hypothesis (the IT sector's activity is based on information technology, therefore it has higher level knowledge about contemporary IT channels). The analysed companies can use the new channels of information technology for more synergic CI too, and they make the best of these possibilities. For example:

Table 6. 'About Us' menu * Synergic CI

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,014	1	0,014	0,023	0,881
	Residual	29,986	48	0,625		
	Total	30,000	49			

a. Predictors: (Constant), there is 'About Us' menu
b. Dependent Variable: synergic CI

Table 7. Corporate philosophy * Synergic CI

ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0,014	1	0,014	0,022	0,883
	Residual	29,986	48	0,625		
	Total	30,000	49			

a. Predictors: (Constant), there is corporate philosphy/mission
b. Dependent Variable: synergic CI

According to the detailed crosstabs analysis (with Phi and Cramer's V, Lambda and Chi-Square Tests) there is very strong cause and effect relationship between synergic CI and communicated corporate philosophy/mission or environment/quality policy:

Tabe 8. Synergic CI and communicated corporate philosophy

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,090	,940
	Cramer's V	,090	,940
N of Valid Cases		50	

Table 9. Synergic CI and environment/quality policy:

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	,181	,649
	Cramer's V	,181	,649
N of Valid Cases		50	

FIELD RESEARCH

The target of this research was to reveal the most important aspects and factors of corporate identity in the building industry and IT sector. Of course the low level of interviews is not enough to prove industrial specialities, but these conversations helped to find the background reasons, the leader's mo-

tivation and the process of CI creation. 5-5 interviews were arranged in the IT and building industry sectors. The leaders answered a concrete guidelined questionnaire, which contained the next main topics: first the period of company establishment, and the later period of the company.

The question „what units were created further, when and why, or who managed them ?" could reveal the process and the motivation of leaders. The most frequent reason was the time: after the first years (when leaders worked for daily profit) and the firm started up, the leaders were more ambitious of the company's external judgement. This disengaged energy and time induced the leaders to care for corporate identity and its central topics.

CONCLUSIONS

This research was only about revealing the background of corporate identity development at small and medium-sized companies, especially in the IT and building industry sector in Hungary. The process of research – reduced for two market sectors – helped to point at the speciality of different industries. This research method was necessary because of the small sample too.

The hypotheses were mostly verified:

1. The centre of corporate identity model (culture, mission, strategy and philosophy) is necessary to be created for synergic CI.

In the IT sector there were other factors with great influence on synergic corporate identity, and these items (environmental policy, interactive connections on the websites, etc) help the consequent communication and behaviour which are the important parts of CI model.

2. There is more synergic corporate identity in the IT sector than building industry, because the IT sector's activity is based on information technology, therefore it has higher level knowledge about contemporary IT channels.

The crosstabs and correlation analysis supported this assumption (Table 4). The IT sector uses more IT based channels to communicate and behave, they use them more efficiently, and these channel's influence on synergic corporate identity is proved by data evaluation.

3. The higher level of human resource (HR) management means more synergic corporate identity.

This hypothesis was not realized completely, because there is special practice for HR management in both sectors. The desk research results showed the emphasized role of HR in the building industry, and in the IT sector this factor was not so important for synergic CI. There is connection between company

culture and synergic CI and HR management, but the style can be different in the two sectors: outside or inside oriented.

4. There is more synergic CI at that firm, where the centre of the CI model (culture, mission, strategy and philosophy) is equal with profit.

In both of two sectors the central CI items were emphasized, just with different importance level. The philosophy, culture and strategy (as compatibility) were opined as an important inner spinal of the company by leaders, and the desk research evaluation proved these factor's essential role to synergic CI.

The change is the key: every leader who was interviewed talked about a new situation which induces the corporate identity development. It can be the company name's change, moving or building a new office, winning a new customer group with different demands, new business relationships, using new communication channels, etc. However the change needs to be thought of the central values of the firm, and usually this process does not stop at design – even if the leaders never payed attention to the other factor of corporate identity model (Ravasi, Schultz, 2006, Corley, Gioia, 2004).

I believe that the analysis of these sectors and this topic is necessary because we have incomplete information about this important part of economy, and the trends show the increasing importance of corporate identity. The role of leaders in the process of synergic CI development is emphasized, especially at small and medium-sized companies, when the leader is often the owner too (Oliver, Roos, 2007, Olins, 1995).

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FRANCHISING AS A STRATEGY FOR SMALL BUSINESS GROWTH

Senka Borovac Zekan
Ivan Peronja
Lucija Bačić
University Centre for Professional Studies, Split, Croatia

ABSTRACT

X-Nation is one of the most famous Croatian franchise brands. The brand owner is MIN d.o.o. company which is engaged in the production and distribution of clothing since 1991. Director of the MIN d.o.o. company believes that franchising concept contributed the rapid brand expansion. Such business concept enabled rapid business development of X-nation resulting in more than 60 locations in Croatia only ten years after introducing the first collection. Company's management has recognized franchising as the fastest and most rational way to increase sales. Today the company generates about thirty percent of sales through the franchising. The advantage of franchise business is that the entire business process, from manufacturing to retailing, is fully marketing covered and thus more efficient. However, the basic precondition for having a successful franchise is a good product which is accepted at the market. This paper gives an example of business growth threw franchising concept and gives pro and con reasons for becoming the franchisor.

Key words: *franchisor, franchise, small business, business growth*

INTRODUCTION

The role of franchising in national economies is becoming more important (Kaufmann and

Dant 1996) by creating employment opportunities and service prevision (Spinelli et al. 2004). Franchising as we know it today is a relatively recent phenomenon. In the private sector, franchising was used initially by manufacturers as a means of expanding the distribution of their products. Business format franchising — the licensing of a trademark in conjunction with a prescribed busi-

ness format and method of operation can be dated to the nineteenth century, but did not develop in earnest until the 1950's. Business format franchising accounts for most of the explosive growth in franchising that has occurred in the past five decades. This article seeks to analyze the factors of significant influence on the entrepreneurship decision to transform their businesses into franchising concept. MIN Ltd. company was selected as an example for business expansion through a franchise concept, because it is one among the most abundant franchise at Croatian market at the moment. For the purpose of writing this paper, the authors used the case study method. Throw this case study the authors tried to emphasize detailed contextual analysis of a Croatian company going through business change and the experiences of it's owner on that way. Also, through the example of a successful business expansion through franchising concept X-nation, authors will try to present all the prerequisites that need to be fulfilled in order to achieve a successful franchise business. The object of this research is to understand the underlying reasons for choosing franchise concept and to discrepancies it more clearly, with appropriate support of an analytical base. Vocational studies students will benefit from this paper, as it could serve as good material for discassion and analysis in the class. Finally, the paper will help small businesses owner to identify in which stage is their business at the moment and whether the franchise business concept is appropriate for them.

1. SMALL BUSINESS GROWTH AND DEVELOPMENT

In mainstream economic literature the supremacy of the economic motive is taken for granted-people act in ways to maximize their profits. In the small business context, a more diverse view may be relevant. We know that people start and operate their own firms for a variety of reasons other than maximizing economic returns (Davidsson, 1989; Delmar, 1996; Gundry & Welsch, 2001; Kolvereid, 1992; Storey, 1994). This does not mean that their motives are totally irrational. However, it is important to assess the relative importance of economic and noneconomic motives in order to understand why small business managers exhibit the growth-related attitudes and behaviors that they do. The main purpose of this paper is to explore the franchising as the model of business growth. Before getting into the theory of franchising, some other aspects of growing the business and options for growing the operations are presented.

1.1. GROWTH ENTREPRENEURSHIP

Growth entrepreneurship is usually described as a company that is innovation based and has internationalisation as a wider goal. Growth is not the purpose for a company but a result of competitiveness, knowhow and innovativeness, which makes it difficult to give a specific definition for the concept. In some

economies when a company's turnover exceeds 20 per cent on average it can be called a growth enterprise. The growing companies that have the exact goals of growth and innovativeness, and invest into the right knowhow will affect the economy around them by increasing employment, national production and productivity. Fast growth also requires attitude and knowledge. Therefore humane capital that is ready to adapt to a fast pace of change is an essential factor in growth. Another requirement for growth is finance. For small businesses, it can be difficult to get a loan. Before even considering expansion into international markets, it is wiser to establish succesful business at the domestic market.

1.1.1. Geographic expansion

Geographic expansion is considered when the company cannot expand in the present location but has reasons to believe that product/ service attracts the consumers in other location as well. Company owned outlets require large capital and direct managing on all the aspects of the business, which makes this a slower way to grow in size and the return on investments are slower compared to franchising. When opening a company owned unit in another location the manager has to balance between the already existing and the new unit. This can cause a lack of attention to the original unit and be harmful for the business operations. On the other hand there are no middle men (franchisees) in between if/when the profits start to flow in (Barringer, et al. 1998, 467, 471; Keup 2007, 65; Barringer, et al. 2010, 521). An alternative that does not grow the business but can be considered an option is to continue the business in the same way as before and avoid the hassle of expanding production, starting franchising operations or other cooperation with other entrepreneurs. The costs stay the same and the owner gets all the profit that come in. The downside is that the companies that do not develop often fail in their businesses and the business owner also loses out on all the good aspects of growing for example trough franchising (Keup 2007, 65). After the company has grown from the inside and desires to grow even larger, the company may reach for other markets and seek expansion prospects on other areas. External growth strategies are based on developing a relationship with third parties, this can be done for example through mergers, acquisitions, strategic alliances, joint ventures, licensing, and franchising (Barringer, et al. 2010, 489).

2. FRANCHISING AS A GROWTH STRATEGY

Franchising is a way to grow business operations. Franchising allows a business to get its products or services to wider markets through the endeavours with the business partners (Murphy 2006, 11; Barringer, et al. 2010, 514). Franchising has been conquering the world during the past few dec-

ades without the masses really knowing of its existence. It is a poorly comprehended type of business ownership and method to grow existing business. In order to completely understand what franchising is all about one really has to closely study the concept and/or throw oneself in and experience it first handed (Barringer, et al. 2010, 512). The beauty of franchising is in the win-win situation that both parties have in the business; franchisor (owner) who seeks to grow the existing business with little financial input and franchisees who are ready to spend the money in order to do a business without having to start from scratch (Bennett, et al. 2008, 11-12).

2.1. DEFINING FRANCHISE, FRANCHISOR AND FRANCHISEE

In order to be able to discuss more deeply about the franchising concept it is good to start with the basic terminology. The word 'franchise' comes from Norman French word "fraunchise" which was derived from French word "frank" – free man, free to work something.[1] The English word "franchise" in origin describes liberation from any prohibition, permission, privilege – by which a company is allowed to do or not to do something for which it would not have right in normal status. There are many definitions of a franchise. They all essentially describe a comprehensive relationship in which one party (the franchisor) grants to another party (the franchisee) the right to operate a business that sells products and/or services produced or developed by the franchisor, under the franchisor's business format and management system (also referred to as an "operating system") and identified by the franchisor's trademark. Franchising is a privilege or allowed right given to the individual or group which allows recipients to do certain commercial activity. It is a way of widening the business and distribution of products and services under known brand name. Franchisor is usually the creator of the business concept, the one that has developed and launched the operations (Tuunanen 2005, 19). Once successful in the business, the business owner lends rights to do business under the same name to another business owner using the original method and/or trademark for a predetermined period of time set in a contract (Barringer, et al. 2010, 513). Franchisee is the receiver of the right to conduct business invented by the franchisor. Franchisee can also be called a franchise owner (Tuunanen 2005, 19). Bennett, et al. (2008, 9) quotes Babcock summarising the roles of the two parties: "Franchisee pays the franchisor a royalty fee and, often, an initial fee, for the right to utilize the franchisor's brand name, operating system, and ongoing support, and agrees to conform to quality standards." The Franchisor contrib-

[1] The Random House Dictionary of English Language, Random House, New York, 1973. (The word frank comes from the word "Frank" which was describing members of German tribes which lived in Gallia in 5th century A.C. In Gallia which was under Francs, only they – invaders – had full freedom as well as the ones who were under their protection. In old European law there was an expression "Francus homo" which was describing free citizens)

utes the initial capital investment, development efforts, know-how and experience and the franchisee contributes the (usually far greater) supplemental capital investment, plus motivated effort, operating experience in a variety of markets and innovation. A modern franchise includes a format for the conduct of a business, a management system for operating the business and a shared trade identity. Franchising is a comprehensive business relationship, not just a buyer-seller relationship, and there is considerable interdependence between a franchisor and its franchisees.

2.1.1. Different types of franchising

There are different ways of implementing franchising type business. The main separation is between product and trade name franchising and business format franchising. In Europe only business format franchising is regarded as franchising and the former is not included in the statistics, so we will give the explanation only for the business format franchising. In business format franchising all aspects of the business are determined by the franchisor. McDonalds was the first company to start business format franchising and is a perfect example of this type of franchising. The franchisor provides the entire formula of the business to the franchisee; this comes with a specific plan on how to conduct business, training on how to operate the business, support along the way, and depending on the business even the words that are used in the customer service might be supplied by the franchisor, so basically everything is covered. Also marketing is done by the franchisor. Sometimes the franchisee can market the local business as well but mainly the marketing is nation wide and conducted by the franchisor. In return of a complete (and successful) business model the franchisee pays royalties and franchising fees for the franchisor.

3. FRANCHISING IN CROATIA

Compared to the history of franchising in US and Europe, Croatia is a beginner in franchising with the credit-card franchise Diners Club International as a first franchising concepts on Cratian market in 1969. In the beginning of the 1990-ties after Republic of Croatia got independence, Croatian market opened completely for the all kinds of products which were arriving from all over the world. Since the franchising is relatively new to Croatia and its inhabitants it is necessary to stimulate franchising in order to enable growth of this way of doing business. At the moment there are two Centers for franchising in Osijek and Zagreb. there is no legal basis for franchising in Croatia. Franchising is first time mentioned in Croatian legal system in Trade law (Narodne Novine, 2003) where the franchising agreement is stated. But it is only stated in one article and very condensed. Therefore there is no standard

for development of franchising and franchising agreement which is at the moment developed by business practice (Alon, I. et al,. 2007). In relation to the other countries in transition, Croatia is placed in the middle with 126 franchise systems. Still, the number of franchise systems in Croatia has increased in the last two years. According to the date from Croatian Franchise Association today there are around 125 (from which around 25 domestic) franchise systems present on Croatian market. They operate at approximate 900 locations. At the moment there are around 16000 peoples employed in franchise systems in Croatia. (Kukec, 2006). Franchising in Croatia can be found in the wide spectrum of business. The same author stated that franchisors in more than 20 industries have chosen franchising as a way of growing in the market. Biggest share have sales industry and fast-food sector with more than 20% of share. Other segments with important shares are tourist industry, rent-a-car companies, courier services and fashion industry. Newest franchise systems are being started in the service sectors. Next table shows some of the most famous domestic franchisors in Croatia with their industry and number of outlets they have at the moment.

Franchisor	Industry	Number of outlets
Elektromaterijal	Household appliances distribution	Over 50 stores
X-nation	Fashion clothes	40 stores / corners
Rubelj Grill	Grill	17 restaurants
Skandal	Fashion clothes	15 stores
Body Creator	Weight loss center for women	4 centers
Bio & Bio	Health food	3 shops
HG Spot	IT equipment	
Bike Express	Courier service	
San Francisco Coffee House	Coffee bar	2 bars

Source: Round table – Franchising in Croatia EFF/IFA International Symposium, October 24-25, 2006, Brussels

Reasons for slower development of the franchise business in Republic of Croatia can be found

in following characteristics: entrepreneur's thinking, lack of franchising education and also in

weak national franchising association. The biggest barrier to the development of franchising is that strength of franchising is not recognized and also that the system and institutional support for franchising is not existing.

4. RESEARCH METHODOLOGY

The case study method has been an essential form of research in the social sciences and management (Yin, 1994). It has been used in research involving business and organisational issues, education, child development and youth policy, family studies, international affairs, evaluation, technology development and research on social problems. Traditionally, case studies were considered appropriate for exploratory research only. Yin (1989), however, points out that some of the best and famous case studies have been both descriptive. A Case Study is expected to catch the complexity of a single case. Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances. We employ single case analysis method to compare theoretical predictions to the practical world**.** The company participating in this study is MIN Ltd. The company was established in 1991. and is engaged in production of various textile products. Empirical information were collected through a qualitative approach in order to gain a deeper understanding of the topic. Various conversations were performed in person with people involved in the business expansion planning of MIN Ltd. company.

5. INTRODUCTION TO *MIN LTD. COMPANY*

The company participating in this study is MIN Ltd. The company was established in 1991. and is engaged in the production of various textile products. The company creates and produces clothing for young people under the trade name X-nation. Although, the brand is successfully sold at 60 stores in Croatia the, they still are looking for franchise partners. MIN Ltd. has about 200 employees and about 50 employees in a network of franchise partners. In the year 2006, the company received a recognition from Chamber of Commerce for its extraordinary growth. The weekly business newspaper Business.hr declared MIN Ltd. as a Croatian company Gazelle, and so became one of the 130 fastest growing companies in Croatia.

5.1. X-NATION BRAND

X-nation brand is Croatian national brand for retail women's clothing. Their competitive advantage is based on a good ratio of quality and price and modern design garments for their customers which are mostly the female population of teenage to adulthood. Less than a half of stores in Croatia are in the franchise relationship. The executive managers in MIN Ltd. company believe that Croatian territory is considered more or less covered, and are more interested in expanding at the territory of Serbia and Bosnia and Herzegovina. X-nation offers very favorable conditions for purchasing a franchise, which in-

cludes owning or renting space at the pedestrian zone. The costs of arranging the store by concept and criteria of X-nation's standards are approximately about 100 eura per m2. Franchising means that the recipient of a franchise that has a store in a pedestrian area should arrange the store in accordance with X-nation requirements. If the store meets the criteria of the top executives from the MIN Ltd. company, the further negotiations can be approached. MIN Ltd. delivers the goods to his franchise partners but the franchise partners pay only for goods which are sold. The franchise partners have no influence on the selection of clothes that they are delivered. Payments for the whole stock must be secured by bank guarantee. MIN Ltd. also offers support to their partners with promotional and marketing activities and plans. Before making the final decision the owners of MIN Ltd company were convinced for several reason that franchise is a viable strategy for their particular business. Firstly, the market for their particular products or service was huge since there was no any other stores at the Croatian market who sell quality and not so expensive clothes for young women. Secondly, they believed that X-nation business concept could easily be duplicated and work in other locations under other owners.

5.2. FRANCHISING AS A EXPANSION METHOD FOR X-NATION BRAND

Franchising is essentially a method of distribution that combines some of the advantages of an integrated corporate network with those inherent in independently owned and operated businesses. A franchisor does not have to acquire and deploy the capital, manpower or organization of a vertically integrated chain. The franchisor is able to obtain the benefits of franchisee financed growth, owner management and avoidance of the costs of centralized management. Moreover, the franchisor is at least partially insulated from the failure of an individual outlet. The benefits usually attributed to franchising as a method of business expansion fall into two general categories:

1) benefits relating to the capital investment furnished by franchisees to develop retail outlets and expand the franchisor's network and
2) the motivated management by franchisees of the businesses in which they have made substantial investments

Relatively low entry barriers have made franchising an attractive method of business expansion. A franchisor does not require large amounts of capital to develop and implement a franchise expansion program. These benefits are enhanced by the interdependence that exists in the franchise relationship. The franchisor relies on franchisees to expand its network and enhance its trademark and the franchisees rely on essential services and support from their franchisor to be competitive and operate profitably. Franchising also offers person-

alsatisfaction benefits to an entrepreneur that conceives an idea for a business, develops that idea in one or more prototypes and then expands the business into a regional or national network of similar business operated by independent owners who are enabled to become successful business owners.

5.3. THE DECISION TO EXPAND BY FRANCHISING

Most franchise networks do not begin with firm plans, or any thought at all, relating to franchising. Without regard to whether the business operates from a single location or several outlets, whether to expand, and if so, the method to use, frequently is a question generated by the success of the business after several years of operation. Whether to expand at all should, of course, precede consideration of method. Many businesses are not easily expanded into a network of outlets Many entrepreneurs are not temperamentally suited to manage expansion and will be happier, and probably more successful, operating their original businesses or growing only to a second or third outlet in the same city. The determination of whether or not to expand can be considered the first step.

5.4. EXPANSION METHODS

Once the decision to expand is made, the different methods by which expansion can be accomplished will naturally be considered. One obvious method is the establishment of additional outlets patterned on the original business and financed with its net cash flow, debt, equity from friends and relatives or a combination of one or more of these sources. Expansion by this method is slow and may strain the management. A variation on this method would be the establishment of first ventures, either with passive investors (a financing device) or active operators to insure that owner-operators will be responsible for the management of each outlet). Finally, the business owner will likely consider franchising. The method chosen is likely to be influenced in part by the goals of the business owner. If the goal is a relatively small, local chain of outlets, expanding with company owned outlets, or possibly joint ventures with passive investors, probably is the most sensible method. If the goal is to build a regional or national, network of outlets, franchising is the logical choice. In many instances a decision is made to expand with both company owned outlets and franchisees, perhaps by establishing the original market as a company store territory with franchising reserved for other metropolitan areas. In order to develop in new markets, a few franchise networks have established company outlets in such markets and ultimately sold them to franchisees. In many larger franchise networks the ratio of company and franchisee operated outlets has fluctuated greatly during the past two decades, most recently tending toward a greater percentage

of franchisee ownership. The selection of the method(s) of expansion can be considered step two.

5.5. STARTING UP THE FRANCHISE CONCEPT

Establishing a successful franchise required considerable thought and planning. A good way to start was to identify the elements of the business that will be transported to each franchised outlet. The MIN Ltd. Company wanted to have a good track record of operations within a particular market so it could support an effective business systems. This business model was set out in an easy-to-implement Business Plan which also included manufacturing processes and distribution systems. The company provides protective framework for their franchisees by monitoring the quality and standards of the network as a whole. These support services (the cost of which is included in the fee) includes: product and service development, promotion and public relations for the network, purchasing, financial and administration services for the network, communication between franchised outlets, discipline and quality control, protection of intellectual property (such as brand names, patents, copyrights and trademarks). Fully tested prototypes of the business was essential. Prototype test and refine the business concept, products, and operating system that the MIN Ltd. Company was going to license to franchisees. It is the models of the business to be franchised. Prototype was tested in different types of markets and locations - and for a sufficient time period. The operation of the prototype afforded the franchisor the opportunity to test and refine: (1) designs, layouts, décor and signage; (2) products; (3) customer reactions and satisfaction; (4) equipment and fixtures; (5) training methods; (6) advertising and marketing; (7) job descriptions; (8) number of employees needed at different times; (9) required skill levels; and (10) wage levels and benefits. Such testing of the business concept and operating system in prototype of the actual business prepared the company for effective franchising. It was essential to have the basics of the operating system and standards developed and understood before franchise expansion was launched. Before implementing a franchising program, the company evaluated what the pilot operations, have shown about the business. Once they were convinced in the viability of frnanchising model they continued to expand the franchise concept.

5.6. ENCOUNTERED OBSTACLES

Franchise development requiered both, money and time. Besides the obvious costs, such as getting the expert advice of lawyers, accountants, and franchise consultants for putting the franchise package together, there were some other barriers faced by franshizors, such as:

laws – there is no legal regulation of franchising in Croatia. The word — franchising is only mentioned in Trade Law. But, Croatia is not unusual in this respect: only 52 countries in the world mention franchising in any significant way in their legal systems (Zeidman, P.F , 2006). Common or no, however, the absence of clear legal precedent makes it difficult for Croatian lawyers to help their clients, especially during the contracting phase—whether franchisor or franchisee, whether foreign or domestic investor.

- infrastructure – there is a dearth of infrastructure related to franchising: no banks that will assist franchisors or franchisees, too few educational centers, no franchise consultants who could help potential franchisors in developing their own networks. Banks seem unable to distinguish between start-up entrepreneurs creating footholds in new franchise sectors and franchisees who are entering preexisting, proven franchise systems. There is not enough education about franchising, so even potential franchisors and franchisees do not know where to go to and who to contact if they would like to find more about franchising and how it can work.
- problems with banks (not familiar with franchising) - banks do not recognize franchising as a relatively safe way of entering into a new business and do not have any specialized loans for the franchising industry.
- small market - because there are only 4.5 million inhabitants in Croatia, examinees are pessimistic that the largest franchisors will come to Croatia due to logistical problems. Large and famous franchisors are looking on bigger area in sense of population number developing new franchises, and they often resist adapting to local standards and prices. Smaller franchisors that would like enter to Croatia are not as well known to Croatian entrepreneurs and are therefore seldom franchisors of choice.
- franchising is not a well-known way of doing business - people seldom recognize what franchising is.

6. DISCUSSION AND RECOMMENDATIONS

The following chapters present the findings and conclusions of the research as well as recommendations of what kind of actions the company could take next, subjects for possible further studies and also an outlook of the reliability of this research.

6.1. RELIABILITY OF THE RESEARCH

Any research aims at avoid mistakes and yet the reliability and the validity of researches can fluctuate. By the reliability of a research is meant the consistency of the findings (Saunders, et al. 2009, 156). It can be assessed by reviewing the following questions (Easterby-Smith et al. 2008, 109):

1. Will the measures yield the same results on other occasions?
2. Will similar observations be reached by other observers?
3. Is there transparency in how sense was made from the raw data?

To answer to these question concerning this research, the first one is naturally no. If the company had been running for longer and was financially more stable and possibly would have expanded already to another location the results could easily be different. The question number two can be a little controversial since everyone observes situations by using their own background and knowledge mixed with the occurrences. In this case we believe that the interviewees made their point clear enough for another observer to come to similar conclusions and therefore the answer to the question number two would be yes. For the third question concerning the transparency we would also answer yes. The used research methods are discussed, it has been made clear when, how and who have been interviewed, the findings are disclosed in detail and the summary is based on straight to the interviews and the theory.

Another measurement of research is the validity. This concern whether the research methods are measuring what was supposed to be measured (Saunders, et al. 2009, 157). The validity of a qualitative research can be achieved through an accurate description of the implementation of the researc. This has been carried out in this research and therefore an endeavor for the validity of the research has been undertaken. A further point of view is a generalisability, or external validity, and it refers to how well the results of a research are generalisable. By this is meant how applicable the research results are to other organizations. When conducting a research for a specific company one should never claim the results could be generalised (Saunders, et al. 2009, 158). In the conclusions of this study there is no mentioning of the results being applicable to other situations.

6.2. SUBJECTS FOR FURTHER STUDIES

Generally speaking the topics related to franchising in Croatia are still underrepresented in empirical researchs except for some sporadic examples. This research has proven that there is a big lack of research of franchising from franchisors point of view. We agree that franchising will grow and defenetly

conquer new industries. Taking this into consideration franchising ought to be receiving more attention from the researchers as well as businesses and other officials. From MIN Ltd. Company standpoint further studies could be exploring of other growth strategies, such as international expansion. If they are going to choose that way of business expansion then a closer study on the next steps should be made that includes for example which countries and which specific areas should be considered etc.

SUMMARY AND CONCLUSION

This research focuses on describing how small company expand their business through francising by using a single case analysis. We analyze the franchising strategy at MIN Ltd company, a national franchise network from Croatia The study provides a detailed insight of franchising strategy of comparing theoretical predictions to practices in real world. If small businesses want to expand more quickly and get ahead of a competitive curve, the franchise concept could be the best way to expand. Opening company locations takes capital and time and the risk of opening each store is up to the owner. Opening company stores can be a slow proposition as it takes time to get each unit open and successfully operational. Also, bankers in Croatia are not willing to lend small businesses money for aggressive expansion. For all of these reasons, more and more entrepreneurs are finding that franchising is the best way to expand a great business quickly with minimal capital and risk. The advantages of development franchising concept for MIN Ltd. Company include the opportunity for rapid development and early attainment of critical mass and better market knowledge and impact in developing markets; enhanced cash flow from the fees generated by the sale of development rights. The study has managerial and academic implications. For the academicians it presents testing of theories in specific contextof business expansion throw franchising and the franchising mangers can get guidelines from practices at a successful franchising network.

AUTHOR'S REMARK

In the time of the formation of this article the MIN ltd. company has arranged a merger with a foreign partner. Unfortunately, due to legal difficulties, the association has failed. This situation proves that the legal obstacles are indeed one of the biggest problems faced by entrepreneurs in Croatia. So, after more than twenty years, the Croatian fashion story ends although the sale figures in 2010 were still promising. More than 220 people remained unemployed.

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CONSUMER ACCEPTANCE OF ONLINE FOOD ORDERING: AN EXTENDED TECHNOLOGY ACCEPTANCE

Haluk Hekimoglu
Serhat Murat Alagoz
Faculty of Economics and Administrative Science, Okan University, Istanbul, Turkey

ABSTRACT

While e-commerce is rapidly spreading around the world, the food industry also began to take its' place in this growing area. The purpose of this study is to investigate the factors that influence the attitude of internet users towards online food ordering and the relationships between users' attitudes toward using internet for ordering food in Turkey. It uses the Technology Acceptance Model (TAM) (Davis, 1986) as a theoretical grounding to study adoption of using the Web environment for ordering food. In addition to TAM; Perceived Web Security, Trust, and Innovativeness are added to the model as main factors that influence internet users attitudes. The research universe is composed of undergraduate and graduate students. Studying a homogeneous group allows us to overcome potential side effects of studying a heterogeneous group with diverse internet usage habits.

1. INTRODUCTION

There are more than 1.46 billion internet users around the world and the number is growing rapidly day by day (Internet World Stats, 2009). While the capabilities of internet becomes more complicated the marketing, accounting, advertising, educating habits and methods also change simultaneously. Almost all of the corporations –even non-profit organizations- are permanently trying to update their information technology (IT) in order to gain advantage in todays' competitive global economy.

By a successfully implemented and updated IT, better productivity, efficiency, communication and organization come off easily (Fisher et al. 2004). Especially in the last few decades, the IT has reached a point which affects the way of shopping

in addition to communication, education and business all around the world. Online shopping is a new developing business, by which customers are able to reach the products on internet as well as sellers can reach to customers in the same way. Besides, shopping online enables customers to find more different kinds of products than shopping in traditional way. It becomes possible to compare products, compare prices and shop from different magazines at the same time.

Consumers' trust to technology directly affects their attitude to use that technology (Pavlou, 2001). Despite the fact that there is a commonly-held negative belief about the security of internet world, -especially by the rapid development of secure online payment systems- customers' trust to online shopping systems has gained power. In this manner, developing online banking systems and exponentially growing credit card usage also contributed this online shopping technology.

As 'time' becomes more important for people, internet makes the world smaller and online shopping systems becomes more complicated; online food ordering sector has also increased its popularity. By its nature, online food ordering is easy and quick process than shopping the material and cook or go to a restaurant. In addition, it becomes possible to check and compare many different types of restaurants in a very short time and choose whatever desired. By the points of view of restaurants, online food ordering is a gradly acceptable way of selling foods. The online system reduces the physical and staff necessity. They just need a simple logistic service to get the food off to customers on time. For instance, the most visited online food ordering website in Turkey, 'yemeksepeti.com' has shared the user statistics of 2011. According to that, 28 million portion of food was ordered online just in 2011.

Despite the rapid improvement in this sector, many researches are carried out about the main factors that affect the consumers' attitudes against online shopping. Especially the technology acceptance model (TAM) (Davis, 1989; Davis, Bagozzi, and Warshaw, 1989) is considered as conceptual framework. Besides, several factors are added to TAM and their effects are also tested.

2. RESEARCH MODEL AND HYPOTHESIS

The theory of reasoned action (TRA) (Ajzen and Fishbein, 1980) and the theory of planned behavior (TPB) (Ajzen, 1985) were born out of examining the relationship between attitude and behavior towards a new introduced action. Technology acceptance model (TAM) is based on these theories and tries to explain and predict the acceptance of a new technology among prospective users. TAM puts forward the perceived ease of use and perceived usefullness as two main factors while trying to explain the attitude directly and behavioural intention indirectly towards using a technology. Perceived ease of use is

described as "the degree that a person believes that using a particular system would be free of effort" (Davis, 1989). According to this, it is believed that if a potential user agrees with ease of using a technology, this heads up adoption to that technology. Moreover perceived usefullness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). Similarly this theory claims that the belief of deriving a benefit from something, leads to the adoption. Both of these factors were examined as the main determinants of attitudes of potential users towards several kinds of actions as web retailing (O'Cass, 2003; Ahn, 2007), online tax filing (Wang, 2003; Fu, 2006), digital libraries (Thong, 2002) and e-learning (Liu, 2003; Roca, 2006). Being inspired by these researches, it is hypothesized that in line with the perceived ease and perceived usefulness of online food ordering systems, the customers' attitude to order food from internet will vary.

H1: The attitudes of students towards online food ordering vary according to the ease of online food ordering process.

H2: The attitudes of students towards online food ordering vary according to the usefulness online food ordering process.

Rogers (2003) defines innovation in his book as 'an idea, practice, or object that is perceived as new by an individual or other unit of adoption' (p. 551). As there were many definitions of the related term 'innovativeness', Goldsmith researched the domain specific innovativeness (DSI) concept and defined DSI as 'reflects the tendency to learn about and adopt innovations (new products) within a specific domain of interest' (Goldsmith et al. 1990). According to this definition, on account of the fact that our research is in the context of IT, Personal Innovativeness in the Domain of Information Technology (PIIT) (Agarwal et al. 1998) can be seen as the exact equivalent term of our innovativeness'. Agarwal defines PIIT as 'the willingness of an individual to try out any new information technology' (1998). Lian examined that PIIT positively affects attitudes of customers towards online purchases (Lian et al. 2008). As being inspired by similar researches (Lu et al. 2005; Wang et al. 2006), it is hypothesized that in line with innovativeness, the customers' attitude to order food from internet will vary.

H3: The attitudes of students towards online food ordering vary according to their innovativeness against information technology.

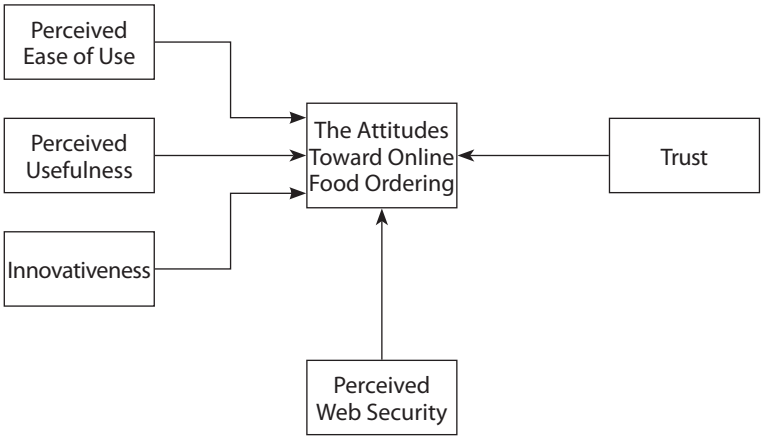
A migration from traditional shopping style to virtual online enviroment, may also gather some perceived risk for consumers (Kuczmarski, 1996). Lian (2008) expressed the similar opinion that since buyers and sellers do not interact face-to-face and the virtual environment allows high anonmity, online shopping involves greater security concerns than conventional trading. Meanwhile, O'Cass and Fenech also referred perceived web security as one of the key factors in adoption of Web retailing (2003). As such it is hypothesized that:

H4: The attitudes of students towards online food ordering vary according to their perceptions of Web security.

Pavlou (2003) defined trust as **"**the belief that allows consumers to willingly become vulnerable to Web retailers after having taken the retailers' characteristics into consideration**"**. Meanwhile, common beliefs about carrying business over the internet has a noteworthy effect on consumers against online purchasing (Gefen and Straub, 2003). According to these definitions, trust forms the basis of consumers' beliefs about the safety of online shopping. Concisely, in this study we mention consumers' trust to customer service quality and reliability of online retailer business. Besides it is referred that trust is one of the key factors that influence customers' attitude towards online shopping. As such it is hypothesized that:

H5: The attitudes of students towards online food ordering vary according to their trust in e-retailers.

Figure 1: Proposed Model



3. METHODOLOGY

A hard copy survey was the predominant measuring device used in our study. The population consist of the students of the Faculty of Economics and Administrative Sciences in Okan University. For all variables in our study we used multiple item (5-point, Likert-type) scales ranging from strongly agree (5) to strongly disagree (1). Convenience sampling method was employed. Data collection was realized as a field survey where the students were requested to fill in the distributed questionnaires without any incentives.

Measure items for the research were selected from prior studies. We tried to use the most commonly used items for each factor. The questionnaire was

composed of 28 closed ended questions. The opening questions were asked to see the internet usage frequencey and whether the subject had ever ordered food online, and if so, its quantile. Five items measuring ease and four items measuring usefulness of ordering food online were derived from Davis (1989), Moon (2001) and O'Cass (2003). Three items measuring innovativeness were adopted from Hung *et al.* (2006). Six items in total that measure perceived web security and trust were adopted from Ha (2009), Flavián and Guinalíu (2006). Three items for attitude toward online food ordering were adopted from Davis (1989) and Liao (2001). The last three items covered age, sex and current city.

4. FINDINGS

Out of 325 questionnaires, 231 questionnaires were returned, suggesting a 71% response rate. 25 questionnaires were excluded due to a large percentage of missing values. The demographic distribution among items as gender, age and internet usage and online food ordering experience can be analysed from Table 1.

Table 1: Sample profile of survey

Item	Demographics	Number	%
Age	Under 20	18	8.0
	21-23	153	68.3
	24-26	49	21.9
	27-29	4	1.8
	Missing	7	3.0
Gender	Female	97	42.0
	Male	125	54.1
	Missing	9	3.9
Experience of using WWW	Under 2 years	0	0
	2-4 years	4	1.7
	4-6 years	42	18.2
	Over 6 years	181	78.4
	Missing	4	1.7
Average time spent on internet per day	Under 2 hours	50	21.6
	2-4 hours	113	48.9
	4-6 hours	48	20.8
	Over 6 hours	16	6.9
	Missing	4	1.7
The number of times ordered food online	Never	47	20.3
	1-5 times	60	26.0
	6-25 times	67	29.0
	26-50 times	28	12.1
	Over 50 times	29	12.6

Prior to factor analysis, it is required to test if the data is compatible for factor analysis. Firstly, the normality checks all the measured variables were realized by the reviewing the skewness and kurtosis. In addition to this, Barlett's test and Kaiser-Meyer-Olkin (KMO) tests were used to test empirically whether the data were likely to factor well.

Table 2: KMO and Barlett's test

Kaiser-Meyer-Olkin		**.856**
Barlett's Test of Sphericity	Approx. Chi-Square	2297.606
	df	210
	Sig	**.000**

According to KMO test and Bartlett test of sphericity (Table 2), we found value of KMO which is large than 0.6 is in line with the requirements of the principal component analysis. At the same time, accompanied probability in the Bartlett test of sphericity is 0.000, which is less than significant level of 0.05, so we reject the Bartlett Test of sphericity and zero assumption and think they are suitable for principal component analysis.

Furthermore, cronbach's alpha coefficient has been used to assess the internal consistency of the scale. The obtained cronbach's alpha value for 21 items is .922 which indicates that the scale has high internal consistency. Besides we determined the cronbach's alpha reliability for each factor. In General, values>0.7 are considered satisfactory and as shown in Table 3, all values were above the recommended level.

Table 3: Convergent Validity and Internal Consistency Reliability

Variables	Items	Factor Loadings	% of Variance Explained	Cronbach's Alpha
Perceived usefulness	PU1	.774	10.552	.813
	PU2	.745		
	PU3	.726		
	PU4	.650		
Perceived ease of use	PEOU1	.724	34.558	.815
	PEOU2	.797		
	PEOU3	.650		
	PEOU4	.746		
	PEOU5	.694		
Trust	TR1	.821	5.716	.825
	TR2	.791		
	TR3	.745		
Innovativeness	INN1	.843	4.672	.761
	INN2	.769		
	INN3	.707		
Attitude	ATT1	.747	8.058	.887
	ATT2	.798		
	ATT3	.844		
Perceived Web Security	SEC1	.851	7.135	.831
	SEC2	.770		
	SEC3	.861		
Total:			70.692	

In addition to consistency test, a confirmatory factor analysis was conducted to test the convergent validity of each construct. Although there is no strict boundaries for the required levels of factor loadings, the commonly accepted values can ben seen in Table 4 (Moore and Benbasat, 1991). This analysis showed that most items had factor loadings higher than 0.71.

Table 4: Factor Loading Acceptance Table

Comment	Factor loading value
Unacceptable	< 0.45
Acceptable	< 0.55
Good	< 0.63
Very good	< 0.71
Perfect	< 1.0

In order to find the one-sided relationship of each independent factor with the dependent factor (attitude) and test our hypothesis, multiple regression

analysis was performed by using IBM SPSS version 19. As a result of the test applied (Table 5), it can be seen that perceived ease of use, perceived usefulness, trust, perceived web security and innovativeness were statistically significant predictors of each country's mortality rate. $F = 32.244$, $p < .001$, $R^2=.453$ (ANOVA). Although a tolerance value under .2 usually means the variable is correlating with other independent variables and should not be included, all of our factors seem significant and not correlating.

Table 5: Multiple Regression Results

Independent Factors	Tolerance	B	β	*p*
Perceived ease of use	.947	.387	.129	.016
Perceived usefulness	.719	.526	.429	.000
Trust	.721	.171	.134	.028
Perceived Web Security	.791	.070	.066	.045
Innovativeness	.813	.232	.176	.002
Dependent Factor: Attitude	***Enter Method Used**			

5. GENERAL DISCUSSION

Given the increased use of the online shopping, the study aimed to study the online food ordering in Turkey. Specifically, the purpose of this study was to empirically investigate the factors that affect the attitudes of university students towards ordering food by internet.

According to the analysis of the data gathered by questionnaire university students, all of our six hypothesis are supported. Despite the fact that this study gives us an idea about the factors that have influence on attitudes of potential customers for the latter studies, the main limitation is the employment of a student sample which prevents the generalizability of the results due to its lack of representativeness. Therefore, the further studies should employ representative samples to replicate the confirmed relationships in the model.

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GOODWILL PLANNING MODEL IN A STEP ACQUISITION PROCESS

Jasminka Radolović
Holcim Hrvatska, Koromačno, Croatia

ABSTRACT

The acquirer realizes quite often investment in a subsidiary through the step acquisition process, aiming consequently for control over an entity. Accounting for step acquisition is quite complex and the impacts, shown in the consolidated financial statements, can be of a great importance. The final impacts are always shown in goodwill and as a gain or loss in the statement of comprehensive income. Understanding these impacts can lead to a step acquisition planning, and, consequently, planning of goodwill. This process can be conducted through a planning model, based on relevant variables. The aim of this paper is to define goodwill planning variables and form a step acquisition model that calculates goodwill as one of the key consequential points of the acquisition process. Having a close insight in the respected variables can facilitate the step acquisition process, enable goodwill planning and predict the impact in the reported results and assets.

Keywords: *step acquisition, goodwill planning, model, goodwill variables*

1. INTRODUCTION

IFRS 3 defines business combinations as bringing together of separate entities or businesses into one reporting entity. It may involve more than one exchange transaction, especially when it occurs in stages by successive share purchases. Each exchange transaction shall be treated separately by the acquirer, using the cost of the transaction and fair value information at the date of exchange transaction, to determine the amount of any goodwill associated with that transaction. This IFRS requires all business combinations within its scope to be accounted for by applying the purchase method (IASC Foundation Education, 2012).

A step acquisition occurs when the acquiring entity obtains control over an entity for which it already held a non-controlling interest (Accounting dictionary, 2012). Accounting for the step acquisition has to be carefully considered and planned because it has significant impacts on reported results and equity.

When an entity acquires another entity, goodwill is the difference between the purchase price and the amount of the price not assigned to assets and liabilities acquired in the acquisition that are specifically identified. Creation of goodwill is to be carefully considered. Goodwill must be consequently tested for impairment on annual basis, at the same time of each succeeding year.

An investment in a subsidiary is often acquired in stages. Sometimes this is because an initial strategic investment has been made as part of a long-term strategy leading to control. In some cases, it makes commercial sense to acquire part of a business, and leave part owned by the vendor executives for a period of time to ensure their commitment to the continued success of the business they are selling (Ernst & Young, 2009).

The revised accounting standards for business combinations IFRS 3 and consolidated financial statements IAS 27 have introduced significant changes to the way these transactions are accounted for. These changes, in many ways, simplify the accounting, but the new approach creates new risks if the accounting impacts are not fully understood and planned for in advance.

2. MEASURMENT OF GOODWILL IN A STEP ACQUISITON

IFRS 3 Business combinations state the following (FASB, 2006):

1. in a partial or step acquisition, the acquirer should:

a. Measure and recognize the acquiree's identifiable assets and liabilities at 100 percent of their acquisition-date fair values, which is consistent with the recognition and measurement principles.

b. Recognize all of the acquiree's goodwill, not just the acquirer's share, which is consistent with the recognition principle. Goodwill should be measured as the difference between the acquisition-date fair value of the acquiree and the acquisition-date fair value of the acquiree's assets acquired and liabilities assumed. (Goodwill is an exception to the measurement principle because it is measured as a residual.).

2. In a step acquisition, any previously held noncontrolling equity interests should be remeasured to fair value and the resulting adjustment should be recognized in net income. Consistent with the accounting for a step acquisition, if a parent loses control of a subsidiary but retains a noncontrolling equity investment in the former subsidiary, the retained noncontrolling equity investment should be remeasured to fair value and the resulting adjustment should

be recognized in net income. In addition, the amount of any remeasurement gain or loss and the line item in the statement of comprehensive income where the gain or loss is recognized should be disclosed.

3. In rare circumstances, a business combination is not an exchange of equal values. Business combinations that are not exchanges of equal values are exceptions to the recognition principle. The acquirer should account for a business combination that is not an exchange of equal values as follows:

a. If the acquisition-date fair value of the acquirer's interest in the acquiree exceeds the acquisition-date fair value of the consideration transferred for that interest (referred to as a bargain purchase), the acquirer should reduce to zero any goodwill related to that acquisition and then recognize any remaining excess as a gain on the acquisition date. Therefore, the only time an acquirer would recognize a gain would be if the acquisition-date fair value of the net identifiable assets exceeds the acquisition-date fair value of the consideration transferred. In addition, the amount of the gain and the reasons why the acquirer was able to achieve a gain should be disclosed.

b. If the acquisition-date fair value of the acquirer's interest in the acquiree is less than the acquisition-date fair value of the consideration transferred for that interest (referred to as an overpayment), the acquirer would not recognize an expense on the acquisition date. Therefore, any overpayment would be subsumed in goodwill and subsequently tested for impairment.

Paragraph B45 of IFRS 3 explains that the fair value of the non-controlling interest will not necessarily be proportionate to the price paid by the acquirer, primarily due to the existence of a control premium or discount (Friedrich & Friedrich, 2009).

IFRS 3 provides limited exceptions to the general recognition and measurement principles. Some items may be measured at an amount other that their acquisition-date fair values. This includes a contingent liability that would be recognized as a provision if it is a present obligation that arises from past events, its fair value can be measured reliably and a future economic outflow is probable. IFRS 3 requires recognition at the acquisition date even if the economic outflow is not probable (Friedrich & Friedrich, 2009).

Subsequently, a partial disposal of an interest in a subsidiary in which the parent company loses control but retains an interest as an associate, creates the recognition of gain or loss on the entire interest. A gain or loss is recognised on the part that has been disposed of, and a further holding gain is recognised on the interest retained, being the difference between the fair value of the interest and the book value of the interest. The gains are recognised in the statement of comprehensive income (Student Accountant, 2009).

Regarding the measurement of Goodwill in a step acquisition, the Financial Accounting Standards Board (FASB) affirmed the fair value approach over the cost accumulation approach, as well as the full goodwill method over the partial or purchased goodwill method. Cost accumulation approach is consistent with existing U.S.GAAP.

3. RESULTS OF PREVIOUS RESEARCH IN GOODWILL MODELLING

Calculation of goodwill in a step acquisition can be found in various literature sources. It can be subsumed in the following model:

Table 1.: Goodwill calculation in a step acquisition

1.	Fair value of acquired assets
2.	Fair value of acquired liabilities
3.	Fair value of net assets (1-2)
4.	Consideration paid
5.	Fair value of previously held interest
6.	Fair value of NCI
7.	Total fair value (4+5+6)
8.	Goodwill (7-3)

Source: Pervan, I.: Računovodstvo poslovnih spajanja prema MSFI i HSFI, 2012.

This basic model is further elaborated, giving insight into variables that influence the main structure. Deeper insight is necessary in order to be able to distinguish the main points of impact in order to be able to carefully plan the acquisition process.

4. PLANNING OF GOODWILL THROUGH MODEL

In order to be able to carefully consider and plan the step acquisition and, consequently, goodwill creation, it is necessary to fully understand all variables that affect the process of goodwill creation. Goodwill planning can be subsumed in a model, created based on the goodwill planning variables.

Goodwill planning variables are the following:

G = Goodwill

P_n = Purchase price for the newly acquired share (ownership)

C_n = Control premium of the newly acquired share

E_p = Equity accounted carrying amount of previously held interest

$E_{f(p,n)}$ = Equity fair value of both, previously held and newly acquired shares
F_p = Fair value of previously held interest
A = Fair value of net identifiable assets
p = Ownership percentage of previously held interest
n = Ownership percentage of the newly acquired share
NCI = Non-controlling interest

1) Variables for determining E_p are:
1. Equity value (e),
2. Ownership percentage of previously held interest (p)
3. In force on the step acquisition date (t).

$$E_p = e_t \times p_t$$

Equity accounted carrying amount is a variable that does not directly impact goodwill. Together with fair value of previously held interest it forms the total value that is to be released in the statement of comprehensive income:

$$E_p + F_p = R$$

R = Gain / Loss resulting from step acquisition

2) Methods for determining $E_{f(p,n)}$ and F_p are:
1. Discounted Cash Flow (DCF) method
2. Purchase price method

DCF method as an accounting technique for estimating the present value (market value) of anticipated future income and expenditures, is normally calculated through tools created for this purpose. This method requires business planning for at least a 5-year period, supplying enough information for calculating the future cash flow.

If business plans are not available or are not reliable, the purchase price method can be applied. This method takes the purchase price as the main variable for determining the fair value of the previously held interest. The logic behind it is the following: purchase price is the best indicator for determining the fair value of previously held interest because it contains information of the fair value of the newly acquired percentage of shares. Main determinants of $E_{f(p,n)}$ and F_p are therefore:

a) Purchase price (P_n)

b) Control premium (C_n)

Control premium is an amount paid to gain enough ownership to set policies, direct operations, and make decisions for a business. It usually amounts to 10%-30% of the purchase price.

c) Ownership percentage of the newly acquired share (n)

$E_{f(p,n)}$ = Equity fair value represents fair value of equity considering the total percentage of ownership (p + n).

(1) $E_{f(p,n)} = ((P_n-C_n)*(p+n)) / n$

(2) $F_p = E_{f(p,n)} \times p = [((P_n-C_n)*(p+n)) / n] \times p$

3) Main determinants of A are:

R = Revaluation of long term assets

I = Impairment of long term assets

V = Value adjustments of assets

P = Provisions for risks

T = Tax implications (deferred tax asset and deferred tax liability).

(3) A = f (R,I,V,P,T)

A_t = Net identifiable assets on the step acquisition date (t).

T_a = Deferred tax asset

T_l = Deferred tax liability

Deferred tax asset in acquisitions usually derives from tax losses that can be carried forward for a certain period of years and are recoverable. Deferred tax liability in acquisitions usually derives from revaluation of assets.

Methodology of goodwill calculation affirmed by the FASB is a Fair value methodology. According to this IFRS accepted principles, the Basic equation can be stated as:

$$(4)\ G = P_n + NCI + F_p - A$$

By integrating equation (1) into (3) the model takes the following form:

$$(5)\ G = P_n + NCI + \{[((P_n-C_n)*(p+n)) / n] \times p\} - A$$

Variables that influence directly goodwill are important for goodwill planning are purchase price and control premium for the newly acquired share, percentage of previously held interest, percentage of newly acquired interest and all the variables that influence the net identifiable assets value, defined in equation (3):

$$(6)\ G = P_n + NCI + \{[((P_n-C_n)*(p+n)) / n] \times p\} - (A_t+R-I-V-P+T_a-T_l)$$

Variables that influence the statement of comprehensive income, causing gain or loss to be recognized as a consequence of step acquisition, are Equity accounted carrying amount of the previously held interest(E_p) and Fair value of previously held interest (F_p). Again, using the equation (2), the impact in the statement of comprehensive income can be shown as follows:

$$(7)\ E_p + \{[((P_n-C_n)*(p+n)) / n] \times p\} = R$$

Impact in the statement of comprehensive income is directly influenced by the purchase price and the control premium amount for the newly acquired share, percentage of previously held interest and the percentage of newly acquired interest.

If $F_p > E_p$ then $F_p - E_p$ = Gain in the statement of comprehensive income

If $F_p < E_p$ then $E_p - F_p$ = Loss in the statement of comprehensive income

Taken into account that the purchase price should be a carefully formed item, based on the information gathered in the due-diligence process, variables that can and should be planned in case of step acquisition are:

1. Purchase price for the newly acquired share,
2. Equity fair value $E_{f(p,n)}$, in sense of determining whether to apply DCF method or purchase price method for the calculation,

3. Control premium amount for the newly acquired share, that directly influences $E_{f(p,n)}$,
4. Percentage of newly acquired interest,
5. Fair value of net identifiable assets, aimed at taking into consideration all main determinants (R, I, V, P and T),
6. Non-controlling interest.

These variables influence firstly goodwill amount in assets, and secondly, statement of comprehensive income. Both moments are very important and influence reported results and equity.

Where an intangible resource is not recognised as an intangible asset, it is subsumed into goodwill. Some acquirers might be motivated to report fewer intangibles, and higher goodwill, because most intangible assets must be amortised whereas goodwill is measured under an impairment only approach. However, a high goodwill figure can create the impression that the acquirer has overpaid. It also raises questions as to whether IFRS 3 has been applied correctly. Acquirers can expect reported amounts of intangible assets and goodwill to be closely scrutinised by investors, analysts and regulators (Grant Thornton, 2008).

5. PRACTICAL APPLICATION OF THE GOODWILL PLANNING MODEL

Practical application of the goodwill planning model will be shown in cases of a bargain purchase and overpayment. The model is easily formed in excel, enabling the change of different variables and monitoring impact on goodwill and statement of comprehensive income.

5.1. BARGAIN PURCHASE

Bargain purchase can be shown using the following equations:

If $(P_n + NCI + F_p) < A$ then $G = 0$ and the impact in the statement of comprehensive income is to be calculated as follows:

$$R = P_n + NCI + F_p - A$$

In the example below a cost is shown with a positive sign, following the debit booking methodology, and gain is shown with a negative sign, as regularly booked on the credit side.

Table 2.: Goodwill calculation in a bargain purchase

Goodwill variables		Amount
Purchase price for the newly acquired share	P_n	1.000.000,00
Percentage of the newly acquired share	n	61,00%
Control Premium 30%	C_n	300.000,00
Equity fair value (purchase price method)	$E_{f(p,n)}$	1.147.540,98
Percentage of previously held interest	p	30,00%
Fair value of previously held interest	F_p	344.262,30
Non-controlling interest 9%	NCI	103.278,69
Fair value of net identifiable assets with respect to all determinants (R,I,V,P,T)	A	2.000.000,00
Percentage	p+n	91,00%
Negative goodwill - to be recognised in statement of comprehensive income as gain	R	-552.459,02
Equity accounted carrying amount of previously held interest	E_p	796.721,31
Impact in the statement of comprehensive income: Loss: Equity accounted carrying amount - Fair value of previously held interest	E_p-F_p	452.459,01
Total impact on the statement of comprehensive income: Gain		**-100.000,00**

Source: Author of the paper

In this case purchase price determines fair value of previously held interest. Sum of purchase price, NCI and the fair value of previously held interest is less than fair value of net identifiable assets. This difference is negative goodwill and has to be shown in the consolidated statement of comprehensive income as gain. In addition, the difference between equity accounted carrying amount of previously held interest and the fair value of previously held interest also has impact on the statement of comprehensive income (consolidated), but negative one (loss). The final impact on the consolidated statement of comprehensive income is the difference between gain and loss calculated, and in this case it results in gain.

Consequently, the only time an acquirer would recognize a gain R would be if the purchase price plus the NCI and the fair value of previously held interest is less than the fair value of net identifiable assets. But the total impact on the consolidated statement of comprehensive income depends also upon the equity accounted carrying amount of the previously held interest that has to be released through the statement of comprehensive income, as well.

Fair value of previously held interest has double impact: it is used in goodwill calculation, as well as in determining the impact on the statement of comprehensive income (E_p and F_p variables are reflected in the consolidated statement of comprehensive income).

A bargain purchase occurs if the fair value of the net identifiable assets exceeds the sum of the consideration paid, NCI and any previously held equity interest. If, after reassessing and reviewing all values and processes, a bargain purchase exists, the acquirer recognizes gain in profit on the acquisition date.

5.2. OVERPAYMENT

If $(P_n + NCI + F_p) > A$ then

$$G = P_n + NCI + F_p - A$$

Any overpayment is to be subsumed in goodwill and subsequently tested for impairment.

Table 3.: Goodwill calculation in an overpayment

Goodwill variables		Amount
Purchase price for the newly acquired share	P_n	1.000.000,00
Percentage of the newly acquired share	N	61,00%
Control Premium 30%	C_n	300.000,00
Equity fair value (purchase price method)	$E_{f(p,n)}$	1.147.540,98
Percentage of previously held interest	p	30,00%
Fair value of previously held interest	F_p	344.262,30
Non-controlling interest 9%	NCI	103.278,69
Fair value of net identifiable assets with respect to all determinants (R,I,V,P,T)	A	950.000,00
Percentage	p+n	91,00%
Goodwill	G	497.540,98
Equity accounted carrying amount of previously held interest	E_p	444.262,30
Impact on the statement of comprehensive income: Gain: Equity accounted carrying amount - Fair value of previously held interest	**Ep-Fp**	**100.000,00**

Source: Author of the paper

In this case sum of purchase price, NCI and the fair value of previously held interest is greater than fair value of net identifiable assets. This difference is goodwill and has to be shown in the consolidated statement of financial position. In addition, the difference between equity accounted carrying amount of previously held interest and the fair value of previously held interest also has impact on the consolidated statement of comprehensive income, but negative one (loss).

Consequently, an acquirer would recognize goodwill in the consolidated statement of financial position if the purchase price plus NCI and the fair value

of previously held interest exceeds the fair value of net identifiable assets. But the impact on the consolidated statement of comprehensive income has to be considered, as well. It depends upon the equity accounted carrying amount of the previously held interest that has to be released through the statement of comprehensive income, together with the fair value of previously held interest. Netting of these two categories results in loss in this case, causing a negative impact on the consolidated statement of comprehensive income.

6. CONCLUSION

Step acquisitions represent business combinations achieved in stages, where an acquirer obtains control of an acquiree in which it held an equity interest. Control is obtained on a certain date. On that date the acquirer must re-measure its previously held interest.

As a result of a step acquisition, the acquirer becomes responsible for the whole business, including acquiree's assets and liabilities. Therefore the acquirer must establish their fair value on the acquisition date, resulting in the fair value of net identifiable assets.

In a process of planning a step acquisition, the acquirer will decide whether to recognise other intangible assets or form the goodwill, considering the fact that most intangible assets must be amortised, and goodwill is to be tested for impairment yearly. Nevertheless, a higher goodwill can create the impression of overpayment.

Previous research in goodwill modelling is limited to defining main variables: fair value of net assets, consideration paid, fair value of previously held interest and fair value of non-controlling interest. This basic structure is further elaborated, searching for other main key points in impacting goodwill.

Considering the significant impacts on the reported results and equity, it would be desirable to plan the step acquisition process in all its aspects. Proposed goodwill planning model can facilitate the planning of a complex step acquisition process. Goodwill planning variables are purchase price, equity fair value, percentage of the newly acquired share, control premium, equity accounted carrying amount, fair value of previously held interest and fair value of net identifiable assets. Equity fair value can be determined through DCF method or purchase price method. Method chosen for the calculation impacts directly fair value of previously held interest and consequently goodwill. The percentage of control premium, ranging usually from 10% to 30%, has to be carefully considered due to its impact on equity fair value, and therefore goodwill. Fair value of net identifiable assets should include all relevant determinants: revaluation, impairment, value adjustments and provisions for risks

and tax implications, which can also be adequately planned. The acquirer can plan the percentage of interest to be acquired, as well as the impact of non-controlling interest.

Goodwill planning variables are to be adequately considered and put into relation with the results to be obtained in assets through goodwill creation and statement of comprehensive income, usually on the consolidation level. Model is user-friendly, can be easily formed in excel and gives insight into the relation among variables, as well as toward the final result in goodwill creation and statement of comprehensive income impact.

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INFORMATION CHALLENGES TO COST ACCOUNTING IN GLOBAL SETTINGS

Radmila Jablan Stefanović
Faculty of Economics, Belgrade University, Serbia

ABSTRACT

Managers in contemporary companies face complex and numerous challenges of successful company management. Achieving and sustaining competitive advantage in a dynamic and thoroughly uncertain environment necessarily requires sophisticated professional knowledge and skills, as well as designing an adequate information system. Cost accounting, as the essential part of a company's accounting information system as a whole, represents a reliable information support for the management. Only a flexibly designed cost accounting information system can qualitatively respond to numerous and various information requirements – as such, it will be able to adapt to changes occurring in business environment as well as in the company itself.

This paper discusses the cost accounting role as the information basis of company management in global settings. Some of the new tools, concepts and approaches to costing and cost management, which are fundamentally important in order to implement and support the companies competitive strategies, have been highlighted.

Keywords: *globalization, management, strategy, cost accounting, cost management.*

1. INTRODUCTION

Cost accounting (CA), as a basis information source useful for business decision-making, has the fundamental role within the entire accounting information system of a company. When considering the development of cost management (CM), it is very important to link it with modern challenges to organizations.

Modern business environment inevitably requires CA restructuring and new approaches to costing and CM in order to improve cost information qual-

ity. It is necessary to provide adequate information support concerning the process of business strategy formulation and implementation, i.e. finding adequate directions leading to the strengthening of the competitive position on the increasingly turbulent market.

2. COST ACCOUNTING AS THE KEY INFORMATION SUPPORT

The accounting of a company has, basically, the objective to create a quality information basis which, ultimately, has to be in the function of efficient company management. CA, which measures and reports financial and non-financial information related to the organisation`s acquisition or consumption of resources (Horngren,et al.,2005), has an exceptionally important position within the entire accounting information system of an organization because it provides information to both management accounting and financial accounting as subsystems of the accounting information system. When its information is intended for the financial accounting it measures product costs in compliance with the strict legal and professional regulations; however, when its information is used for internal purposes it provides the basis for planning, control, and decision-making. Thus, information support of CA is not exhausted by providing information for the purpose of reporting balance sheets and income statements of the company as a whole, which is its traditional task. It also provides valuable information support for the management in performing the systematic management control as well as in making various business and financial decisions. This means that its information support is expanding towards the creation of relevant information for internal reporting on a company's business activities – especially for short term periods and in smaller organizational segments. Cost data for the purpose of internal reporting are meanwhile relatively free from the constraints of legal and professional regulations. Accounting data used for external reporting very often do not completely satisfy managers' needs for decision-making purposes. Attempts at slight modifications of financial accounting systems for managerial purposes rarely end happily – like eating soup with a fork: it is possible, but it is far from effective (Maher, 1997).

Meeting various information needs of the management related to *making individual business and financial decisions* has been emphasized over the last few decades as the fundamental CA task – it assumes calculating costs and benefits of individual business alternatives. By using unroutine cost-benefit analyses, CA creates reports based on the concept of *relevant* information. The concept of relevant costs, in choosing among alternatives, assumes considering the expected future costs which differ in alternative actions. Relevant cost analysis generally emphasizes quantitative financial information, but in decision-making, managers must pay due attention to quantitative nonfinancial

and qualitative information and must, occasionally, give greater significance to qualitative or nonfinancial quantitative information. Nonfinancial information concerns legal and ethical considerations and long-term effects of decisions on the company image, employees' morale and the environment, and is relevant to particular business decisions.

While designing accounting information systems one must not lose sight of the following (Maher,1997): decision-makers' needs must be met; different cost information is used for different purposes – what works for one purpose will not necessarily work for other purposes; cost information must meet the cost-benefit test – namely, cost information can always be improved, but before establishing a new system, one basic question should be asked: will the benefits outweigh the costs? It is of vital importance that cost accounting information systems should be flexibly designed. Due to the fact that they are relatively free from legal and professional constraints and are in function of the company management, they are, in accordance with the needs of internal users, able to generate a broad range of information. Being flexible, it will be able to adapt to changes occurring in the business environment as well as in the company itself and, accordingly, respond in a qualitative manner to numerous and various information requirements of the company management.

Today, there are new requirements for changes and continuous improvement so that the management could have adequate information support in managing the company – particularly key strategic variables. The extent to which CA is capable of helping the management in serving the abovementioned purposes fundamentally determines its significance, i.e. the usefulness of its information. It is of great importance that the accountants should know their job well and seek the ways to add value to their organizations. In many successful companies in the world the accountant is a member of multifunctional teams as a reliable associate.

3. CHANGED BUSINESS ENVIRONMENT AND NEW KEY THEMES

Market globalization creates a new business environment - some traditionally powerful markets have weakened while others have grown, cultural and geographical distances between people are fading, innovation in all aspects (technology, markets, finance, etc.) has become paramount for companies' sustainable competitive advantage. Achieving maintaining and improving the competitive advantages of companies, is a *condition sine qua non* of modern business. The trends of globalization followed by the removal of national barriers inevitably result in sharp intensification of international competition. Powerful integration relations require systemic perception and coordination of business processes of all involved organizations. In recent years,

companies worldwide have considerably changed their strategies – from internally focused strategies to externally focused ones, whose top priority is customer satisfaction. Numerous studies reveal that companies emphasize creating long-term value for shareholders are likely to outperform those that focus on preserving shareholder value in the short term (Horngren, et al. 2005). Moreover, customers are more fastidious – they insist upon low costs/prices, quality, time and innovations. This imposes the need of redirecting from mass production of standard products and the strategy of the economy of scope to the strategy of the economy of scale of company activities. Regardless of the concrete orientation regarding business strategy, the contemporary company inevitably faces the requirements of cost competition.

Many organizations have faced a new environment that inevitably affects CA and CM. CA should provide helpful information for a quality business decision-making and specifically for supporting CM analysis and projects (Silvi, et al. 2008). There are a few new crucial themes that should be stressed. One of the new key themes in CA is turning the attention to the customer. *Customer in focus* is the key point of the organization's success. "To be customer-driven" lies at the heart of CM; among all aspects of business operations which the management must take care of, the customer is the most important because without him the organization loses its purpose. There is a permanent question in the way business operations are performed which puts the emphasis on customer satisfaction: how can value be added for the customer? The focus is on the most profitable customers and the ways to first attract them and then retain them. Today, companies first identify customer needs and demands, and then proceed with the product design and production. *Value chain and supply chain analysis* is also a key theme. By using VC and activity cost information companies can identify strategic advantages on the market. Supply chain (SC) assumes the idea of an "extended company" - the focus expands from company *production* VC to *purchase* VC on the one hand to *distribution* VC as the final part of the whole industrial VC on the other. CM emphasizes integration and coordination of these activities through all links i.e. companies in the SC, as well as through each business function in the VC of individual companies. *Costs, quality, time and innovations* are key factors of business success. The management must continuously focus on these key strategic variables in relation to competition, which surpasses the frames of their company and draws their attention to changes in the external environment observed and assessed by their customers as well. It is of vital importance to manage them carefully and thus affect the level of customer satisfaction. Customers want more than just lower prices and costs – they want quality, responsibility, punctuality. The combination of *benchmarking and continuous improvement* is an ever-present theme in the new approach to management. By comparing with the best examples, the management finds ways of

continuously improving their proper practice. Benchmarking and continuous improvement are often described as a "the race with no finish" because management and employees displeased with a particular performance level seek continuous improvement. When they adopt this philosophy, the organizations perceive that they are able to achieve performance levels which they previously considered unattainable (Maher, 1997).

Thus, new environment brings new challenges and problems which inevitably impose the need for serious reconsideration of past business philosophy established in stable and predictable business settings. It is of great importance to adopt a wider external orientation with the constant focus on changeable and sophisticated customer demands. The company's existence on the market directly depends on the degree of fulfillment of customer expectations but also on the intensification and strengthening of cooperation with other organizations from the environment (customers, suppliers, distributors). Quality exchange of ideas and information, better interorganizational coordination and integration of vital business activities are necessary assumptions for more successful competitive positioning of the company on the market.

4. NEW CONCEPTS AND APPROACHES TO COSTING AND COST MANAGEMENT

Numerous studies point at the weaknesses of traditional formal CA systems, particularly emphasizing the problems of distortion, i.e. distorted information and limitations in presenting cost drivers, amounts and cost profiles in an extended business operations system. Modern business environment inevitably requires CA restructuring and new approaches to costing and CM in order to improve cost information quality. It is necessary to provide adequate information support concerning the process of business strategy formulation and implementation, i.e. finding adequate directions leading to the strengthening of the competitive position on the increasingly turbulent market. In general, improved CA can reach more management objectives than traditional CA.

In the past few decades there has been an increasing number of discussions about CM and extending various limits. It is a dynamic process which assumes intensive efforts directed towards continuous improvement, i.e. improving the existing and inventing new tools and techniques, starting with early activity-based costing models and pursuing lately in the direction of strategic cost management (SCM). In that period, the most prominent trend has been *shift the focus* from determining product costs by using standard traditional cost models, towards providing support for strategic and operational decisions by using certain forms of activity analysis. While considering the development of CM, it is very important to link it to modern challenges to

organizations. Therefore, suggestions go in the direction of separating it from traditional accounting and abandoning the long-standing linearity of measuring historical costs and static standards.

The turning point in the development of CA was the advent of *Activity Based Costing (ABC)* which emerged primarily as an expression of the need to provide much more accurate data about the output cost price compared to traditional methods. It focuses on activities as parts of the entire process in a company and their cause and effect relations with the resources used as well as with cost objects (products and services, market segments, customers) i.e. activity drivers. However, management can use it not only for the purpose of calculation, i.e. more accurate product costing and, therefore, more successful price and product and service range management, but also for providing financial and nonfinancial information on activities, and effective CM – as assistance to activity based management. *Activity Based Management (ABM)* focuses on managing activities with the aim of increasing the value which the customer receives and profit obtained by providing this value, which assumes driver analysis, activity analysis and performance evaluation. According to ABM approach to company management the attention of managers is directed towards company activities; ABM assumes a set of decisions and actions based on ABC concept information. The goal is to increase the value delivered to customers and to boost company profitability to a higher level. Strategic and operational ABM are singled out. *Strategic ABM* assumes directing the organization towards the most profitable use of resources. *Operational ABM* assumes decisions and actions with the goal of continuous improvement of business processes - it is directed towards the improvement of efficiency and reduction of resources necessary for performing respective activities. (Cooper and Kaplan, 1999) ABC model determines where the greatest possibilities of cost reduction lie; but ABC information is not a current operating tool for the activities of improvement. This model offers the key direction for decision-making where to launch initiatives such as kaizen costing, pseudo-profit centers, TQM and reengineering. *Activity Based Budgeting (ABB)* extends the ABM idea to the planning cycle by using it to establish cost limits and control systems in organizations. Supported by activity analysis ABB uses benchmarking information to help the company to control costs and eliminate the increasing trend of exceeding the budget without improving the company's ability to create value for customers (McNair,2007). ABB is directed towards future resources, activities and outputs and is a valuable information support to the process of strategic decision-making.

One of the most important recent innovations is *Just-in-Time (JIT)* concept of purchase and production. This business philosophy emerged from the need of the management for a more efficient inventory management, i.e. reduction of investing in inventories and it assumes that materials flow and produc-

tion process runs smoothly. JIT system application requires a highly efficient coordination of purchasing, production and marketing functions. Unless all production process components are reliable, this system loses its efficiency. As a result, significant changes in organizational (structural and procedural) company activities which occur with the introduction of JIT systems, affect the nature of CM accounting systems–traceability of costs changes, product costing accuracy rises, the need for allocation of service-center costs diminishes, cost behavior and relative importance of direct labor costs changes, job-order and process costing systems are affected, reliance on standards and variance analysis as well as inventory tracking systems decrease. In sum, organizational changes concern both CA and operational control systems. In general, they simplify CM accounting systems and at the same time increase the accuracy of cost information obtained. Therefore, a simplified approach to manufacturing cost flow has been developed – *Backflush Costing (BFC)* method which significantly saves time and effort and reduces errors – in JIT settings, among other things, there are no departments, production cycle time is measured in minutes or hours, and products are dispatched immediately after the completion; so it looks absurd to track costs from position to position within a cell. BFC uses trigger points to determine when manufacturing costs are assigned to particular key accounts. There are several variants of this method depending on the number and location of trigger points (Hansen and Mowen, 1997).

Target Costing (TC) is a tool (McNair,2007) which emphasizes the relation between the price and market share as a basis for disciplining an organization's spending during product and process design, development and engineering. It is a completely new approach: how much a product is allowed to cost (Seidenschwarc,2005). TC is built in the decision-making (planning) process concerning introduction of new and making radical changes to the existing products and processes. *Target Cost Management (TCM),* as a tool for a comprehensive cost and profit management and as a concept of long-term strategic CM, focuses on the design stage. It initiates CM in the earliest stages of product development and is aimed at intensifying the cooperation with the suppliers and other organizations on the market. TC operates after a general model: target costs = target sales price – target profit. If the target cost is below the presently feasible cost, the management budgets cost reductions which direct real costs to target costs. Bearing in mind the organizational aspect, a successful implementation of TC concept assumes the creation of an organizational team structure that should include experts from different functional areas of the company as well as from the organizations it cooperates with on the market.

Life Cycle Product Costing (LCPC) is an extension (McNair,2007) to TC tools, which links all costs driven by a new product, from the conception of the

idea for the product through to its removal from the production program and withdrawal from the market, i.e. 'from the cradle to the grave'. The products are analyzed in order to determine whether they will bring profit during their entire life cycle. *Life Cycle Product Cost Management (LCPCM),* according to the integrated approach, consists of activities leading to product design, development, manufacturing, marketing, distribution, use, maintenance, service and removal, with the aim of maximizing life cycle profits. As a result, product costs are tracked and analyzed through all stages of its life cycle, which is radically shortened due to changeable customer demands and the increasingly ambitious competition regarding the technological product innovations. In contemporary settings it is of vital importance to launch a new product on the market and replace the existing product with the innovated one as soon as possible (regarding quality and functionality). LCPCM stresses cost reduction, not cost control.

Value Chain Analysis (VCA), i.e. costing and CM through the value chain, is a concept representing the broadest approach to management. It assumes monitoring the relations among activities that create value with the aim of cost reduction, where the problems of tracking, measuring, analyzing and managing costs are extended outside the borders of a company. Beside internal value chains (VC), it extends to the area of supply chain, i.e. suppliers, on the input side, and distribution chain, i.e. customers – distributors and end users, on the output side, because the internal VC of a company is built in the broader value system which includes both supply VC and customer VC. That is to say that the leadership strategy in low costs and/or the differentiation strategy can lead to sustainable competitive advantage, but successful application of these strategies requires the managers to understand all the activities that contribute to their achievement. It is necessary to understand the industrial value chain as a whole, not only the part in which the company participates. Without an external focus there is no effective strategic CM. With the aim of successful implementation of the relevant strategies it is necessary to break the VC into strategically relevant activities of a company. VC is a necessary approach to understand these activities; understanding both the complex links and interrelations between activities performed inside the internal VC of a company (internal linkages), and those describing the linking of activities of a company with the activities of suppliers' VC and customers' VC (external linkages). Therefore, in order to describe and exploit these relations, it is necessary to identify company activities and choose the ones that can be used for creating and sustaining competitive advantage. The optimal choice assumes the knowledge of costs and value created by each of the activities, as well as relevant cost drivers.

It is also very important to point out that one of the critical factors of the success of pursuing competitive strategies on the market is to provide a

rounded up performance measuring system. One of the solutions is the so-called *Balanced Scorecard (BSC)* which provides a comprehensive framework linking strategic objectives of the company with a coherent set of performance measures (Zimmerman,2000). BSC attempts to unite and balance traditional financial perspective (concerning the measuring of current and designing future financial results) with three more perspectives of vital importance for a successful pursuit of competitive strategies on the market – the perspectives of customers, business processes and innovations and learning. In the BSC approach to performance improvement the most critical processes for the success of a strategy are identified. When using BSC, managers usually realize that for the implementation of a new strategy it may be much more important to stand out in completely new processes than to create gradual cost improvements in the existing processes. (Cooper and Kaplan, 1999)

Value Stream Accounting (VSA) is characteristic of *lean manufacturing (LM)* which developed from Toyota production system based on the JIT model and is the complete opposite of traditional production. Many companies, aspiring to the "world class" position, follow LM whose objective is to improve efficiency and effectiveness in every area – including product design, interaction with the suppliers, factory operations, managing employees and customer relations. In order to keep this position, they must persist in "endless journey" which requires continuous innovations and improvement. The lean philosophy promotes cost reduction, elimination of waste, reduction of cycle time and increasing organization efficiency (Gordon, 2010). "Lean" includes making the right product at the right place at the right time in the right quantity with minimum waste and sustaining flexibility. Thus, the key for successful LM lies in the achievement of production flexibility which includes physical organization of production plants and the application of automated technologies including CNC machines, CIM, *robotics,* CAD, CAM. (Hall,2008). Companies inclining to LM often use the tool *value stream map (VSM)* to present their business process graphically in order to identify the wasteful aspects which should be eliminated. VSM identifies all actions needed to complete product processing (batches or individual products) together with the key information about each individual action (it can include total labor hours, overtime, cycle time for the task completion, error rate. Information needs of a lean company cannot be adequately supported by traditional information provided through conventional accounting techniques, because of inaccurate cost allocation, promotion of non-lean behavior, inaccessibility in real time, financial orientation. Therefore, many lean companies have adopted an alternative accounting model. Some of them see the solution in ABC method, but many replace it with a simpler accounting model, the so-called VSA. It tracks costs by the value stream instead of department or activity; the value streams cut across function lines and departments,

i.e. horizontally, and thus links with traditional vertical reporting on structure and cost flows are broken. It is of fundamental importance for its implementation to define *product families* – namely, products are grouped into natural families which share common processes from placing an order to delivering of finished products to customers. (Hall,2008) As for the information support to lean manufacturing and world class companies, three information systems are being considered, from MRP and MRP II to ERP. ERP integrates departments and functions throughout the company into one system of integrated applications with a unique common database. A lean manufacturing company will thus have ERP system capable of external communication with customers and suppliers through electronic data interchange (EDI).

In order that CM could secure an important position in the 21st century and reject the label 'old wine in new bottles', key instructions are listed for the most recent research and practice regarding new techniques for the 21st century, such as (McNair,2007): resource consumption accounting; the relative cost of intellectual capital and the value it creates; waste measurement and analysis; non-linear cost functions; dynamic cost modeling and prediction. Each of these techniques adopts a broader view of costs, focusing more on the way resources affect one another in creating or destroying the company value than on measuring the status quo. CM follows the need to define, measure and help the organization to maximize its potential to create value.

5. CONCLUSION

Achieving sustainable competitive advantage in a dynamic and thoroughly uncertain environment necessarily requires sophisticated professional knowledge and skills, as well as designing an adequate information system. Only a flexibly designed CA information system can qualitatively respond to numerous and various information requirements – as such, it will be able to adapt to changes occurring in business environment as well as in the company itself. Only by integrating the internal and external aspects it is possible to provide quality information for strategic management of a modern company.

Practical application of some new solutions faces difficulties in developed countries as well, because of high investment and operational costs. It is particularly emphasized that, from the aspect of modern CM, there is much left to be done in order to raise CM to the highest level of the modern practices. Our conditions are, unfortunately, characterized by underdevelopment and weak application of the CA new solutions in practice. It is necessary to widen and deepen more intensively the existing theoretical and practical knowledge which will enable us to examine the wide focus of company cost and perfor-

mance management and to recognize the right conditions for gradual development and implementation of new solutions along with the development of our economy. It also seems logical to ask the following question: How much do cultural features and mentality affect the implementation and efficient functioning of a particular solution? In any case, the new solution must be closely examined by the cost-benefit analysis which should clearly show whether the benefit of using particular information outweighs the costs of providing it.

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THE REALITY OF ACCOUNTING EDUCATION IN LIBYA AND PROSPECTS OF ITS DEVELOPMENT

Tarek Mami
Faculty of economics, Zawia University, Zawia, Libya

ABSTRACT

The study aims to determine the knowledge, experience and required skill from the accountant to perform her/his functions and duties, and to identify the appropriate teaching techniques and methods for qualifying accounting graduates to carry out such tasks. One of the most important results of this study is that curricula are the most influential and contribution elements of accounting education to raise the efficiency and development of students.

Keywords: *accounting education, curriculum, accounting profession, accounting research, Libya.*

1. INTRODUCTION:

Due to the increasing of challenges size in the world economy ,and trade that was imposed by globalization on various countries around the world, including Libya and what's the world undergone of severe economic crisis which hit all countries, in addition to consequences of all this on the domestic economic situation, and what's doing at all levels to reduce its exacerbating, so all of these increases responsibilities of those involved in the accounting profession in general as well as the academic and educational institutions in particular to carry out their duties in the preparation and graduation of professional competencies in the various financial areas those are capable to contribute to implementation of development plans and fulfillment the needs of the labor market of graduates in the field of accounting.

The comprehensive development is now suffering either from a sharp shortage and scarcity of accounting information for the development or lack

of its availability in a timely manner and for appropriate purposes in accurate and correct form, overshadowing the ability of decision makers, whether in private or public sector to put strategies and appropriate plans to reach good decisions when making development decisions that live up to event and urgent challenges facing the economy of Libya such as reduction of oil prices and its impact on reduction of state revenues and influence of all on development projects, which casting a heavy responsibility on those bodies those are entrusted with production of appropriate and correct accounting information, such as departments of companies , departments of government agencies and different sectors, so this casting on the governmental supervisory and control bodies as the accounting bureau and ministries of trade and central banks, a big responsibility to make sure that these accounting information live up to the requirements of international accounting standards ,laws ,systems, regulations and decisions issued by these bodies and its various organs, particularly with regard to full disclosure , transparency and bases of the government.

Accounting education occupies a big importance along with many other disciplines, this importance comes because of the specificity of accounting view and the continuous and permanent need of accounting work for business organizations and labor market in the scope of any society.

So, accounting is art depends on using the self-capabilities of accountants in judging a lot of economic and financial events those are facing accounting work, also it is science under social sciences which is characterized by classified knowledge with scientific article that could be accessed by study and experience together through different stages of time, as well as it is a well-organized profession that is practiced in practical life according to privacy characterizing by it and making it prominent among other professions they are needed by the society in a permanent and continuous form.

The responsibility for the preparation of qualified accountants with academic and professional skills is the duty of several sides, institutions of higher education come in the forefront through formulating, adopting and keeping up teaching methods based on proficiency in academic and professional preparation, namely those focus on providing the learner academic abilities and professional skills and which international organizations called for ,and most notably is the international union of accountants, necessity of moving towards it, whereas the traditional method currently used does not qualify the student as much as required to practice the profession competently, also this method does not take into account concept became widespread recently in the educational communities, that is «transferable skills»[1], in the sense that the skills

[1] Stephen Fallows & Christine Steven, **Integrating Key Skills in Higher Education**, (UK,Glays Ltd, 2000),p8.

those are being developed through various educational stages can be useful for the person when he/she is moving to the stage of employment, thus, this concept can help to know the required skills for working, then acting to integrate them into educational programs, in addition to these developed skills ,the employee could be moved it thereafter in practice at his/her moving between different work environments. It is worth to mention that the accounting education, which gives the knowledge, skills, values and ethics, is an education based mainly on the general education[2], which is based on non-professional knowledge those are received in either in previous educational stages or at stage of accounting education itself, and examples of such knowledge are: history , human behavior, legal &political sciences, mathematics, language arts, literature, etc., where it can encourage education lifelong if it is studied extensively, and give the base that is built on it professional and accounting studies, so this base may consist of:

- Understanding the flow of ideas and events through history, the different cultures of the world today, and international perspectives.
- Basic knowledge of human behavior.
- Having capacity on horizon of thinking about ideas, issues & different economies, and political & social forces in the world.
- Experience in inquiring about quantitative data and evaluating it.
- Ability to conduct consultative investigations, keep track of the logical thinking, and understand critical thinking.
- Taste of art & literature and appreciate science.
- Realization of social& personal values and awareness of inquiry and passing of professional judgment processes.
- Experience in passing of professional judgments.

Thus, public education is the basis of learning and the acquisition of most required skills for accounting work, like mental and technical skills, interpersonal skills with others and communicate with them, and skills of organization and management of business and others.

Results of a study entitled "The future of accounting education in the Arab world" that dealt with curricula of accounting which are taught at 26 university in various Arab countries (Libya outside the study sample); have shown that the percentage of coverage of non-accounting topics (general

[2] IFAC Education Committee, IES3: **Professional Skills**, (www.IFAC.org/store/category.tmpl?category=Education/, October,2003),page 21.

education) with respect to accounting topics reached 21% , while this percentage increases in programs of universities in developed countries to 50%[3] ,and when calculating this percentage from the reality of both programs of accounting departments at faculties of economy , Benghazi and Tripoli universities, it was found that it is 31% approximately, and this is a good indication, but does the content of these subjects to the local environment to appropriate quality able to develop these skills?

In order to meet the needs of the community of accounting , it had to take an interest in the process of accounting education in which they can prepare academic& professional cadres those are able to fulfill the needs of the growing demand for accounting that is arising from many developments that occur continuously, and to identify qualification and effectiveness of accounting education system in Libya and how to fulfill the required requirements in the light of numerous and rapid developments that occur in various areas of life and what require from study of accounting education reality and its evaluation and then the continuous search for areas of development in it as a matter of taking into account and thereby to maintain the role of accounting and contribute in achieving of the objectives of its educational system, hence the importance of research shows also by highlighting on Libya as one of developing countries that needs to continuous update for development prospects and try to take them, especially in the educational field.

The paper organized as follows. Next section (theoretical) discusses accounting education. Section 3 briefly refers to accounting education in Libya. Section 4 process and analysis data. Finally, section 5 I provide results and conclusion.

2. ACCOUNTING EDUCATION:

The interest in accounting education is an continuous need, and this interest can be achieved through the availability of correct scientific bases by which it may achieve the purpose of accounting education and accordingly it has to be considered the accounting education as an integrated system consists of a set of interrelated elements to achieve its objectives, the elements are:

1 - Inputs: those are represented in students who can prepare them to practice accounting work.

the greatest attention is lying on students themselves in order to be their participation in development of society in general and the business community in particular, thus the educational system focuses on the rehabilitation of students to satisfy the accounting requirements.

[3] E.J. Gress, "The Future of Accounting Education in the Arab World" Arab Certified Accountant, July 2003. available in: www. ascasociety .org

2 - Operational processes: those are represented in different education means of curricula, accounting laboratories, field applications as well as qualified scientific staff.

A. Curriculum: represent general &comprehensive plan for scientific content, or materials that should be provided by university to the student to qualify his/her for graduation, in order to enter into a realm of life.

B. University staff: is one of the most basic elements of the educational process, and the higher level of its efficiency increases the efficiency of the educational process.

C. Educational Administration: requires advanced planning, continuous giving for arrangement and development in the educational process, effort for the implementation of collective human work, which seeks for providing appropriate environment to achieve educational goals ,so it is a set of interconnected processes those are integrated with each other to achieve the goal of educational institution.

3 - Outputs: those are represented in qualified graduates to practice accounting work academically and professionally.

4-Feedback: through monitoring, evaluation and developing of the previous elements, and try to correct any deviations.

3. ACCOUNTING EDUCATION IN LIBYA:

We can take a brief look at the reality of accounting education at all educational levels as follows:

First: accounting education in Libya exercises in secondary school (high school or secondary school), therefore their way to study of accounting isn't considered in most cases, may depends often on the advice of someone or because of inability to complete the study in other branches, or any other side factors ,as well as the number of study years at this stage is from three to four years where the student high school is given secondary school certificate in economic sciences which qualifies him/her for university.

Second: high school graduates are accepted in the faculties of management and economics ,as well as the number of study years is four years then the student is given bachelor of accounting science which qualifies him/her for work in accounting.

Third: There is no sufficient areas for higher studies within higher education institutions in Libya, where the number of universities that give higher diploma, master's and professional master's is limited, and generally Libyan universities don't give a doctorate degree (PhD) in any of disciplines in the field of economic and administrative sciences.

4. PROCESS DATA:

The study sample included four main categories of close relationship with the accounting education, and these categories are:

1 – university staff.

2 - The educational curricula.

3 - The students.

4 - Educational administration.

The study data has been collected by using questionnaire to find out the views of relevant groups about the reality of accounting education in Libya and prospects of its development.

The following table No. (1) shows study population number of six universities those are distributed over parts of Libya, (Tripoli, Benghazi, Al-Markab, Misurata, Gharyan, and Zawia).

Table No. (1)

Classification	Faculty members	Students
Tripoli university	15	700
Benghazi university	28	176
Al-Markab university	9	15
Misurata university	4	117
Gharyan university	17	70
Zawia university	8	55
Total	81	1133

The following table No. (2) shows sample individuals number those are distributed over students and faculty members.

Table No. (2)

Class	Sample	Community	Percentage
Students	182	1133	16%
University staff	20	81	24%
total	202	1214	

Source: from registration faculty of economic in universities

The questionnaire uses (41) paragraph concerning the four elements of education (university staff, curricula, educational administration and students).

5. ANALYSIS DATA:

It was used multiple-linear falling equation to measure and analyze the relationship between the elements of accounting education ,to test whether there is a relationship between the efficiency of each of the university staff, and curricula, educational administration to performance of students.

$$Y = b + aX1 + bX2 + cX3$$

Where y represents the efficiency

X1 represents the university staff.

X2 represents the educational curricula.

X3 represents the educational administration.

B represents the constant of falling.

The following table No. (3) shows the linear relationship between the efficiency of the students and the efficiency of university staff, curricula and educational performance.

Table No. (3)

		B	Value of (t)
	The constant of falling	17.13	6.27
1	The university staff.	0.032	0.38
2	The educational curricula.	0.29	3.61
3	The educational administration	0.20	2.63
The multiple Correlation between independent variables	0.45		
Explanatory power of the equation R (R secure)	0.20		

It was shown in Table (3) that B= 17.13 in the sense that any single school vocabulary will get a 17.13 of determined degree for testing the efficiency of the students. It is clear that the efficiency of the university staff doesn't have significance compared to the other elements.

Y=17.13+0.032X1+0.29X2+0.29X3

It was done by using analysis of mono-variance to test whether there were significant differences between the performance of university staff and students in the elements of accounting education (university staff ,curricula, and educational administration). And Table No. (4) shows the analysis of variance for one dimension between elements of the study:

Table No. (4)

	Source of criticism	Sum of squares	Degree of freedom (DF)	Variance	Value of F	Tabular Value of F 5% level of significance
The university staff	Between groups	441.6	2	220.8	2.500	0.34
	Within groups	17398.7	197	88.3		
Curricula	Between groups	13.11	2	6.55	0.10	0.34
	Within groups	12653.2	197	64.2		
Students	Between groups	41.05	2	20.52	0.51	0.34
	Within groups	7857.16	197	39.88		
The educational administration	Between groups	233.01	2	166.50	1.79	0.34
	Within groups	12768.14	197	64.81		

The table shows the absence of statistical significant differences between study groups in their appreciation of variables efficiency, which means accordance of study sample in appreciation.

It was used factor analysis to identify connection degree of accounting education components and which one contribute more than other in raising and the developing the accounting education. And Table No. (5) shows the degree of saturation for each of them.

Table No. (5)

Factors	Degree of influence (saturation)
The university staff	0.752
Curricula	0.824
The educational administration	0.707

The table shows that curricula is more influential elements of accounting education, followed by university staff and then the educational administration.

6. RESULTS:

It was shown through the study and statistical analysis the following:

1) the existence of a strong relationship between the curricula of accounting education and developing accounting education in Libya.
2) the presence of a strong relationship between university staff of the accounting education and developing accounting education in Libya.
3) the absence of significant statistical differences between the elements of accounting education in their appreciation of variables efficiency in development of (university staff, curricula and educational administration) which means accordance of study sample for their appreciation.
4) It was shown that the curricula are more influential& contribute accounting education elements and for development of educational process of accounting in Libya.
5) No period of practical training in accounting education programs for the development of the educational process of accounting in Libya.

7. CONCLUSION:

Through the above, it is noted that the system of accounting education in Libya would achieve the objectives more effective if it takes into account the set of scientific requirements, which could be clarified according to the following basis:

1) Necessity of attention to the formulation of accounting education curricula, and finding a balance between theoretical subjects and areas of application.

2) Necessity of attention to the continuous development of accounting education curricula, to be consistent with the subsequent and rapid developments worldwide.

3) Urging educational administration to the necessity of providing books, references, periodicals and messages continuously, to be able students to check out the latest scientific researches for helping them in preparation of scientific researches that deals with the problems of society. For example:

- The modern sources in areas of various accounting research.
- The possibility of printing and reproduction at college.
- Modern means of communication such as Internet and e-mail service.
- Encouraging participation in seminars and scientific conferences inside and outside of Libya.

4) Working to include accounting education program a period of time for practical training, whether it is concurrent with or after the theoretical study.

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A QUESTIONNAIRE

Paragraphs		I agree very much	I agree much	I agree	I agree slightly	I disagree
1	**University staff** university staff have personal qualifications of the teaching profession					
2	university staff are interested in guiding hours for students					
3	university staff are interested in library- hours for students					
4	university staff depend on scientific lecture method					
5	university staff encourage students to engage in discussion and exchange of views and ideas during the lecture					
6	university staff use technical and clarification means in accounting education					
7	university staff have experience in the areas of professional fieldwork					
8	university staff interested in the scientific method , analysis, study cases and professional scientific problems					
9	university staff abide by teaching the subjects of their accurate specialization					
10	university staff use system of education portfolios, which includes homework and research activities					
11	university staff contribute in conferences and local & foreign seminars,					
12	university staff depend on the modern sources in the field of scientific specialization					
13	university staff are interested in publishing books and scientific researches					
1	**Curricula** Courses prepare for student an academic appropriate preparation					
2	Courses prepare for student an appropriate preparation for the profession					

Paragraphs		I agree very much	I agree much	I agree	I agree slightly	I disagree
2	Courses develop the accounting capabilities for students					
3	Courses raise logical thinking and critical analysis of students					
4	Curricula gives students the abstract knowledge and scientific skills					
5	Units of study are interrelated and consistent					
6	Specific standards are put and abiding by it when preparing courses					
7	Subjects courses suit the time limit					
8	Courses keep pace with developments in the accounting profession					
9	Specialists and professionals participate in the preparation of curricula					
10	Researches of graduates are interested in scientific problems of profession					
1	**Educational Administration** Educational administration provides modern specialized books in the library in general.					
2	Educational administration provides periodicals, pamphlets and modern magazines in the library sufficiently					
3	Educational administration is interested in practical training programs for students					
4	Educational administration is interested in information relating to students (registration, documentation, results of exams, distinguished students)					
5	Educational administration makes, scientific and practical activities, conferences and public forums					
6	Educational administration provides requirements for appropriate teaching (classrooms, and illustration methods, computers, accounting programs)					
7	Educational administration provides information system related to graduates					

Paragraphs		I agree very much	I agree much	I agree	I agree slightly	I disagree
8	Educational administration benefits from distinguished graduates					
9	Educational administration cooperate with accounting department and working parties to conduct researches					
10	Educational administration provides financial assistance to needy students, especially the distinguished					
11	Educational administration provides university staff with sufficient number and good quality					
1	**Students** Students choose the accounting department to have a real desire for it					
2	Students abide with working hours continuously					
3	Students feel stability and peace of mind in their professional future					
4	Students feel in participation of community development for it relates to the external environment (community)					
5	Students are aware of their social, professional and future role					
6	Students have personal tendency for education and success					
7	Students devote themselves to study					

HRVATSKI RAČUNOVOĐA

Croatian Accountant
Independent Association of Accountants,
Tax Advisors and Finance Professionals.
ZAGREB, Vlaška 68
CROATIA