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Dedication

The first graduates of the Faculty of Economics of the University of Miskolc were awarded their degrees in 1990, which shows that our Faculty is celebrating the 20th anniversary of its establishment this year.

The studies in this volume have been compiled in the spirit of commemorating that event. They are i ntended to present a cross-section of the professional activities pursued at the Faculty, and also to formulate answers to the challenges resulting from the social and economic situation of Hungary.

We consider the latter endeavour to be one of our obligations. In connection with this fact, it should be emphasised that the majority of the academic staff of the Fa culty are involved in applied research. In the past two decades, we have been striving to find realistic solutions to the problems arising in Hungary.

The changes in direction of Hungarian economic policy have presented a number of opportunities to do this in recent years. The accession of Hungary to the European Union (2004) did not (and could not) solve our problems automatically.

The economic performance of Hungary, including that of our own region – Northern Hungary – has continued to deteriorate in the last two y ears. The global crisis, which has erupted in the meantime, has only made the indicators of an alrea dy weakened economy worse. It seems that there are also tasks for us to do in the years and decades to come. I am recommending these studies to the kind attention of our readers in the hope that we shall have the capacity, knowledge and application to solve those tasks.

Lectori salutem!

Miskolc, 20.05.2010

Prof. György Kocziszky

THE HUNGARIAN TAX SYSTEM IN INTERNATIONAL COMPARISON WITH SPECIAL REGARD TO THE RESPONSE TO THE ECONOMIC CRISIS

SÁNDOR BOZSIK

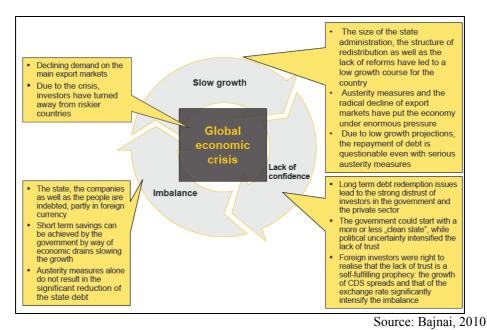
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SUMMARY

The outbreak of t he gl obal fi nancial an d ec onomic cri sis com pounded H ungary's economic pro blems. In O ctober 2008, Hungary ha d t o ask t he i nternational financial institutions for help to restore the country's solvency. The IMF and the EU offered a standby loan package of approximately EUR 20 billion to the country. In return for the package the go vernment ann ounced a set of econ omic measures, i ncluding som e im portant modifications in tax regulation. These changes affected a wi de range of taxes. This paper examines the regulatory purposes of the modification, the actual output, and the intended and unintended consequences of these measures on the Hungarian economy. The policies introduced by the Bajnai Government have successfully st abilized the e conomy without significant growth a nd act ivity sacri fice (compared t o t he other E uropean co untries). However, the problem of i ndebtedness has not disappeared and the intended changes in revenue and expenses structure have not happened yet.

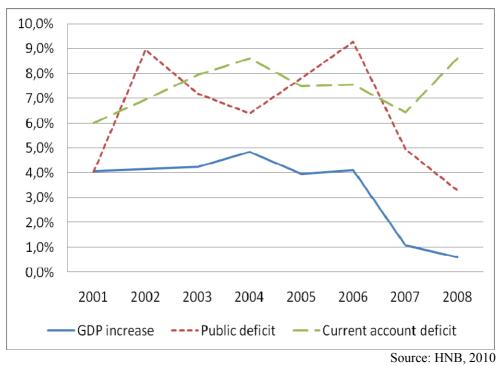
1. THE GENERAL CONCEPT OF THE BAJNAI PROGRAMME AND THE TAXATION SITUATION BEFORE THE START OF CRISIS MANAGEMENT

The Bajnai programme was based on the idea that the economic crisis had compounded the problems of the Hungarian economy and the country had got into a vicious circle. The elements of the vicious circle are presented in the following diagram:



1. chart The vicious circle of the Hungarian economy

The imbalance in this situation can be measured by the state deficit a nd the c urrent account deficit. Since 2001 the public deficit has never been lower than the GDP growth rate; co nsequently, the state h as b een con tinuously in debted. The 20 06 stab ilisation package successfully reduced the public deficit, but also reduced the GDP growth rate – so the gap has not decreased. These measures especially increased the state revenues and only in limited cases reduced the expenses. The introduction of in terest tax effectively reduced the net savings of households and the corporate sector. Thus, the public deficit cut did not affect the external deficit, because the level of household and corporate borrowing resulted in diminishing pu blic l oan d emand. B y t he out break of t he financial cri sis the size of external imbalances was at its peak. The following chart shows the situation before crisis.

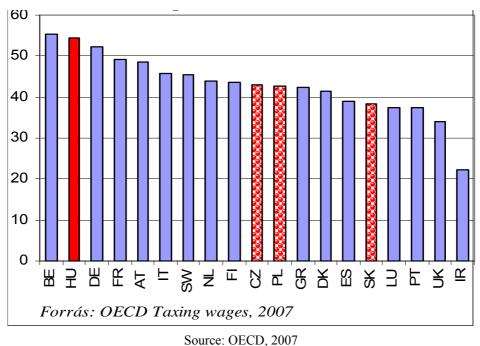


2. chart

The public and the current account deficit as a percentage of GDP and the GDP growth rate

Structural factors, c onnected to t he restrictive f iscal policy, und ermined th e GD P growth rate. The most important structural problem is the vicious circle of the Hungarian labour force. The core element of this structural vicious circle is the overtaxation of labour. This problem will be the main subject of this paper.

The Hungarian labour force i s overtaxed. Due to t he overtaxation, the official activity ratio is v ery lo w (curren tly, after Malta, t his is th e lo west in Eu rope). The activity i s especially low among the undereducated population (people who have c ompleted less than eight sc hool y ears). The re is a very na rrow gap between the minimum wage and s tate benefits. Consequently, only a sm all portion of the population pays for the benefits of the others. This leads to high labour costs. The high labour costs can only be compensated for by high productivity, which can be ensured only by multinational companies. A two -tier enterprise structure h as been form ulating. A to p lev el, ex port-oriented, co mpetitive, foreign-owned multinational segment; and the bottom level which can be d escribed as an unefficient, self-employed segment, which tries to avoid taxation. The middle segment of the pyramid is practically very weak and u nderdeveloped. The following chart s hows the extent of overtaxation in international comparison.



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3. chart
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Taxes and social insurance contributions as a percentage of labour costs

It might appear that, alongside Belgium, Denmark, France and A ustria, Hungary is in very attractive company. However, the effectiveness of the Hungarian labour force is a long way below those of the previously mentioned countries. The comparable countries (the Czech Republic, Poland, Slovakia) have much lower figures.

The ch art shows the situ ations in 200 8 and 2009. However, the f igure for Hun gary should be modified, because it does not contain the solidarity tax, whose base is almost the same as the c orporate tax base. The direct comparison of the corporate tax rate is t otally unreliable. T his is because the tax base varies from country to count ry; as do tax allowances, and the extra taxes which reduce the profits of the corporation.

Especially in Hungary, if we add the solidarity tax (4%), the local business tax (2), and the re search&development c ontribution (0.35%), the effect tive tax rate exceeded 22%, which put Hungary among the medium-taxed countries.

As a part of Bajnai package, the general VAT rate was increased from 20% to 25% in 2009. The i ncrease i n i ndirect t ax successful ly hi ndered co nsumption, w hich was an essential response of an indebted country to the crisis. However, the increase in excise taxes was not greater than the general in flation rate. The VAT in crease was not permitted to exceed t he VAT rates of the nei ghbouring EC countries. If t he VAT rate had been significantly greater than the VAT rate of Slovakia, it would have motivated the Hungarian consumers who live near the border to go shopping in Slovakia, which could have led to a decrease in collected taxes.

2. THE ECONOMIC ENVIRONMENT OF THE BAJNAI GOVERNMENT AND THE MAJOR ECONOMIC MEASURES, APART FROM THE TAX CHANGES

The major assumptions of the government's programme for the following year were as follows.

GDP growth and balance of budget: The government expected the GDP to decline by 5.5-6% in 2009, followed by a small drop in 2010. The government's prediction seems to have been a little p essimistic. In the first quarter of 2010, the Hungarian Statistical Office reported a sligh t 0.9% i ncrease in GD P. The budg et deficit tar get w as 3.8% of GDP in 2009, which has remained almost the same in 2010. However, the actual deficit in 2009 exceeded the budgeted figure mainly because of the accelerating indebte dness of the local government sector.

Expenditures: The programme planned to cut public spending by HUF 400bn in 2009 and HU F 900b n in 2010. An especially i mportant p art of the programme w as the reinstatement of the sustainable pension system

The most important elements of the spending cuts were the following:

- 1. Public wag es: Public sector nominal wages were frozen for 2 y ears. The 13th month salaries in the public sector were scrapped.
- 2. Pensions: 13th month pension pay ments were ab olished. The originally planned autumn pension increase (pension correction) was cancelled. The age limit for retirement would also be changed.
- 3. Health care cut: Lower sick 1 eave benefits were in troduced (from 70% to 60% of monthly wages)
- 4. Family allo wances: It was an nounced that family child allowance would stay unchanged for two y ears and that there would be a cut in duration. Other forms of child benefits would also be reduced from three years to two years. The home buying subsidies were also stopped.
- 5. Cuts in sub sidies: The programme planned to reduce and then e ventually eliminate the majority of budget su bsidies for public t ransport, home buying, and energy.

3. TAX CHANGES IN 2009 AND 2010

The major declared target of tax rule modification aimed to make taxation simpler and more tran sparent, an dt o make tax es l ower, i n order to im prove the reg ional competitiveness of Hungary. It was also felt that the changes should encourage people of working age to go back into the labour market, by making it worthwhile to work instead of living on social bene fits. In or der to achi eve this, the Bajnai Government decrease d the share of direct taxes (es pecially the taxes burdening employment) and i ncreased the share of indirect taxes. This is a logical response to an indebted crisis, where the main problem is over-consumption – or high consumption – compared to a low level of production.

Naturally the government needed to k eep its eye on the budget equilibrium; thus, the reduction of the direct tax rate had to be in line with widening the tax base. The government abolished the majority of personal tax allowances, and cut the tax- exe mpt e lements of

salaries. Simil ar cu ts also happened in the case of corporate tax. This dim inishing of allowances made direct taxes simpler.

The intended introduction of a general property tax would have resulted in the widening of tax able wealth; h owever, the Court of Co nstitution scuppered t he main ai m of th is measure by refusing to allow a tax on high-value real estate. (in italics in the table below).

Although simp lification was also one of the targets, there d id not seem to be much progress in this area. The major source of simplification was the removal of the personal and corporate tax allowances. But the introduction of new types of property tax plus the division of the social insurance contribution base and the personal tax base worked against this aim.

The new rules on tax evasion could have a controversial effect. On one hand, they can result in the widening of the tax base and the whitening of the economy; however, they can also explain why the net direct investment flow was negative in 2009.

The following table shows the major tax modifications made by the Bajnai Government.

Intended purposes	2009	2010
Reducing the burden of live labour	 5% point reduction of employers' contributions up to twice the minimum wage Extending the threshold of personal income tax to HUF 1, 9 m 	 5% point reduction of employers' contributions for the total income Elimination of the itemized health care contribution Introduction of the super gross wages Tax brackets lowered to 17 and to 32% (but rehabilitation contribution became 5 times higher than before) Lowest bracket: HUF 5 m
Combating tax evasion	•The amnesty ended as of December 31, 2009	 Off-shore revenues and assets to be included in tax base Introduction of a 30% resource tax
Ensuring sources, decreasing the consumption	•VAT increased to 25% •Preferential rate: 18% •Excise tax rate raised by 5- 6%	 Introduction of a general property tax Further increase in excise tax rate The reduction of VAT on district heating
Streamlining		•Uniform corporate tax with the elimination of the extra tax •Limitation of tax benefits and tax exemptions

1. table The intended purpose and the list of tax modifications

Intended purposes	2009	2010
		•Reducing and simplifying duties

Source: Bajnai, 2010

Let us look the major tax rule changes by grouping the types of taxes. *Indirect taxes*

The normal VAT rate was raised from 20% to 25% from July 1 2009, instead of the earlier planned 23%. In addition, an 18% lower rate was introduced for bread and bakery goods, milk and district heating. (The 5% preferential VAT r ate for books, medicine and daily papers would remain unchanged.) However, the excise taxes would be increased only by 5-6% on average, which was the general level of inflation. A further increase in excise taxes was prevented by the fear that this would lead consumption towards the black market or to private imports.

Taxes on living labour

The c ut i n e mployment t axes p roved c ontroversial. With regard t o the sy stem of personal income taxes and social contributions, the so c alled "super g ross wages" were introduced, which m eans that the gross wag es of e mployees also contain t he social contributions paid by employers – thus the full wage cost is seen in one figure. In line with increasing the tax base, the personal tax rate was cut by 1% or 3% and the income limit was dramatically raised from 1.7 million forint to 5.0 forint.

The level of social contributions paid by employers was cut by 5 percentage points on lower wages from July 2009, and was extended to the whole working population in 2010. This 5 p ercent cut meant that the former tax of 32% on gross monthly wages fell to 27%. Unfortunately, this reduction did not result in sim plification. The grounds and title of payroll payments remained complex. The following table contains the general percentages.

Payable by the employer				Payable by the employee						
Social se	ecurity	o contri	butions	Early	-	sion bution	Private	insu	ealth rance ibution	Labour
pension insurance contri- bution	insur con	alth cance ntri- ion in cash	labour market contri- bution	bution	non- private pension fund	fund member	pension fund member- ship fee	in- kind	in cash	market contri-
24% 1.	5%	0.5%	1%	13%	9.5%	1.5%	8%	4%	2%	1,5%

2. table Social security contributions payable as of 1 January 2010

Sources: Hungarian Tax Office

The b ad n ews for bigger en terprises was that the rehab ilitation contribution was dramatically increased, by 5 times the former basis, to about 1 million forint per head per year. The rehabilitation contribution should be paid by companies with over 20 employees, but enterprises can decrease the tax payable by about 20 million forint per year with each disabled person they employ. This fact encourages enterprises to recruit disabled people in order to avoid the rehabilitation contribution payment.

The transformation of in-kind benefits was also bad news for both the enterprises and the employees. A tax rate of 25 percent was in troduced for certain in-k ind benefits which were formerly t ax e xempt. These i nclude – depending on t he l egal t hresholds – t he following perks that companies preferred to provide their employees with for free:

- tickets and passes for public transport
- accommodation or the specific vouchers to be used for this purpose
- recreation or the specific vouchers to be used for this purpose
- money transferred to voluntary pensions or health care funds for the benefit of the employee.

Taxes on corporate added value

As for the corporate sector, the 4% s olidarity tax on corporations would be eliminated from 2010, while the corporate tax rate would be raised to 19% from 16%.

Under the new rules, dividends received from any subsidiaries by Hunga rian holding companies that are ultimately owned by foreign individuals were made exempt from tax in Hungary without further conditions having to be satisfied.

Capital g ains o n the sale of the sh ares of an y sub sidiary by Hu ngarian ho lding companies that are ultimately owned by foreign individuals were made exempt from tax in Hungary provided t he sh areholding is registered with the tax au thorities, and a 30% ownership test and one-year holding period are met.

The new rules clarified t he shareholding registration requirement: after the original acquisition and registration of at least a 30% shareholding in a subsidiary, any share acquisition in the subsidiary could be registered to qualify for capital gains participation exemption irrespective of the shareholding ratio.

Under current rules, to qualify for dividends or capital gains participation exemption the subsidiary m ust b e l ocated in a "go od" ju risdiction, which in cludes th e EU, OECD countries and countries that have concluded a tax treaty with Hungary.

No changes have been made to the dividend withholding tax rules; Hungary does not impose withholding tax on dividends distributed to domestic or foreign legal entities.

A 30% withholding tax is applied to interest, royalties and certain service fees paid to residents in non-treaty countries. Such payments made to residents in treaty countries are not subject to withholding tax under domestic law, so any withholding tax imposed under a tax treaty will not be relevant.

Hungary's "50% r ule", which allo wed a deduction of 5 0% of rel ated party interest income from the corporate income tax base, was a bolished as a result of a formal state aid investigation by the European C ommission. The government intended to introduce new measures by 2010 that would be approved by the Commission.

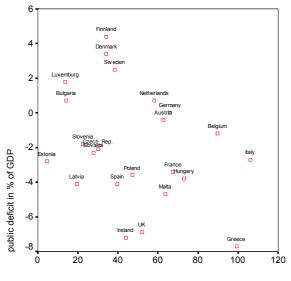
The new legislation extended the transfer pricing rules to contributions in kind made during the in corporation of a n ew en tity, thereby closing off on e of the tax -free ex it strategies at that time available. The transfer pricing rules would also apply to transactions

between a Hungarian entity and its foreign permanent establishment although the practical application of this rule is yet to be determined.

4. ASSESSMENT OF THE STABILISATION PROGRAMME

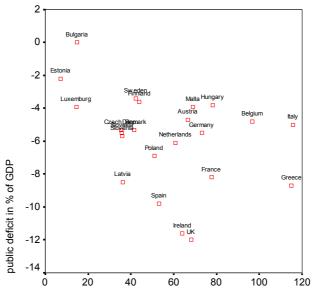
Contrary to the 20 06-2007 fiscal austerity package, which had been strongly based on collecting more revenues and thus further increased the redistribution ratio in Hungary, the Bajnai programme was really based on expenditure cuts. Measures on the expenditure side of the budget strongly affected pensions and social spending, which had been taboos for the former gove rnment. The pl anned changes in the system of per sonal income t axes and contributions started to move in the direction of simplicity, while the high tax wedge could somewhat decrease, especially for average wage earners.

As a result of the expenditure cut, the public deficit in 2009 did not increase. However, there was a sig nificant drop in revenue. Due to the relatively low level of the deficit, the indebtedness of the county d id not increase as dram atically as in the devel oped part of Europe. The following chart shows that, while before the outbreak of the crisis the debt of the country was the four th biggest in Europe (a fter Italy, Greece, and Belgiu m) and the deficit was also the fourth biggest (after Greece, Ireland and the UK), by 2009 Hungary's public deficit was am ong the better half of the European nations'. However, Hungary's indebtedness still remained high.



public debt in % of GDP

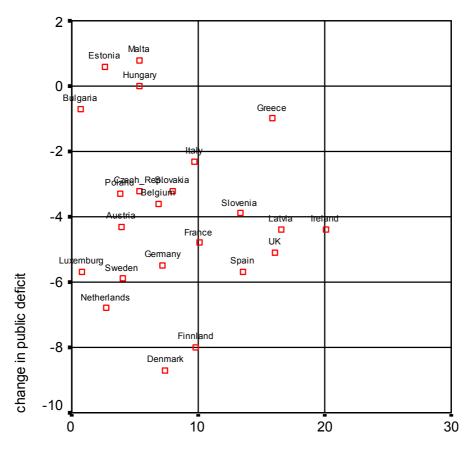
Public deficit and debt in 2008



public debt in % of GDP

Source: Ecostat 4. chart Public deficit and debt in 2009

Hungary's achievem ent can be better seen in the following chart, which shows the annual change in public deficit and public indebtedness. Hungary was among the three European counties (see the upper left corner of the table) whose debt position worsened at least during the last year.



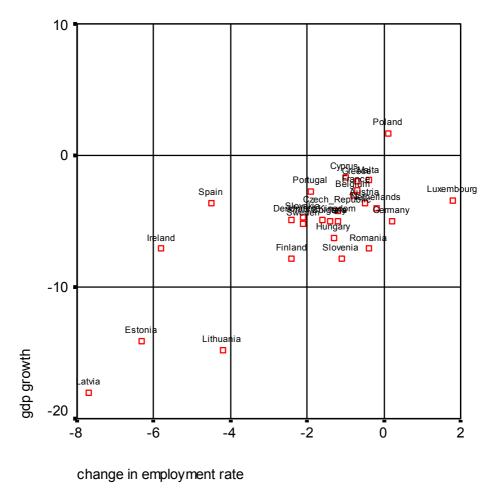
change in public debt

Source: Ecostat, 2010

5. graph Change in public debt in function of public indebtedness between the end of 2008 and 2009

The su ccess of this short term crisis management was im proved by the fact that the country did not have to make a large sacrifice in terms of GDP growth and employment to achieve this position. The GDP decline and the fall in the activity ratio was not extremely big, it proved to be average among the EU countries. As you can see in the following chart,

Hungary is in the big "cloud" (however in the less f avoured p art), in common with the majority of the European countries.

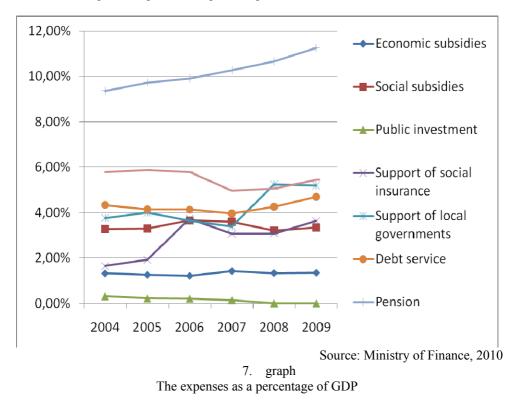


Source: Ecostat, 2010

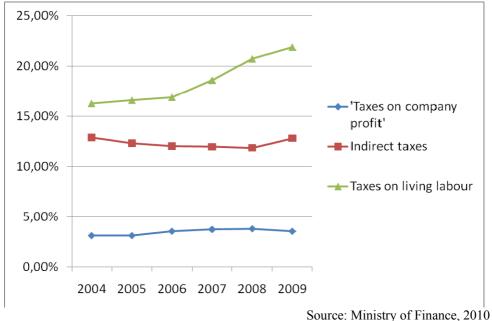
6. graph The GDP growth rate and the change in the activity ratio between the end of 2008 and 2009 among the European countries

If we consider the allocation of expenses and the share of the various state revenues, the picture is no t so positive. In contrast to the o riginal target of the Bajnai p rogramme, the share of taxes levied on living labour increased in 2009 as a percent age of G DP, and the welfare expenses of the budget also did not decrease significantly.

If we see the various central budget expenses, we can observe that the share of social expenses, especially pension expenses, did not decrease. Despite the removal of the 13th month pension, the pension expenses are increasing in terms of GDP. There is no room for further cuts in public investment, because it had gone down to zero by 2009. The following chart shows the public expenses as a percentage of GDP.



Drastic changes cannot be reported with regard to revenue. The share of tax levied on living labour also did not decrease in 2009.



8. graph Functional distribution of revenues as a percentage of GDP

REFERENCES

- [1] IMF (2010): Fifth R eview Under the St and-By A rrangement, and R equest for Modification of Performance Criterion Staff Report www.imf.hu
- [2] Hungarian Ta x O ffice (2010): S hort sum mary on t he taxation of c ompanies www.apeh.hu
- [3] Koroknai P. (2 008): M agyarország kül földi t artozás nem zetközi összehasonlításban (Th e fo reign debt of Hungary in intern ational com parison) MNB Szemle 2008/12
- [4] Kiss G. Szemere R. (2009) Al mát körtével? M érlegen a vi segrádi orszá gok állami kiadása (Apple wit h pear? Public ex pense of Vi segrád-countries on balance) MNB Szemle 2009/5
- [5] Kreko J. Kiss G. (2007): Adóelkerülés és a m agyar adórendszer (Tax evasion and the Hungarian tax system) MNB Tanulmányok 207/65
- [6] KPMG (2009) Corporate and Indirect Tax Survey 2009 www.kpmg.hu
- [7] Kopits G. (2007) Fiscal Resp onsibility Framework: International experience and Implications for Hungary Occasional Paper 2007/62
- [8] MNB (2010): Analysis of the convergence process from the point of view of the financial crisis
- [9] Réti A. (2010): The new tax package has been adopted PriceWaterhouseCoopers www.pwc.com

- [10] Császár A. (2010): Tax law ch anges in Hungary for 2010 in the financial sector Tax&Legal Letter Autumn 2009
- [11] Ernst&Young (2009): Hungarian Personal Income Taxation in 2010 Ernst&Young Human Capital News January 2010
- [12] Bajnai G. (2010): One Year of the Crisis Management Government

THE TOURISM DEVELOPMENT PLAN CONCERNING THE ZEMPLEN DESTINATION

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SUMMARY

The eastern part of Borsod-Abaúj-Zemplén County, which includes the southern part of the historic Zemplén County and the area of Abaúj County situated to the east of the River Hernád, is provided with extremely significant tourist attractions. These attractions include both the natural environment and man-made phenomena. Half of the county's tourist attractions (54) are situated in Zemplén County.

Driven by the regional and economic development possibilities offered by tourism, Zemplén Local Enterprise Foundation and the towns of Sárospatak, Sátoraljaújhely, Szerencs and Tokaj, along with their statistical districts, submitted an application to the Hungarian National Tourist Office (Magyar Turizmus Zrt., hereafter referred to as "HNTO"). The aim of this application was to obtain financial support for the development of tourism in the Zemplén Region.

Due to the support received from the HNTO, it became possible to prepare the Tourism Development Programme of the Zemplén Region in 1997.

1. THE MAIN CONCLUSIONS OF THE ZEMPLÉN REGION TOURISM DEVELOPMENT PLAN ARE DETAILED BELOW, BASED ON THE THEMATIC ORDER OF THE STUDY:

- 1.1. First of all, we achieved the sub-separation of the Zemplén Region in the framework of a tourism-related state evaluation of the Zemplén tourism destination. In connection with the external separation plan of the county's Tourism Development Strategy, we forwarded a modification proposal with regard to the internal borders of the sub-regions:
 - In the case of Tokaj-Hegyalja, on the basis of legal regulations concerning the so called closed wine area.
 - Regarding Taktaköz-Harangod, we suggested that four settlements, situated on the bank of River Hernád, belonging to the Tokaj-Hegyalja sub-region should be reclassified as belonging to the Taktaköz-Harangod sub-region. Moreover, we prepared a land register of settlements in certain tourism sub-regions in order to develop a SWOT analysis, objectives, and development suggestions which may concern the more precisely designated regional sub-units.
- 1.2. We considered the following topics during the evaluation of the tourism situation in the Zemplén Region:

- the history and culture of the region
- the natural endowments of the region:
 - terrain
 - climate
 - water
 - quality of the landscape
 - mineral resources
 - flora and fauna.
- Endowments created by humans:
 - economic situation
 - tourism infrastructure
 - catering and retail services
 - cultural endowments
 - sport and hobby facilities
 - local and small-scale regional programmes
 - tourism organisations
- Tourism-related settlements and tourist "attractions".
- 1.3. Based on an analysis of the state evaluation regarding tourist "attractions", tourism-related settlements and infrastructure; we pointed out that Zemplén Region has the capacity to host significant numbers of both foreign and domestic guests, as it has the infrastructure, endowments and attractions appropriate for a holiday destination. 84 settlements from the 104 settlements in the region can be considered holiday resorts and there are two settlements which specialise in tourism. Out of the 5 towns which have advantages concerning international tourism, there are three (Sárospatak, Sátoraljaújhely, Tokaj) that have the basic conditions to meet the necessary demands. In the region of Hollóháza and Vizsoly, there are also settlements which are suitable for further development.
- 1.4. When examining the demand for tourism, the characteristics of foreign demand can be divided into the following categories on the basis of a national middle-term tourism marketing strategy:
 - Related to the product:
 - business travel
 - health and wellbeing
 - special interest
 - the preference of holidaymakers for riverside accommodation.
 - Related to the target groups:
 - young tourists having holidays for fun
 - world travellers
 - tourists of the future
 - tourists who prefer staying at home instead of going on holiday
 - groups interested in traditions.

Regarding the Zemplén Region, improvements in the "special interest" and "health and wellbeing" product groups are expected. Meanwhile, in the case of target groups, the number of world travellers and young people travelling for fun seems to be increasing significantly.

- 1.5. The main features of the domestic demand relevant for our region based on the evaluation of questionnaires made for the County Tourism Development Strategy are as below:
 - Our primary objective is to extend the length of people's stays in the region. The main group we are targeting in order to fulfill this aim are middle-aged parents who have two children and a university education.
 - The frequency of visits can be increased mainly in category of trips.
 - Opportunities to travel by car and the provision of safe parking places strongly influence final attitudes.
 - As travel agencies (direct sales) do not play a significant role in encouraging tourism in the region, this sector should be also improved.
 - In order to boost tourism in the Zemplén Region, the following 8 target groups and their demands should be taken into consideration: young people travelling for fun, including those with both low and high salaries; young families interested in the region's traditions; active middle-aged people who wish to relax; more passive middle-aged travellers who want a cheap holiday; older people who are recovering from illnesses; more active older people who wish to have a rest; and well-off older people who are interested in the traditions of the region.
 - The public image of Zemplén, along with its towns and products, all have to be considered and kept in mind.
- 1.6. When analyzing the regional SWOT (Strengths, Weaknesses, Opportunities, Threats) we examined not only the region's good and bad points, but also the competitiveness of the region and its sub-regions.

	Bodrogköz		Taktaköz Harangod		Tokaj Hegyalja		Mountains of Zemplén	
	G	W	G	W	G	W	G	W
1.Location,approach	5	3	4	1	7	3	3	5
	Х	Х			х			х
borders of the country	х							
mountains					х		х	
river, flood area	х		х		х			
airport					х			
appropriate public road	х	х	х	Х	х			х
railway		х	х		х	х		х
cycle path	Х		х			х	х	х
tourist trails					х	х	х	х
2. Sights	9	1	5	0	15	0	14	1
a.) natural	5	0	3	0	6	0	7	0

1. table: SWOT analysis

Indiaturhad area	Х		\mathbf{v}					
Undisturbed area	А		Х		x		X	
mountains					x		Х	
shore	х		х		х			
woods, parks	х						х	
geological					х		х	
wildlife	х						х	
landscape					х		х	
environmental protection	х				х		х	
cultivated land			Х					
<i>b</i> .) Cultural and	4	1	2	0	9	0	7	1
economical								
Monuments	Х	Х	Х		х		х	
historic monuments					х		х	
architecture, settlement					х		х	
art, culture					x			x
museums					х		х	
folklore, traditions	х				х		х	
product			х		х		х	
profession	х				х			
enterprise zone	х				x		x	
3. Programmes	5	0	3	0	9	1	6	0
Events	Х				х			
hiking	х		х		x		х	
open-air					х		х	
pool	x				х			
horse-riding	x		х		х		х	
hunting			x		x		x	
sport facilities					x		x	
camping								
wine-tasting, wine-road					x	x		
gastronomy	x				x			
narrow-gauge railway in					~			
the forest							x	
4. Accommodation	1	5	1	5	6	0	6	2
Hotel		X	-	x	X	-	X	X
guesthouse		X		х	х		х	X
camping		х		х	х		х	л
youth hostel		х		х	х		х	
summer cottage		х		х	х		х	
village guest hosting	Х	Λ	х	л	х		х	
5. Catering	1	4	1	4	5	1	5	4
	1	4 X	1			1		
Restaurant				X	X		X	X
bistro	v	Х		х	X		X	Х
pub	Х		Х		Х	Х	Х	

coffee-barxxxxxxxxxx6. Services03023103Car ski-liftXXxxxxski-liftxxxxxxretailxxxxxxhealthxxxxxx7. Human resources0302424Point of view getting old, migration mixed minority language skillxxxxxxxxxxxxxx8. Local environment14133323road network having public utilities relaxing places safe car-parking valuable landscape of the settlementxxxxxx9. Information11013221Existing fame publication roomiform officesXXxxxx10. Institutions13002222small regional roorinform officesXXxxxx11. Marketing02011202sale marketing investmentXXxxxxx	confectioner's		х		x	х		x	x
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sale marketing X X X X X X X		0		0	1			0	
investment x		0		0	-	1		0	
			Λ		Å	v	Λ		Λ
	distance		Х			Λ	x		x

Source: Dankó L.: Tourism Development Plan Concerning the Zemplen Region In: Tri-Border Regional Economic Co-operation USAID-Zemplen LEF, Sátoraljaújhely, 1999. pp. 129-144. A SWOT analysis was completed separately, which includes the *development objectives* related to the four sub-regions:

- Development objectives for Bodrogköz:
- 1. Infrastructure development (public transport, narrow-gauge railway, sewage treatment, the collection and disposal of rubbish)
- 2. Creating accommodation facilities, such as village guesthouses and campsites (with meals provided)
- 3. Establishing an information network
- 4. Publishing maps
- 5. Training and retraining in tourism, primarily in the area of village tourism
- 6. Designation of cycle paths along public roads
- 7. Opening a border crossing
- Development objectives for Taktaköz-Harangod:
 - 1. In order to harmonize tourist programmes, cooperation will be necessary in the cross region of River Tisza and Hernád
 - 2. Designation of cycle paths along public roads
 - 3. Establishing an information network
 - 4. Improving accommodation in villages along the river banks, as requested by tourists
- Development objectives for Tokaj-Hegyalja:
 - 1. Creating real regional cooperation with the participation of local governments
 - 2. Improving the conditions of tourist accommodation
 - 3. Developing infrastructure through the establishment of Tourinform offices and of local TDM associations in Abaújszántó, Tokaj, Sárospatak and in Sátoraljaújhely
 - 4. Preparing and distributing marketing and PR publications
 - 5. Training in tourism, as well as retraining and further training,
 - 6. Improving the conditions for tourists who have come to bathe in thermal baths and spas (thermal tourism)
- Development objectives for Zemplén-Mountains:
 - 1. Developing quality accommodation facilities
 - 2. Renovating tourist trails
 - 3. Organising the landscape
 - 4. Developing an information network
 - 5. Improving opportunities for hunting
 - 6. Improving marketing activities
 - 7. Developing conditions suitable for horse-riding tourism
 - 8. Supporting the operation of mountain-bike and skiing clubs
 - 9. Creating tourism programme units
 - 10. Training local tour managers
 - 11. Preparing appropriate brochures, which include information concerning accommodation facilities
 - 12. Creating rest stops, lavatories and rain shelters
 - 13. Designating and building cycle paths (Eurovelo 11A),
 - 14. Training village hosts and hostesses
 - 15. Putting up outdoor information notice boards
 - 16. Organising cultural programmes

- 17. Contributing to the reconstruction of a narrow-gauge railway on an entrepreneurial basis
- 18. Supporting an organization aimed at encouraging coordination and cooperation
- 19. Supporting the renewal of the traditional wood industries (e.g. charcoal burning, making barrels, the wood industry)
- 20. Organising ecological training programmes for professionals
- 21. Creating car-free zones in the Zemplén National Park
- 22. Integrating wood and game farming with the development of tourism
- 23. Rebuilding youth-hiking tourism in Zemplén and in its expanded region
- 24. Improving trade and hospitality services
- 25. Developing a Slovakian-Hungarian border-crossing road at Hollóháza.
- 1.7. Based on the SWOT analysis and the development objectives summarized above, we formed our vision of tourist development in the Zemplén Region according to the following considerations:
 - target groups
 - accessibility of the tourist destinations
 - supply of tourism products
 - hosting capacity
 - regional and location environment
 - shareholders

We summarized the requirements of products to be developed in the table below:

Type of tourism service	Bodrogköz	Taktaköz - Harangod	Tokaj- Hegyalja	Mountains of Zemplén
Business travel:				
* Conferences, seminars	+	+	+	+
* Incentive			+	+
Health and Wellbeing				
tourism:			+	
* Thermal tourism	+	+		+
* Village tourism			+	+
* Youth tourism				
Social interest:				
* Hiking tourism			+	+
* Cycling tourism	+	+		+
* Sport tourism	+			+
* Hunting tourism	+	+		+
* Cultural tourism			+	
* Tours to castles, historic				
sight tourism			+	+
* Wine tourism, harvest				
programmes			+	

2. table Products to be developed

Holidays near the river:			
* water sports	+	+	

Source: Dankó L.: Development Tourism Zemplen's In.: Marketing-kaleidoszkóp ME Marketing Intézet Miskolc, 2006. pp. 405-425.

1.8. In order to put the tourism marketing conception of the region into practice, we determined what tourism marketing "instruments" would be useful. Most of the "instruments" we are going to use are from the sector of communication, since the marketing instruments of product, price, and distribution require concrete entrepreneurial decisions which would first need us to generate cooperation on a public level.

2. SECONDLY, BASED ON THE VISION OUTLINED ABOVE, WE DEFINED REGIONAL TOURISM DEVELOPMENT TASKS BOTH IN GENERAL AND FOR SPECIFIC PRODUCTS

In order for each product to be developed, we indicated an institution, an enterprise or representative that is in charge of the improvements on a regional level and that can become the facilitator of a managed or spontaneous process.

A) General development tasks:

2.1. To explore, conserve and introduce place(s) of interest we need:

- To make known the region's tourist attractions, to ensure their publication and distribution on information leaflets.
- To save, renovate and establish tourist attractions in the region.
- To encourage organisations which specialise in saving local attractions, as well as supporting them financially and professionally.
- To reorganise private collections so as to make them presentable to the public.
- 2.2. To create tourism programme units we need:
 - To elaborate and develop the five products that determine the tourism-related demands of the region (wine routes, thermal tourism, village tourism, water tourism, hunting tourism) in a coordinated system.
 - To initiate further health and wellbeing programmes, cultural and entertainment programmes, ecological and hunting programmes based on natural endowments, activity programmes that raise awareness of cultural traditions, as well as practical programmes based on economic endowments.
 - To improve factory tours by explaining the technology used and making shopping available on the premises.
 - To establish special services to host businessmen and groups from workplaces.
 - To develop regional products from the small regional programmes according to demand.
- 2.3. To improve accommodation conditions we need:
 - To increase the number of campsites, village or paying guesthouses, and providers of public accommodation that are accredited and mentioned in brochures.
 - To modernize and renovate buildings providing accommodation.

- To increase the number of beds, to improve the professional and technical levels in hotels and guesthouses, and to improve the quality of the various services these places provide.
- To organise a network of the places providing accommodation and to integrate these places with other tourism services.
- 2.4. To improve the capacity and quality of hospitality services we need:
 - To assist in setting up small restaurants whose characteristic features are traditional for the local rural area.
 - To utilize canteens owned by local governments for tourism purposes in rural areas.
 - To increase the technical and professional quality of the restaurants available, to improve their internal decor, and the design of menus and their translation into foreign languages.
 - To indicate special local dishes and beverages on the menu by increasing the use of local products.
- 2.5. To improve the tourist infrastructure we need:
 - To develop rental services (cars, bikes, boats, and other sport equipment).
 - To expand the network of, and the selection of goods available in, souvenir shops.
 - To create a network of bureau de changes, ensuring their accessibility in terms of their physical locations and opening hours.
 - To extend the service provided by information offices such as tourist information offices, tour operators and local tour guides.
- 2.6. To strengthen the organizational infrastructure we need:
 - To act as a guide in the organization and activities of the Zempléni TDM Szövetség (Zemplén Tourism Destination Management Association).
 - To develop and support the network of sectors dealing with tourism within the framework of the Chamber of Commerce and Industry.
 - To promote the integration of entrepreneurial activities.
 - To establish tourism offices in small regions and to link these offices to the county's professional network.
- 2.7. To promote active tourism we need:
 - To clarify the tasks of the different organisations that promote tourism (travel agencies, tour guides).
 - To ensure the tourists enter the country in an unproblematic way, and to ensure the activities of travel agencies meet the economic and legal requirements.
 - To organise programmes that ensure the unproblematic entry of tourists into the country.
 - To organise the transfer of products to their markets by involving local governments, entrepreneurs and other system operators, and utilizing their contacts.
- 2.8. To develop the environment of the region and its settlements we need:
 - To expand the multilevel network of rest stop places for tourists and information stops.
 - To designate, mark, describe and introduce tour routes, to ensure directions for sightseeing are placed in brochures.

- To accelerate the utilization of castles and monuments for tourism purposes.
- To arrange for landscaping to be carried out in the region.
- To renovate villages, and continue the reconstruction of city centres by encouraging the proprietors of buildings to engage in reconstruction.
- 2.9. To improve accessibility we need:
 - To build the M30 motorway and repair the linking roads
 - To extend cycle paths
 - To improve the network of border crossing routes and the services available at these places
 - To arrange coach/bus and railway schedules
- 2.10. To improve marketing activities we need:
 - To make the public aware of publications (leaflets, travel brochures, postcards, catalogues and video films)
 - To create road signs indicating tourism facilities. These signs should be placed along the routes which lead tourists towards target locations.
 - To create a positive image of the region in the media.
 - To represent the region at accredited national and international fairs and exhibitions.
 - To promote our region on the Internet.
 - To improve and produce products and souvenirs that emphasise the region's special characteristics.
 - To strengthen local and regional foreign contacts and make use of them for tourism purposes.
 - To maintain contact with professional and social organisations.
- 2.11. To develop human resources we need:
 - To ensure tourism managers receive higher education.
 - To involve adults in foreign language learning, especially those who are employed in the hospitality sector.
 - To compile a list of tour guides and interpreters, and to make this list available to the public.
 - To train and retrain hosts and hostesses.
 - To train local tour guides.
- 2.12. To establish the necessary conditions of financing we need:
 - To establish the Regional Tourism Development Fund as a separate entity, which could be financed from a part of the central contribution. This could supplement the central, decentralized and tourism tax incomes which support tourism activities.
 - To ensure indirect support for development activities from the B.A.Z. County Development Fund.
 - To take advantage of the opportunity to make applications to the Tourism Objective Prospect.

B) Possible directions for regional tourism development:

Significant sectors for regional tourism development among the previously mentioned tourism-related products include:

- wine tourism
- thermal tourism
- village tourism
- water tourism (canoe tours)
- sport tourism (mountain sports, horse-riding)
- hunting tourism

3. BASED ON THE TOURISM DEVELOPMENT PLAN, THE FOLLOWING DEVELOPMENT SUGGESTIONS WERE MADE TO CERTAIN RELEVANT AUTHORITIES:

A) To the Ministry of Local Governments and the Regional Development Tourism Unit of the Hungarian National Tourist Office:

- We suggest that from the product development contribution applications submitted in connection with tourism in the Zemplén Region, those initiatives which comply with the directives of the Regional Development Tourism Plan should be given priority.
- We recommend involving the public of the region (local entrepreneurs, the general public, and institutions). The public should be informed about detailed "attraction" list created by the Zemplén Tourism Destination Management Association.
- We advise compiling brochures in thematic order which focus on the same or similar products (e.g. wine routes, thermal pools, the national cycle path-system) on either the national level or on the eastern-Hungarian regional level.
- We propose that you consider contributing to the training of local entrepreneurs and citizens dealing with (village) tourism by involving the Tourism Department of the Kossuth Lajos Gimnázium és Egészségügyi Szakközépiskola (grammar and secondary schools), as well as by starting to train tourism managers at the Comenius Tanítóképző Főiskola (a teacher training college) in Sárospatak.
- We suggest that you consider contributing to the regional marketing and PR activities of the region, as well as to entrepreneurs' advertising activities.

B) To the Regional Development Council:

- 1. We recommend setting up a tourism committee to encourage cooperation and coordination regarding concepts, plans and development programmes that extend over the region and the country e.g.:
 - to suggest wine tours
 - to suggest facilities for sport tourism and horse-riding tours in the mountains
 - to develop castle tours and sightseeing tours
 - to improve the cycle path network
 - to develop water tourism on the River Tisza on a cooperative basis
 - to propose hunting tourism on a large-scale regional level.

- 2. We suggest that you should consider contributing significantly to tourism development in the Zemplén region through the Regional Operative Development Programme 2007-2013. Special products of regional tourism development are wine, (mountain) sports, hunting, and village and water tourism.
- 3. While utilizing regional decentralized funds in the application system, we suggest that you consider the development directives of the Regional Tourism Development Programme and its suggestions.
- 4. We recommend that you support promotional activity: firstly, by involving the Zemplén TDM Association; and, secondly, on the basis of a common regional system of publications and PR.

C. To the Tourism Department of the B.A.Z. County Assembly

- 1. It is necessary to be aware of the County Tourism Development Strategy and its compliance with the Tourism Development Plan of the Zemplén Region in order to define the Zemplén Region more clearly in the county's PR and promotional activities.
- 2. We recommend that you provide the Zempléni TDM Szövetség (Zemplén Tourism Destination Management Association) with both professional assistance and all the necessary information.
- 3. We suggest that you promote the Tourinform offices in Abaújszántó, Tokaj and Sárospatak (Tokaj-Hegyalja) and in Sátoraljaújhely (Mountains of Zemplén).
- 4. We suggest that you participate in the training of regional entrepreneurs and citizens interested in village tourism.
- 5. We recommend that you hand over the regional database, including the regional "attractions", to the entrepreneurial library of the Zemplén TDM Association in order to provide entrepreneurs and institutions with information.
- 6. When accrediting community marketing programmes and regional entrepreneurial applications in both the national and regional application system, it is important to consider how they comply with the tasks outlined in the Regional Tourism Development Plan.

D. To the local governments and institutions situated in the Zemplén Region:

- 1. It is necessary to make others aware of the facilities "hiding" in tourism based on studying the Tourism Development Plan and the list of "attractions".
- 2. We need to improve cooperation among settlements and their institutions for the purpose of harmonizing and suggesting common high-quality tourism products.
- 3. It is necessary to meet the needs of tourism in settlement infrastructure i.e. in the issues of environment protection, cleanliness, tidiness and rubbish disposal (e.g. providing litterbins at rest stop places).
- 4. We need to improve the accessibility of tourist resorts by providing outdoor tables, parking places, cycle paths, and tour routes.
- 5. It is necessary to organise programmes and events at settlement-level in order to create new tourist "attractions".

E. To enterprises and institutions involved in regional tourism:

- 1. It is necessary to, either in parallel with the activities of the Zempléni TDM Szövetség (Zemplén Tourism Destination Management Association) or within its framework, to establish a sufficient level of entrepreneurial co-operation.
- 2. Is it necessary that all the relevant organizations, through coordination and participation, establish a united representation so as to achieve results in common marketing activities and regional tourism development programmes.
- 3. Those working for the same or for similar sectors should agree on a business policy in order to provide good entrepreneurial possibilities in the future.
- 4. There should be more coordination of the people who run guesthouses. As these people and their establishments are often seen by tourists as the most authentic face of the region, they can contribute significantly to the development of tourism.
- 5. We should analyze the possibility of financing a common sales agent and TDM office, depending on the resources available.
- 6. There should be closer cooperation among organizations in order to ensure they are informed about currently available and potentially successful national and county application opportunities, and to provide the County Tourism Unit, as well as the Zemplén Tourism Destination Management Association, with any necessary information.

REFERENCES

- [1] Dankó L.: Zemplén Region's Tourism Development Plan (Zemplén térségi turizmusfejlesztési terv) Magyar Turizmus Rt K+F Igazgatóság, Budapest, 1997.
- [2] Dankó L.: Tourism Development Plan Concerning the Zemplen Region In: Tri-Border Regional Economic Co-operation USAID-Zemplen LEF, Sátoraljaújhely, 1999. pp. 129-144.
- [3] Dankó L.: Zemplén turizmusának fejlesztése (Development Tourism Zemplen's) In.: Marketing-kaleidoszkóp ME Marketing Intézet Miskolc, 2006. pp. 405-425.
- [4] Dankó L.: Tourism destination management development in the Zemplén (Turisztikai desztináció menedzsment kialakítása és megvalósítása Zemplénben). In.: Piskóti I.(ed.): Marketing-kaleidoszkóp 2008. ME Marketing Intézet Miskolc, 2008. pp. 188-208.

THE EFFECTS OF INFLATION ON BUSINESS PROFITS AND BUSINESS ASSETS

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SUMMARY

Inflation has various effects on the economic indices and business of companies. One of the most important problems, which is hardly examined in the literature, is its effects on the value of fixed assets and profits. In the literature, we can often find a mention of this problem, a general explanation for it, and annual estimations of the worth of different companies on the basis of certain accounting principles. The specialist literature, however, does not deal with the structural relationships of the deviations, and with the estimations based on them, in detail. This paper models the profit-correction on the basis of the accumulated effects of inflation, and the methods of estimation used for the inflationary revaluation of fixed assets and the inflationary loss of assets¹.

1. THE ROOT OF THE PROBLEM

Accounting with its clear logic – and in accordance with its aims and values – usually only allows those items to be charged as costs behind which there is real expenditure. This principle ensures that sooner or later all profits have to be shown and tax has to be paid on them (at the sale of the company at the latest, when the purchase price will be higher than the book value). With the use of this principle, economy-organizational guidelines can be formed according to which entrepreneurial assets can be increased only from taxed sources.²

Purchase value records are a part of purchase accounting. However, due to the effect of inflation, the counter value, in terms of the value of the resources present at the companies, may become higher than the purchase value. The longer the time which elapses between purchase and consumption, the higher the probability of this is. The time between purchase and total consumption is the biggest in the case of fixed assets. In this case (assuming the depreciation proportionate to attrition and obsolescence) the inflation of the years elapsed

¹ The inflationary profit demand, as a return requirement, is presented in detail, quantified and modelled in: Illés Mária – Vezetői gazdaságtan. (Managerial Economics.) Kossuth Kiadó, 1997. (pages 187-206)

 $^{^2}$ Significant differences can be found concerning the question of the relationship of accounting and taxation even within the states of the European Union. With respect to the fact that the connection of Hungarian accounting to taxation follows the German principle, this paper does not deal with the questions of the two different kinds of profit-statement and the creative accounting related to the examined topic.

from the purchase "accumulates" to the current net value. For instance, in the case of a 30year-old office building (if in the meantime neither asset revaluation was carried out nor was the edifice substantially renovated) the inflation correction can be calculated on the basis of the net value and the accumulated (building industry) price index of the 30 years concerned. This kind of inflation-accumulation is not typical in the case of assets which change continually (materials and other current assets). In spite of this, under high inflation, and a rare and low circulation speed, nominal increases in value may become significant in this case as well.

On the other hand, competitive market prices refund costs necessary to the current reproduction and the profit pursuant to the average profit rate as a tendency. The return of costs necessary to reproduction means that the part of the value adequate to the current market price of the used resources is included in the price. On the other hand, only the original purchase price can be taken into consideration regarding costs. Thus (basically) the difference between the purchase price and return price of the used resources appears as profit. This part of the profit is, however, only apparent, it could not mean real surplus since the recycling of the total amount concerned is crucial to maintain the system at a real value. The apparent profit deriving from the inflation – which is usually called inflationary profit – appears merged with real profit. It can be separated from this with calculations differing according to the types of resources concerned.

Separation and a treatment different from real profit are justified by the fact that the return of costs obtained from actual purchase prices does not cover re-purchase. Therefore, in order to maintain the system, the recycling of inflationary profit is necessary at the very least.

The accounting procedure which is suitable for a systematic and clear solution to the problem is called inflation accounting. Several difficulties impede the development of a version of inflation accounting which would work in practice. There have already been several attempts (which later turned out to be unsuccessful) to develop inflation accounting and use it in practice.³

2. ACTUALITY OF THE TOPIC

Inflation was typically at 10-30 per cent in the first part of 1990s, and still exceeds 5 per cent nowadays in the manufacturing sector in Hungary. The repercussions of these inflation levels shall be probably be felt for several decades, even during years of very low inflation. It is, therefore, important to have a thorough knowledge of the inflationary relations.

A detailed presentation of this topic is also justified by the lack of specialised literature related to this subject. The fact that in 1993 a word famous (foreign) asset valuation company made a conceptual mistake during the appraisal of the actual value of certain buildings is revealing. Due to a lack of other approaches and the specific features of the given case, the company attempted to estimate the actual market value (including the net replacement value) of the building based on the increase in value pursuant to inflation. As a starting point, they corrected the purchase price with the inflationary effect. Then, with the help of a correction carried out with time-proportionate attrition, they arrived at the

³ Tompa Miklós: Inflációs számvitel. (Inflation Accounting.) Számvitel- és Ügyviteltechnika, 1991. 1. szám

estimated market value. This logic could be acceptable, but they quantified the inflationary effect as an additive and not as a multiplicative relation. Due to the fact that, on average, the assets concerned were several decades old, the conceptual mistake of the calculation resulted in a very great estimation error. (The nature of this mistake – to make a simple comparison - can be illustrated by the example of a bank that would not calculate remuneration with compound interest on our deposit of several decades, but would add up the interest percentage due in each year and multiply the amount of our former deposit by this.) Let us take an overview of the changes in the industrial price index in order to gain an idea of the rates. In Hungary the price indexes of the domestic sales of industry between 1988 and 1995 were – in chronological order – 1,041; 1,134; 1,242; 1,319; 1,130; 1,105; 1,102; 1,300. The accumulated inflationary effect can be quantified if the product of multiplication of the price indexes is decreased by one. The product of multiplication of the price indexes in the period concerned is 3,459 which means that an industrial product which cost 100 HUF on the 1st of January 1988, on the 31st of December 1995 cost 346 HUF (provided that the ratios of the product concerned did not change compared to other products). Consequently, the average industrial price increase of this period is 246 per cent. If we add up the annual price increases, we will get 137 per cent. As is conceivable on the basis of these figures, the asset valuation company set the value of the fixed assets concerned at an unrealistically low level. As a point of interest, it has to be mentioned that even the obvious change in ratio did not draw the attention of the experts to the fact that, although the buildings concerned had great importance within the original book value, in the structure following the revaluation it was less significant.

3. HUNGARIAN CHARACTERISTICS

So far in Hungary there has been no real opportunity to withdraw inflationary profit from taxation. As of 1995, a unique inflation-handling method was introduced, probably on microeconomic pressure. The indication of asset value corrected with inflation, or to be more exact, the current actual (market) asset value in the balance, became possible. This correction shall be referred to as "value adjustment" within the assets, and as "revaluation reserve" as part of the equity capital. The great methodological trick was that the tax liability of the inflationary profit did not cease to exist with this. The value adjustment cannot be "deducted" (these items cannot be taken into consideration when quantifying depreciation); thus, the nominal increase in value concerned cannot become the property of the company on a steady basis. In other words, no matter how large the actual value is of the fixed asset which has increased with inflation, the values which can be recycled in the system by way of costs shall be quantified in compliance with the original purchase prices. It is true that, due to the accumulative effect of inflation, the sum of the value adjustments shows an increasing tendency for some time. However, after the ceasing of inflation, which occurs simultaneously with the continuing decrease of the net value of the fixed assets affected by the inflationary effect, the amount of revaluation reserve will gradually disappear.

It can be seen that, under the regulations introduced as of 1995, the equity capital of the companies applying value adjustments differs from the classical equity capital. From a financial point of view, this construction seems to be a delusive solution. The revaluation reserve – as can be seen above – is a floating item; therefore, the return of costs does not

grant the maintenance requirement of the equity capital. In the long run, taxed profit becomes unavoidably necessary to the latter, contrary to the maintenance of the equity capital of those companies which do not apply value adjustments.⁴

Serious damage has been caused to the domestic economy by defects in the knowledge of experts, especially in the case of the public-utility companies. In the nineties, it was typical that the requirements concerning inflationary profit were not taken into consideration in the course of regulating the public-utility companies. In addition, costlevel prices, i.e. prices covering only costs, were dictated, which served as a basis for a process of a substantial loss of assets. For a long time, the consumers got the services at a price that was less than the real value of the costs. This is similar to a situation in which the service provider would have given little pieces of assets to the customers in each case. The higher the consumption was, the greater the gift attached to it. As a matter of fact, these pieces of assets given under necessity (and invisibly) meant the loss of the value mechanism contained in these systems.

In the case of the companies with great resource demands – until the middle of the '90s, in addition to the water and sewage companies, the energy supply companies were also operated in a non-profit way – in the inflationary period great amounts of asset values vanished due to prices which granted a profit near zero. The real shortage of capital accumulated in this way originated independently from the economic level of the companies concerned. (On the other hand, it is also hard to measure the level of economy in the case of natural monopolies.) The inflationary profit demand should have been included in the prices to ensure real opportunities for the system's maintenance. However, with respect to the fact that in Hungary inflationary profit is also subject to taxation, the related profit tax is also attached to this item. Under inflationary circumstances, only the price containing such a measure of profit can be regarded as a viable cost level price. This price, however, usually only ensures incomes necessary to maintain the system and does not make expansion possible.

4. CUMULATIVE EFFECT

The volume of cumulative inflationary profit and the inflationary profit demand, and the difference between the volume of the purchase price of fixed assets, corrected with economic attrition, and the actual market price of the fixed assets can all be determined as a function of two variables. These are:

- the age of the fixed assets, and

- the inflation which occurred during the lifetime of the fixed assets.

The higher the age of the fixed asset, and the higher the inflation occurring continuously during the lifetime of the fixed asset is, the greater the inflationary effect which has to be taken into consideration.

Cumulative inflation:

⁴ Legal background: Act XX of 1995 on the modification and amendment of the Act XVIII of 1991 on accounting.

$$H_{t} = [(1 + \hat{c}_{1})(1 + \hat{c}_{2})....(1 + \hat{c}_{t})] - 1$$

 H_t = the cumulative inflation which occurred during the lifetime of t years of the fixed asset \hat{c}_t = the producers' price increases in t year in the sector manufacturing the fixed asset $(1+\hat{c}_t = \text{price index of t year})$.

5. INFLATIONARY PROFIT DEMAND OF FIXED ASSETS

Concerning fixed assets, to maintain the real value of the capital in relation to depreciation, the surplus value, which can be estimated as the difference between the purchase value and the value when used, has to be recycled. It seems to be expedient to carry out the estimation (for the sake of greater exactness) starting from the individual depreciation sums of the fixed assets. (In the case of computer records this should not cause any difficulties.)

The sum of the annual depreciation (to put it more simply, assuming time-proportionate linear depreciation conforming realities) is:

$$A = \sum_{i=1}^{\hat{z}} E_{Bi} \hat{k}_{i}$$

(2)

(1)

A = the sum of the depreciation of the year concerned,

 E_{Bi} = the gross value of i fixed asset,

- \hat{k}_i = amortisation rate of i fixed asset (in certain cases, its invert quantifies the normative lifetime pursuant to depreciation of i fixed asset),
- \hat{z} = the number of fixed assets.

The amount of tax-free profit necessary to compensate for the inflationary effect, in the case of depreciation proportionate to attrition (by detailed calculation) is:

$$M_{I} = \sum_{i=1}^{\hat{z}} E_{Bi} \hat{k}_{i} H_{it}$$

(3)

 H_{it} = cumulative inflation concerning i fixed asset,

 M_I = the amount of tax-free profit necessary to compensate for the inflationary effect, in the case of depreciation proportionate to attrition.

Profit before taxes necessary to compensate for the inflationary effect (if the inflationary profit is also subject to taxation) is:

$$M_{Ia} = \frac{1}{1 - \hat{a}} \sum_{i=1}^{\hat{z}} E_{Bi} \hat{k}_i H_{in}$$

(4)

 M_{Ia} = profit before taxes necessary to compensate for the inflationary effect if the inflationary profit is also subject to taxation,

 \hat{a} = the tax rate of the profit recycled to the company.

If the depreciation time of the fixed assets differs from the actual expected lifetime, or if the company applies any accelerated version of depreciation, the difference between the accounted depreciation and the amortization justified by the actual economic processes can have a cost diversion effect in the year concerned. The comparison of this cost diversion effect with the inflationary profit demand can be carried out in different ways starting from different considerations. Since the correction of the inflationary profit demand due to the acceleration of depreciation cannot be solved with conceptual clearness, each of the estimation methods has evident mistakes.

The part of the inflationary profit demand, which is covered by accounting profit, can be construed as inflationary profit. If we deduct the inflationary profit demand of the fixed assets from accounting profit, we will get an amount approaching the actually realized profit, which still might include the inflationary profit originating due to current assets. If the accounting profit is smaller than the inflationary profit demand, then the company is unprofitable regarding the real value in the year concerned.

6. INFLATIONARY ASSET APPRECIATION

The essence of nominal asset appreciation due to inflation (concerning fixed assets) is as follows: the inflation is accumulated on the value-parts still not used up and becomes obsolete of the fixed asset in line with the time period covered by their current actual lifetime. From the date of revaluation, cumulative inflation has to be taken into consideration concerning the group of fixed assets which were in the possession of the company at the latest revaluation and which are in the possession of the company as of that time. The quantification of the nominal surplus-value – if depreciation rates properly follow attrition (and obsolescence) rates – can be determined as the product of the multiplication of the net values and cumulative inflations:

$$\delta E = \sum_{i=1}^{\hat{z}} E_{Ni} H_{ti}$$

(5)

If the rate of depreciation is not in line with attrition (and obsolescence) rates, then it seems proper to start not from the net value, but from the gross value corrected by the attrition (and obsolescence) rate.

7. INFLATIONARY PROPERTY LOSS

In an inflationary environment the nominal appreciation of the assets is regular. The inflationary property loss, however, is not regular. We can talk about property loss effect only if the replacement of the real value of the fixed assets, or to be more precise, the recycling of the profit amount commensurate with inflationary profit demand is not carried out. The estimation of the amount of inflationary property loss is not a simple task due to several reasons. The main problems are:

a) In addition to the existing fixed assets, the property loss effect is also related to the stock of fixed assets which, due to total attrition, is not indicated in the company's database. In the case of fixed assets entirely written off, the part of the difference which is not replaced, between the gross value and real value, also constitutes an integral part of inflationary property loss.

b) One part of the profit formed in the competitive sector calculated on real value can be regarded as profit as well; the other part is the inflationary profit itself. Their separation requires a conceptual standpoint. If we start from the fact that the return of costs is primary, and the inflationary profit tends to ensure the replacement of costs at real value, then, first of all, this has to be separated from the amount of accounting profit. The tax-free recycling of it would make possible the maintenance of the real value of the fixed assets. Consequently, if inflationary profit is subject to taxation, then the tax of the inflationary profit is equal to the amount of current relative property loss. This problem has further aspects:

If as much accounting profit is not formed at the company in one year as the amount of the inflationary profit demand, but if in other years it significantly exceeds this, then there is no point in dealing with the fluctuation, if we bear in mind cost accounting features as well.

If as much profit is not usually formed at the company as the amount of the inflationary profit demand, then the situation is to be interpreted as follows: beside the total tax of the formed profit – as the inflationary property loss formed in each year – there is an economic property loss as well, which is concealed by inflation. The economic property loss can be quantified as the amount of accounting profit still being necessary to the return of inflationary profit demand.

If the non-profit sector, or the companies operated in a non-profit way, realise zero profit from an accounting point of view, the real value of their property loss can be regarded as corresponding to the (not recovered) inflationary profit demand.

c) The accumulation of the annual sums of inflationary property loss has to be recalculated. Consequently, it should be taken into consideration in the course of accumulation that, to replace the unadjusted real values, greater and greater amounts are normally required. The later it is carried out, the greater the sum is that covers the replacement demand of previously due 100 HUF.

d) The special circumstances of the economy – depending on the nature of its characteristics – may justify the correction of the original calculation conception. For instance, in Hungary, it was typical in the first part of the 1990s that, besides inflation reaching 30 per cent, company profitability was near zero. This – together with many other factors (for example, credit interests exceeding inflation significantly) – is mainly the consequence of the special economy management solutions of the economic and political

transformation.⁵ With respect to these circumstances, in this period the amount of annual inflationary property loss can be estimated by the inflationary profit demands, which were connected with the fact that the majority of companies were in domestic ownership.

e) There are always smaller or greater increases in prices. We have to ask what time period should be used to calculate the property loss effect of inflation. If the theoretically possible time interval is too large, it can be practical to calculate several variations by making sections pursuant to the extent of inflation. In the case of a company which has recently been established or purchased, the establishment itself and the time in which the assets are re-evaluated determines the period that the calculation can concern. It can happen, however, that the time period, which can be interesting regarding the estimated value of property loss, is even shorter than this.

Concretization of the estimation calculation is alterable with respect to the degree of information supply. For all those years for which we have the databases necessary to calculate the inflationary profit demand, by using these databases we can estimate, with a fairly high degree of accuracy, the nominal appreciation and the possible inflationary property loss.

Only the formation of the formula requires more thorough consideration. We need to bring the not replaced inflationary profit demand in the concrete year to the level of real value of the further years. Logically, the inflationary profit demand of the earlier years will determine, depending on the reference date of the calculation, how many years have to be examined in order to calculate the cumulative inflation. The date of examination is 4 years distant compared to the end of the first year of a five-year interval; no time is lapsed between the end of the last year and the date of examination. Consequently, we need to look back at the inflation years 4; 3; 2; 1; and 0. If we mark the number of years of the examined time interval with $\hat{\mathbf{n}}$, and the serial number of the years in this interval with $\hat{\mathbf{t}}$, then the cumulative inflation rate of year $\hat{\mathbf{t}}$ is to be calculated according to the last $\hat{\mathbf{n}} - \hat{\mathbf{t}}$ year.

The estimation of inflationary property loss of non-profit (also from an accounting point of view) companies and companies set to zero profit by government-regulated prices (if the database necessary to calculate inflationary profit is available) is:

$$-\delta \mathbf{E}_{\mathrm{I}} = \sum_{\hat{t}} \mathbf{H}_{\hat{\mathbf{n}}\cdot\hat{\mathbf{t}}} \mathbf{M}_{\mathrm{I}} = \sum_{\hat{t}} \mathbf{H}_{\hat{\mathbf{n}}\cdot\hat{\mathbf{t}}} \sum_{i=1}^{z} \mathbf{E}_{\mathrm{B}i} \hat{\mathbf{k}}_{i} \mathbf{H}_{it}$$

(6)

As it can be clearly seen from the logic of calculation, in this case we have to work with two kinds of cumulative inflation:

⁵ In more detail: Illés Mária – Inflációs eredetű vagyonmozgás a vállalati szférában. Elvi kérdések és a magyar megoldás. (The Move of Capital Starting up on Inflation. The Questions in Principle and Hungarian Solutions to These Questions) Vezetéstudomány, 1995. 10. szám, and: Illés Mária – Privatizációs módszerek és jövedelmezőségi perspektívák. (Privatization methods and perspectives of profitability.) Ipargazdasági Szemle 1996. 1-3. szám.

On the one hand, we need the cumulative inflation uses at the estimation of the inflationary profit demand. This changes year by year in connection with the individual age of fixed assets, and accumulates as the age grows.

On the other hand, we have a problem if the inflation which is accumulated on the inflationary profit demand is not replaced in due time. The later the date when we wish to replace it, the greater the nominal value which is necessary to cover the real value concerned. On what we did not replace five years ago, the inflation of the last five years is accumulated, on what we did not replace four years ago, the inflation of the last four years etc. is accumulated. Thus, in this case we have to work with a "backwards accumulated" inflation depending on the number of years we look back.

In the case of companies in the competitive sector, the absolute and relative inflationary property loss is caused by the taxation of inflationary profit. Therefore, the rate of property loss in this sector is typically smaller than in the case of non-profit companies. Since the amount due to the taxation of inflationary profit can be classified here, its quantification is amended compared to the above formula.

$$-\delta E_{I} = \sum_{\hat{t}} H_{\hat{n}\hat{t}} \hat{a} M_{I} = \sum_{\hat{t}} H_{\hat{n}\hat{t}} \hat{a} \sum_{i=1}^{z} E_{Bi} \hat{k}_{i} H_{it}$$

(7)

If the actually formed inflationary profit is smaller than the inflationary profit demand, then of course it shall be used instead of the above $\sum_{i=1}^{\hat{z}} E_{Bi} \hat{k}_i H_{it}$ component.

8. ESTIMATION UNDER AN INCOMPLETE INFORMATION DATABASE

If the database necessary for a relatively exact estimation is not available, informatory information shall be construed with satisfactory accuracy by less time-consuming methods. These estimations are also suitable for a kind of global control of the results of detailed calculations. This comparison may give a natural opportunity to analyse the reality more thoroughly.

Of course – as in the case of producing the approximative value of all the information – several methods can be worked out here as well. Their conditions, the required work and the accuracy may vary. Below an extremely simple, fast and more or less satisfactorily exact variation is shown.

Conditions:

- The accounting lifetime approaches the economic lifetime well, timeproportionate linear depreciation is used, which follows the process of economic attrition well.
- The lifetime and age structure of fixed asset stock is constant.
- We might take no notice of the effect of the relatively higher price of changing fixed assets on the value structure.
- The company has only amortizable fixed assets.

Required data:

- The depreciation of the last year of the period concerned (A).
- The gross value of fixed assets in the last year of the period concerned (E_B).
- The net value of fixed assets in the last year of the period concerned (E_N).
- The average increase in prices in each of the years of the period concerned (inflation).

The rate of depreciation and gross value gives the average rate of depreciation:

$$\hat{k} = \frac{A}{E_B}$$

(8)

The converse of the average rate of depreciation quantifies the average functional lifetime of the fixed assets under the given conditions:

 $n = \frac{1}{\hat{k}}$

To estimate the nominal value increase, at first the temporal distribution of the former existence of the net fixed asset value available at present has to be examined. The inflation can be nominally appreciated only in line with this. In line with our conditions, n years earlier we had 1/n part of the assets available at present. In year (n-1): (1/n)+(1/n) etc. Of course, in the year of examination all assets are in our possession, i.e. n(1/n) = 1.

The fixed assets being in our possession at the end of year n years before and at present is affected by the cumulative inflation of year n-1. The relating nominal increase in value is:

$$E_{N} \frac{1}{n} H_{n-1}$$

(10)

The value increase of the fixed asset group having gradually one year less cumulative inflation effect is to be calculated and summed up in each year. With this we get the estimated value of the nominal increase in value resulting from the effect of inflation:

$$\delta E = \sum_{t=1}^{n} E_{N} \ \hat{k} \ H_{n\text{-}t}$$

(11)

The rough estimation of the inflationary property loss differs here too, concerning the concretization to the non-profit and competitive sectors. In possession of the given information the two variations are concretized as follows:

$$\begin{split} &-\delta E_{I}=\sum_{t=1}^{\hat{n}}A~H_{t}~\left(H+1\right)_{\hat{n}-\hat{t}}\quad\text{, and}\\ &-\delta E_{I}=\sum_{t=1}^{\hat{n}}~\hat{a}~A~H_{t}~\left(H+1\right)_{\hat{n}-\hat{t}} \end{split}$$

(12)

(If the value of fixed assets grows dynamically, the formula can be used pursuant to the existing depreciation, i.e. A_t .)

After making the calculations, it is practical to examine the conditions of the estimation method one by one, and the accuracy of the estimation can be seen in line with the extent of the deviation of the reality from these.

If, for example, the used depreciation rates result in a shorter "accounting" lifetime than the average life expectancy, then the processes move towards the hidden increase in value of the fixed assets, resulting in greater actual fixed asset value than estimated above and smaller property loss. Otherwise, the directions of deviation are inverse.

REFERENCES

- [1] Maria Illes (1995) Inflációs eredetű vagyonmozgás a vállalati szférában. Elvi kérdések és a magyar megoldás. (The Move of Capital Starting up on Inflation. The Questions in Principle and Hungarian Solutions to these Questions.) Vezetéstudomány, N⁰ 10, pp. 7-13.
- [2] Maria Illes (1996) Privatizációs módszerek és jövedelmezőségi perspektívák (Privatization methods and perspectives of profitability.) Ipargazdasági Szemle N⁰ 1-3, pp. 76-84.
- [3] Maria Illes (1997) Vezetői gazdaságtan. (Managerial Economics.) Kossuth Kiadó, Budapest
- [4] Miklos Tompa (1991) Inflációs számvitel. (Inflation Accounting.) Számvitel- és Ügyviteltechnika, N⁰ 1, pp. 2-9
- [5] Hungarian Act XX of 1995 on the modification and amendment of the Act XVIII of 1991 on accounting.

OPPORTUNITIES AND LIMITS OF ECONOMIC CONVERGENCE FOR HUNGARY

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Key words: growth, convergence, state intervention, subsidisation

The decision makers of the European Union have committed themselves a great number of times in the past two decades to decreasing the economic and social differences between the member states and also between the regions within them. The Regional (Cohesion) Policy of the Community was designed to achieve this aim: this is the policy that the populations in the poorest regions of the new members have trusted in. The results are, however, far from unambiguous. This paper seeks to find the reasons for this by examining the causes in Hungary.

SUMMARY

The hope of catching up with economically more developed countries is not new in Hungarian thinking. The very best of the intellectuals from the Reform Age to the present day (e.g. István Széchenyi^{1/}, Miklós Wesselényi, Endre $Ady^{2/}$, Oszkár Jászi, and István Bibó), in accordance with the spirit of the age and their social standings, asserted their conviction of the need for convergence and discussed its obstacles.

The political propaganda prior to Hungary's accession to the European Union (2004) set out the promise (both directly and indirectly) of catching up fast. The facts so far show that our wishes have not become reality. Therefore, an increasing part of the population looks on the European Union as on a bureaucratic hydrocephalus. The direct consequence is that the initial great enthusiasm has soon been replaced by disappointment and disillusionment and the recognition that we have again entertained disproportionate hopes. It seems that the economic forecasts of politicians concerning the impact of resources from EU funds have

^{1/} "How could we lift Hungary out of the mud?" asks István Széchenyi in his letter to Miklós Wesselényi in 1830 (Széchenyi, 2004).

^{2/} "Ferry-boat county, ferry-boat county, ferry-boat county. Even in its best dreams it only shuttled between two banks: from the East to the West, wishing to go back. Why did they lie that the ferry, oh Potemkin, you holy man with anointed hands, you only cheated on Czarina Catherine?... Idealists and malefactors united to build castles of the air-stones of falsity and shouted to the whole world with joy that Europe had been built up under the Carpathian Mountains.

The Great Humbug did not hurt Europe, the lie was believed at home. We were told that Europe was here, we were preparing for a life of culture and jerked ourselves forward with taut nerves." Ady Endre, Budapesti Napló, 15 October 1905. (Complete Prose Works of Endre Ady, Vol. 7. Arcadum Adatbázis Kft.).

also been unrealistic. Given this knowledge, we have to recognise that our accession to the European Union will not automatically start our convergence.

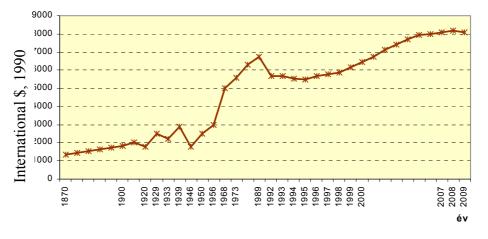
This paper attempts to answer two questions:

- Has our economic performance achieved a substantial breakthrough as a result of our economic policy following the accession or has it been enough only to more or less maintain our position?
- What impact have EU subsidies had on the economic convergence of Hungary and of our region?

1. BACKGROUND

Economic history is more or less in agreement about drawing up the periods of growth and development determining the past 150 years of the Hungarian economy.

The period of nearly fifty years ('balmy days of peace') between 1867 and 1914 (Austro-Hungarian Monarchy) is in general positively evaluated, although opinions are divided on the economic growth rate of the period. It remains a fact, however, that Hungary developed from a backward agrarian country (with a semi-peripheral position) into an agrarian-industrial country with a developed food industry in that period. As a result, the growth rate of the economy accelerated between 1870 and 1913 (at a growth rate of 2-3.5 % per year) and the per capita GDP was nearly trebled (Figure 1).



Source: A. Maddison: Monitoring the World Economy 1820-1992. Paris: OECD, 1994 and author's own calculation based on CSO data

Figure 1. Per capita GDP in Hungary, 1870-2007

This growth rate was shattered by World War I. Although the governments succeeding each other took serious steps to protect the economy (repayment of foreign debts was halted,

industry was given considerable military orders, etc.), resources had been depleted by 1918 and the economic performance of the country suffered a significant setback.

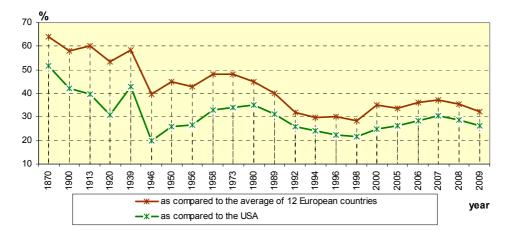
As it is well-known, the Treaty concluding World War I (04.06.1920) had a serious effect on the economic potential of Hungary (the territory of the country was reduced by 232.000 km², and its population by 3.9 million persons).

Opinions are greatly divided on the economic performance of the period between the two World Wars. Unbiased empirical analyses have been published only recently.

As verified by the analyses of Maddison (Maddison, 1994), apart from the years of the World Economic Crisis (1929-1931), the economy of Hungary was characterised between the two World Wars by a growth rate that exceeded that of the decades of the Austro-Hungarian Monarchy.

The period of more than forty years following World War II (1945-1989) also produced several peaks and troughs. Practically, from the 1980s onwards, the Hungarian economy has consistently lagged behind others. (Figure 2).

The economic-political measures of the change in political orientation taking place after 1989 were unable to halt this process. Privatisation, the decline of state interventions, the opening up of markets, the indebtedness of the country, etc. have put a range of companies in difficult situations, and industries have declined. The added value as well as the output of the economy underwent a dramatic decline and its specific performance continued to decrease (Figure 2).



Source: Based on figures in A. Maddison (1995) and author's calculations

Figure 2. Relative development of per capita GDP in Hungary (1870-2007)

At the beginning of the new millennium (between 2000 and 2003), hopes were again aroused and economic growth re-appeared. These hopes were shattered in 2007. The global economic crisis, which broke out in the spring of 2008, shook the Hungarian economy

dramatically. Although there are differences amongst the opinions of politicians concerning the causes (according to political commitments), there is hardly any dispute about the fact that the Hungarian economy suffered the negative external effect whilst already in a state of ill health. Thus, the consequences are far more serious than the Union average.

The per capita GDP at purchasing power parity in Hungary in the year of accession was 63.2 % of the EU average; in 2007 it was only 62.6 %, in 2008 60.3 %, and by July 2009 it had fallen to only 59.8 % (EUROSTAT, 2009).

Thus, the real convergence indicators of Hungary have shown a relative decline in the past four years (as opposed to the period 2000-2004, when convergence was registered with the value of the indicator rising from 56.1 % to 63.2 %).^{3/}

Hungary ranks ninth of the ten countries which joined the Union in 2004 in terms of real convergence in the period 2000 to 2007, and last when considering the period since the accession (http://epp.eurostat.ec.europea.eu). This means that our economic performance is weak, not only in an absolute sense, but also when compared to the new members.

According to Eurostat data, in the field of industry and services, the annual gross income of full-time employees in companies employing at least ten persons in Hungary was 12.8% of the average of the 15 old members in 1998. This ratio increased to 21.7 % by 2008, with the major part of the increase taking place between 2000 (13.51 %) and 2004 (20.56 %).^{4/}

Nevertheless, foreign direct investments of non-resident companies in Hungary have visibly increased since the accession (according to data of the Hungarian National Bank, FDI remained, between 1995 and 2000, in a narrow band between 2.63 billion Euro and 3.70 billion Euro, while in the three years preceding the accession it showed a definite decreasing tendency: from 4.39 billion Euro in 2001 to 3.19 billion Euro in 2002 and then to 1.89 billion Euro in 2003. In the year of accession, this tendency changed: FDI increased to 3.63 billion Euro in 2004, then to 6.17 billion Euro in 2005 and also exceeded 6 billion Euro in 2006. In the last two years, it decreased to a level of around 4.5 billion Euro, with its average amounting to 4.93 billion Euro between 2004 and 2008. Meanwhile, the public debt increased, with the highest rate of debt service in the region.)

To sum up: the economic statistical data of the past 150 years proves that Hungary continues to belong to the semi-peripheral countries of the world economy.^{5/} The previous

^{3/} It is worth noting that in Slovakia, which joined the Union at the same time as Hungary, 50.1 % in 2000 rose to 55.5 % at the time of accession and to 67 % in 2007; between the turn of the millennium and 2008 the same indicator rose from 68.5 % to 80.2 % in the Czech Republic, from 48.3 % to 53.3 % in Poland, and from 44.6 % to 67.9 % in Estonia.

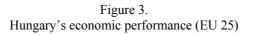
^{4/} In 2006, the value of the indicator was 22.93 % in the Czech Republic, 10.28 % in Rumania, 19.49 % in Slovakia and 17.67 % in Poland (the last figure is for 2005). In Hungary, the annual gross income grew by 10 % in 2006 as compared to 2004, and in 2007 the increase in incomes was 26 % as compared to the year of the accession.

^{5/} The centre-periphery world theory comes from Immanuel Wallerstein (1983). According to it, in a global world a centre at a high level of economic and social development concentrates capital, state-of-the-art technology, information, and science, and this is where innovation originates from. The economically backward periphery has the role of providing raw materials for the centre, and is characterised by a low technical level and social underdevelopment. These – in addition to other features – determine the difference as well. The exchange of goods between the centre and the pe-

improvement in our economic situation has been halted, and, at the moment, Hungary is sliding downwards (Figure 3).



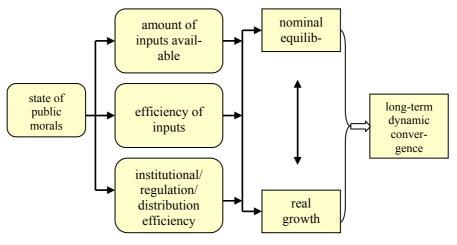
Source: Eurostat, 2010.



2. CONDITIONS FOR SUSTAINABLE CONVERGENCE

The general concept of convergence allows for a wide range of interpretation. Economic and regional economic scientists have formulated two interpretations for convergence. The first definition regards a decrease in the differences between the chosen socioeconomic indicators as convergence, which indicates in effect a decrease in the range of standard deviation (σ convergence). In the second interpretation, convergence means catching up on a longer term growth path (β convergence). Thus, the latter (sustainable or long-term convergence in other interpretations) is of greater importance than the former. The rate of sustainable (long-term) convergence and the changes in its rate over time are basically determined by three groups of factors, which have a strong logical interrelation in a given country: the public morals, nominal equilibrium and growth surplus (Figure 4).

riphery is performed with terms of trade beneficial for the centre. A relation of economic dependence develops between the two regions with the capital of the centre playing a major role. The model was refined in the late 1980s with the introduction of the concept of semi-periphery.



Source: author's own work

Figure 4. Macro-economic conditions of sustainable convergence

Nominal equilibrium is described by the stability of state finances (the monetary and budget situation). (As is known, the European Union wishes to keep the differences between the member states within limits and to secure convergence by the prescription of the Maastricht criteria, though with varying results).^{6/} Nominal equilibrium is determined by an increase in the inputs, particularly the strengthening of savings, the efficiency of their use and the system of institutions and norms handling them. The equilibrium of financial and fiscal affairs (or the still manageable imbalance) is a necessary, but not sufficient, condition of convergence.

^{6/} The Maastricht Criteria (as is well-known) defined four convergence criteria for the introduction of the common currency (Euro):

[•] Price stability: the rate of inflation in the period examined may exceed the average of the three countries with the lowest inflation by max 1.5 %.

[•] Budgetary deficit is not to exceed 3 % of the GDP, and national debt is not to exceed 60 % of the GDP.

[•] Long-term nominal interest may exceed the average of the interest of the three countries with the lowest inflation by maximum 2 %.

[•] Stable exchange rate: in the European Monetary System (EMS) Exchange Rate Mechanism, the national currency is not to be devalued against another currency (Euro) for at least two years.

The (above) criteria ensure the manageability of the imbalance of a given country, in addition to the introduction of the common currency (Euro) under low and controlled inflation.

In case of real convergence, the performance of a country with a lower performance (development and income levels) approaches those of countries with a higher performance. In practice, this can be achieved if the income-generating capacity of the poorer country grows more rapidly than that of the richer country. This process can be generated by an increase in productivity and employment, and by eliminating factors hindering the growth of performance (e.g. a system of institutions with low efficiency, political instability, etc.).

There is hardly any chance for real or nominal convergence when there is a lack of stable moral conditions or of the will to improve the moral situation.

The general moral situation exerts its effect both on fiscal and real processes. The larger the proportion of the black (hidden) economy, the higher the budgetary revenue lost. The proportion lost in this way can be replaced by increasing the budgetary revenues (taxes and contributions by the white economy), by selling assets of the national wealth ('denationalisation'), by reducing the state expenditure, or by credits.

In the case when the political elite violates the written and unwritten legal regulations or, whilst abiding by them, takes the liberties to take steps infringing public morals, then a 'simple' citizen will also regard tax evasion as a forgivable sin (e.g. work without invoice, etc.).

The connections between the black economy, corruption and real processes are at least that serious. Part or all of the state intervention intended for increasing capacity, improving productivity, and improving efficiency (i.e. the convergence of real processes) may disappear in the current system without having achieved its purpose.

Without improving our public moral conditions and states, it is a vain hope to assume that the performance of the economy will increase or that nominal equilibrium will be created.

Obviously the same logic can be followed regarding the evolution of conditions related to regional convergence, noting that the steps taken by the government in power for creating (sustaining) nominal equilibrium may strengthen or also weaken the chances of convergence of a particular region.

3. CAUSES OF CONVERGENCE SLOWING DOWN IN HUNGARY

The lack of both nominal equilibrium and of real growth in the economy has not ceased to exist with Hungary becoming a full member state of the EU. This phenomenon has several causes, including the low added value and productivity of industrial production, the errors in the government's economic policy, the shortage of capital of domestic SMEs, etc. Neither the larger market resulting from EU membership, nor the working capital arriving in Hungary, nor the subsidies from the EU Cohesion Fund have been able to compensate for this.

All in all, the Hungarian economy seems to have lost the drive in the past four years that would have been necessary for convergence. This is also borne out by the increasingly worsening, and more pessimistic, forecasts. (Table 1).

	2009	2010	2011	2012
Consumption by households	-8	-2.5	3	2.8
Community consumption	-1.1	-0.8	0.3	0.2
Gross accumulation of fixed assets	-7.1	1.1	7	6.9
Exports	-10.1	5.5	9.2	9.5
Imports	-16.1	4.5	9.2	9.5

Table 1. Changes in the components of growth (%)

Source: Ministry of Finance, 2009.

4. INCREASING REGIONAL DIVERGENCE

Worsening macro-economic performance has resulted in an increase in regional discrepancies in Hungary. This is in effect contrary to the practice of the developed industrial countries, where increasing macro-economic performance has caused regional divergence; and, when a well-functioning regional policy has been in place, regional income differences (sigma convergence) have decreased (Table 2).

Country	Number	beta conv	vergence	Regional income inequality (sigma convergence)						
	of re- gions	Period examined	(%/year)	1940	1950	1970	1990	2005 *		
Germany**	11	1950- 1990	1.4	-	0.31	0.20	0.19	0.14		
Sweden	24	1951- 1933	2.4	0.26	0.15	0.10	0.07	0.06		
Great Brit- ain	11	1950- 1990	3.0	-	0.17	0.10	0.12	0.10		
France	21	1950- 1990	1.6	-	0.21	0.17	0.14	0.11		
Italy	20	1950- 1990	1.0	-	0.43	0.33	0.27	0.25		
Spain	15	1955- 1987	2.3	-	0.34	0.27	0.22	0.20		
USA	48	1880- 1990	1.7	0.35	0.24	0.17	0.17	0.16		
Japan	47	1955- 1990	1.9	0.63	0.29	0.23	0.15	0.12		
Hungary***	7	1995- 2007	0.81							

 Table 2.

 Development of macro- and mezo-level convergence indicators in selected countries

EU ***	199 20	
		Source: Sala-i-Martin *Author's calculation

*Author's calculation **without the former GDR *** Author's calculation

As a result of the semi-peripheral character of Hungary, the speed of convergence between the regions of Hungary falls behind the EU average. The regional policy of Hungary in the period examined was not able to achieve convergence as such, either by improving economic activity or by setting the economy on a new growth path. Therefore, convergence is, in effect, virtual. For almost the last 15 years, Hungary has increased its macroeconomic performance while at the same time increasing the regional differences as well (Figure 5).

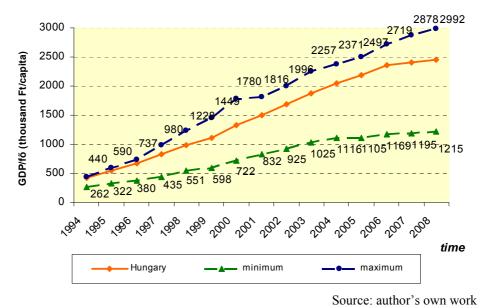
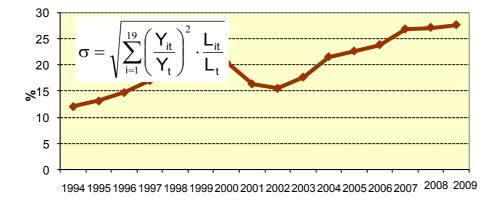


Figure 5. Standard deviation of county per capita GDP in Hungary

While the growth rate of counties in Hungary with outstanding performance, as compared to the basis period (6.17), is well above the national average (5.56), the range of standard deviation has increased (Figure 6).



Source: author's own work

Figure 6. Development of σ -convergence of per capita GDP in Hungary

According to the standard deviation of economic performance, Hungary became split into three parts. The lagging behind of Szabolcs-Szatmár-Bereg County seems to be permanent. The situation of Borsod-Abaúj-Zemplén County is somewhat better, but no real improvement can be perceived. The performance of counties in Western Dunántúl and in the region of the capital is steadily above average.

Changes in per capita GDP (thousand HUF /person in Hungary														
County	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	200 7
							1	1	1	1	1	1	2	2
Pest	324	394	487	643	760	894	035	309	493	678	816	949	018	233
							1	1	1	1	2	2	2	2
Fejér	410	542	696	980	1228	1283	577	561	596	782	009	091	292	415
Komá- rom-														
Eszter-							1	1	1	1	2	2	2	2
gom	341	471	599	716	827	918	104	397	561	997	282	497	426	738
Vesz-							1	1	1	1	1	1	1	1
prém	339	460	543	669	795	901	115	262	343	483	606	633	713	929
Győr-														
Moson-							1	1	1	2	2	2	2	2
Sopron	440	590	737	905	1182	1449	780	816	996	257	371	430	719	838
							1	1	1	1	2	2	2	2
Vas	439	581	734	951	1150	1317	517	529	679	985	067	068	332	373
							1	1	1	1	1	1	1	2
Zala	401	496	620	751	881	989	122	310	472	754	875	871	878	032
-							1	1	1	1	1	1	1	1
Baranya	356	433	518	662	769	868	005	122	258	401	516	584	702	834
Somogy	325	413	498	579	672	760	911	1	1	1	1	1	1	1

Table 3. Thanges in per capita GDP (thousand HUE /person in Hungar)

								058	158	301	421	439	469	538
							1	1	1	1	1	1	1	1
Tolna	401	497	600	690	838	978	092	206	342	345	457	512	593	767
Borsod-														
Abaúj-									1	1	1	1	1	1
Zemplén	299	410	468	570	670	736	851	950	054	182	371	499	563	662
								1	1	1	1	1	1	1
Heves	310	405	493	599	716	805	946	113	250	398	523	528	626	828
										1	1	1	1	1
Nógrád	263	322	380	435	553	605	722	832	925	025	116	105	169	162
Hajdú-								1	1	1	1	1	1	1
Bihar	353	421	521	632	741	794	963	126	249	435	564	620	698	805
Jász-														
Nagy-										_				
kun-	225	110	502	(20)	704	745	004	1	1	1	1	1	1	1
Szolnok	335	419	503	620	704	745	894	062	152	239	327	358	542	643
Sza-														
bolcs-														
Szat- már-										1	1	1	1	1
Bereg	262	327	391	474	551	598	731	847	934	069	167	196	257	1 352
Bács-	202	321	391	4/4	551	398	731	1	934	1	107	190	237	1
Kiskun	329	425	502	602	696	769	916	038	178	280	434	466	567	686
Kiskuli	527	425	502	002	070	707	710	050	1/0	1	1	1	1	1
Békés	338	422	507	590	673	750	893	985	069	158	263	302	359	462
Csong-							1	1	1	1	1	1	1	1
rád	402	503	614	737	864	947	110	195	327	465	607	670	744	891
Hun-														
garian							1	1	1	1	2	2	2	2
average	425	544	669	830	983	1113	325	499	691	870	050	185	363	527

Source: KSH.

Table 4.

Range of per ca	nita GDP standar	d deviation and	changes in	n relative variance
Range of per ca	ipita ODI standar	a acviation and	changes h	

	199 4	199 5	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Hun- gary	425	544	669	830	983	1113	1325	1499	1691	1870	2050	2185	2363	2363
mini- mum	262	322	380	435	551	598	722	832	925	1025	1116	1105	1169	1169
maxi- mum	440	590	737	980	1228	1449	1780	1816	1996	2257	2371	2497	2719	2719
relative variance	11,9 957 2	13,0 681 5	14,6 7219	16,9 5513	19,0 9979	20,0 7193	20,4 6015	16,3 2432	15,4 7635	17,6 2038	17,0 3029	17,1 6	17,0 3	17,03

Source: author's calculation based on figures by KSH

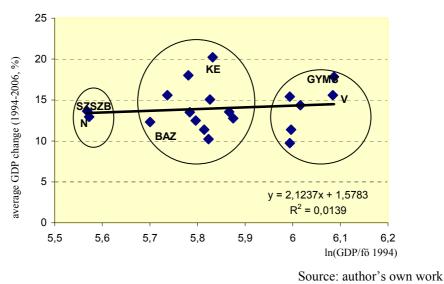


Figure 7. Convergence clubs of counties in Hungary

5. IMPACT OF EUROPEAN UNION SUBSIDIES ON REGIONAL CONVERGENCE

The first works on economic growth were already raising the question of what role governments played in generating growth and of what capacities governments had that the private sphere did not.

The 1950s and 1960s (the golden age of state intervention) was pervaded by a naive approach to the operation of governments. Explicitly or not, the supposition was entertained that the public sector served the advancement of social welfare with each of its acts. Therefore, hunting for annuities played an insignificant role in the motivation of political decision makers and executives. It was thought that the public sector formed a monolithic unity, that economic decisions were reasonable and understandable, and that there could be no inconsistencies between policies.

The consistency of the individual steps in economic policy was regarded as given not only in space, but in time as well. Therefore, the political time horizons of governments were believed to be sufficiently long for the decisions of the present not to enter into conflict with those to be employed by the future governments. However, these conflicts arose either as a result of errors, or of political considerations (e.g. winning the elections to come) that urged governments in the short term to choose alternatives that were obviously incompatible with long-term objectives.

It was also taken at face value that economic policy decisions were reversible. Civil servants could be dismissed when they were no longer needed, or after the objectives

strived for had been achieved; entitlements could be automatically eliminated, etc. Conversely, we know today that it is much easier to increase entitlements than to decrease them, and that it is much easier to hire than to fire civil servants.

Finally, mention must be made of the misconception that the instruments of economic policy are completely under the control of decision makers, and they in turn can rely on an honest and efficient civil servant body, which executes all the decisions made at a higher level in an objective and efficient way. (It is sufficient to refer here to corruption, the problem of employer and agent, or the hunt for annuities – the relevant literature is also the product of the past years.)

Experience has shown that this romantic or idealised image is far from reality. Actually, the public sector is not monolithic, but consists of a number of political centres with conflicting interests and ways of thinking, which are not necessarily governed by the same concepts of public interest. The economic policies followed by them are not necessarily consistent in space and time. While it may easily happen that some public servants are hunters for annuities and are under the influence of various groups of interests, it is also possible that those making some of the economic political decisions ignore how the economy works in reality. There may be employer-agent problems present, measures may be irreversible, bureaucracies may have low efficiency and/or be possibly corrupt (or both).

The fundamental objective of the Cohesion Policy of the European Union is to achieve the convergence of regions with low performance. It follows that subsidisation is only efficient if it generates surplus output (as compared to the conditions without subsidies).

The literature makes the impact of surplus performance contingent on two factors: firstly, on the efficiency of the operation of the system of institutions, and, secondly, on that of utilisation.

Empirical studies and analyses also verify that, in this respect, there are considerable differences between the member states. Side by side with obviously positive examples, low absorption capacity is not infrequent. Unfortunately, this is what was typical of the first two years following Hungary's accession (2004-2006) (Table 5).

Country	GDP/EU*	Contribut	tion to increase in	GDP (%)
Country	Subsidy	1989-1993	1994-1999	2000-2006
Portugal	~ 3 %	3.9	4.6	6.1
Spain	~ 1.5 %	2.9	3.1	4.2
Greece	~ 2.6 %	4.3	5.6	6.1
Ireland	~ 2.8 %	n.a.	8.9	8.6
Hungary	~ 2.1 %	-	-	1.2**

Table 5.	
Impact of subsidies on increase in GDI	P

Notes: * AGENDA 2000 (max. 4 %)

** in 2004-2006

Source: The Role of Fiscal Transfers in Regional Economic Convergence in Europe (No.1029.2009.)

The tendency has not changed in essence since 2006 either. The impact of subsidies arriving in Hungary on GDP growth lags behind the EU average. This has or may have a number of causes:

- the political 'brainstorming' present in resource allocation.
- the majority of EU funds arriving in the Hungarian convergence regions (60-65 %) have the one-time effect of increasing demand or of improving community infrastructure, and not of strengthening the economic potential of those regions. This also includes the potential of a high proportion of 'soft projects'.
- Resource allocation happens on the basis of political (partial) interests, and the majority of resources are not spent on investments supporting long-term convergence, thus their impact is also weaker.
- Resources are not additive, but substitute in character. In the majority of cases, they do not appear as additional funds, but replace previous domestic investments.

6. ON THE SHORTCOMINGS HINDERING REGIONAL CONVERGENCE

In spite of the subsidies of the past years, the economic performance of the Hungarian regions lags behind (at various rates from time to time) what we have hoped for; divergence rather than convergence has emerged. The causes are complex. Beyond the conditions for nominal and real convergence, the moral foundations are lacking, which has a fundamental influence on the room for manoeuvring of the former.

The Regional Level Convergence Programme seems to be virtual. Parts of the subsidies (depending on the type of programme) are used for 'political scenic plans'. It is only an extraordinarily small proportion (hardly verifiable) that attempts to change the economic structure. As long as there is no intention in the political elite to change this, hardly any positive advances can be expected.

REFERENCES

- [1] Ady Endre (1905): Az ismeretlen Korvin-kódex margójára. Budapesti Napló, 1905. október 15,. (Közölve: 7. kötet. Arcadum Adatbázis Kft. 1999). Ady Endre összes prózai művei. (To the margin of the unknown Korvin-codex.)
- [2] Berend T. Iván/Ránki György (1987): Európa gazdasága a 19. században. Gondolat, Budapest. (European economy in the 19th century.)
- [3] Krugman Paul (1991): Increasing Returns and Economic Geography. Journal of Political Economy, Vol. 99. PP. 483-499.
- [4] Maddison Angus (1995): Monitoring the World Economy 1820-1992. Development Centre of the Organisation for Economic Co-operation and Development. Paris.
- [5] Sala-I-Martin Xavier (1995): The Classical Approach to Convergence Analysis. Economics Working Papers 117.
- [6] Széchenyi István/Wesselényi Miklós (2004): Feleselő naplók. Helikon Kiadó, Budapest. (Saucy blotters.)

THE FUTURE OF ACHS AFTER SEPA

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Key words: Automated Cl earing House, Clearin g and settle ment, Pay ment, Payment t system, Payment industry, Euro Zone, Monetary Union, ACH, PEACH, EACHA, SEPA, EPC, TARGET1, TARGET2, GI RO, RTGS

Although given less focus over the past year owing to the eff ects of the world economic crisis, the stand ardization of clearing and settlement remains one of the most important financial policies of the EU. After these developments, the ACH's activities and services will dramatically change in the Euro Zon e. Given the regulatory and self-regulatory environments (e.g. S EPA), and banks' p owers and traditions, it is one of the most interesting community achievements of the European Union. This paper provides details on the past development of clearing and settlement, the present situation, the activities of clearing houses, the integration processes and the possible future of Automated C learing Houses.

SUMMARY

The adoption of a single European currency was an important step in the emergence of the Ec onomic an d M onetary Uni on. T he i ntroduction of t he Euro on 1 Ja nuary 1999 brought an end to the fluctuations of former national currencies against each other, and also eliminated the costs of c urrency e xchange. A single Europea n money m arket was established.

However, there were factors other than currency exchange that hindered the perfection of m onetary integration. I n co ntrast wi th c urrency e xchange, t he cost o f m onetary movements (i.e. funds transfers) was not reduced immediately following the introduction of the Euro: by 1999, the single fin ancial in frastructure had only partially been created. By 1999, the central banks had set up TARGET1, which formed a single payment system by linking previously developed national systems for real time gross settlement. TARGET1 was re placed, between 2007 and 2008, by TARGET2. Without TARGET1, the single money market could not have been created.

At the same time, the central banks did not provide for the standardization of payment services and payment in struments, their comprehensive improvement, and the adjustment of the i nfrastructure facilitating t he ex ecution of payments. (Howev er, it should be emphasised that – because their differing powers had not been harmonised at EU level – they probably could not have achieved these objectives.)

Following the redenomination of national currencies into the Euro, the national payment system of each Member State has continued to exist, and domestic payments have remained separated from in ternational payments to a lmost the same extent as b efore. In the early 1990s, the execution of cross-border Euro payments was not – and even later it was only

barely different from – the management of funds transfers in, for instance, USD (i.e. those made to curren cy areas outside the EU). This situation is unsustainable in political and economic terms. It is un reasonable, for example, that the content and quality of the service should not be consistent within the same currency area, and that the costs of cross-border transactions should remain several orders of magnitude higher than those of domestic ones. It became clear that - through spontaneous changes and without the i nfluence of public policy – the standardization of payments could only take place at a slow rate, if it we re to be accomplished at all.

In the Euro area, t he financial in termediation sector was face d with a challenge: it needed, now at the European level, to re-e stablish the infrastructure supporting payments, as well as t o rearrange European payment tr affic. A pa yment syste m was needed that complied with, or indeed exceeded, the practice of the best-performing Member State.

This challenge is a significant one, because the development of a single payment system would a ffect European banks at the very foundations of their operations. Not only do the elements of central infrastructure need to be transformed (if a clearing house exists at all in the country concerned); each and every credit institution is required to rearrange its banking transaction activities. Regulatory measures were adopted as early as the 1980s and 1990s to facilitate this change, and since 2002, commercial banks have been engaged intensively in institutionalized work in order to develop a solution to this problem. The standardization of payments in the Euro Zo ne will need more than a decade, which is a good indicator of the scale of the task the banks are facing.

Around the turn of the millennium, it was a widely held view among professionals that, given t he rel atively sm all v olume of cross-border payments i n a ccount m oney, no standardization of payments was needed. Others, including European authorities, were of the opinion that standardization was ab solutely necessary, the standardization of payments being a prerequisite for further integration (in addition to a single currency.) According to the advocates of the latter view, the rationalization of infrastructure and the development of a consolidated cl earing house c ould s ignificantly r educe t he c osts of financial intermediation, and involve the epo tential of proportional in crease in its penetration. Professionals expected that by 2010, payments would be migrated to the new payment schemes on a mass scale, and that only a couple of clearing houses would be fit to survive in a single market.

Actual developments took a course that was different from professional expectations. Contrary to a n anticipated decrease, there was actually a slight increase in the number of clearing systems. Despite its m ission of becoming a single clearing system, STEP2 had attracted only a fragment of payments by 2010, while an increasing number of traditional clearing houses have been entering the market and gaining share, with others defending their existing positions.

The programme of the Single Euro Payment Area (SEPA) is setting a new standard in clearing. In the SEPA, clearing and settlement infrastructures are regulated separately from payment schemes: it is not the clearing system (there being a number of systems operated by competing clearing houses) that defines payments schemes but the EPC, an independent pan-European organization responsible for the development of standardized pan-European schemes for E uro payments. This change is creating direct competition between clearing mechanisms. Inevi tably, the development and general adoption of the SEP A payment

schemes will lead to the linking and perhaps even the merger of clearing systems, and the development of a new network of clearing relationships that is more transparent and is also expected to be more efficient.

It remains to be determined what infrastructure and structure of clearing membership is needed and can be developed in order to achieve the economies of scale resulting from the size of the European market, and to fulfil the v ision of the Lisbon Programme concerning competitiveness and inno vation. Can the desired conditions be provided by competition itself, or is a p urposeful policy required to facilitate t he d evelopment of an efficient t structure? The demand by financial intermediaries for clearing services will change in the aftermath of financial integration, to which supply needs to adjust itself. The perspective of consolidated clearing houses in tensifies competition in the market, putting players under pressure to innovate.

Monitoring the dev elopment of clearing so lutions is also a task for r public policy. In terms of clearing, re gulators are supposed to ensure that payment services are provided in an efficient and secure manner; and that customers of payment service providers should create a reasonable distribution of payment instruments through rational choice, resulting in the reduced role of cash and the wide use of effective payment solutions. Although the modernization of clearing is in the interest of the entire banking system, development will not give a competitive edge to individual banks. As a result, cred it in stitutions are n ot directly motivated to initiate or actively support the development of clearing infrastructure.

1. THE POSITION OF RETAIL PAYMENT ORDERS AMONG BANKING TRANSACTIONS

A k ey ch aracteristic in the mech anism of the fin ancial in termediation system is the execution of financial tran sactions. Tran sactions i nvolving lo ans, d eposits and fin ancial assets affect the balance sheets and trading books of the financial intermediaries concerned. There are a large number of transaction types, allowing a variety of cl assifications. For instance, financial transactions are, i n part, own account transactions, where the financial service provider (in this paper, referred to as a *bank* for the sake of simplicity) carries out a new loan, deposit, etc. transaction for its own customer. They are als o, in part, third party account transactions, which partly involve the bank serving its c ustomers as an agent in financial market transactions. Banking is settled by means of bank transactions, one typical element of which is the payment of money through an account transaction. Such business also often involves accounts held w ith other banks, ge nerating i nterbank payments as a result.

Banks provide account management and transaction services to settle their cu stomers' transfer orders. T ransfers may result from financial transactions between customers, transactions between c ustomers and other financial service providers, customers' transactions in the real economy, and even from the customers' need to rearrange funds in their own accounts. In order to settle su ch transactions, where it is merely a p assive participant, the bank makes its own clearing capacity available to its customers. The bank is therefore ordered by its customers to carry out payment and clearing transactions. As technological development and competition make it possible, and even require that orders should be settled with in creasingly shorter lead times, financial service providers need to operate ever more reliably and smoothly in terms of IT, customer service and liquidity.

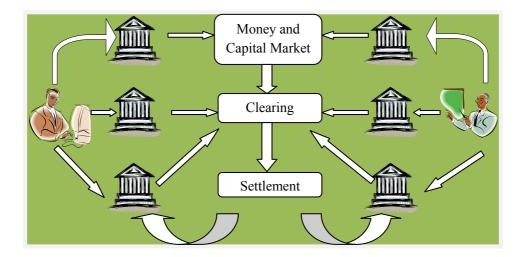
The usual classification distinguishes between three levels of financial transactions.

Trading is the domain of the purchase and sale of financial assets in the market. A bank also trad es financial assets with its custom ers on its ow n account, and often car ries ou t business in stock exchanges and OTC markets on its customers' behalf and to their benefit. Orders a nd t ransactions co ncerning l oans, de posits, t he pu rchase and sale of cu rrency, equity, futures, etc. always invol ve at l east on e, and so metimes p otentially several, monetary movements between accounts.

The levels of clearing and settlement serve partly to carry out business transacted at the level of trading. They also have the purpose of carrying out other types of business that involve multiple service providers.

At the level of clearing, orders for funds transfers are processed and interbank liabilities are calculated with respect to business tran sacted at the trad ing level. In the course of clearing, mutual liabilities remain, but may be reduced in amount due partly to netting and partly to the offsetting of p ayments against on e an other. Offsetting also qualifies as settlement. Clearing involves risk management activities as well, and the clearing entity may also act as a central counterparty that provides a guarantee facility.

At the level of settlement, the financial obligations established in the course of clearing are settled between in stitutions, and outstanding items are p aid. The instrument of cash settlement is a financial asset considered by the counterparties to be of low risk, ideally central bank money. Real time g ross settlement (i.e. i temized clearing and financial settlement) compresses the clearing and settlement of orders into a single item in accounts managed by the settlement agent.



Source: Kovács Levente Figure 1. Connections of transactions among the finanacial institutions

A discussion of banks' p ayment services will certain ly not cover transactions in the financial markets. Banks clear their customers' orders with one another in-house, through correspondent banks or in clearing systems. Interbank claims and liabilities resulting from clearing are paid on the accounts of the settling bank (usually the central bank).

2. HISTORICAL OVERVIEW

Bank account services were introduced to wider retail audiences in the 1950s and 1960s in the United States and Western Europe, and in the late 1980s and in the 1990s in Eastern Europe.

This development gained momentum in a period when the application of computing in administrative systems had begun on a m ass-scale, but telecomm unication services and generally accepted, internationally consolidated message standards were not yet supporting the mass-scale transmission and processing of data.

In America and Western Europe, automated clearing houses (ACHs) enabled the retail payment of wages a nd sa laries t o be c leared between banks. T he exec ution of t he operational tasks of banks participating in the settlement system was mad e easier by the possibility for employers (customers of such banks) to submit their orders on permanent data carriers directly to the clearing houses rather than with the intermediation of their banks. Such transfers were therefore called *direct credit*.

Based on a similar p rinciple, the *direct debit* service was developed to enable regular expenses related to daily sustenance to be paid from the bank accounts credited, as part of which, obviously, a f ar gr eater nu mber of transactions are carried out th an in cred it transfers. It is simpler to charge an acc ount holder's regular overheads a gainst the funds credited to their current account than to pay the same bills either by cheque or in cash.

In co untries where ho lding b ank accounts and the use of ch eques had not become widespread before the appearance of automated clearing houses, i.e. where citizens became bank account holders at a relatively late st age, direct debit was ad opted fast. Direct debits were orig inated by pub lic utility p roviders, in surance co mpanies, banks or an y o ther corporate c ustomers of t he bank by forwarding their direct debit or ders di rectly t o t he clearing house, which cleared the debits between banks against the appropriate accounts.

Today it is ra re for clearing houses to ac cept orders by banks' customers directly. Technological development has enabled banks to receive any number of orders from their customers el ectronically, through t elecommunication ne tworks. At the cur rent level of development of telecommunication networks and IT systems, it is not particularly difficult for individual banks to receive orders and process their data content. Consequently, the vast majority of orders today are submitted to clearing houses by banks, and clearing results are also forwarded to banks. Nevertheless, clearing houses have retained their basic function of clearing interbank payments related to transactions in the real economy.

Most clearing houses were established on a national basis. In large and federal states (e.g. the US, Germany), there were several clearing houses. In most European c ountries, however, a single clearing house was s ufficient for the interbank clearing of customers' credit transfer and direct debit orders.

Generally, it is the clearing houses themselves that have regulated the mechanism of credit transfers and direct debits bet ween banks, i.e. they have established the rules for payment instruments. Such rules, with deviations as appropriate, are applied by each bank

even when payment takes place between two of its own customers, that is, in the case of inhouse payment transactions as well. As they have been established in different currency areas, there is no consolidated rule to govern the operations of clearing houses; clearing procedures, payment instruments, financial messages and the contents of such messages have been developed by each clearing house separately.

3. TYPES OF CLEARING RELATIONSHIP

Owing to differences in the traditions, financial culture and the structure of the banking system in each country, different clearing models have evolved. Normally, these are rather stable en vironments t hat ch ange o nly sl owly. The cl earing m ethods involved can be distinguished on the basis of the topography and content of counterparty relationships, and on the counterparty relationships themselves.

In-house transactions

In essence, the settlement of customers' credit transfer and direct debit orders within the same bank is a single accounting transaction. If payment simply requires a transfer between two accounts, then, from t he bank's perspective, a tran saction between two liab ility accounts will be neutral with respect t o the balance sheet total, whe reas a transaction between an asset account and a liability account will either increase or decrease the balance sheet total. T he larger a bank, the greater the number of p ayment transactions for its customers it can keep in-house.

Correspondent banking relationships

Payments can also be cleared between commercial banks through a direct relationship. As part of thi s, one of the commercial banks holds a n account with the ot her. The two banks c orrespond, a nd t he procedures of t his co rrespondence a re determined by t heir relationship, which is based on each bank's ways of w orking. In international banking relations, the relationship can be e qual and mutual, wherein one bank, which is located in one of the c urrency areas, manages an acc ount in that c urrency for the other bank. The other bank, in turn, provides the same service in the currency of the c ountry where it is located.

Other case s i nvolve a u nilateral co rrespondent banking relationship. He re a l arger, internationally better-known bank acts as the p ayment service provider, mainly to smaller banks. It channels the payments of small banks to other banks through its own clearing relationships.

Standard bilateral clearing relationships

The clearing of payments between two banks does not necessarily require an account to be opened. The banks may refrain from doing so in order to prevent the fragmentation of their own liquidity, or because the m anagement of the m ultilateral relationship involves difficult op erational work, or b ecause they do not trust the count terparty bank enough to

become exposed to it through an account balance. In such a case, the banks can clear their own customers' payment transactions bilaterally, with cash p ayments taking place on the account of a third party bank (usually the central bank). If this system of relationships is based on the generally accepted standards and rules of a country, then bilateral clearing can also be carried out efficiently without a central orga nization enga ged in operat ional activities. As a rule, central banks perform interbank settlement based on matching bilateral position reports, which are requested from both parties.

Decentralized multilateral clearing

In addition to the bilateral exchange of messages to be cleared, arran gements can also be made for multilateral settlement in the books of a third party (typically a central bank). If the bilateral clearing positions which exist between the clearing participants are converted by the settlement counterparty (central bank) into multilateral clearing positions, then the requirement of settlement for coverage will be reduced significantly.

Intra-group clearing

With intra-group clearing, the procedures of data exchange between participating banks, as well as the settlement of their mutual claims and liabilities, are normally arranged by the parent bank. Bank groups can al so be as sociations formed by banks of the same rank. Generally, such banks enhance their cooperation to provide fast payment services which meet in ternational stan dards, communicating the im age of a consolidated bank to customers.

Clearing in clearing systems

With a large number of participants, clearing works the most efficiently on the basis of multilateral arrangements and consolidated rules. In most cases, a multilateral arrangement also requires a central clearing house and its infrastructure. The clearing house can perform a number of functions including message forwarding, the establishment of operating rules for p ayment in struments, the clearing of orders, preparations for fi nancial settle ment, activities related to financial risk management, etc. There is no stand ard definition for the range of clearing house activities, as the functions performed vary according to the clearing house.

Clearing house networks

Clearing houses can ac hieve great er ge ographical c overage by linking their sy stems. This is entirely obvious within one country. The need for connections between clearing houses in d ifferent countries em erged in the 1980s and 1990s. Such i nitiatives were undertaken, for example, to bridge the clearing systems of the US and Canada as well as those of the US and Mexico. Recently, European clearing houses set up a network to settle SEPA payments.

Global multicurrency clearing houses

Only a few of the banks in the world (e.g. the US-headquartered Citibank) have been able to grow large enough to settle b ank transfers for their customers globally in a variety of currencies. Most of t he world's large banks operate in major financial centres and in select regions. Banks have been facing strong competition from money transfer networks like Western Union, Money gram, etc., and most recently from online payment syste ms such as PayPal. This has urged banks to voice their need periodically for the development of a multicurrency clearing system that covers a large area. In the first years of the new millennium, an attempt was made to creat e such a system, but the WATCH (Worldwide Automated Transact ion C learing H ouse) project p roved to be e xcessive i n sc ope a nd eventually failed to be implemented.

4. THE GOVERNANCE OF CLEARING SYSTEMS

The governance of ea ch cle aring system is largely dependent on its structure. In a decentralized model without a clearing house, rules are set by the participants' mutual arrangements and no permanent staff or organization is maintained. System governance is thus embodied in rulemaking.

In a clearing house, however, decision-making is centralized. The greater the number of participants in the system and the more marked the distinction between those owning and those usi ng t he i nfrastructure, t he l ess directly p articipants' po ints of view can b e considered in decision-making. Individual participants, especially if they have no delegate to contribute t o B oard activities, ten d to perceive a clearing house operating a m ajor clearing system as a body that exclusively di ctates the t erms of part icipation. B usiness decision-making may become alienated from system participants' real needs. Consequently, utmost care needs to be taken in the development of governance procedures for the smooth and efficient execution of payments.

Clearing houses may be owned by different shareholders, which will obviously present different challenges in terms of governance. In practice, a clearing system may be operated by any of the following:

- a central bank
- an association of commercial banks,
- a central bank and commercial banks together.

In their role as clearing hous es, central banks focus on their core task, s ince a central bank is not a private en terprise and h as no m eans to extend the scope of its activities. Central banks usually charge participants low fees although this does not necessarily mean that they actually operate their systems more efficiently than the private sector does. Much more typically, in order to maximize the perceived or actual positive external effects of the system (such as the displacement of cash), central banks tend to charge fees that do not even cover their costs.

At the same time, central banks place special emphasis on the reliability of operations, particularly the fact that their responsibilities include financial stability at the macro level. When bureaucratic operations predominate i n a central bank's system, the participants' interests are given only partial consideration. In addition to wasting resources, ano ther

disadvantage of central banks' systems is restrictive operations in cases where participants also use parallel systems for the execution of payments. The subsidies involved in a central bank's system may d istort co mpetition, d riving efficient and profit-o riented serv ice providers out of the market.

When competing with clearing houses in the private sector, central banks therefore must make efforts for cost-based pricing, i.e. charging their customers fees at least at cost, and applying a costing method similar to that of private enterprises which also takes alternative capital cost into account. Additionally, central banks must disentangle their system operator activities from their administrative roles, avoiding even the app earance of any intention to drive parallel service providers out of the clearing market.

In the case of clearing houses controlled by participating commercial banks, Board members delegated by shareholders cooperate with their competitors in the market. These people would by no means want to make decisions that could put their own employer at a competitive disadvantage against other banks. Banks participating in the governance of the system have a tendency to ignore the interests of minority participants that are usually not represented at management level. Such clearing houses see it as a challenge to develop system o perations which have the interests of all participating banks in m ind, as the interests of non-shareholders and sm all sh areholders are offen m arkedly different from those of their large shareholder counterparts. While central banks are liable to su bsidize system operations, privately owned clearing houses are at risk from being biased towards large shareholders.

With clear ing hou ses owned by non-participating p arties, system operations ar e determined by their owners' profit-orientation. For third party providers, the key issue is whether they compete with similar providers. In the absence of strong competition, a third-party provider will become passive and fail give due consideration to customers' needs, the opposite of which holds true in a competitive situation. In strong competition, however, the stability of the provider is also a key issue, since the insolvency of the provider should not be allowed to put the stable operations of a clearing system at risk.

5. DOMESTIC AND INTERNATIONAL PAYMENTS

Most of the traffic in credit transfers and direct debits is related to the activities of the domestic eco nomy. In nation al econ omies, and also reg ionally, the commercial, services and financial relationships between businesses and the local p opulation are more intensive than tho se involving more distant or ev en cross-border transactions. Of course, national enterprises have extensive relationships across the country, but many local producers and service providers serve local consumers.

At the level of individual national economies, single payment systems have been developed. Development specific to each country has brought a bout different payment habits, leading to variations in the extent to which each payment in strument is used, the specific rules for payment instruments, the content and structure of messages, and the mechanism of interbank clearing.

The de velopment of pay ments has al ways followed c hanges in the economic environment and technical possibilities. The computerization of the settlement of intrabank transactions, c omplemented by the development of telecommunications, has enabled the closure of local clearing houses and clearing centres that were based on the use of p aper and physical data carriers. Only one – or at most a few – clearing centres have survived in each country.

Mergers, which are characteristic of the development of the modern e conomy, cause company sizes to increase, with multinational companies operating on an ever-increasing scale. This leads to the extension and consolidation of relations between distant regions. These i ntensifying relations are all so c reating new needs in the field of international payments.

International payments continue to be dominated by correspondent banking relations. A bank involved in a direct correspondent banking relationship is connected to the payment system of the other country indirectly, through the intermediation of its correspondent, and vice ve rsa. Correspondent ban king relations primarily require a communication infrastructure. On an industrial scale, correspondence between two credit institutions is an efficient tool i f it is based on m essages exchanged bet ween the count erparties that are standardized, confidential and authentic. This means that no third party should have access to their content and that the recipient is as sured that each message is sent by its actual counterparty.

In the first half of t he 20th century, a gra dual shift to t elex m essages took place in correspondence between banks. Telex m essages were encrypted, which allowed banks to have confidential correspondence using t he app ropriate ciph er and decip her keys. The development of the technology for exchanging messages electronically started in the 1970s. Established in 1973 for the standardisation of message types, the electronic verification and forwarding of m essages and t heir ret rievable st orage, SWIFT (Society for Worldwide Interbank Financial Telecommunication) became operational in 1977.

The services provide d by SWIFT a re cons idered as c onsolidated s tandards in international payment traffic. Increasingly, SWIFT st andards a re see n a s be nchmarks in domestic payment traffic as well. In several countries, domestic clearing is built on SWIFT message standards and, in fact, on SWIFT as a communication service.

Despite the continuing growth of international payment traffic, cross-border transactions account for a maximum of 1-2% of customers' payments even in small open economies.

6. THE DEVELOPMENT OF CLEARING IN EUROPE

The Euro was in troduced in 19 99, by stat es which we re at the centre of economic integration within the EU. The Monetary Union aims to improve the efficiency of the single internal market, in addition to reducing exchange risk and the cost of financial transactions. States in the Euro Zone have waived the right to pursue independent monetary policies and have agreed to su bordinate their fiscal policies to the Maastricht standards, i.e. to balance the m anagement of t heir public finances. The single currency a rea is especially advantageous for the small emerging economies that are parties to it because, in theory, it makes their GDP g rowth potential higher in the long term in comparison with their own currencies.

Among the advantages, the objective of reducing the costs of financial transactions is of particular interest. The introduction of the Euro and the establishment of a si ngle money market elim inated the s ubstantial costs of currency exchange. In the field of pay ment

transactions, however, conso lidation h as b een tak ing lo nger th an was hop ed at the beginning (1992). Payment traffic in the countries of the Euro Zon e has yet to reach the level that could be expected of a single currency area.

Despite pre parations for the Euro having started in 1992, the full hom ogenization of payment traffic was not possible until either the introduction of the Euro as account money in 1999, or until the Euro bank notes and coins were put into circulation in 2002.

The estab lishment of the WGPS (Working Group on EU Payment Systems) in 1992 marked the formal start of coope ration between the central banks of EU Member States in the field of payments. In the paper "Issues of Common Concern to EC Central Banks in the Field of Payment Systems," the Working Group proposed a number of measures, focussing primarily on the consolidation of large-value payments. Based on that paper, each Member State developed an RTGS¹ system. These were organized into the TARGET² network as of the day the Euro was introduced.

Starting in 2007, this system was rep laced by TARGET2: a system that is built on a standardized IT platform and is more harmonized than its predecessor in every as pect (membership criteria, up time, pricing, etc.) Desp ite its standard platform, TARGET2 in legal terms continues to be a complex system comprised of national RTGS systems, and the clearing and settle ment mechanism of the ECB. The clearing systems are own ed by national central banks and the ECB. These manage accounts for their own banks (the ECB for international institutions) and perform business functions in the system. The IT platform has been developed and is operated by three central banks (Deutsche Bundesbank, Banca d'Italia, Banque de France).

The primary functions of TARGET2 are to support the operation of the money market and clear large-value and urgent payment orders. Given the small number of large-value orders, the per unit cost of the system is higher by several orders of magnitude than that of systems clearing small single orders on a mass scale. The latter are preferred by banks for the purpose of executing orders from their retail and corporate customers.

A great advantage of TARGET2 over TARGET1 is that payment and securities clearing systems, which rely on TARGET2 with reg ard to financial settlement, are able to arrange settlement in a way that direct participants are no longer required to hold accounts with the local central banks. For instance, it is sufficient for a large bank participating in the systems of a dozen countries to hold a single account in TARGET2, while previously it would have to hold account s with the central b ank of each m ember state. This facilitates d irect connections to foreign systems and banks' liquidity management.

Consolidated payment schem es requi re mechanisms that can e nsure the appropri ate clearing and settlement of orders between the participants in payment traffic. An overview of the clearing map of today's Euro Zone shows several solutions for the clearing of credit transfers and direct debits.

In general, the operation of multilateral clearing and settlement infrastructures requires the following components:

• procedures specified in business regulations and contracts (the system of rules)

¹ Real Time Gross Settlement

² Trans-European Automated Real-Time Gross Settlement Express Transfer System

- uninterrupted service to participating banks, customer service
- a central clearing engine, meaning the central technological platform for clearing
 - · data transmission and network solutions
 - development and maintenance of the technology
 - procedures for the management of financial risks
 - financial settlement process

Certain countries outside the Euro Zone use the same system for small and large-value credit transfers, which is also the RTGS system of such countries. However, it is typical for most countries to have separate systems for clearing and RTGS.

Bilateral clearing models feature only some of the components listed above. This type of model does not require the existence of a clearing house; at the most, it only requires a consolidated s ystem of rules, and perhaps an organization to develop and enforce them. Bilateral clearing is an efficient component in the mutual relationships of a small number of banks. The refore, in c ountries where s uch a m odel pre vails, the majority of banks are correspondents of the few clearing banks.

Most European countries operate multilateral clearing systems. Clearing systems are not to be confused with clearing ho uses. A clearing system is not an institution, but an agreement of the parties i nvolved in it concerning the execution of pay ments am ong themselves according to a set of spe cific procedures. In principle, a clearing house may own several clearing systems, since its fundamental tasks include the definition of rules, the provision of access for participating banks, and preparations for fin ancial settlement. The management of settlement risk may also be one of the tasks.

A clearing and settlement system may have more than one operator. Central banks, which provide fin ancial settlement to the systems, or enterprises in charge of financial messaging, are operators of specific key components of the clearing and settlement system just like the clearing houses themselves.

Although clearing houses often operate the IT clearing platform and the communication that enables messaging, and often also develop system components, such responsibilities do not necessarily constitute clearing houses' functions. In several countries of the Euro Zone, commercial banks have outsourced the operation of the clearing system to central banks. It is al so n ot uncommon f or t he o peration of the c ommunication and data p rocessing components of the system to be undertake n by specialized institutions (e.g. S WIFT for Euro1/Step1, or SIA for the Step2 system).

In most cases, clearing systems handling payment traffic on a mass scale were created by the commercial banks of the countries concerned. These countries also create the rules for system operations. It is also fairly common for central banks to participate in clearing houses.

7. THE VOLUME OF INTERNATIONAL TRAFFIC – DIFFERING FINANCIAL CULTURES

Prior to the turn of the millennium, the national economies of Europ ean countries had created their own clearing and settlement methods for domestic interbank clearing. In these countries, t he rang e of payment in struments used by en terprises and the public, t heir

relative weight in the entire payment traffic, the legal environment of payment instruments, the ru les of ex ecution, the legal background and the s tandards app lied were ex tremely variable and are still largely different today.

Traditionally, the ex ecution of international p ayments h as essen tially relied on t wo mechanisms: c orrespondent b anking serv ices and international card systems (pre viously also Eurocheque and the Eurocheque card). International card systems are not covered in this p aper. It is sufficient to no te t hat these relatively well-regulated instruments enable cash advances and purchases to be made nearly all over the world subject to terms similar to those applicable domestically (ex cluding costs). At the same time, there is room for r improvement in m any countries with res pect to the acceptance network of international cards, as it is cheaper for businesses to accept domestic cards. Other countries, such as Hungary, do not use a domestic card system, leaving businesses with no other option but to accept international cards.

Until the 1970 s, co rrespondent banking primarily meant co rrespondence b y telex messages using bilateral coding. Following the establishment of global financial messaging society SW IFT³, this m ethod was gradually re placed by com munication betwe en computers, with bilateral coding retained. SWIFT message standards brought great progress by making co rrespondence u nambiguous and s uitable for machine processing. However, the task of SWIFT is to st andardise ex isting m essages in ord er to clarify an d facilitat e communication between participants. It is not supposed to develop business schemes for any payment instruments. As part of a UNCITRAL⁴ initiative, the UN drafted a model law in 1992 c oncerning i nternational cre dit tran sfers⁵. However, the v ast maj ority of UN Member States d id not t ranspose th is 1 aw in to t heir n ational leg islation an d it is, consequently, not in general use in banks.

Despite t he modernization of co rrespondence, in ternational cr edit transfers h ave remained a highly manual activity. This is largely due to two factors: firstly, uncertainties about the extent of the bank costs incurred across the intermediation chain, and secondly, because of the method of cost allocation. As regards the time required for the execution of credit transfers, in ternational co nventions do not speci fy any dea dline for r end-to-end settlement.

8. PAYMENTS IN THE EU

Despite econ omies b ecoming i ntertwined, Euro pean econ omic in tegration h as so far failed t o al ter t he fact t hat, wi thin payment sy stems, about 99% of cr edit transfers are executed on domestic accounts and only one in ev ery hundred cre dit transfers links two countries. For th at r eason, several banks ha ve e xpressed t heir d oubts t hat s uch a low volume of traffic would justify fundamental changes to domestic payment systems.

As part of preparations for the introduction of the Euro, Directive 97/5/EC was adopted to provide a general leg al framework for cr edit tran sfers of up to ECU 50 000 until

³ Society for Worldwide Interbank Financial Telecommunication

⁴ United Nations Commission on International Trade Law

⁵ Model Law on International Credit Transfers (1992)

November 2009. The Directive specifies a maximum lead time for the execution of credit transfers; a nd de fines t he principles of cost allo cation, the rights, ob ligations and responsibilities of the counterp arties, and the m ethod of providing in formation to customers.

As the Directive had failed to bring genuine progress in the segment of single credit transfers of relatively small value, legislation was adopted on the eve of the introduction of the Euro which, as a leg al expression of strong political pressure, marks the beginning of the stan dardization pro cess in Eu ropean payments and clearing. Regulation No. 2560/2001/EC requires that, within a Member State, the charges for credit transfers of up to EUR 50 000 should be the same as those of Euro payments.

Under pressure from the demands of this Regulation, banks have two options. They can either increase the charges for domestic credit transfers and spread the costs of cross-border payments over all of their transactions, or, yielding to political pressure, develop structures and payment instruments that rend er all payment transactions do mestic in the Eu ropean market. The former course of action is hampered by the resistance of customers, and by discounts tailored to large corporations: in other words, competition. Moreover, in several countries such as Austria and t he Netherlands, d omestic orders f or bank ac count transactions have traditionally been free of charge, preventing banks in these countries from charging excess costs to customers.

Pressure h as proved to be eff ective. In June 200 2, the Eu ropean Payments C ouncil (EPC) was estab lished with the objective of creating the Si ngle Eu ro Paym ent Area (SEPA). This was intended to be a single region within which citizens, businesses and other actors of the economy can execute Euro payment transactions subject to the same terms, rights and obligations, irrespective of their place of residence, business location, or national borders.

The E PC is a sel f-regulatory organization est ablished by three E uropean bank associations, in which the banking communities of SEPA countries are represented in proportion to the volume of their payment traffic. Under the decision-making body of the EPC, committees and working groups draft proposals on business and standards for the Council to adopt.

The rules a dopted by the E PC are im plemented in practice t hrough a cont ractual statement, in which banks using SEPA credit transfers and SEPA direct debits undertake to comply with the rules as a civil liability.

The EPC has also undertaken the enforcement of payment schemes and processes. It acts as the owner of the schemes and also plays a role in the settlement of disputes between intermediaries participating in payment traffic.

9. THE SEPA PROGRAMME

As the first step of its activity, the EPC created the Credeuro and ICP business rules for credit transfers. These rules are built on existing international payments, and they impose stricter-than-usual regulations on the terms of execution.

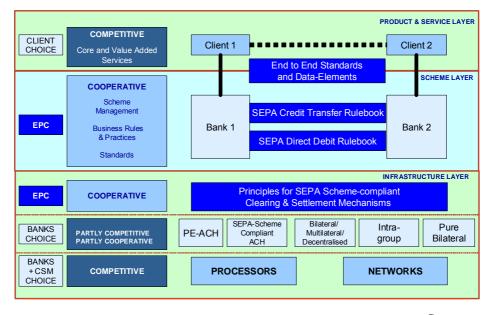
Banks adhering to the Credeuro Convention undertook to settle single credit transfers of up to EUR 12 500 (today EUR 50 000) in a maximum of T+3 day s. Credeuro also enables the end-to-end automation of orders. This requires each order to include the BIC (SWIFT bank ID) and IBAN (international bank account number) codes, which identify the account of the beneficiary. In addition, it sho uld also be possible to forward a reference of up to 4×35 characters. Another criterion is the forwarding of the charging option code. This code can take one of the following values: OUR, BEN or SHA. With OUR, the originator bears all costs; with BEN, the beneficiary bears all costs; and with SHA, each counterparty bears the costs incurred by its own service provider. The ICP Convention requires participants in payment traffic to use this last charging option.

The next step of the SEPA programme involves the development of SEPA payment schemes. SEPA payment schemes (credit transfer and di rect debit) ar e regulated with the same thoroughness as their domestic counterparts. Not only do the SEPA payment schemes constitute new business rules, they are also different from previous payment instruments in technological t erms. The U NIFI ISO 20022 (XML) st andard has been i mplemented i n practice for the first time, providing a dequate fo undations for the design of schemes for financial messaging.

Another im portant c haracteristic of SEPA payment sche mes is that ea ch scheme is separated from the supporting infrastructure, i.e. from clearing houses and clearing systems. In most countries, payment in struments were previously specified by the regulations of clearing houses. SEPA cred it transfer is av ailable for settle ment with in the same b ank, through banks' as sociated ac counts, or through the use of any clearing system. Once the SEPA has become fully implemented, the di sentangling of i nfrastructure and pay ment schemes will create competition among clearing houses.

Naturally, the SEPA is not only a programme, but, as its n ame indicates, it is also a specific geographical a reat hat includes the c ountries of the Euro Zon e as well as the remaining EU Member States, the EEA countries and Switzerland.

The connections b etween the SEPA sch emes and the SEPA clearing and settlement mechanisms (CSM) as well as the competence levels of the EPC are illustrated in the figure below:



Source: epc

Figure 2:

Levels of activity supporting the operation of the SEPA payment schemes.

10. CLEARING AND SETTLEMENT OF SEPA PAYMENTS

In a ddition t o t he de velopment of t he p ayment schem es, t he E PC a lso p rovides a framework for the activities of clearing houses. The most important requirement of the EPC for clearing and settlement mechanisms (CSM) is that they should ensure the SEPA-wide availability of all recipients of credit transfers and direct debits, as well as full compliance with the rules of each payment scheme.

There are two ways to achieve this. One involves the use of a system that provides pan-European coverage (currently the STEP2 system of EB A C learing S. A.), and the other consists of an interlinked network of clearing ho uses and b anks, which is capable of providing full coverage.

The EPC has al so provided more detailed definitions for the models of clearing and settlement,⁶ which are the following:

- Pan-European Clearing House (PE-ACH)
- Clearing house supporting SEPA payment schemes

⁶ EPC170/05 CSM Framework

• Multilateral clearing and settle ment mechanism (with out clearing houses)

• Bilateral clearin g and settle ment m echanism (in cluding bilateral account management: in other words, correspondent banking relationships)

- Intra-group clearing and settlement
- Clearing and settlement within the same bank

As a pan-E uropean clearing house may be capable of c onnecting all payment service providers that engage in SEPA payments, this solution is clearly preferred by the EPC. The EPC also does not rule out the possibility of achieving SEPA geographical coverage by linking clearing and settlement tyste ms. The im plementation of the SEPA p ayment schemes and the displacement of old payment instruments are greater priorities in international and do mestic payment traffic than the consolidation of clearing houses. The years to c ome, therefore, will enable the free evolution of competition among the clearing systems, clearing houses and data processors. As a result, the survival or growth of these institutions is to be expected.

However, such service providers do not operate in a regular market. Clearing houses – and most processors – are owned by European banks. These banks are also users of services in the same infrastructures.

In the short term, it is probably the pan-European clearing house(s) and some networks of other clearing houses and banks that will be in charge of clearing SEPA in struments in the SEPA area. In order for this to be achieved in the shortest possible time, the EPC has called on t he actors involved in clearing to find the appropriate balance on the issue of cooperation and competition.

Today, the first priorities of the EPC are the implementation of the SEPA payment schemes and migration to the new schemes. The banks forming the EPC are aware that the consolidation of clearing houses is inevitable in the longer term and that the Euro Zone will make do with fewer clearing systems. However, for the time b eing (until migration to the SEPA schemes is completed), they do not urge any reduction in the number of clearing houses.

That will ch ange in later stages. Star ting i n 2013–2014, with SEPA m igration completed for the most part, the clearing mark et will also be transformed. It remains to be seen what the European clearing map will look like in the future.

11. THE FUTURE OF EUROPEAN CLEARING HOUSES

The European clearing m ap has just entered the transitory period. An attempt at an y forecast of fut ure development may be made by exploring the changes that have already occurred, the processes known, and the interests of the banks determining these processes.

The STEP2 syste m o f EB A Clear ing S.A. is known to be the only p an-European clearing house today. It is the only system capable of connecting the banks of all SEP A countries. However, a major flaw of the STEP2 system is that the traffic it drives has so far remained rel atively m odest. L uxembourg is t he only SE PA M ember St ate t o have channelled its clearing into the system. Although it h as attracted the m ajority of f international t raffic b etween larg e banks, t he system w ould only achi eve a r eal breakthrough if entire banking communities were migrated.

The plans of the other clearing systems are largely influenced by the shareholders of the organizations operating them and the interests specific to participating institutions.

In c ountries where ce ntral banks a re responsible for t he technical operation of the clearing system, but the system itself is managed by the banks participating in clearing (e.g. Belgium); the banking community is in clined to migrate its traffic, at the first op portunity (in 2010 at the earliest), to a pan-European platform or the clearing system of a nother country. For such communities, abandoning their own platforms and joining a partner with a great potential for economies of scale may be the way to reduce operational costs and improve their competitiveness.

By contrast, where the central bank not only operates the clearing system but also runs it as a clearing house, as in the case of Deutsche Bundesbank, it is to be expected that the central bank will remain a serv ice provider. The primary motivation of central banks is to ensure that a large num ber of sm all local banks can be come reachable Europe-wi de at competitive rates, without becoming dependent on large local banks. From the perspective of central banks, the increasing prevalence of large banks as intermediaries is not desirable in terms of either competition or financial stability. It is t o be noted that in Germany, the role of the central bank's system is only auxiliary to bilateral relationships and the clearing operations of smaller communities. It is also limited to clearing the segment of the traffic which the other solutions are not capable of handling effectively.

In a large number of European countries, central banks have traditionally kept clear of automated clearing houses that process orders of small value. Where such clearing houses were formed as club-like organizations of banks, and are owned by banks, changes have taken place in accordance with the economic philoso phy prevailing in recent years. The not-for-profit character of clearing houses and their focus on clearing activities have been eroded. A lthough th ey con tinue to b e owned m ostly b y banks, a growing nu mber of shareholders are no t b anks. Activities are b ecoming d iversified and now in clude new elements su chas e-in voicing and Electron ic Bill Presen tment an d Pay ment (EBPP), electronic signature authentication, a variety of dat a warehouse services, the takeover of subordinated banking activities, services to facilitate e-trad e, car d pro cessing, credit reference services, etc. T he sepa ration of cu stomer and s hareholder roles, as well as diversification, motivate organizations to grow. It is not surprising that such clearing houses are i mportant drivers of c hange. Their p rimary ob jective m ay be t o merge with other clearing houses or to take full control of the traffic in certain countries.

Despite strong com petition among clearing houses, organizations of this type have no other choice but to cooperate closely with other clearing systems and clearing houses. The EACHA⁷ has dev eloped protocols for in teroperability. The b ilateral relationships of the European clearing houses participating in the project are based on a common standard and are sim ilar to the TARGET1 system in p articular. This type of re lationship m ay, i n principle, e volve into an efficient model, since a net work of such relationships does not require the same k ind of cen tralization, in operational terms, as TARGET2. At the same time, the di rect connection of clearing houses cannot be a long-term solution for se veral reasons. On the one hand, these clearing houses do not as yet operate in every European

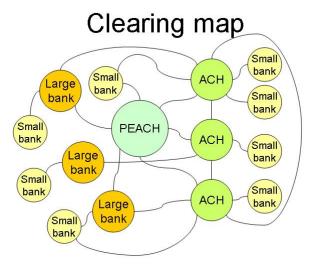
⁷ European Automated Clearing House Association

country, which prevents them from covering the SEPA area completely. On the other hand, the b anking communities of u neovered countries m ay e ither choo set he pan-Eu ropean clearing house, or settle their traffic bilaterally.

Clearing houses built on a n ational basis have certain major advantages over the pan-European clearing house. They do not form an elite club,⁸ and they have inherited a wide customer base and a significant volume of traffic. If they adapt successfully to the SEPA environment, they have a potential for growth using central banks' clearing systems (e.g. the RPS system of D eutsche Bund esbank). In today's European market, there are three clearing houses which are not p an-European yet have strong in ternational ambitions: the French STET, the German-Dutch Equens and the British VocaLink.

As the clearing houses do not necessarily per form the tasks of data transmission and processing, two processors also need to be part of the picture. These are SIA, a processing and data transmission company established by Italian banks (it operates the pan-European STEP2 pl atform), and SWIFT, a gl obal service provider ow ned by banks. SWIFT is traditionally engaged in data transmission, and is also the operator of the Eurol/STEP1 platform. SWIFT, not being a clearing house itself, can provide a service which competes with clearing houses primarily in the field of bilateral clearing.

Based on the facts mentioned above, a SEPA-based European clearing map of the future can be outlined as follows:



Source: Kovács Levente

Figure 3. Topology of clearing in Europe

This map does not indicate the connecting lines along which the vast majority of traffic will be handled.

⁸ Direct participants in STEP2 are mostly large banks.

The deca de precedi ng 2007 was characterised by t rust in t he regulations aim ed at ensuring financial stability and in the system of supervisory institutions. Nothing, therefore, disturbed interbank lending. Individual payment service providers were making efforts to optimize t heir cl earing c osts. Lar ge banks secu red c harges i n st rong devi ation f rom infrastructures, which made access to the system expensive for institutions handling smaller volumes of t raffic. In t urn, these large banks attracted smaller b anks, as in termediation allowed them to achieve lower rates for clearing their own payments than they could have done by obtaining direct membership of a clearing house. A model was emerging in which large banks m anaged acc ounts f or smaller o nes, and traffic between large banks was cleared through the PE-ACH.

Today's financial crisis will set a new d irection. In the future, smaller institutions will probably be more vigilant of their exposure to larger banks. For that reason, it is expect ed that a wi de range of banks will seek opportunities to link directly to a clearing house of their choice. This tendency will reinforce the role of locally connected clearing houses, with short-term changes expected in countries where the clearing architecture is not considered safe enough by participants.

A comparison of the European model with the system of clearing houses in the US clearly shows that the European market cannot accommodate a dozen local clearing houses for long. At the same time, a greater number of institutions could survive, as the benefits of competition counterbalance the higher costs of passiveness resulting from monopolization. Nevertheless, the European system could be more versatile, flexible and in novative in the future t han i ts g overnment-dominated Am erican c ounterpart. H owever, E urope s hould make sure that competition, which facilitates innovation, is retained in the future as well.

REFERENCES

- T. Padoa- Schioppa: Clearing and settlement of securities a European perspective Symposium of the Deutsche Bu ndesbank "Pay ments and Securities Settle ment Systems in Germ any against the Backgr ound of European and International Developments", Frankfurt 2001.
- [2] R. Boer, T. Booijink, J. Schokkenkamp: Trends and Development in Online Payments & Background and T heory Online Payments 2009 – European m arket overview, www.innopay.com, Innopay 2009.
- [3] L. Bartha: Payment systems in the European Union (in Hungarian), Prime Minister's Office and Ministry of Foreign Affairs, 2003
- [4] Additional relevant m aterial (u npublished and used with the permission of their respective authors): Papers by the EPC SPS Working Group, Papers by István Prágay (GIRO Ltd. Budapest) on clearing

COACHING RELATED FINDINGS OF A COMPARATIVE PERSONALITY SURVEY

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SUMMARY

Self-insight, conscious personality development and the continuous tracking of the changes in our personality play important roles from a leadership point of view. This article summarizes the findings of a Hungarian coaching-related survey in order to reveal personality differences between leaders and non-leaders. Our aim is to contribute to the development of coaching practice and education. The survey concerned measures 11 primary and 5 secondary personality factors based on 165 questions. 100 leaders and 200 non-leaders (100 men and 100 women) were asked to answer a questionnaire. Along with graphs and explanations, the results for each factor are listed below; giving the reader an opportunity to compare them.

Good leaders possess accurate self-insight, which they continually strive to deepen. The basis of accurate self-insight is balance. Both overly positive and overly negative self-evaluations can be barriers to the development of successful organizational abilities. Deeper self-insight helps us to have a clear vision of our aims and how to achieve them. Leaders need to form a picture of themselves that contains both advantageous and disadvantageous traits.

Personality can be measured from various points of view, there are lot of personality tests. However, the motivational structure of the personality is rarely examined by scientists. This structure contains those deep, significant, partly genetic primary needs, which determinate our aspirations, instruments, aims and also the style of our socio-strategies. These motivations or needs are more complicated than our instincts and generic-biological programmes. These drives are also referred to as "psychogen needs", because they exist in the human-psychic sphere.

The exploration of these factors has motivated lots of scientific researchers to create various instruments and tests.

By filling in the above-mentioned questionnaire, we can compare ourselves in relation to other leaders concerning factors like:motivation for performance, sociability, aggression, the need for defence, scrupulousness, dominance, exhibitionism, independence, regardfulness, order, and helpfulness; and as secondary factors: the need for selfjustification, rational dominance, aggressive non-conformitivity, and passive dependency.

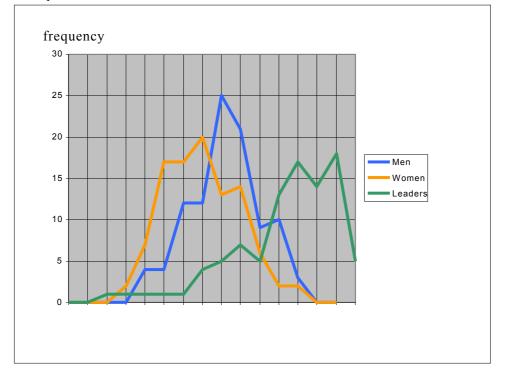
On the basis of these results, we cannot say that one person is a better leader than another. However, if we know our ordinary and less ordinary features, it helps us to orient ourselves and think over our aims. By the means of this survey, which deepens our selfinsight, we can find out where we are at the moment and where we would like to go.

In this survey there are no "abnormal" results. Our needs are not good or bad, they just have different values attached to them. By taking a closer look into the mirror we have made, we can estimate our skills and abilities. Furthermore, we can decide what things we would like to develop and the ways in which we would like to develop them. The results, with our interpretations, are shown below.

1. INTERPRETATIONS

1.1. Motivation for performance

Motivation for performance is an inner motivation to create something, to win in a competitive situation, to be successful, to show our competences to ourselves and others, and to prove our skills and abilities.



Source: own

1. chart Motivation for performance

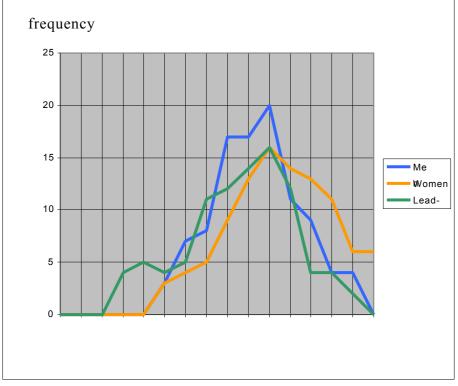
90% of the Hungarian leaders have scores between 7 and 14, non-leader men have scores between six and twelve, and non-leader women between five and ten. People over 55 years of age score 1 point less. The Figure demonstrates that leaders' motivation for performance is higher than non-leaders'.

People who have higher scores try to show and prove their abilities in every situation. They value work and productivity (and respect it in others as well). They like challenges, competitions, and adventures.

If a person scores fewer points than average, it indicates that he or she is rather quiet, accomodating, less driven and less work-centric. Most of us have some motivation for performance. We differ only with regards to the amount of this quality we possess. Therefore, people should not be judged on their level of motivation for performance. A person who has a score of one is not any less valuable than somebody with a score of 15.

1.2. The need for affiliation

The essence of the need for affiliation is the desire to belong somewhere. This includes the need for social membership and the need for human relations with relatives, friends and partners. This need played an important role in the past, because it was one component in the quest for survival (the lonely individual died quickly).



Source: own

2. chart The need for affiliation

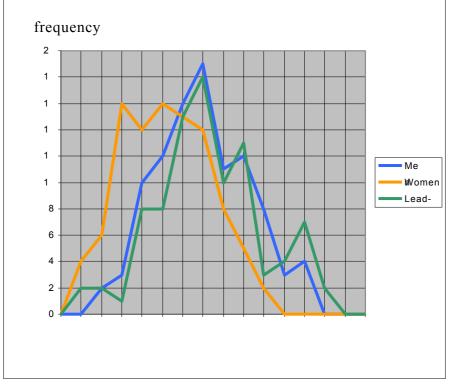
Everbody has the need for affiliation: 90% of the Hungarian leaders score between 5 and 12 with regards to this factor, non-leader men score between 6 and 12, and non-leader women between 8 and 13. These scores are unrelated to age. These results do not show a significant difference between the leader and non-leader populations.

People who score above the average have more emotional links to other people such as friends and relatives (not necessarily social relationships). These individuals show attention to the people around them.

People who score below the average are likely to be rather unsociable, lacking in empathy, introverted, and possibily egoistic.

1.3. The need for aggression

Aggression is not necessarily a negative feature. Survival seems to be impossible without aggression.



Source: own

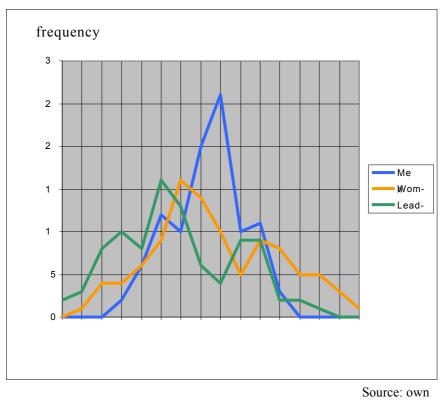
3. chart The need for aggression

Leaders scored between 5 and 11, non-leader men scored between 4 and 10, and non-leader women between 3 and 7. The need for aggression decreases with age: for people above 60, scores of only 1 to 2 points are common. The figure shows that the results for leaders are closer to those of non-leader men than non-leader women.

Individuals who score more than ten are often prone to anger and direct wish-expression. (They also frequently have a need for anger management) These people are often surprised at their scores. Those with low scores are calm, peaceful and gentle people, who would rather submit, surrender, and give up than come into conflict with somebody or fight. There is no doubt that society strongly reduces the need for aggression, but higher scores do not mean a problem. They just indicate a personality feature that one can use as a drive in various areas of life.

1.4. The need for defence

This motivation means self-defence. This can include both physical and psychological defence, but also the defence of our self-esteem and the positive picture we have created of ourselves.



4. chart The need for defence

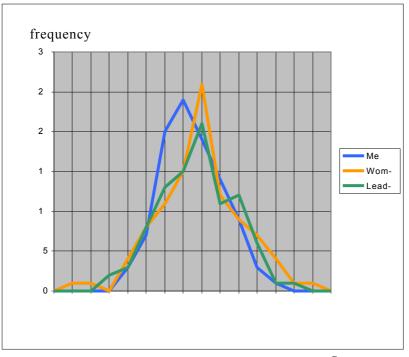
90% of Hungarian leaders got scores of between 2 and 9, and non-leader men scored between 5 and 10, as did non-leader women. These scores change slightly with age. The average scores of leaders and non-leaders are very similar, but the deviation is smaller with non-leader men.

People who score higher than average are basically defensive. It is important to them to avoid failure. They often explain away episodes of bad luck and reject criticism, because they have to defend their precarious self-esteem in this way.

Individuals with lower scores tend to be accommodating, flexible people, who are willing to change. These people can easily bear the consequences of failure. They often have very strong self-confidence, but can be modest as well.

1.5. The need for scrupulousness

In fact, here we are focusing on the characteristic of remorse. We need to believe we act in a moral and decent way. If we know we have not behaved in this manner, we require penance, confession and absolution.



Source: own

5. chart The need for scrupulousness

The leaders' scores are between 5 and 10, and are similar to those of non-leader men and women. Between ages of 55 and 60, the score increases by 1. The three curves are very similar, so there are no significant differences regarding sex, age, and position.

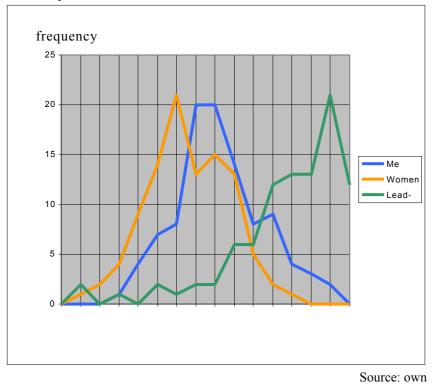
People who have high scores are usually scrupulous, fair, faithful, well-balanced, loyal and ethical.

Lower scores indicate people who are frivolous and unscrupulous, and who have less of a conscience. Such individuals have a preference for play-acting and they sometimes break the rules.

People with very high scores (above 13) can be self-destructive and masochistic, while those with scores from 0 to 2 may sometimes exhibit irresponsible, inconsiderate and insensitive behaviour.

1.6. The need for dominance

The need for dominance means the desire to have power over other people and the wish to be in control. This need motivates people to become politicians, captains, chairmen and leaders in various fields. This trait is in every of one us, we just differ in the extent to which we possess it.



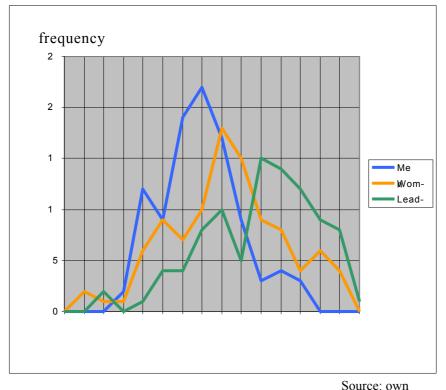
6. chart The need for dominance

90% of Hungarian leaders scored between 7 and 14, non-leader men scored between 5 and 11 and non-leader women between 4 and 9. For those above 60, the score is 1 point less. The Figure shows that the leaders' need for dominance is much higher than that of non-leaders'. If a person has a score above average, he/she will probably strive for a leadership position. They will have a strong motivation for leading and ruling over others.

Low scores naturally mean the opposite: an accomodating, rather receptive person who carries out orders obediently and efficiently; instead of a dominant or leading personality type. Very high scores indicate people who, besides having good social skills, are often very successful. Naturally, on the other hand, such individuals usually have a lot of conflicts as well.

1.7. The need for exhibition

This need reflects our concerns with our appearance and our desire to push ourselves into the centre of attention. Regarding this need, parallels are often drawn with the good-looking Greek guy *Narcissus*. All of us have this need, even if in some cases we would like to hide it.



7. chart The need for exhibition

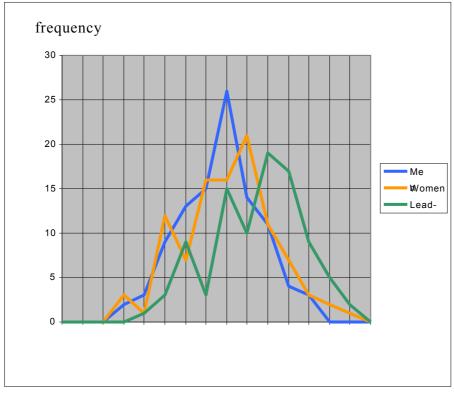
Leaders have scores of 6 to 13. The average for non-leader men is between 4 and 9, whilst for non-leader women – at between 5 and 10 – the average is slightly higher. These scores decrease quickly with age: for people above 60, the score is at least 2 points less. Taking all this into consideration, we can conclude that leaders show much more exhibitionism than non-leaders.

Individuals with high scores tend to become actors, politicians, teachers, artists, and even doctors and lawyers. People who work in these professions and who do not have a strong need for exhibitionism worry a lot. The need for exhibition is not only a female feature. Presenting ourselves has been the key to survival since ancient times.

People with lower scores may display characteristics associated with severity, dignity and reserve.

1.8. The need for autonomy

Autonomy can be defined as having independence, and acting according to our own will and inner compass.



Source: own

8. chart The need for autonomy

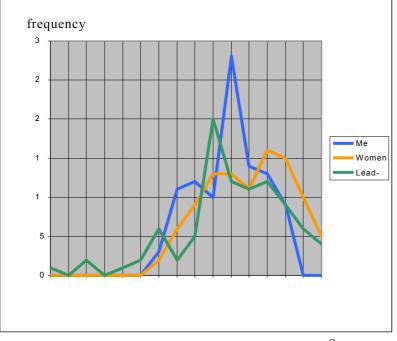
90% of Hungarian leaders scored between 7 and 12, non-leader men and women both have scores of between 5 and 10. Leaders have a greater need for autonomy.

People with higher scores particularly require independence from others, act on their own, and make their own decisions about what they like and what they reject. When making decisions and forming viewpoints, they do not follow public opinion or the advice of others. They make their own rules. They stick to these rules even if they cause conflicts or have drawbacks.

People with low scores are good at making adjustments, and tend to display characteristics of dependence and obedience. They like group decisions, tend to believe public opinion, and can easily tolerate being dependent on others. They are good subordinates. People with low scores are easy to deal with, while those with higher scores can be more difficult.

1.9. The need for regardfulness

One of the most typical forms of regardfulness is so called "the maternal instinct", which can be defined as defending, feeding and loving the weak. From a broader perspective, this is the inner need to help the unlucky, sick and weak. This intention is a basic need from ancient times, because only those groups whose team members helped each other during times of trouble could survive (other groups quickly perished).



Source: own

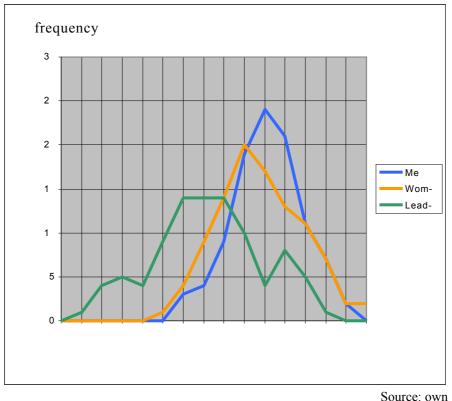
9. chart The need for regardfulness

The leaders' scores are between 6 and 13, which are slightly less than the scores for non-leader men, who scored between 7 and 13 (average scores). The average for non-leader women is between 9 and 14. These score increase with age by 1 to 2 points. So non-leader women scored the highest, followed by non-leader men, and lastly by the leaders.

People with higher scores tend to be caring individuals who help others because they are motivated by love. Those with lower scores tend to be reserved, neglectful and less empathetic. The need for regardfulness manifests itself not only towards people, but towards animals as well.

1.10. The need for order

We might wonder whether the order and cleanliness of our surroundings is the result of an instinctual need deeply programmed within us. A broader definition of this term could include the need to order knowledge and memories, and the need for unification. We try to understand the order of the world we live in.



Source

10. chart The need for order

90% of Hungarian leaders have an average score of between 3 and 11. Non-leader men scored between 8 and 13, while non-leader women had an average of between 8 and 12. The deviation of leaders is quite high compared to non-leaders, and their average score is also much less.

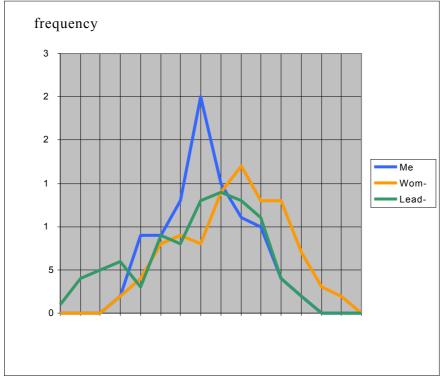
Higher scores indicate an increased need for order and cleanliness. Extremely high scores can indicate mania.

Very high scores are often characteristic of rational, intelligent, but introverted people who are sometimes prone to worry.

Those with lower scores are often unconstrained, unfocused and unambitious. There is a need to underline again that extremely high or extremely low scores do not mean abnormal or less valuable people. They simply mean that we are different from each other.

1.11. The need for help

This motivation means that, when we are in trouble, we need the help, care and empathy of others. The need for help does not have a sexual content.



Source: own

11. chart The need for help

90% of the leaders examined have scores of 2 to 10. The average for non-leader men is between 4 and 10, and for non-leader women it is between 5 and 12. There are hardly any changes with regards to age. The group with the greatest need for help is non-leader women, followed by non-leader men, and lastly by the leaders.

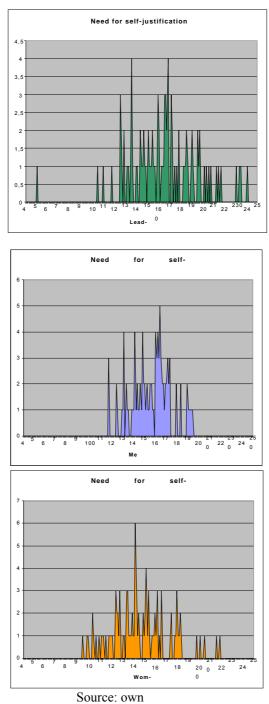
People with high scores tend to depend on others, and they worry if they have to face problems alone. It is clear this motivation has a biological aim.

Persons who have lower scores become withdrawn and hide when they fail or get sick. Some of them are disposed to fake illness in order to get the help they so desire from others.

1. SECONDARY FACTORS:

The need for self-justification

This drive is characteristic of the so called "*neurotic*" type. Those with higher scores tend to consistently fail and experience great frustration.



12. chart Secondary factors

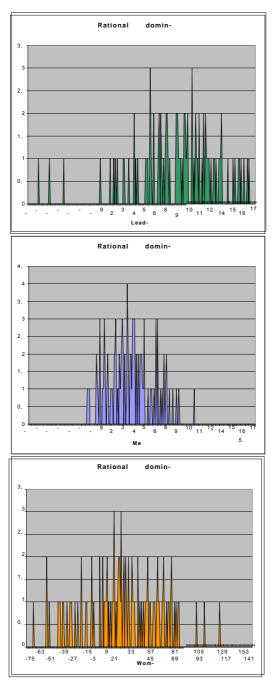
90% of Hungarian leaders got scores between 126 and 216, while non-leader men scored between 120 and 165. So it seems that this difference between these two classes of males indicates that this feature is more important for leaders than for non-leaders.

Higher scores indicate a mixture of the desires for defence and attack. This manifests itself in phenomena such as the need to defend our values against real or imagined offences, the need to prove that our beliefs are true, and adherence to our ideas and our background.

Lower scores may indicate passivity, and a tendency to withdraw from other people and the world. Some people accept their low level of self-respect and build it into their self-image.

Rational dominance

Rational dominance can be defined as the desire to overcome others by the use of instruments such as arguments, power etc.



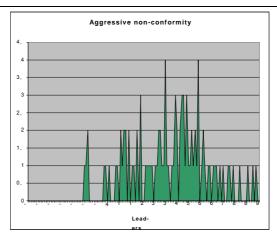
Source: own 13. chart Secondary factors

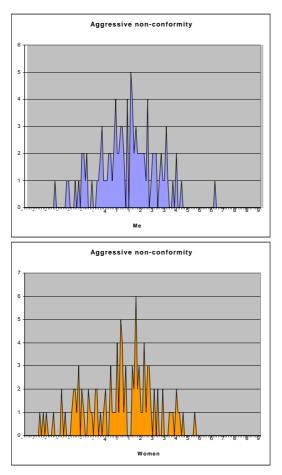
Rational dominance also includes the need for success, the need to compete and the need to manage others. The average scores of Hungarian leaders are between 22 and 160. Non-leader men scored between 10 and 65, and non-leader women between 5 and 40. There is a significant difference between men and women. Scores greatly decrease with age, and women can have scores as good as 0 to 10. We can detect even more significant differences between leaders, because, as our hypothesis states, leaders have much greater needs regarding rational dominance. People with higher scores are competitive and have a need for success. They strive to overcome others, even unfairly, and often at the expense of other human values like care, love, empathy etc. This is especially true of individuals with scores from about 90 to 100.

People with very low scores – especially in the minus range – tend to be unassertive and quiet. They do not enjoy fighting and competing, but instead have other kinds of values. Therefore, there is a significant decrease in the need for rational dominance with age, because the time for fighting passes.

Aggressive non-conformity

Aggressive non-conformity can include traits such as rebelling against social traditions, conventions and values. It can also mean following one's individual intentions and wishes, and creating and following one's own rules, if necessary by force. In addition, it can include a general refusal to obey every type of order and authority, and a tendency to rebel against expectations and official institutions.





14. chart Secondary factors

Source: own

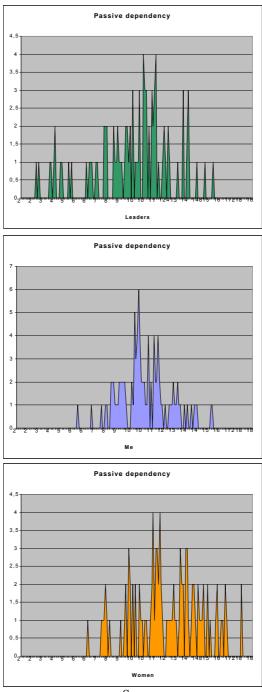
Hungarian leaders got scores of between 3 and 78. Non-leader men scored between 5 and 22, and non-leader women between 10 and 23. So, we can see the trait of aggressive non-conformity is more pronounced amongst leaders.

Higher scores indicate people with the needs mentioned above: in other words, the desire to have one's own way against other people, society and traditions, whatever it takes.

Those with lower scores tend to be accomodating individuals who behave in a respectful manner and are good at making adjustments. Aggressive non-conformity is usually the driving-power behind development and innovation. On the other hand, those with lower-end scores are likely to be people who help to achieve and maintain peace, harmony, warmth and safe human relations.

Passive dependency

Passive dependency can include behaviour such as striving for safety, letting others make decisions in important situations, the preference for dependence in order to have safety, and hiding behind other people so as to avoid the weight of responsibility. Passive dependency is a very common human feature. This might seem contradictionary, but we humans are contradictionary creatures.



Source: own 15. chart Secondary factors

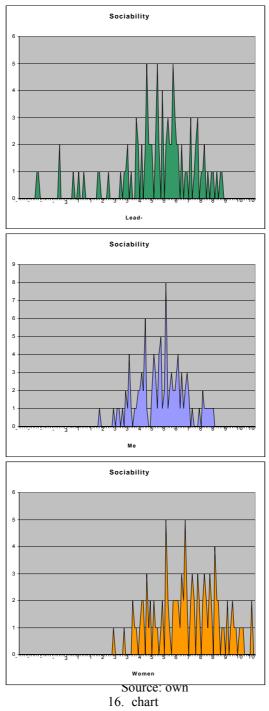
90% of Hungarian leaders got scores of between 45 and 142. Non-leader men scored between 85 and 125, and non-leader women between 100 and 140. There is virtually no change with regard to age. So, the qualities of independence, high performance and assertiveness are more important for leaders than safety and the need for regardfulness.

Higher scores indicate people who are willing to give up their independence for a safer environment.

Those with lower scores have a need for independence, a need to perform successfully, and a desire to be in the centre of attention in various situations.

Sociability

Sociability can include the need to be feel one is a social being, the need to belong to a group, and the need to share common activities with others. Sociability can also include emotional intelligence, coupled with the capacity for tolerance and warmth.



Secondary factors

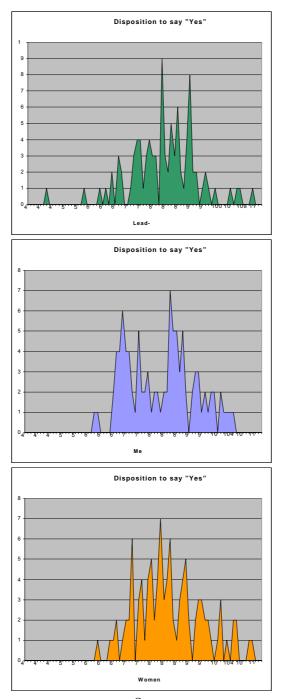
The average scores of leaders were between 7 and 84. Non-leader men scored between 40 and 80, and non-leader women between 55 and 90.

People with high scores are likely to be sociable, open, relaxed, and friendly.

Those with lower scores may often feel the odd man out. They are introverted peope who prefer dealing with facts and objects. People with very low scores are often dreamy individuals with a poor grasp of reality.

The disposition to say "yes"

This is the measure of how far we tend to say "yes" rather than "no" to various questions.



Source: own 17. chart Secondary factors

The average score is somewhere between 60 and 100, while 90% of Hungarian leaders got scores of 68 to 99.

If your score is above this, you tend to say "yes" in various situations, so you are a rather accomodating person who likes to agree and accept.

Scores below 60 - and particularly below 45 - indicate rather rebellious, bull-headed people who often refuse, argue and protest. This factor is not a real "psychogen need", but only a by-product of the test.

SUMMARY

By analysing the test-results, we can explore different personality traits that could be of interest from the managerial point of view.

On the basis of the 17 traits examined, the following list shows the significant differences that were found between leaders and non-leaders. So, leaders:

- have a higher motivation for performance
- have a greater need for dominance
- are more exhibitionistic
- place a higher value on autonomy
- have a lower need for regardfulness
- have a lower need for help
- place a higher value on self-justification
- place a higher value on rational dominance
- have higher scores regarding aggressive non-conformitivity
- have a lower level of passive dependency

There are no big differences concerning the factors below:

- the need for affiliation
- the need for defence
- the need for scrupulousness
- the need for sociability
- the disposition to say "yes".

These findings can be built into leadership development programmes, in addition to coaching education and coaching practice.

REFERENCES

- Balogh László, Barta Tamás, Dominik Gyula, Koncz István: Vezetéspszichológiai sarokpontok, (Basics of Leadership psychology) Szókratész Külgazdasági Akadémia, Budapest, 2000.
- [2] Fedor György, Hidegkuti István, Münnich Ákos: Tesztek használata a pszichológiában és a pedagógiában: minőségi és alkalmazhatósági kritériumok, (Tests in Psychology and pedagogy) Alkalmazott Pszichológia, 3. évfolyam, 1. szám, 2001, 55-62.

- [3] Juhász Márta: Munka és Személyiség (Work and personality) / Az FFM (Five Factor Model) előrejelző érvényessége a munkateljesítményre, Alkalmazott pszichológia, 2. évfolyam, 4. szám, 2000, 43-57.
- [4] Kun Ágota: Van- e általános érvényű taxonómia? Az ötfaktoros személyiségmodell, (Is there any general taxonomy? (Five Factor Personality Model)), Alkalmazott pszichológia, 1. évfolyam 2. szám, 1999, 61-73.
- [5] Kunos István: "Role of Personality in the Management Science", University of Caen, Franciaország, 2006. május 09.
- [6] Kunos István: Positive Psychology in Management Science, 4th European Conference on Positive Psychology, Opatija, Croatia, 2008.07.01-04.
- [7] Kunos István: A vezetéspszichológia pozitív lélektanra épülő adaptációs modellje, "Hagyományok és új kihívások a menedzsmentben" (Adaptation model of leadership psychology built on positive psychology) konferencia, Debrecen, 2008.október 2-3.
- [8] Kunos István: Pozitív pszichológia a vezetésfejlesztésben (Positive psychology in leadership development), A Miskolci Egyetem Vezetéstudományi Intézetének 50 éves jubileumi kiadványa, Miskolc, 2009.
- [9] Kunos István: A vezetésfejlesztés lélektani alapjai az önismeret jelentősége (The psychological basis of leadership development – the importance of self-insight), Miskolci Egyetem, Gazdaságtudományi Kar, VII. Nemzetközi Konferencia, Miskolc-Lillafüred, 2009. május 19-20.
- [10] Kunos István: Személyiségfejlesztés (Personality development), Miskolci Egyetem Kiadó, 2009.
- [11] Kunos István, Komócsin Laura: Coaching-orientált vezetői személyiségvizsgálat a hazai gyakorlatban (Coaching-oriented leadership survey in Hungary), Magyarországi Coaching Konferencia, Budapest, 2009.09.30.

THE DEVELOPMENT OF REGIONAL CENTRES IN HUNGARY IN THE PAST TWO DECADES

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SUMMARY

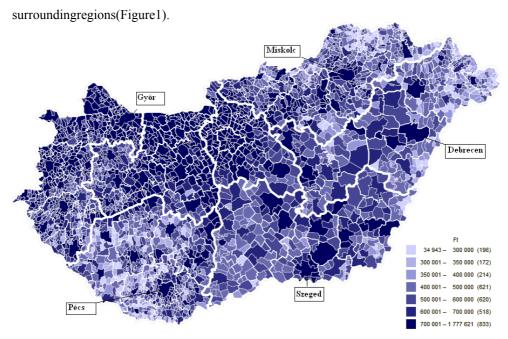
The most important objectives of development policies must be the creation of dynamic and competitive towns, and the support of their development. Generally speaking, one of the most important contributory factors to the competitiveness of regions is the existence of towns which can act as driving forces of economic growth. In the future, the role of gateway towns will increase.

Attracting development possibilities and investors depends to a large extent on the business environment, and the state regulators (the state tax system, the administration burden, incentives, the social welfare system, etc.), which no territorial unit, region, small region or settlement can evade. This role of the state determines and affects the local governments, the investors, and the economic and social players. In addition to the characteristics of the labour force – and the factors of accessibility and market opportunities – the effects of the business environment and the state regulators may be of decisive importance in the choosing of sites and domiciles, and in the settlement of investors and foreign capital. Regional centres, metropolises and towns have decisive roles to play in this situation as well.

1. YEARS OF DECLINE (the 1980s and 1990s)

Before 1990, spatial levelling (mainly in terms of counties) was characteristic in Hungary. This covered economic relations, infrastructure and industrialisation features, as well as the living conditions and economic activity of the population.

In the 1990s, there was a differentiation in the composition of society, and in its demographic characteristics, according to settlement hierarchy. The spatial structure of the country underwent a rapid change, with some elements of the structure becoming less important or even ceasing to exist altogether, whilst other new elements emerged [1]. By the end of the decade, the differences developing at area and regional levels had become definitive whilst the differences between settlements had lessened. Nowadays, the country is tripartite: in addition to the differentiation between the western and the eastern parts, the capital and the provinces are also sharply differentiated. This has led to the development of a mosaic-like image. However, at the same time, the regional centres and large towns in the eastern part of the country have remained among the country's most developed settlements throughout the two decades under examination. This is in marked contrast to their



Source: author's own work on the basis of the KSH Regional Atlas Figure 1.

Income forming income tax base per resident in Hungary's settlements in 2008 and the locations of regional centre

The factors responsible for creating the differences were also changing. According to P Beluszky (1999) [1], by the end of the 1990s, the most important factors included the possibilities of earning an income, the labour market situation, the evaluation of the situation by investors, and the opportunities for enterprises. (Previously, the position in the settlement hierarchy, the infrastructure and institutional facilities had been of decisive importance.)

These changes also affected the regional centres of Hungary. Beluszky differentiated between regional centres with deficient roles and regional centres of full value (their typical institutions are: regional committees of the Hungarian Academy of Sciences, universities, Malév-offices, general post offices, technological institutes of the judicial authorities, a minimum of 25 financial institutions, 16 travel offices, a dialysis centre, vascular surgery clinical or hospital department, etc.). Similar conclusions were drawn by I Berényi and Z Dövényi (1996) [2], according to whom, in the hierarchy of Hungarian cities in the early 1990s, Miskolc and Győr were regional centres, which lagged behind Debrecen, Pécs and Szeged, which were developed regional centres.

In the opinion of Beluszky (1999) [1], Miskolc was not able to get into the highest class of the hierarchy. In spite of the fact it had been receiving subsidies for several decades, the number of its urban functions was fewer than those of the three leading regional centres. In terms of dynamics, Beluszky ranked Miskolc among the stagnating-declining cities that were losing some of their functions (dynamics was measured according to the change in the population in the periods 1980-1989 and 1990-1995, the change in the number of jobs between 1980-1989, the unemployment rate after 1995, the change in the number of economic organisations after 1990, and the changes in the hierarchy of cities).

A weakening of the positions of the industrial cities (including Miskolc, Ózd, etc.), which had been developing dynamically until the 1980s, is indicated by the fact that, by the late 1980s and early 1990s, they had got into a crisis situation. This was due partly to the out-of-date industrial structure and also partly to the political changes of that period. Because of these impacts, the necessary infrastructure developments either failed to come about or were slowed down, and the structural changes – which were also necessary because of the prevalence of heavy industry – met with financial difficulties. This generated considerable decline in all the areas of the economy, and, as a result, large-scale unemployment added to the problems of these cities. In this way, in the 1990s – as a result of economic and social decline – large, contiguous zones of crisis emerged. (e.g. in North-Eastern Hungary along the Ózd-Miskolc axle)

This decline is borne out by the investigations of J Rechnitzer in 2002 [3], in which these large towns were put in the group of Those Lagging behind or Being Transformed (see below). This group consists of towns which were heavy industrial centres, and which have poor and one-sided innovation environments.

Rechnitzer analysed the populations of a network of 165 Hungarian towns at the time of the change of regime. Using data from the years 1988-90, he employed the method of factor and cluster analysis on the basis of 5 indicator groups. The groups were as follows:

- activity of economic organisations
- product and activity innovation
- intellectual resources
- social-political innovation
- centre functions

In the course of the analysis, towns with identical innovation environment features were put into groups. The groups created in this way were as follows:

> 1. Potential Innovation Centres: the 14 towns placed in this group have active and many-sided innovation environments. These 14 towns include Győr, Székesfehérvár, Pécs, Szeged, Debrecen, and Nyíregyháza. Surprisingly, the only town from north-east Hungary in this group is Salgótarján.

> 2. Special Innovation Centres: the towns in this group have communication and enterprise-oriented innovation environments. All the towns in this group are in Dunántúl, and three of them are in the agglomeration of the capital (Szentendre, Érd and Budaörs). In addition, the group includes towns by Lake Balaton, as well as Sopron and Kőszeg.

3. The Group of those Towns which Are Establishing themselves and Catching up: this adaptation-oriented environment group includes Eger; secondary centres such as Pápa, Esztergom and Balassagyarmat; traditional small and medium-sized towns such as Keszthely, Cegléd, Vác and Gyöngyös; and developing small towns like Csurgó, Fonyód, Tokaj and Szerencs.

4. The Group of those Falling behind and Being Transformed: this is a group of poor towns with one-sided innovation environments. These towns were centres of heavy industry. The group includes the towns of Kazincbarcika, Tiszaújváros, Dunaújváros, Százhalombatta and Paks, along with the county towns of Miskolc,

Szolnok and Szekszárd. (The position of Miskolc is in this group is somewhat unusual and does not necessarily concur with the findings of other analyses.) According to Rechnitzer 2002 [3], the ability of these towns to harbour innovation is apparently restrained and mediocre in spite of their favourable roles and infrastructures. Surprisingly, in the analysis of the network of towns including Budapest, the capital was also put into this group.

5. The Group of the Passive and Stationary: the towns in this group have environments lacking in innovation. This group is the largest, with 102 members. The group is mostly formed of small towns. The medium-sized towns in this group are mainly centres with populations between 20 and 30 thousand, such as Komló, Dombóvár, Hajdúszoboszló, Békés, Hatvan and Gödöllő. There are also some medium-sized to large towns such as Hajdúböszörmény, Gyula, Ajka, Ózd and Orosháza. [3]

The role of enterprises

One reason for this realignment was that the rush to establish companies in the early 1990s occurred on a larger scale in Dunántúl (e.g. Győr and Pécs). This, according to E. É Kiss (2001) [4], was a kind of measure of innovation ability. This process was also assisted by other factors, namely the amount of capital available and the level of education of the population, which were somewhat lacking in the Alföld and Miskolc. In Szeged and Debrecen, there was a shortage of capital and a slow reaction to innovation; in Miskolc, the shortage of capital and the lack of a skilled workforce slowed down 'the rush to establish companies'. At the same time, it was typical that the share of newly founded industrial companies in all the economic sectors did not reach 20% in any of these towns. In addition, between 1990 and 1998 the number of industrial sites decreased to less than half its previous level in all of Hungary's five large regional centres. (Győr, Pécs, Szeged, Debrecen and Miskolc)

In the 1990s, an increase in small and medium-sized companies could be observed together with the disintegration of once large company structures. Among the five regional centres, the previous main centre of heavy industry, Miskolc, was most severely hit by the structural crisis. This resulted in a dramatic decrease of those employed in industry. In addition, the town lost its role in the mining-metallurgy sector. By contrast, industrial activities in the town of Győr increased. The machine industry remained an important sector of the town's economy. This was partly due to the manufacture of road vehicles and their components. It was also due to the electronics industry, in which there were a high number of significant new investments by companies such as Audi and Philips. The structure of the industry of the other three towns did not undergo pronounced changes, apart from the termination of the mining industry in Pécs. This, however, did not result in such deep-reaching structural changes as in Miskolc [4].

Appreciation of accessibility

I Lengyel (1999) [5] is of the opinion that, in 1996, the location and accessibility of Hungarian towns determined the nature of their economies. The large university towns of Miskolc, Debrecen and Szeged prospered less. Although they had a well-qualified labour

force, this was not appreciated by the market. Lengyel argues that this was due to the facts that these towns were not easily accessible and their poor traffic connections made journeys time-consuming.

According to Lengyel (1999) [5], an examination of the rate of development could show variations among apparently similar towns. He argues that it was mainly the increase in material goods, incomes and investments, along with the housing stock, that differentiated towns. Taking the rate of development as a basis, he found that towns in the north-west of Hungary developed much more rapidly, whilst the pattern of development of the towns of the other regions appeared mixed. There is again a significant differentiation between those following an individual path of development, such as Dunaújváros and Tatabánya, and those in a crisis area, such as Miskolc, Salgótarján and Nyíregyháza. These findings agree with the results of Beluszky (1999) [1] and Rechnitzer (2002) [3].

According to E. E Kiss (2001), foreign investors also played a part in the privatisation of industry in large towns. [4] In Győr, this was particularly the case and the process of privatisation was faster here than in the other regional centres. The reason for this was that, in a globalised economy, the traditional elements of choosing a site, such as infrastructure and qualified labour, are becoming less and less important. At the same time, the time factor, easy accessibility, the role of communications, and the general quality of life in the area are assuming greater significance. Kiss is of the opinion that these factors might have contributed to the fact that, in addition to its fortunate location, Győr attracted the largest number of foreign investors. In contrast to Győr, Miskolc represents the other extreme among the regional centres under investigation. In the late 1990s, the number of foreign companies was the smallest here. This was the result of the geographical location of the town, its social and economic situation, and the quality of its man-made environment. Foreign capital appeared in the town only in the late 1990s. This was due to the fact that foreign investors had waited for conditions to become more settled after the crisis in the traditional heavy industries. Moreover, the shortage of areas suitable for green-field investments also hindered the appearance of foreign investors. The other three regional centres (Szeged, Debrecen and Pécs) can be found in positions between these two extremes [4].

In terms of the competitiveness of the labour force, the towns in north-west Hungary also made much greater progress in this area, but in the case of the large towns (Pécs, Szeged, Debrecen and Miskolc) the potential for development also existed. However, the economies of these towns did not begin a dynamic development in the mid-1990s [5].

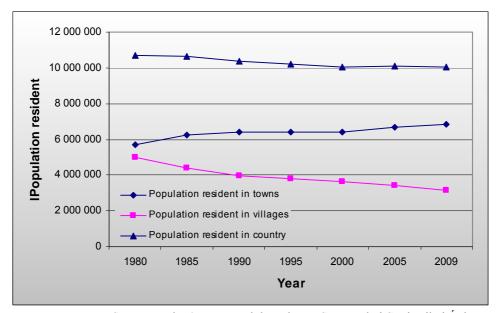
Shifts in the network of towns

The situation of a town and its position in the spatial hierarchy is determined by a great many components. This is proved by the fact that, in the ranking of centres in terms of positive factors in the investigations by I Süli-Zakar (1996) [6], Budapest is followed by Miskolc, ahead of Debrecen, Szeged, Pécs and Győr. According to Süli-Zakar, government subsidies and foreign assistance can speed up the development of the network of growth centres. In addition, the creation of 'oases' can balance the effects of isolation. The 'oases' receive and transmit innovation impulses and may mobilise local resources. Debrecen, Nyíregyháza and Miskolc can be regarded to a lesser extent as dynamic poles according to Süli-Zakar (1996) [6]. They can only be seen as poles to a lesser extent because Hungarian

and, especially, international capital have been concentrated more in Budapest and the centres in western Hungary. Süli-Zakar considers human (intellectual) resource as the main factor in regional development.

"In the period since 1995, the villages which – to a greater or lesser extent – have increased their populations through migration surplus, have formed a closed ring or widening circle around several towns, in addition to Budapest."¹ It can be said that around most of the large towns (and in some cases even around medium-sized towns) the centre of gravity of the population has completely moved out of the towns. It is clear that in these centres the population is decreasing.

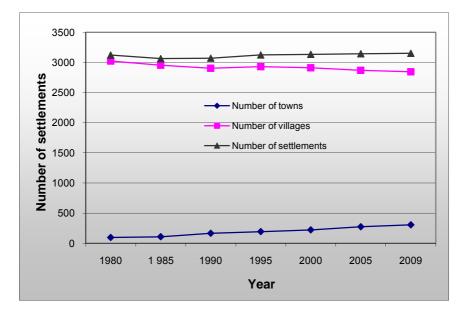
The data of the KSH (Central Statistics Office) show that, in the 1990s, no clear migration loss could be seen in the villages nor could a clear gain be seen in the towns. In several years, villages actually experienced a migration gain: for example, in 1995 and 2000. Since 2000, however, the migration loss of the villages has become pronounced, while a migration gain can only be seen in towns and urbanised villages with large populations (Figure 2). In smaller villages, migration loss increased and then stabilised at a high level. Thus, migration from small villages and hamlets in the peripheral regions of the country is becoming more and more typical.



Source: author's own work based on KSH Területi Statisztikai Évkönyv Figure 2. Changes in the resident population in Hungarian settlements between 1980 and 2009

¹ Beluszky, P. (1999, p. 157)

However, the increase in the population resident in towns could also be related to the increase in the actual number of these settlements. In 2010, Hungary has 328 towns. This can be seen as a result of the 'rush to declare settlements to be towns' which has taken place in recent years. However, in many cases, these new towns have no central functions and do not exert a perceivable influence on their regions. In addition, their fundamental infrastructure, and socio-economic and income conditions do not differ from those of villages (Figure 3).



Source: author's own work based on KSH Területi Statisztikai Évkönyv Figure 3.

Changes in the number of settlements in Hungary between 1980 and 2009

The analyses of Rechnitzer (2002) [3] were also aimed at presenting the shift typical of the late 1990s. Rechnitzer investigated the years 1990-91 and 1997-98. In order to track the shift in the network of towns, he endeavoured to use the same groups of indicators that he had employed at the beginning of the decade. Concerning the developments he had discovered, he stated: "among the features of the network, the factors and institutions representing modern business and economic services show a stronger relation and interrelations."² By the end of the decade its mass character had increased both in supply and spatial extent. According to Rechnitzer, while in the early 1990s traditional centre functions (institutions related to public services) and economic factors had had the strongest influence, at the end of the decade "business and economic services as market relations were the most important."³ He also emphasised that the accessibility and transport

² Rechnitzer, J. (2002, p. 177)

³ Rechnitzer, J. (2002, p. 177)

connections of towns – together with the effect they exert on their regions – have increased in importance. His findings concur with the ideas of Beluszky, (1999) [1], Süli-Zakar, (1996) [6], Kiss, (2001) [4], Lengyel (1999) [5], I Győrffy, (2009) [7] and others.

The types of towns that emerged from the investigations of Rechnitzer (2002) [3] are as follows:

- 1. Active and Stable towns: these centres of innovation and economic revival are characterised by the fact that the value of each variable is high, with most of them reaching or even exceeding the national average.
- 2. Towns with Special Roles: resort towns and industrial towns.
- 3. Towns Able to Improve their Transforming Situations: centres which are becoming stable in their economic and social structures and which are widening their roles as towns and in the regions.
- 4. Towns in Transitional Positions: centres in peripheral locations, or in the agglomeration of Budapest, with unstable structures.
- 5. Towns Lagging behind others: towns deficient in functions.

According to Rechnitzer (2002) [3], group four from the first investigation (including the data for the years 1988-1990), which represented the group of one-time socialist and industrial towns with poor and one-sided innovation, ceased to exist. Some of these towns, such as Paks, Tiszaújváros and Százhalombatta, joined the cluster of new industrial towns; others, such as Miskolc and Szekszárd, recovered to some extent. This was perhaps due to their roles as county towns. Rechnitzer felt that, by 1997, they had entered the group of Active and Stable Towns. Only Szolnok made a smaller step – it only managed to join the Towns in Transitional Positions.

In 2000, the investigation by Lengyel and Rechnitzer [8] focused on four groups of factors:

- indicators expressing economic-organisational activity
- the group created by innovation in activity
- indicators related to employment, the qualifications of the labour force and intellectual resources
- major demographic indicators and indicators showing traditional and new centre functions⁴

The major results of the analysis included the finding that in the early 1990s – besides the presence of the classical centre functions (i.e. institutions related to public services) – it was the economic factors that fundamentally affected the differences between towns. At the beginning of the decade, the competitiveness of the towns was strongly connected to control from the top; by the end of the decade, however, these relations to the centre had become less decisive. This truly reflected the political and socio-economic changes in the country.

Naturally, these relations to the centre can still be seen today. However, they have, in general, lost some of their significance. Although, in certain cases, major investments in infrastructure and institutions have played major roles in development; on the whole, their order of magnitude has decreased. By the end of the 1990s, the accessibility of the towns

⁴ The time horizons of the investigations were 1990-91 and 1997-98.

had become more important. This factor exerts an attraction on the region of the town in question.

2. COMPETITION AMONG TOWNS

In essence, competition takes place between large towns, county towns and towns with county rights [8]. These towns compete for investors, compete to obtain new market institutions and organisations, and also compete for various new administration functions to be established in them.

Enterprises with foreign interests in the favoured regional centres concentrate on industrial investments. Industrial enterprises gave 70 %, 75 %, 93 %, 95 % and 97 % of the called up share capital of enterprises with foreign interests in Győr, Miskolc, Szeged, Pécs and Debrecen in 1998, respectively [4]. Foreign capital might have led to considerable changes in the structure of local industry in areas where companies were established in green-field investments. This also supported the development of Győr, as in the second half of the 1990s green-field investments were the most prevalent in this town. On the other hand, in the other regional centres brown-field investments mostly dominated. There were, however, a few exceptions, such as the investments made by Shinwa in Miskolc and by Elcoteq in Pécs. Kiss (2001) [4] thinks that there were no perceptible radical changes in the spatial structure of industry in the regional centres after the change of regime: reforms were late starting and few industrial plants were closed down. In addition, on the sites of the plants which were closed down new industrial facilities appeared again to some extent.

The first industrial park was established as a green-field investment in Győr in 1990. Such parks later appeared in the other towns: in Debrecen and Szeged as green-field investments and in Miskolc and Pécs as brown-field investments. In the 1990s, there were no considerable changes in the size of the industrial areas in any of the towns. This was due to a moderate deindustrialisation and large-scale revivals. In the first years of the third millennium, it can also be seen that smaller industrial areas – mostly in the vicinity of town centres and residential neighbourhoods – may disappear. The functional transformation of the previous industrial areas, however, may take place, mostly due to commercial and service facilities being established in abandoned, disused industrial zones. It is also typical that the re-use of industrial areas mostly happens spontaneously, as – due to construction and environment protection stipulations – local governments have few resources at their disposal to speed up this process.

The investigations by Lengyel and Rechnitzer (2000) [8] have also shown that "a great number of varied elements may be considered when analysing the competitiveness of towns. This fact holds true if we examine the whole network or just a select group of towns, if we examine the structure of the economy and its changes, or even if we examine the operating elements and institutions of the system of towns studied. Competition among towns is a complex and complicated process. It includes a complete system of relations, of which the town's economic potential and its changes represent only one – albeit, in many cases, the most important one."⁵ A major finding of the authors is that in the early 1990s, in addition to the presence of the classical centre functions (i.e. the institutions related to public services), it was the economic factors that exerted a fundamental impact on the

⁵ Lengyel, I. and Rechnitzer, J. (2000, p. 148)

differences between the towns. By the end of the decade, "business and economic services as groups of factors embodying market relations and economic performances exerted a joint influence on the competition among towns."⁶ Apparently, the "network-forming factors" built on public services (education, health care, public administration, justice and culture) became less important and impacts related to market and consumption relations, population concentration, and attraction functions grew in significance. The competitiveness of towns was still strongly bound to control from the top at the beginning of the decade; by the end of the decade, however, these relations to the centre had become less definitive. This corresponds with the opinion of P.C Cheshire and S Magrini (2002) [9], according to whom this process strongly deviates and differs from the traditional top-down regional policy. Nevertheless, it is undeniable that these relations with the centre continued to exist, even if at lower levels; and in some cases, such as those concerning significant investments in infrastructure and institutions, they might have played significant roles in development.

The competitiveness of towns

A basic definition of competitiveness might include components such as the tendency to obtain, retain and improve market positions; the capacity to hold one's ground in the competitive market; and the attainment of success in business.

According to Á Török (1999) [10], the concept of competitiveness at micro-level, for individual companies, means the ability to gain positions in the competition in the market and to hold their ground against their competitors. From a macro-economic aspect, the ability to gain and hold positions appears in the competition among national economies.

"The competition among regions and towns is inevitable; no town can back out of it."⁷ Naturally, this inevitable competition has several levels. Accordingly, the winners and losers also appear on several levels.

According to Lengyel and Rechnitzer (2000) [8], competition takes place essentially among large towns, county towns and towns with county rights. These towns compete for investors, compete to obtain new market institutions and organisations, and also compete for various new administration functions to be established in them.

"Territorial competition means a process, in which certain groups attempt to influence the development of the regional and local economy through local policies in competition with other regions in an explicit or often implicit way."⁸ According to Lengyel and Rechnitzer, competition has the following features:

- the competitors in a territorial competition are the various territorial units, regions and towns.
- the active players in territorial competition include the local governments and their institutions, and the bodies of the economic and the civil sphere.
- groups of local entities take part in the competition; we can talk about competition only in the case of bottom-up regional and urban development.
- the main objective of competition is to promote economic development.

⁶ Lengyel, I. and Rechnitzer, J (2000, p. 141)

⁷ Lengyel, I. and Rechnitzer, J. (2000, p. 138).

⁸ On the basis of Lengyel, I. and Rechnitzer, J. (2000, p. 132) Budd, L. (1998), Cheshire, P. C. (1999), and Cheshire, P. C. and Gordon, I. R. (1998).

- competition takes place among territorial units at the same level in the hierarchy, and among towns with roughly the same functions.
- in a territorial competition winners can gain benefits not only at the expense of the losers. Development is possible simultaneously for several actors, as conscious cooperation and negotiated development strategies may carry mutual benefits.
- competition can also be shaped by implicit developments and synergic impacts.

According to W.F Lever (1999) [11], competition takes place in order to achieve concrete objectives:

- to gain mobile investments in the processing industry, in commerce, and in the real estate and IT sectors
- to attract the population, particularly qualified and competitive human capital
- to attract budgetary funds and public funds in order to create public goods (roads, education and health care institutions) and establish public institutions
- to organise events and programmes

According to Lengyel and Rechnitzer (2000) [8], regions and towns are competitive if in their open economies their revenue per resident is high and increasing, the employment rate is high, and wide layers of the population have a share in the revenues generated. Accordingly, competitiveness is nothing else but "economic performance which is as high as possible and is accepted in the global competition, which can be measured by the revenues/incomes generated on the one hand, and by the high level of employment, on the other."⁹

In the OECD interpretation, competitiveness may also mean the speeding up of internal development. This requires the support of local enterprises and the strengthening of their innovation potential. Accordingly, competitiveness also means institutional capacity and a network of public institutions and private organisations, which promote the reception of innovation [12] [13].

This concept of regional and urban competitiveness is determined by economic performance, growth and competitiveness in relation to the circumstances of the individual countries. The pyramid model of competitiveness was created on the basis of these factors. In addition to the fundamental categories of competitiveness, this model includes both direct and indirect factors.

According to Lengyel and Rechnitzer (2000) [8], the direct factors include the following:

- research and development
- infrastructure
- human capital and foreign investments
- small and medium-sized enterprises
- institutional capital
- social capital

The factors which have an indirect effect on the success of towns include:

- economic structure
- innovation culture
- regional accessibility
- competence of the labour force

⁹ Lengyel, I. and Rechnitzer, J. (2000, p. 137)

- social structure
- decision centres
- quality of the environment
- social cohesion of the region [8]

On this basis, it can be established that success and competitiveness are closely related categories, according to both G Enyedi (1996) [14] and Lengyel and Rechnitzer (2000) [8]. Only successful towns are able to compete effectively. Such towns have the following features: they can change their economic structures, the rate of segments adding value is high in their service sectors, and knowledge-based production is a significant characteristic. In a successful town, the capacity for innovation is strong, decisions are made, and the middle class is strong and growing. In addition, such settlements are able to provide an environment with a high value for the players in the economy and society. Moreover, a successful town manages its conflicts well, and has significant external and international relations. As a result of the above mentioned factors, incomes and employment are on the increase (Enyedi, G 1998) [15].

According to F Erdősi, (2003) [16], the dual behaviour of large towns can be more and more frequently observed:

"While as a residential environment they put off many people (but not everybody) and lose population through the process of people moving into suburbia and also through peri-urbanisation (though, naturally, today, the not infrequent process of re-urbanisation may slow down the decline in the number of residents), they are able to increase their functional radiation through the economic and social activities, and media concentrated in them. These areas are being intensified and institutionalised, are becoming more important in our age, and are being qualified as a completely new power factor."¹⁰

Relations of towns

In the information society, inter-city relations have become accelerated, and the concepts of distance and location have undergone changes, as has the hierarchy of towns. In this environment, the service functions of small and medium-sized towns are growing weaker and may even become unnecessary (Enyedi 1999) [17]. In the hierarchy of towns, the role of large towns has been strengthened. This is mainly the case with those towns where economic and political decisions of strategic importance are made.

According to OTK (2005) [18], there is a need for centres or poles which help the whole country to become competitive. These centres are the organic elements of a harmonic, polycentred, collaborating network of towns. These will be the poles of development in Hungary¹¹, and these poles will also include regional centres (Figure 3). The objective of

¹⁰ Erdősi F. (2003, p. 2)

¹¹ Definition by OTK (2005): "a pole of development is a large town whose function is to transmit development, to generate the development of its field of action across regional and national borders, and to retain the best qualified labour for its own region. Accordingly, it supplies its field of action with high-standard services, cultural possibilities, and special products; and has a significant weight in the economic and public administration system of relations and decision making. Its large companies are organically integrated through their wide-ranging suppliers into the local economy, thus promoting the development of their region. A pole is characterised by a whole complex of

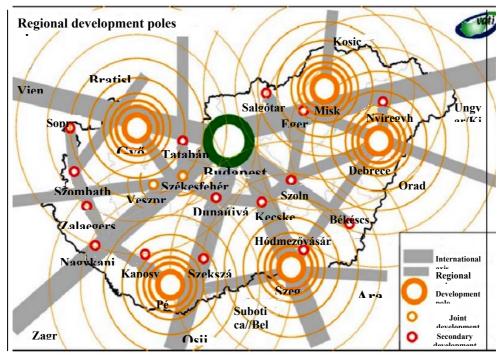
creating these poles is to ensure that development should not be limited to the capital and its surrounding region. There are also the aims of modifying the highly Budapest-centred spatial structure and ensuring the feasibility of a more efficient and sustainable society and economy. The functions of the poles are to encourage development, to promote the development of fields of action across regional and national borders, and to retain qualified labour through their supply of high-quality services, cultural institutions and workplaces. The poles of development may play one of their most important roles in introducing and spreading innovation. Accordingly, poles:

- "supply their wider regions or fields of action with special services and cultural possibilities, etc. which at present can be found by rural and provincial citizens, companies or institutions in many cases only in the capital;
- organise their wider regions through their economic weight, their roles in decision making and public administration – including even their lobbying force, and through their varied systems of relations with their wider regions;
- make their wider regions more dynamic economically, mainly by means of, firstly, supplier networks, and secondly, the positive 'shadow impact' on the region of the large companies that have established themselves in the pole;
- retain resources, primarily the best qualified labour and innovative enterprises, a large part of which have so far migrated to the capital.¹²

According to the development plans of the European Union and Hungary for 2007-13, the poles of growth of the country are: Debrecen, Miskolc, Szeged, Pécs, and Győr. In addition, Székesfehérvár and Veszprém in the region of Central Dunántúl operate as development co-centres through organic collaboration based on a division of functions. The aim is to create a well-balanced system of towns, with the objective of ensuring a more balanced process of development in the country as a whole. It is hoped that this will be achieved through intensive cooperation. Poles, along with the larger towns which have county rights, will cooperate in a network as regional sub-centres. This cooperation is of particular importance in strengthening the roles of those large towns which are capable of making the regions far away from the poles more dynamic [18].

¹² OTK (2005, p. 49)

dynamic, innovation-oriented sectors. Due to the presence of high-standard university education, and research and development activities; a high-standard info-communication infrastructure; and a highly qualified labour force, the pole plays the role of a knowledge centre. In the international literature the word 'hub' – taken from the field of transport – denotes the intermediary, regional centres of the system of settlements which have the task of promoting the development of their own regions." OTK (2005, p. 133)

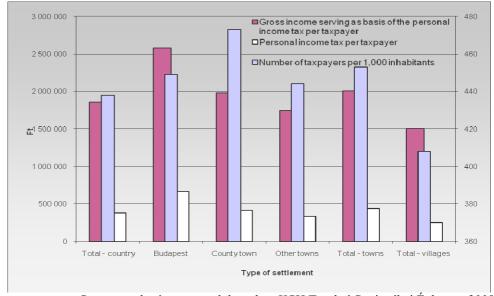


Source: OTK (2005, p. 51)

Figure 4. Regional poles of development and axles according to OTK (2005)

Accordingly to the above-mentioned plans, the networking cooperation of the poles of development and the larger towns will play a distinct role in strengthening the competitiveness of the regions, as will the axles of development located along the transport routes between the larger towns.

In parallel with the urban areas, the network of villages has also undergone considerable development. Living conditions and the infrastructure have improved. However, in spite of this, there are significant differences in the development of the members of the system of settlements, and in the socio-economic and infrastructure characteristics of the towns and villages. This marked difference can be perceived in almost all of the indicators, including the differences in incomes and in the number of taxpayers, as shown in Figure 5.



Source: author's own work based on KSH Területi Statisztikai Évkönyv 2008 Figure 5.

Number of taxpayers per one thousand inhabitants in settlements in Hungary and their income relations in 2008

Hungary – the one-time 'happiest barracks' – had, by 2008, become one of the countries with the worst rates of development in the European Union. Although by 2010 it had stabilised its situation somewhat, development in the years to come is still uncertain. The escalating crisis, however, is also threatening other countries (primarily the Baltic and Mediterranean countries) with a similar, or even worse, decline. The factors characteristic of this decline include, in addition to the indicators, downgrading by credit assessing institutions and large-scale increases in debt. In the case of Hungary, however, there were ominous signs before the crisis. The setbacks in Hungary's economic growth could also have their origins in errors made within the internal structures. This unfortunate process has been intensified by the general decline, meaning that we have to find solutions to our problems during a difficult period. What is more, these solutions have to be realistic and workable. [19]

In Hungary, the 8-10 years following the political change of regime can be characterised by the process of catching up with the countries of the European Union. However, the necessary changes did not take place in a number of fields connected with the Hungarian economy and society. The shock was not sufficiently intensive to require reconstruction starting from the foundations; thus, the former groups of interests continued to exist. This was one of the reasons why this previously promising country fell behind the other countries of Central-Eastern Europe after the turn of the millennium. Hungary has been forced to suffer a considerable loss of position in conditions of intensifying competition. A series of erroneous economic policy decisions led to the country lagging behind those nations whose economies were being transformed. [20] [21]

Declining economic growth; high budgetary centralisation and a huge public deficit; rising state debts; constant disturbances in the welfare systems; a high tax burden; divisions and disillusionment within society; a loss of trust and confidence; and the uncertain, and increasingly delayed, target date for the introduction of the euro all indicate that Hungary will have to face very serious problems. [22]

This failure to take the path of development that used to look viable was caused by the failure to implement institutional reforms, the untenable situation of public administration, the level of political culture, the excessive political exposure of the economy, and the errors in economic policy. The loss of the country's position can be tracked by means of the most important macro-economic indicators. These show a sad picture. For example, in the past years both Estonia and Slovakia have preceded us in terms of per capita GDP, and Latvia, Lithuania and Poland have approached Hungary's level.

Positions of towns in the 2000s

According to the findings of H Lőcsei (2004) [23], at the beginning of the 21st century in Hungary, agglomerations were becoming more and more distinct from their surroundings, while at the same time their internal divisions had been decreasing since the second half of the 1990s.

P Beluszky and R Győri (2004) [24] pointed out that "though the short-term changes that took place in the 1990s indicate noteworthy tendencies, the hierarchy of towns has not been reshaped to any considerable extent during the short time since the change of regime. The stock of regional centres and their hierarchic rankings have not changed, although we can observe that small shifts have occurred in the past few years."¹³

According to Kiss (2001) [4], though the tertiary sector is the leading sector in the postindustrialist epoch, industry will also play a major role in the life and economies of large towns in the 21st century. Accordingly, their economies can also be intensified by developing the dynamic industries, improving competitiveness and creating specific, unique features.

É Ehrlich (2006) [25] investigated the infrastructure development of large towns (towns with more than 100,000 inhabitants) at the beginning of the new millennium on the basis of several indicators. A change in the population of large towns may also mean a change in the settlement structure or the migration of the urban population into the agglomeration. The population of all the large towns decreased between 1990 and 2002, with the exceptions of Nyíregyháza and Kecskemét. Examining the migration difference data of the small regions around the large towns, it can be seen that only the small regions of Miskolc and Nyíregyháza show a negative picture (the reason being that in Nyíregyháza the increasing population comes partly from its own agglomeration). Among the large towns, Miskolc is one of those in the least favourable position. This is also true regarding its employment data. Its unemployment rate was the worst in 2002 (8.4%), and the second worst in 1993 (10.5%) after Nyíregyháza.

It is noteworthy that by the beginning of the millennium, Miskolc 'had recovered'. It had stabilised its positions and caught up with Debrecen, Szeged and Pécs (although, in some cases, it is still behind them). The success of this 'catching up' is borne out by

¹³ Beluszky, P. and Győri, R. (2004, p. 25)

investigations in several fields, including analyses of the info-communication sector, the innovation potential, the communication of the local governments, and the roles of financial institutions. [26] [27]

The investigations of Z Csizmadia and Rechnitzer (2005) [28] were aimed at analysing the innovation potential of large Hungarian towns. According to their findings, Miskolc together with Nyíregyháza was grouped in the second cluster. The three large towns of the first cluster (Szeged, Pécs and Debrecen), as traditional regional centres which are focal points of higher education and innovation processes, have favourable economic and labour market characteristics. These include the following features: an above average education level, a knowledge-oriented labour market, and high average values of human and innovation indicators. Miskolc and Nyíregyháza, as large towns with roles as centres, also belong to this front-rank. Their lagging behind can be traced mainly to their economic performance. According to Csizmadia and Rechnitzer, "in order to improve on today's tendency to lag behind the economic potential of other cities, all energies must be focused on playing a more intensive and successful innovative role."¹⁴

The analysis of M Nárai (2005) [29] was aimed at presenting the innovation potential of towns with county rights. 22 of these towns were put into groups by means of factor and cluster analysis. His results concerning Miskolc differ from those of Csizmadia and Rechnitzer (2005) [28]. This is mainly because, in Nárai's study, Miskolc is placed alone – without Győr or Nyíregyháza - in the second cluster. Nárai called Miskolc a primary innovative centre with an unfavourable economic background. According to Nárai (2005) [29], Miskolc is in a similar position to the major innovation centres of the first cluster (Szeged, Debrecen and Pécs) in terms of social activity and on the basis of labour market characteristics. However, it appears as an independent cluster because its economic situation is very unfavourable.¹⁵ The indicators for Miskolc in the fields of labour market structure, education figures and intellectual areas are, in general, more favourable than average. The innovation features of the town are significantly better than average, but do not reach the level of the towns in the first cluster. Its role as a higher education and innovation centre, and its institutional structure of higher education and innovation support, place it in the vanguard of innovative efforts. Nevertheless, so far the town has been unable to use its favourable human resources to revive its economy and improve competitiveness.

In the investigations of Rechnitzer, A Grosz, and Csizmadia (2003) [30], the groups were formed with regards to calculations based exclusively on ICT indicators. The findings showed considerable similarities to the results obtained on the basis of the complex system of indicators. The town of Miskolc was put into the first group of towns, among the regional centres. The regional centres (Miskolc, Szeged, Pécs and Debrecen) stand out from the rest of the towns on the basis of almost every indicator in the info-communication sector. However, Miskolc falls somewhat behind the rest in terms of the indicators of the ICT sector. T Döry and G.M Ponácz (2003) [31] calculated the rankings of towns with county rights based on ICT and the number of companies in the media economy, using the data for 2001. The rankings which emerged showed a familiar picture: Miskolc is ranked

¹⁴ Csizmadia, Z. and Rechnitzer, J. (2005, p. 161)

¹⁵ The author remarks that according to his calculations only Salgótarján and Hódmezővásárhely have more unfavourable economic potentials than Miskolc.

fourth behind Debrecen, Pécs and Szeged, although it is placed higher than Székesfehérvár and Győr.

The investigations of financial institutions by Z Gál (2000) [32] indicate a strengthening of Miskolc's position. In 1996, Győr, Pécs and Székesfehérvár were the largest banking centres in the provinces; by 1998, Miskolc (with 37 branches) had become the most important, preceding the towns of Győr, Kecskemét (32-32), Pécs, Szeged (31-31) and Debrecen (28).

According to Rechnitzer and M Smahó (2005) [33], the positions of Miskolc are not very favourable regarding some indicators of higher education and research and development. The number of full-time leading academic and academic staff, and the number of members of the public bodies of the Hungarian Academy of Sciences based in the town, do not show a favourable picture. In 2000, only 365 members of the public bodies of the Hungarian Academy of Sciences based in This falls a long way short of the situation in Budapest (where 6199 members live), Szeged (with 846) and Debrecen (817) and their agglomerations. The figure for Miskolc was also smaller than those for Pécs (523) and Veszprém (519) and their agglomerations [33].

G Kozma (2004) [34] investigated the communication activities of local governments in Hungary with regards to the publications they produced for potential investors. The local governments and their publications were put into four categories according to the content and quality of their materials. In the analysis, Miskolc was placed in the "best" or first category, along with Debrecen, Szeged, Pécs, Eger, Nyíregyháza and other towns.

The emergence of metropolitan regions

The advance of trans-national companies, the fundamental changes in the economy, and the renewal of economic organisations have set new challenges for sites, the labour force, transportation, infrastructure and – perhaps most importantly – towns. These new challenges require that settlements change, renew themselves and operate according to the conditions of the 'New Economy'. Competition between towns is becoming increasingly significant with regards to the gaining of investments from both the private and public spheres. It is also important for towns which wish to gain various economic advantages and forms of support, and for the towns' citizens. While in the course of history most towns (with the exception of perhaps the capitals) only competed within the borders of a country, today this competition has become international and towns have to fight against foreign 'opponents'. (Let us think of the examples of subsidies from the European Union, the choice of sites/domiciles of trans-national companies, etc.) According to Enyedi (1998) [15], the existence of local factors such as a knowledge-based innovative industrial environment, the nodes of information flow, and an information-rich environment that can be regarded as capable of producing sustainable growth are of utmost importance.

Today, the rocketing development of communication – or rather information technologies – forms the foundation of globalisation. In the course of this development, time-space relations have been transformed all over the world, and time-space limits, which used to separate national economies from each other, are decreasing in importance. These processes, however, do not affect geographical locations in the same way; thus, paradoxically, the processes converging in time and space are coupled with a geographical inequality.

Since communication technology innovations are aimed at the geographical locations where the expected profits are highest, 'important places' emerge for the information world [35]. As a result of these processes and phenomena, both the global communication networks and the centres of these networks become stronger [36]. Thus, towns, regions and countries must compete with each other.

Economics in general sets localisation against globalisation. According to Á Bernek (2000) [35], it is obvious that these are parallel processes. What is more "one of the most important paradoxes of the global world economy is that the world is global only as long as local differences exist."¹⁶ The roles of regional levels above the national economy level (international integrations) and below it (regional economy, local economy) are becoming more and more important. As a result, in economics the concept of localisation is undergoing considerable transformation. In the activities of trans-national companies and international banks, regions and settlements – along with large regional fields of force and countries – are significantly decreasing in importance. Today's metropolitan regions – with their larger dimensions – have become multi-centred. This is quite different to the structures of urban agglomerations in the 19th and 20th centuries. Today's metropolitan regions, research and development, cultural institutions and education functions may be established in the external settlements.

In this way, horizontal cooperation and operation in networks of settlements of different sizes – but often of identical rank – can be observed, replacing the hierarchic divisions that have existed until recently. The emergence of such a metropolitan region can be observed through the widening of the agglomeration around Budapest [37].

The emergence of metropolitan regions increases the inequalities within the networks of settlements; the fields of attraction become wider and may cross national frontiers. "Some of the small towns lose their independent functions and become parts of a large town region or fade into the village environment."¹⁷

"Global impacts have shaped the network of Hungarian settlements into a tripartite division. The first level is represented by those systems of settlements which have been penetrated by the global network. The second level is represented by regional networks of smaller areas within the country, which also extend small distances across national borders. The nodes of these local networks are the large provincial towns. The third level is mostly represented by backward village or small town regions which are left out of the network and not connected to dynamic axles or centres. Actually, this division of the settlement network forms the basis of the territorial inequalities of the country: ruptures in the developed networks (e.g. even around such dynamic centres as Debrecen and Nyíregyháza) are the main causes of backwardness."¹⁸

Under ESPON (2005) [38] the classification of functional urban regions took place according to the functional specialisation of urban nodes¹⁹. Accordingly, the following groups were created:

¹⁶ Bernek, Á. (2000, p. 89)

¹⁷ Enyedi, G. (2003, p. 11).

¹⁸ Enyedi, G. (2003, p. 19).

¹⁹ The functions were examined in the following fields: population, transport, tourism, industry, science, and decision making in both the private sphere and public spheres.

- the group of MEGA regions (Metropolitan European Growth Area), which includes Budapest
- the group of urban regions with international and national functions, which includes Miskolc
- the group of urban regions with regional and local functions, which includes 72 towns in Hungary

The objectives of ESDP (1999) [39] were economic and social cohesion, the preservation of natural resources and cultural heritage, and a better balance of competition within the European area. The European Spatial Development Perspective (ESDP) highlights three levels in the European network of towns: towns with international, national and regional significance. The document sets several objectives, for example: developing better-balanced and multi-centred systems of towns, establishing new connections between towns and their regions, ensuring access to high-standard infrastructure, and increasing the protection given to natural and cultural heritage. Towns are one of the main focuses of European territorial development. This is because their spatial processes are decisive for the development of their regions. The development of the systems of towns has the objective of strengthening cooperation between towns.

The achievement of harmonious regional development entails ensuring cooperation between towns, the establishment of networks and systems of cooperation, and ensuring that towns of different sizes are not isolated from each other. The strengthening of networking relations is of particular significance in Eastern and Central Europe. To achieve this objective, cooperation between towns should include many different aspects and take place at both intraregional and interregional levels.

These towns may represent new communication points in the European economic area (for example, air and seaports; transport nodes; significant economic, cultural, administrative and political centres; and major frontier towns of the European Union). The gateway towns are the sites for establishing contact with areas outside the Union, other continents or even systems representing other economic, political and cultural systems.

In addition, (small) towns may be the sites for and sources of the revival of some peripheral or declining regions. Towns will be able to fulfil these functions if they attract capital, if their economic structure is many-sided, and if they offer services and infrastructure of the appropriate standards. Furthermore, the Union has the objective of renewing urban structures and the elements which comprise them. Improving the urban quality of living has also become a major objective; thus, land use in towns, infrastructure developments, the accessibility of the settlements in the agglomeration, the management of social problems, and the renewal of urban eco-systems may take new directions. According to the Union, the objectives will also include developing new partnerships between towns and rural areas and improving the links which already exist. In the system of relations between a town and its area the following factors will be of decisive importance: environment-oriented development policy, improving the standard of services in small towns, encouraging internal development, and strengthening the regional operation of the system of institutions. In this way, these development objectives may promote the economic diversification of rural areas. This is particularly necessary in the agrarian regions, where the aim of development is to preserve and develop local products, and develop their sales systems under the impact of increased competition. In addition, it is also necessary to develop other related or secondary activities (forestry, tourism, etc.) and to

make the opportunities available to the rural areas more varied in collaboration with the towns [40].

The author is of the opinion that – by relying on existing resources, by utilizing systems of relations, and by taking advantage of developing, or renewed, infrastructures – these towns may be able to play the role of dynamic poles and participate in the competition between towns successfully. Miskole may face similar challenges to Debrecen, and human resources may represent a strength not only of Debrecen, but of Miskole as well. This requires the intensification of the initiative and innovation sensitivity of the town. In addition, there is a need to develop and strengthen a regional system of relations. A key issue may be the success of education in strengthening the relations between the University of Miskole and the town, and directing these relations towards realistic targets, such as increasing job opportunities. Links between enterprises working in the town, county and region, and the University should also be strengthened. We should ensure that these relations have a practical function, and joint research and development projects could be launched. An example which could be followed is the cooperation between the Bosch groups and the University of Miskole.

REFERENCES

- [1] BELUSZKY, P. 1999: Settlement-geography of Hungary. (Published in Hungarian: Magyarország településföldrajza.) Dialóg-Campus Kiadó, Budapest-Pécs. 584 p.
- [2] BERÉNYI, I. DÖVÉNYI, Z. 1996: Historiche und aktuelle Entwicklungen des ungarischen Siedlungsnetzes. In: Mayr A. – Grimm F. D. (Hrsg): Stadte und Stadtesysteme in Mittel- und Südosteuropa. Beitrange zur Regionalen Geographie, 39. Leipzig. pp. 104-171.
- [3] RECHNITZER, J. 2002: The city network in transition, directions of 90's (Published in Hungarian: A városhálózat az átmenetben, a kilencvenes évek változási irányai.) Tér és Társadalom 3. sz. pp. 165-183.
- [4] KISS, E. É. 2001: Industry of Regional Centre in Millenary (Published in Hungarian: A kiemelt regionális centrumok ipara az ezredfordulón.) Földrajzi Értesítő 1-4. sz. pp. 219-236.
- [5] LENGYEL, I. 1999: Measuring of Immeasurable? Analysis of Towns of Country Rank with Multidimensional Scaling. (Published in Hungarian: Mérni a mérhetetlent? A megyei jogú városok vizsgálata többdimenziós skálázással.) Tér és Társadalom 1-2. sz. pp. 53-73.
- [6] SÜLI-ZAKAR, I. 1996: The Region: Geographical Integration. (Published in Hungarian: A régió: földrajzi integráció.) Tér és Társadalom, MTA FKI, Budapest
- [7] GYŐRFFY, I. 2009: Possible measuring of the availability potential. Social and Economical Processes in the period. (Published in Hungarian: Az elérhetőség modellezési lehetőségei. Jelenkori társadalmi és gazdasági folyamatok.) IV. évf., 3-4. szám, pp. 231-236. Szeged
- [8] LENGYEL, I. RECHNITZER, J. 2000: The Competitiveness of Towns. (Published in Hungarian: A városok versenyképességéről. In: Horváth Gy. – Rechnitzer J. (szerk.): Magyarország területi szerkezete és folyamatai az ezredfordulón.) MTA RKK, Pécs. pp. 130-152.

- [9] CHESHIRE, P. C. MAGRINI, S. 2002: Competitiveness in European cities what can we learn? Urban Governance, Economic Competitiveness and Social Cohesion: What can Britain learn from Europe? Oxford. pp. 1-20.
- [10] Török Á. 1999: The Competition for Competitiveness. (Published in Hungarian: Verseny a versenyképességért.) MH Integrációs Stratégiai Munkacsoport, Budapest. 300 p.
- [11] LEVER, W. F. 1999: Competitive cities in Europe. Urban Studies. 36. 1029-1044. pp.
- [12] OECD 1997: Regional Competitiveness and Skills. Paris.
- [13] OECD 1999: Globalisation of Industrial R&D. Policy Issues. Paris
- [14] ENYEDI, G. 1996: Regional Processes in Hungary in the transition period (Published in Hungarian: Regionális folyamatok Magyarországon az átmenet időszakában.) Hilscher Rezső Szociálpolitikai Egyesület, Budapest. 138 p.
- [15] ENYEDI, G. 1998: The Succesful City. (Published in Hungarian: A sikeres város.) Ezredforduló 3. sz. pp. 3-7.
- [16] ERDŐSI, F. 2003: The Space Ruled by Globalisation and Metropolises (Published in Hungarian: Globalizáció és a világvárosok által uralt tér I.) Tér és Társadalom 3. sz. pp. 1-27.
- [17] ENYEDI, G. 1999: The integration challenges of the Hungarian settlement development. (Published in Hungarian: A magyar településfejlődés integrációs kihívásai az ezredfordulón.) In.: Csontos J. – Lukovich T. (szerk): Urbanisztika 2000. Akadémiai Kiadó, Budapest. pp.117-126.
- [18] OTK 2005: The National Spatial Development Concept. (Published in Hungarian: Országos Területfejlesztési Koncepció.) Országos Területfejlesztési Hivatal. Budapest 127 p.
- [19] NAGY, Z. –GYŐRFFY, I. 2009: Winner and loser positions Changing development process of Hungary and Slovakia in the past decade. Vesztnyik 38/2009 Harkovi Nemzeti Műszaki Egyetem, Harkov, pp. 28-35.
- [20] KUTTOR, D. 2009: Modelling of the spatial structure of the V4 during the EU accession (Published in Hungarian: A Visegrádi Négyek térszerkezetének modellezése az Európai Uniós csatlakozás idején.) in: Széchenyi István Egyetem Évkönyv, SZIE, Győr, 541p.
- [21] RADICS, Z. 2006: The change of external economic contacts in Central Europe between 1989 and 2003 in the respect of studying the CEFTA. – In: Regional Development in the Romanian-Hungarian cross-border space – from national to European perspective (eds. Süli-Zakar, I. - Horga, I.), Kossuth Egyetemi Kiadó, Debrecen. pp. 137-142
- [22] KOCZISZKY, G. 2004: The possibilities of creating health clusters in North Hungary (Published in Hungarian: Egészségügyi klaszter(ek) kialakításának lehetőségei az Észak-magyarországi régióban.) Észak-magyarországi Stratégiai Füzetek, 2. sz. pp. 3-31.
- [23] LŐCSEI, H. 2004: Development path of rural urban agglomeration (Published in Hungarian: A vidéki városi agglomerációk fejlődési pályája.) In.: Térségi és települési növekedési pályák Magyarországon. ELTE Regionális Tudományi Tanulmányok, Budapest. pp. 75-91.

- [24] BELUSZKY, P. GYŐRI, R. 2004: Rise and fall...Changes in Hierarchical Position of the Hungarian Cities in the XX. Century (Published in Hungarian: Fel is út, le is út... Városaink településhierarchiában elfoglalt pozícióinak változásai a 20. században.) Tér és Társadalom 1. sz. pp. 1-41.
- [25] EHRLICH, É. (2006): Development of the Hungarian infrastructure (Published in Hungarian: Az infrastruktúra fejlettsége Magyarországon.) In.: Horváth Gy. (szerk.) 2006: Régiók és települések versenyképessége. MTA RKK, Pécs. pp. 196-235.
- [26] KOMÁDI M. MOLNÁR E. PÉNZES J. 2005: The importance of Debrecen in the North Great Plain Region and the local development policy priorities (Published in Hungarian: Debrecen súlya az Észak-Alföldi Régióban és a helyi fejlesztési politika prioritásai. In: "Várostérségek-versenyképesség. Társadalmi kohézió Magyarországon és az európai integráció" MTA, Budapest. CD-kiadvány
- [27] BUJDOSÓ Z. 2005: Constributions to the growth of the Hungarian city stock (Published in Hungarian: Adalékok a hazai városállomány gyarapodásához.) In (szerk: Süli-Zakar I.): Tájak-Régiók-Települések, Debrecen, Didakt kiadó, 2005. pp.185.-190.
- [28] CSIZMADIA, Z. RECHNITZER, J. 2005: The innovation potential of the network of Hungarian towns (Published in Hungarian: A magyar városhálózat innovációs potenciálja.) In: Grosz A. – Rechnitzer J. (szerk) 2005: Régiók és nagyvárosok innovációs potenciálja Magyarországon. MTA RKK, Pécs-Győr. pp. 147-181.
- [29] NÁRAI, M. 2005: The innovation potential of the county capital cities (Published in Hungarian: A megyei jogú városok innovációs potenciálja. In: Grosz A. – Rechnitzer J. (szerk) 2005: Régiók és nagyvárosok innovációs potenciálja Magyarországon. MTA RKK, Pécs-Győr. pp. 181-221.
- [30] RECHNITZER, J. GROSZ, A. CSIZMADIA, Z. 2003: The Hungarian Urban Network's Structure Based on the Information and Communication Infrastructure at the Turn of the Millennium (Published in Hungarian: A magyar városhálózat tagozódása az infokommunikációs infrastruktúra alapján az ezredfordulón. Tér és Társadalom 3. sz. pp. 145-163.
- [31] DŐRY, T. PONÁCZ, G. M. 2003: The Role and Weight of Information and Communication Sectors in the Hungarian City Network (Published in Hungarian: Az infokommunikációs ágazatok szerepe és súlya a magyar városhálózatban.) Tér és Társadalom 3. sz. pp. 165-181.
- [32] GÁL, Z. 2000: Challenges of regionalism: development and spatial structure of the Hungarian banking system (Published in Hungarian: A regionalizmus kihívásai: a magyarországi bankrendszer fejlődése és területi struktúrája.) In.: Magyarország területi szerkezete és folyamatai az ezredfordulón. MTA RKK, Pécs. pp. 374-397.
- [33] RECHNITZER, J. SMAHÓ, M. 2005: The elements of the regional innovation potential – the higher education. (Published in Hungarian: A regionális innovációs potenciál elemei - A felsőoktatás. In.: Grosz A. – Rechnitzer J. (szerk): Régiók és nagyvárosok innovációs potenciálja Magyarországon. MTA RKK, Pécs-Győr. pp.47-52.
- [34] KOZMA, G. 2004: The Brochures of the Local Governments in Hungary for Potential Investors. (Published in Hungarian: A magyarországi önkormányzatoknak a gazdasági élet szereplői körében felhasznált kommunikációs kiadványai.) Tér és Társadalom 4. sz. pp. 69-94.

- [35] BERNEK, Á. 2000: "The New Geography" of the Global World. (Published in Hungarian: A globális világ "új gazdaságföldrajza".) Tér és Társadalom 4. sz. pp. 87-107.
- [36] DICKEN, P. 1992: Global Shift. The Internationalization of Economic Activity. Paul Chapman Publishing Ltd, London.
- [37] ENYEDI, G. 2003: The urban world urban development in the globalization. (Published in Hungarian: Városi világ – városfejlődés a globalizáció korában.) Pécsi Tudományegyetem, Pécs 25 p.
- [38] ESPON 2005: Potentials for polycentric development in Europe. ESPON Luxemburg 1000 p.
- [39] ESDP 1999: European Spatial Development Perspective. Brussels. European Commission.(Adopted by the European Council of EU Ministers Responsible for Spatial Planning, in Potsdam, 10-11/05/99.
- [40] NAGY, Z. 2007: Changes in the position of the town of Miskolc in the network of Hungarian towns from the late 19th century to the present day (Published in Hungarian: Miskolc város pozícióinak változásai a magyar városhálózatban a 19. század végétől napjainkig.) Studia Geographica 19. Debreceni Egyetem, 244 p.

THE IMPACT OF THE ECONOMIC CRISIS ON AUDITING

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SUMMARY

The global economic crisis – due to its unusual nature – has meant that auditors have to be very aware of the prime importance of judging different risks when assessing companies. This is especially true with regards to the 'going concern concept.'

The judgement of these risks is a more complicated problem – and a serious challenge for the auditor – during a period of crisis.

However, professional terms such as audit standards, the principles of quality assurance, and methodological recommendations are available. Therefore, any problems can be solved though not easily.

1. INTRODUCTION

The economic crisis started in the fall of 2008 in the United States and spread all over the world. The analysts and scientific researchers do not agree over the question of to what extent, and for what period of time, the processes and the common origin of economic crisis can and must be reckoned with. The current global economic crisis has been considered as the most important since the great economic global crisis of 1929-33 (the Great Depression). The Great Depression had developed from a preceding global financial crisis. There are several approaches, including V, W, L, etc. configuration, and pro and contra arguments. Several opinions have been voiced - and also published - in the professional literature. Such opinions include statements like "slowly we are getting over it", "it could still last for years" and "What does not kill you, makes you stronger". This last phrase could easily be adapted for the players in the economy. The news is all about narrowing markets, decreasing demand and bankrupt enterprises. However - even though they are not numerous - there are enterprises which are actually capable of growing in response to the impact of crisis. Therefore, there are several unanswered questions. What kind of company strategy was applied by the companies which have survived the crisis globally, regionally and nationally? What are the most frequent problems that the companies have to face and how could they avoid these in the future? What kind of economic environment would be preferred by the companies and what is the reality available? What would be the structure of an appropriate tax system? What kind of typical errors have been committed and are being committed by companies? What kind of conclusion can be drawn from the crisis? Ernst & Young, the international auditing company, conducted a worldwide survey in 2009. This survey was based on 45 thousand personal interviews and it included the questions: "what kind of impact has the crisis had on companies?" and "what type of survival techniques are being employed by companies?"¹ The study focuses on those business opportunities and solutions which are suitable for breaking out of the crisis and which have been applied by successful companies.

One of the important characteristics of the crisis is the growing tendency of insolvency. This paper does not claim to fully cover the concept of bankruptcy. However, when examining the development of bankruptcy as well as the insolvency and liquidation procedures, it can be stated that in the first nine months of 2009 – let us consider this year as the first "business" year of crisis – in comparison to the same period in 2008, the corresponding insolvency index of companies grew by 36 percent. According to the most recent analysis by Coface Hungary, in the first nine months of 2009 the number of procedures against companies in connection with insolvency in Hungary also grew by 36 percent. Coface expects the peak in the number of such procedures to be reached by the end of 2009 or perhaps at the beginning of 2010.

real of insolveney in the first line months of 2000 2009					
	Bankruptcy	Liquidation	Full settlement	Total	
2009. (JanSept.)	58	10826	9735	20619	
2008. (JanSept.)	12	8096	7090	15198	
2007. (JanSept.)	17	7250	6473	13740	
2006. (JanSept.)	14	6996	4024	11034	

Table 1				
Run of insolvency in the first nine months of 2006-2009	2			

Source: Analysis of Coface Hungary

The number of insolvency procedures has increased by 34%, whereas the number of liquidation procedures increased by 37%. In the first nine months of 2009, the number of procedures is substantially higher in comparison to the preceding years. However, this proportion is lower in comparison to that of other countries. In addition, the number of successful bankruptcy procedures still lags behind the number of insolvency and liquidation procedures. When the analysis is made in terms of economic sector, the most affected areas are the construction industry, retail and wholesale trade, and enterprises associated with tourism and real estate management.

¹ www.fn.hu/konferenciak/2010.06.01 Havas István Ernst & Young

² Analysis of Coface Hungary, www.privátbankár.hu 2009 10. 22.

Sector	Number of processes	Rate of insolvency (%)
Building industry	4 068	19.73
Retail trade	2 851	13.83
Wholesale trade	2 247	10.90
Tourism and hospitality	1 280	6.21
Estate management	1 242	6.02
Motor vehicle industry	924	4.48
Electronics and computer	714	3.46
technology		
Transportation	612	2.97
Press and publishing industry	569	2.76
Steel and metal industry	402	1.95
Agriculture	376	1.82
:	:	:
National average	20 619	100.00

 Table 2

 Industries affected by insolvency procedures in the first 9 months of 2009³

Source: Analysis of Coface Hungary

When we compare the number of companies engaged in certain branches of industry to the number of procedures, it turns out that the building industry (19.73% of procedures, 13.54% of all registered companies) and the textile industry (1.11% of procedures, 0.75% of all registered companies) perform the worst. Coface registered characteristic differences in the steel and metal industry, in transportation and in commercial enterprises. In contrast to this, the real estate management sector (6.02% of procedures, 13.92% of all registered companies) performed the best. The analysis evaluates further data - regarding the rate of insolvency – and it demonstrates that essential changes have not occurred in the ranking order of risk for years. Service-supplier companies are in the best position, followed by the construction industry as well as companies carrying out activities in the textile industry. However, several sectors can be found which are above the national average. These sectors include transport, the retail trade, the wood and furniture industry, the paper and packaging industry, companies engaged in printing and publishing activities, the construction industry, the food industry and wholesale trade enterprises. In addition, the car industry has also risen above the national average. It is worth reflecting on the fact (and this applies to the crisis in general) that out of the sectors examined there is not a single area which could have reduced its rate of insolvency.

³ Analysis of Coface Hungary, www.privátbankár.hu 2009 10. 22.

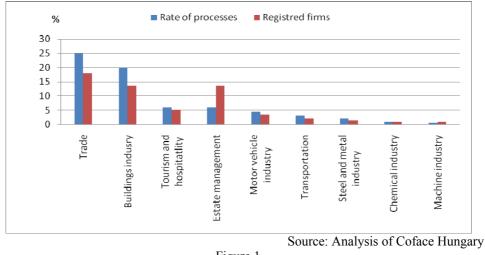


Figure 1 Rate of process and rate of registed firms in the first nine months of 2009⁴

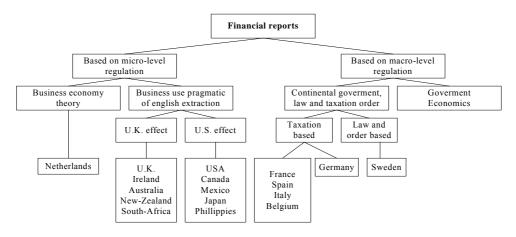
The crisis obviously – also on a national and international level – does not spare any economic area. Auditing is an institution that comprehensively encompasses the economy and substantially contributes to the regulatory aspect of its functioning. Auditing has also been subjected to the crisis: both direct and indirect effects have made themselves felt from several angles. Firstly, one of the important areas of the work of auditors has faced many challenges in the crisis. Secondly, work performed in the midst of crisis requires, in its methodology, new or reformed professional solutions, as well as a different attitude from the auditors. Finally – from the auditors' point of view – the market conditions have changed unfavourably. This is because the service sectors – referred to above – are suffering in the crisis for understandable reasons. Let us examine these questions from the perspective of the target system of auditing work.

2. SOME ACCOUNTING ISSUES THAT HAVE COME INTO FOCUS DURING THE CRISIS

Globalization and the need for a common accounting language are now goals of the accounting profession. Substantial steps have been taken in order to achieve this target. Nowadays consolidated reports, which comply with international accounting standards, are being adopted by stock exchanges all over the world. The number of countries using and following the IFRS system has been growing. Moreover, in connection with this, some countries have been aligning their national standards to international ones at an accelerating rate. In addition to these major advances, difficulties have emerged as well. In several cases, different rules deal with the obligation to prepare consolidated and individual

⁴ Analysis of Coface Hungary, www.privátbankár.hu 2009 10.. 22.

financial reports for domestic listed companies, foreign listed companies and non-listed companies. The dual reporting requirement is still typical. Authorizing the application of IFRS for the individual financial reports of subsidiaries depends on the countries, as does requiring individual financial reports based on national accounting principles. From the investors' point of view – although there is a tendency towards the greater harmonisation of accounting systems – being faced with the various problems related to evaluation which arise from the comparison of reports prepared according to different principles is likely to remain typical.



Source: C.W. Nobles. "International Classification of Accounting Systems" Figure 2

Classification of the international accounting systems by Nobles⁵

In this period of crisis, the same problems arise due to the compilation of reports with different perspectives. Dealing with these reports – despite the fact that different features appear in micro and macro-level regulation – requires similar tools and methods. Let us review what new phenomena have emerged from the crisis and what specific actions have been taken in response to them.

⁵ C.W.Nobles. "International Classification of Accounting System". In: Czinkota M.R: et.al. (2003) 455.0. [1]

2.1. Reliability issues of accounting information

2.1.1. Reinterpretation of the issues regulated by accounting policies

- The judgement of the rate of significance

In their accounting policies, companies have to pre-register which accounting data are regarded as significant in the course of daily activities. This rule also applies during the compilation of the financial report. These data should be listed separately from company's assets. They can be stated either as an absolute amount; or as a ratio in relation to the historical cost, to the aggregate amount of the balance sheet, or to the shareholders' equity. Each case must be examined separately; the occurrence of the same qualifications in different cases cannot be allowed. It is acceptable for the enterprises to determine a lower rate of significant error in their accounting policies than that stipulated by the law. However, these rates cannot possibly be seen as appropriate benchmarks. During the crisis, a more realistic definition of the limit should be aimed for. The internal limit – or its rate – can be raised to a high level, on the basis of which no action would be required, even though such action would be justified in order to obtain information.

- Adjudication of the level of durability

In general, approach duration means those trend effects which can be identified as lasting for more than one year. However, since the beginning of the crisis (September-October 2009), durability could not be assessed for the 2009 year-end financial reports. This was due to certain factors, including, for example, that fact that the market value of some assets had fallen to well below the book-value. However, there were no legal conditions attached to the recording of unplanned depreciation or impairment loss. When adjudicating the durability of the prices of stocks, not only the prices applicable for the current year and the previous ones should be taken into account, but also the prices stated in contracts which are likely to make up the balance sheet of the next business year.

The company's long-term market awarding, its tendencies, its stock and out of stock exchange rate of (accumulated) dividends-reduced investments, and its long-term trends should be taken into account when evaluating the equity share investments demonstrated among its financial assets or current assets. Due to the crisis, this is an important issue. Decisions about durability present an enduring problem when the tendency has not been recorded for one year due to a change in the balance sheet date.

With regards to receivables which are outstanding at the end of the business year and have not been settled before the balance sheet date, the durability has to be judged on the basis of the customer's position. Based on the information gathered up to the balance sheet date, we should be able to decide whether the partner has only a temporary liquidity disturbance, whether the partner is threatened by bankruptcy or winding-up proceedings, or whether these processes are already under way. As a loss in value should be recorded, the difference between the book value of the receivables and the recoverable amount should be apparent regardless of whether the receivable has been in existence for more than one year.

2.1.2. Recording of inappropriate accounting procedures

- Own work capitalized

In order to achieve the desired result for the current period, companies struggling with the crisis may aim to reduce subsequent costs. A result of this could be that the capitalization of assets may occur at a value which does not reflect reality or is not reasonable. It has already become extremely clear – for example, in the case of Enron – what such accounting practices can lead to.

- Value correction

If over the past few years, a company has followed the practice of correcting fixed assets to their market value, and has subsequently shown this value correction and valuation reserve in its books, and has continued to follow this procedure during the crisis; the honesty and good practice of this company should be praised, especially considering the effects of the crisis.

- Accrual of exchange loss

The crisis has resulted in the unrealised exchange loss of foreign currency liabilities in relation to investments and intangible assets. During the course of the evaluation, when such phenomena become apparent, they should be highlighted. According to the regulations, the rules can be applied only in the case of losses which are not covered by the funds shown in the foreign exchange account. Accordingly, it can be established during the course of the investigation whether the liability – in foreign currency – is covered by the funds or not.

The delimitation of unrealized exchange loss is followed by the creation of other statutory provisions. This is a potential source of error. Other provisions should be shown at the end of the business year at the ratio of the deferred cumulative amount of the borrowing period and the duration of loan. If the provisions created before the end of the previous business year are less or more than this, provision should be increased or decreased by the difference in the current year.

- Other possible – and inappropriate – accounting procedures could include the following: (These are just examples and are not intended to be an entire list)

The activating of the costs of restructuring, research and development, or maintenance which emerged during the business year; changes in depreciation rates; the suspension of planned depreciation allowances; omitting to record justified extraordinary write-offs or losses in value; characterising works in progress as being closer to completion than they are in reality; the separation of information from real results in the case of common affairs of joint ventures; omitting to record bad debts; the incorrect creation of provision; and unwarranted accruals.

2.2. Accounting solutions to the problems arising due to the crisis⁶

In response to the offers of the G20, The International Accounting Standards Board (IASB) – having cooperated with the American Standards Board – has already managed to take some steps – in several areas – towards an effective handling of the effects of the crisis. In compliance with the offer of the Financial Stability Forum, the areas to be considered in connection with financial crisis – as determined by the IASB – are the following:

- The representation of off-balance sheet items and connected publications in the financial reports. The IASB suggests the introduction of a unified definition of "controlling" and it plans to introduce stricter publishing obligations both in consolidated and non-consolidated reports.
- Valuation of complex and non-liquid financial instruments, especially during the financial crisis: the IASB's aim is to create consistency between the explanations of the quickly published interpretations of IAS 39 (which modifies how financial instruments can be categorised) and IFRIC 9 (which is the reassessment of embedded derivate products). Moreover, it is also an aim to strengthen the obligation to publish the details of investments in debt instruments and to increase these instruments' comparability irrespective of their classification.
- The IASB is dealing with the development of standards concerning the impairment loss of invested assets. Its target is to strengthen the convergence with the US-GAAP in respect of the introduction and settlement of impairment loss reversal. In this context, with regards to credits, three impairment loss models arise:
 - 1. Impairment loss generated by a rising deficit, which happens only in connection with realized losses.
 - 2. Impairment loss generated by foreseeable loss, which unlike the previous model bases its calculations on probable items as well.
 - 3. Cyclical foreseeable impairment loss, which also contains extra reserve and is declassified during crisis.
- The modification of the IAS 39 "Financial Instruments: settlement and valuation" and the IFRS 7 "Financial Instruments: publishing" standards, whose aim is to ensure "equal chances" with the US-GAAP regarding the ease with which financial instruments can be categorised.
- In accordance with the modified requirements, IFRS 7 was altered. Therefore, more complementary information needs to be published, i.e.: the amount moved from and into several categories; and the registration and the real value of the financial assets, which were moved between categories in the current year or during previous periods of time.
- Public limited companies should contain a uniform definition of "controlling" that can be used in the case of "general" subsidiaries and ad hoc units. According to the new

⁶ Tardos, 2009/6 (262-264 o.)

Zboray,2009/7-8 (329-331 o.)

www.mazars.hu/newsroom/pdf/mazars_ifrs_2008_12_hu.pdf 6,

www.deloitte.com/dtt/cda/doc/content/hu(hu)_audit_IFRSspecialedition30102008(1).pdf,

Krízis és túlélés: Beszámoló és képgaléria: http://www.piacesprofit.hu/?r=22299

definition, an organization – which makes a report – controls another unit if the report maker is able to lead that other unit in such a way that a return arises. This return can then be shown in the report. On the other hand, the act of control demonstrates the abilities of those strategic and financial decision makers connected with the activity. The following elements are needed in order for control to be achieved:

1. The ability to control the other unit's activity

The affairs of public limited companies often show a majority vote does not always result in the effective leadership of the organization concerned. In addition, organisations can sometimes control the work of others without having a majority vote.

Control does not have to be absolute and some minority owners can have rights without having a negative effect on the controlling rights of the majority owners. In spite of the current standards, purchasing options and other conditions which may seem to have an immediate effect on votes do not have an influence on determining the scale of control.

2. The existence of returns for the group and the ways in which returns can be influenced.

Returns deriving from the controlled unit can appear in different forms in the consolidating unit. In addition, the unit has to possess abilities in order to influence this. Among the possible returns, the following can be mentioned: dividends or any other ways of distributing income between shareholders, containing the change in the value of the subsidiary within the consolidating unit, returns deriving from service, return and risk exposure connected with credit given to the subsidiary, or the financing possibilities given to others.

3. THE CRISIS AND AUDITING

3.1. Changes in the auditing profession

Nowadays in Hungary – though a specific survey has not been prepared with regards to this issue, it is likely that one will be in the future – the owners of companies hardly ever request an auditor except in those situations when the law obliges them to do so. The activities of auditors are affected by the regulation which obliges companies to make their requests for an auditor on the basis of the scale of the business and the company type.

This regulation – which directly influences the work of most auditors and restricts the market – originates from the guidelines of the Accountancy Law. The regulation stipulates that audits are compulsory for companies with a net income of 100 million HUF or above. There is also a limit regarding the number of employees – there must be an average of 50 employees every two years – and the company type is also significant. However, the most significant factor for determining whether an audit is necessary is net income. Up to 2008, the lower limit was 50 million HUF. When this limit was raised, it certainly caused business losses for auditors. The limit is stipulated in the form of an absolute sum. Because the crisis has meant decreasing incomes for many companies, many bodies that were previously obligated to audit can now avoid this obligation. As a result, there is a further loss of clients for auditors.

3.2. The methodology of auditing in connection with the crisis

If – during the period of this crisis – we analyse the audit from the viewpoint of methodology, we have to consider that the identification of the emergence of 'the going concern concept' in the audited company means an enhanced risk factor. The occurent contingencies and the specific dangers – in relation to their relevance – have to be emphasised in the auditor's report: either via a warning remark or by labelling the appropriate clause. In such a situation, the analysis of the financial status and the risk classification of the position of a client and its partners are necessary. What are the issues raised by the crisis? Many authors, such as Gion⁷ and Lukács⁸, chose the pragmatic approach. By using this approach, they aim to demonstrate the dangers – and the practices that might result in those dangers – which can become apparent during the audit of a company operating in a crisis situation. According to Gion, it is necessary to use the Aspect-System (which is outlined below):

1. Does the management of the company apply the necessary risk-estimation procedures? Such procedures can help to measure the effects of the changed market situation on the company's operation.

2. Safety of financing: can it be ensured that the sources needed for the company's operation and development – of course, here we are talking mostly about financial credits - will, henceforth, be available? We have to know in advance whether the company will be able to fulfil its obligations, such as the terms of its credits. We also need to be aware of the relationship between the expiry dates of credits and other important factors, especially the company's incomes and its recovery plan.

3. With regards to the company's securities, the most urgent and important task is to measure the current value of its instruments. If the company's market value is located permanently and significantly below its book value, the recording of a loss of value in the books should be considered.

4. When judging the success of mergers, it is important to be aware of the extent to which the purchased organisation possesses the asset of 'goodwill.' The concept of 'goodwill' includes the company's market position, its good name and its system of business relationships. These assets should be demonstrable not just in the previous business years, but also in the current position of the entity.

5. The firms have to review their degree of independence from their suppliers. They have to estimate how the changed economic environment influences the solvency of their suppliers. It is not enough that the entity feels stable its own position. If its partners do not have a similar degree of stability, the enterprise has to take into consideration the dangers which could result from this.

6. The entity also has to examine the positions of its customers. With a thorough analysis of its customers, the problems resulting from factors such as difficulties in paying and the risk of interconnected obligations could be recognized in time.

7. In the case of manufacturing enterprises, an examination of their products' merchantability and the future of their stocks (produced by right of order) are important

⁷ Védekezés a válság hatásai ellen, www.vallalkozoinegyed.hu/20081216/

⁸ A recesszió és a könyvvizsgálat, Számvitel-Adó-Könyvvizsgálat 2009/09 (367-371 o.)

undertakings. A significant factor is whether the raw materials used in production can be used to make another product. If this is the case, the risk can be sustained at a low-level. Otherwise, it is necessary to record a loss of value in the books.

8. The implementation of accounting policies can be allowed only in justified cases. An example of such a case could be when a drastic change occurs in a firm's productivity.

9. We have to keep in mind that if an enterprise buys assets from a subsidiary, there may be conditions in the contract: for example, a guaranteed growth in net income or a stipulated number of employees. In addition, such terms are, subsequently, strictly monitored. This can restrict the decision-making capabilities of the entity.

10. Every enterprise has to take into consideration the fact that if it has to discharge its employees, the severance pay will cause additional expenses. Therefore, the enterprise must make provisions for this.

According to Lukács, we have to pay special attention:

- 1. to the risk of acquiring false information, which can extend the period of crisis. This is because – in such a case – the management has the chance to influence the accounting process with actions such as registering pro-forma invoices, applying favourable transfer-prices, recording losses in value, etc.
- 2. to the judgement of 'going concern concept.' Lukács suggests that the examination should have three stages: first, identifying the risks which threaten the going concern; second, gathering evidence which supports the conclusions of the first phase of the process; and third, conducting a further survey, if necessary, in order to meet the obligation of compiling a report.
- 3. to the investigation of the matters of supplementary enclosure and business reports. These documents have to be compiled using appropriate data and in a suitably detailed form. They have to contain analysis with regards to the past and to future.

In my opinion, these essential and methodological assumptions are appropriate approaches to the problems generated by the crisis. Every auditor has the opportunity to decide – on the basis of his or her professional opinion – what solutions they will choose in relation to the current professional methods available.

REFERENCES

- [1] www.fn.hu/konferenciak/2010.06.01 Havas István Ernst & Young
- [2] Csődhullám Magyarországon: vihar előtti orkán Coface Hungary elemzése (Bankruptcies in Hungary: hurricane before a storm), www.privátbankár.hu 2009 10. 22.
- [3] C.W. Nobles. "International Classification of Accounting Systems". In: Czinkota, M R., Ronakainen, I, A. and Moffett, M. H. (2005) International Business. Thomson. (2003) 455 o.
- [4] Tardos Ágnes: Pénzügyi válság, valós értékelés, hitelek értékvesztése (Financial crisis, fair valuation, loss in value of credits) Számvitel-Adó-Könyvvizsgálat 2009/6 (262-264 o.)

- [5] Zboray Ilona: Az IASB válasza a globális pénzügyi válságra Számvitel-Adó-Könyvvizsgálat 2009/7-8 (Answer of the IASB to the global financial crisis) (329-331 o.)
- [6] http://www.mazars.hu/newsroom/pdf/mazars_ifrs_2008_12_hu.pdf 6
- [7] IFRS Hírlevél: http://www.deloitte.com/dtt/cda/doc/content/hu(hu) _audit_IFRSspecialedition30102008(1).pdf
- [8] Krízis és túlélés: Beszámoló és képgaléria: (Crisis and survival: report and snapshots) http://www.piacesprofit.hu/?r=22299
- [9] Gion Gábor: Védekezés a válság hatásai ellen (Guarding against impacts of the crisis) www.vallalkozoinegyed.hu/20081216/
- [10] Lukács János: A recesszió és a könyvvizsgálat Számvitel-Adó-Könyvvizsgálat (Depression and auditing) 2009/9 (367-3710.)

CONCEPT OF ENVIRONMENTALLY-CONSCIOUS STRATEGIC MANAGEMENT

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SUMMARY

The aim of this paper is to introduce a strategic management concept that is focused on environmental consciousness. First, starting from the concept of environmental consciousness and its interpretation at a corporate level, it determines the external and internal factors of companies' strategic positioning. In the next step, it summarizes the possibilities of formulating strategic alternatives based on strategic behaviour and strategic orientation. Then, it describes how the individual strategic alternatives can be achieved in different contexts. Finally, a case study presents the "green" factors of positioning which can be found in companies. The case study also focuses on which environmentallyconscious strategy is characteristic of the company, or rather which areas should be made "greener" in order to create an environment-oriented corporate strategy.

1. INTRODUCTION

In addition to the considerations that have existed for centuries, enterprises in the 21st century have to face new trends of ever growing significance. Sustainability, ecoconsciousness and environmental protection have become central questions for enterprises nowadays. Environmental protection tasks fulfilled by enterprises can partly be connected to the elaboration of company strategies as well as to daily operations. From these two groups of activities, only the latter one has been perceptible so far, as it has been made tangible to company executives by several regulations. However, environmental protection as a factor shaping company strategy generally has not appeared. Therefore, it is important to emphasize the role of environmental protection activities in the elaboration of company strategies because without doing so, environmental protection tasks and organizations related to environmental protection within the company may seem to be unnecessary, bothersome or even unproductive. Although environmental-consciousness and an environmentally-conscious mentality have an important presence in a number of companies, these companies cannot state that their operation is based on an eco-conscious business strategy. This is because of deficiencies in the knowledge of the related strategic principles and methods.

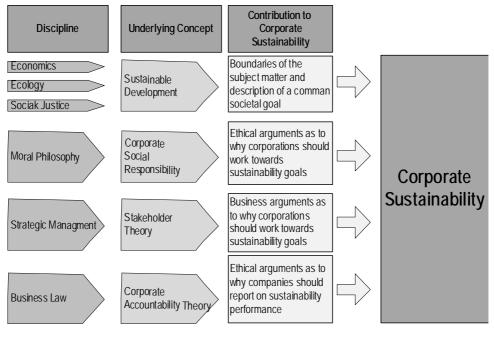
2. PRINCIPAL FOUNDATIONS OF ECO-CONSCIOUSNESS AND CORPORATE SUSTAINABILITY

According to Wilson [33] "corporate sustainability" is often used in conjunction with, and in some cases as a synonym for, other terms such as "sustainable development" and "corporate social responsibility." Managers see this evolving concept as an alternative to the traditional growth and profit-maximization model.

Corporate sustainability can be viewed as a new and evolving corporate management paradigm. Although it acknowledges the need for profitability, corporate sustainability differs from the traditional growth and profit-maximization model. It requires the company to pursue societal goals, specifically those relating to sustainable development, environmental protection, social justice and equity, and economic development. The concept of corporate sustainability borrows elements from the following four wellestablished concepts:

- sustainable development
- corporate social responsibility
- stakeholder theory
- corporate accountability theory

The contributions of these four concepts are illustrated in picture 1.



Source: Wilson [33]

Picture 1 The Evolution of Corporate Sustainability

The contribution of *sustainable development* to corporate sustainability is twofold. First, it helps set out the areas that companies should focus on: environmental, social, and economic performance. Second, it provides a common societal goal for corporations, governments, and civil society to work toward: ecological, social, and economic sustainability. However, sustainable development by itself does not provide the necessary

arguments for why companies should care about these issues. The answers to those questions come from corporate social responsibility and stakeholder theory.

Corporate social responsibility deals with the role of business in society. *Its basic premise* is that corporate managers have an ethical obligation to consider and address the needs of society, not just to act solely in the interests of the shareholders or their own self-interest. Corporate social responsibility contributes to corporate sustainability by providing ethical arguments as to why corporate managers should work toward sustainable development. If society in general believes that sustainable development is a worthwhile goal, corporations have an ethical obligation to help society move in that direction.

Stakeholder theory can be seen as a relatively modern concept. It was first popularized by R. Edward Freeman [14] in his 1984 book Strategic Management: A Stakeholder Approach. Freeman defined a stakeholder as "any group or individual who can affect or is affected by the achievement of the organization's objectives." The basic premise of stakeholder theory is that the stronger your relationships are with other external parties, the easier it will be to meet your corporate business objectives; the worse your relationships, the harder it will be. Strong relationships with stakeholders are based on trust, respect, and cooperation. The goal of stakeholder theory is to help corporations strengthen relationships with external groups in order to develop a competitive advantage. Favouring sustainable growth also strengthens this goal as it contributes to corporate sustainability during the daily operations of companies.

The fourth and final concept underlying corporate sustainability is *corporate* accountability. Accountability is the legal or ethical responsibility to provide an account or reckoning of the actions for which one is held responsible. In the corporate world, there are many different accountability relationships, but the relevant one in the present context is the relationship between corporate management and shareholders. This relationship is based on the fiduciary model, which in turn is based on *agency theory* and agency law (Jensen and Meckling [13]; Fama [11]; Fama and Jensen [12]; Arrow [1] and Holmstrom and Tirole [19]). In this relationship, corporate management is the 'agent' and the shareholders the 'principal'. This relationship can be viewed as a contract in which the principal entrusts the agent with capital and the agent is responsible for using that capital in the principal's best interest. The agent is also held accountable by the principal for how that capital is used and the return on the investment. Companies enter into contracts with other stakeholder groups as a matter of everyday business, and these contractual arrangements can serve as the basis for accountability relationships. The contribution of corporate accountability theory to corporate sustainability is that it helps define the nature of the relationship between corporate managers and the rest of society. It also explains why companies should report on their environmental, social and economic performance.

Not all companies currently subscribe to the principles of corporate sustainability, and it is unlikely that all will, at least not voluntarily. However, a significant number of companies have made public commitments to environmental protection, social justice and equity, and economic development.

3. BASIC ELEMENTS OF ECO-CONSCIOUS STRATEGIC MANAGEMENT

Today, the new forms of corporate strategies are composed of *eco-conscious corporate* strategies. These strategies – to borrow a quotation from the study by Buday-Sántha [5] –

emphasize the importance of "the harmonic and balanced development of business activities as well as a sustainable and non-inflationary growth which respects the environment". Furthermore, they stress the importance of considering the interests of the environment in the operations of companies. It is possible to give a more precise definition based on one of the previous works of Kerekes and Kindler [23]. This definition states that eco-conscious strategies put an emphasis on strategic corporate responsibility activities that regard the issue of environmental protection as a potential for growth and company development, and that enforce it in every field of activity. The aim of eco-conscious strategies is to achieve a high level of prevention. This needs to be based on the principle of caution. In order to achieve this aim, the (ecological) requirements mentioned above have to be built into the formation and achievement of the company's other (economic) goals in a way that should not lead to reduced competitiveness and disturbances in business activities. Thus, an eco-conscious strategy can give tangible help to companies in creating synergy between economic and ecological requirements, and in pursuing environmentally-friendly economic activities.

According to Kerekes and Szlávik [22], one of the greatest problems of eco-conscious strategies is that the expected economic returns for companies are not in tune with the costs of environmental protection. *The basic condition of a successful eco-conscious strategy* for companies lies in removing the conflict between social and corporate interests and making corporations interested in social goals. In order to achieve this, a system of advantages and disadvantages has to be created that guides corporate activities in the desired direction.

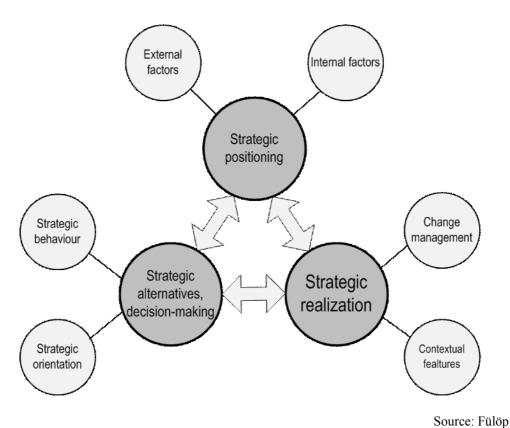
Eco-conscious strategic management allows corporations and businesses to develop holistically and to use those management methods and tools that can help to save the environment and ensure people's welfare. Translated into everyday language, it means that general corporate tasks have to be set out, and that the company and its management need to behave in an eco-conscious way during the performance of these tasks:

- The principles concerning the relationship of the company to the natural environment have to be included in the company's mission statement.
- Environmental effects have to be taken into account.
- International environmental protection norms have to be applied in the company's management system.
- Concrete environmental goals and measurement methods have to be created and these goals have to be assessed on a regular basis.
- The main fields of responsibility have to be set out and suitable systems have to be set up in order to monitor and put into practice decisions made in the related fields.

On the basis of these definitions, it can clearly be seen that the components of environmentally-conscious strategic management are highly dependent on the real-life situation of the company. In spite of this, however, we still think that the basic elements and main activities of environmental strategic management can be determined. These – based on Johnson, Scholes and Whittington's internationally-recognized book [20] – are the following:

- the strategic positioning of the company
- creating environmentally-conscious strategic alternatives
- the implementation of environmentally-conscious strategies

The conceptual model of environmentally-conscious strategic management is illustrated in Figure 2.



Picture 2 The conceptual model of the elements of environmentally-conscious strategic management

The elements and activities illustrated in the model can be easily understood in environmental terms. In addition, they have a mostly positive influence on achieving the desired results. Naturally, the individual elements do not appear separately in the companies but interact simultaneously. However, in order to aid the readers' understanding and to integrate additional factors more easily, these elements are discussed as separate points below.

3. 1. Strategic positioning of the company

On the one hand, determining the company's sustainable and environmentally-conscious strategic position means the recognition of the requirements of environmental protection well in advance. The ever-growing pressure from those who are "affected" requires the continuous analysis of regulations along with the environmental value system (external factors) of the society. On the other hand, in order to have an environmentally conscious strategic position, the company must know, and continuously assess, the environmental effects of its internal resources and its activities (internal factors).

3. 1. 1. External positioning factors

When examining the strategic positioning of the company, we will first and foremost discuss those *external factors* that have a long-term influence on the company's general and competition environment. This means *analyzing environmental trends and threats*, in order to gain a better understanding of the framework of legal and economic regulations, market constraints, and arising opportunities.

Environmental regulations: laws and standards. The shift from *direct regulation* to socalled *self-regulation* has been a characteristic tendency in recent years. The essence of self-regulation is that those companies which cause environmental problems are given the responsibility of solving them. As a consequence of having caused these problems, they probably have a deeper knowledge of them. Naturally, self-regulation can only work with the appropriate institutional support. In addition to knowing the main environmental regulations, perhaps it is even more important for companies choosing environmentallyconscious development to be able to assess the impacts of such a policy. In other words, the consequences of future changes should be predicted in advance.

The aim of international standardization can help to represent environmental interests. However, such interests are not enough in themselves to guarantee that the reduction of the environmental burden will take place after the introduction of environmental protection standards. This is exactly what we tried to imply earlier by emphasizing the situationdependence of environmentally-conscious strategic management. In other words, environmental management has to be tailor-made: it has to be in line with environmental opportunities and threats, the company's internal resources and its own activities. General solutions, on the other hand, carry dangers for companies. However, in practice, serious efforts are made to develop and promote *environmental management systems* that are considered beneficial.

Market constraints: customers and public opinion. From our point of view, securing sustainability and improving environmental performance are not solely the responsibilities of companies and states. They are also the responsibility of every individual citizen, with regards to their everyday lifestyle, consumption and shopping habits. The development and the successful implementation of an effective environmentally-conscious corporate strategy are only possible in a receptive medium. An appropriate institutional background is also needed. In this regard, the social need for a clean environment is important. In other words, this means a *well-informed population with high environmental quality expectations*.

Since the end of the 1980s, environmental aspects have started to play a more significant role in customer decisions. This development has occurred side by side with the improvement of people's environmental sensibilities and consciousness. Those who are really interested in using environmentally-friendly products make their decisions on the basis of carefully considered criteria. In most cases, the targeted customer group needs to be sufficiently environmentally-conscious for an environmentally-friendly product to achieve the necessary sales. *Environmental consciousness* is a compound concept. Based on Rokeach's work [30], five dimensions of the concept are distinguished in the literature: knowledge, attitudes, values, willingness to act and real action. In reality, the biggest problem with the environmental consciousness of consumers is caused by the huge gap between *the willingness to act* and *the real action*.

Arising opportunities: cost reduction, products/services. With the limiting effects of market constraints and environmental regulations, new *opportunities may become available* for environment-oriented companies. Among them, the cost reduction resulting from the introduction of new products and services has a surprising significance. It can happen that the production costs of a green product are lower than its non-environmentally-friendly rivals. In this case, its lower-than- expected sales price might make it more desirable for customers. Supposing that the main features of two products are identical, customers are more willing to try the new product, provided it can be produced and bought more cheaply than the traditional brand. Honest communication is important in this case: namely, explaining that the cost reduction is due to savings on resources, and that, moreover, the new product is more environmentally-friendly. However, this possibility hides the problem that low costs – together with low prices – encourage overconsumption, even if we speak about buying environmentally-friendly products. That is the reason why arising opportunities should continuously be assessed with regard to the future.

3. 1. 2. Internal positioning factors

Companies respond to environmental challenges by relying on their internal resources and their own activities. Therefore, the analysis of internal resources and corporate activities forms an inevitable part of strategic positioning.

3. 1. 2. 1. Internal resources

Companies accumulate various resources in the earlier stages of their development. Among them there are technological and financial resources, resources that are built on human knowledge, and the resources built on organizational culture. Others are based on the perception of the company. However, these resources do not produce value in themselves, but only as part of a complicated system of interconnections. The values – and the quantitative and qualitative parameters of internal resources – can be determined by using *resource analysis. The aim of resource analysis is to identify the devices available for companies aiming to implement their environmentally-conscious strategy, and to reveal the environmental effects of such devices being used.* The starting point of the analyses is the grouping and quantifying of company resources. The resources available for companies are traditionally divided into the following groups (Table 1).

Resources	Main characteristics	Main indicators
Financial resources	 The company's creditworthiness, credit capacity Internal liquidity, income- producing capacity 	 Debt-to-assets ratio, credit rating etc.

Table 1 The alignment of internal resources

		1	
Physical resources	 Size, premises, technological standards Flexibility provided by technology, the availability of raw materials, the limitations of the premises, standard of additional technologies 	 The value of fixed capital Modernity of equipment, the chance of alternative utilization of existing machinery Technological utilization 	
Human resources	 The number, qualifications, experience and flexible skills of employees The learning abilities, flexibility, commitment and loyalty of employees 	 Qualifications, degrees Workplace training Labour costs as compared to those of the competitors The number of industrial disputes, the extent of absenteeism from work, the turnover of staff 	
Technology resources	 The availability of technology needed for production Necessary quality control systems, patents, licences, inventions The organizations of innovation, scientific relationships 	 The number of inventions, the extent of R&D expenses, the rate of R&D employees compared to the total number of employees The rate of new products introduced each year 	
Organization	 Division of labour within the organization Range of competence Coordination mechanism Organizational structure 	 Principle of labour division: functional, objective, regional principle The extent of decision-making centralization and decentralization Coordination devices: technocratic methods, structural, individual-oriented solutions The depth and breadth of the organizational structure 	
Culture	 Beliefs and convictions embedded in the organization Accepted common values The way of thinking used in decision-making Generally accepted behaviour patterns 	 The methods of labour organization The principle of managing people The importance of rules and processes as compared with results 	
Image, recognition	 The standard of customer relations 	The rate of branded productsPrice difference as compared	

Source: Fülöp [16]

The resource audit gives a sort of snapshot of the resources available for companies. However, apart from the existence of resources and their value and income- producing capacity, their contribution to sustainability and environmental protection is also very important for environment-oriented companies. In the following part of this paper, these facilities are listed in accordance with the factors illustrated in Table 1.

3. 1. 2. 1. 1. Financial resources

Financial managers are responsible for securing the financial resources needed for the operation of the company and for the proper planning of cash flow. Financial resources have a huge significance, due to the fact that other resources can only be bought by money. At the same time, financial decisions are inferior to the other goals of the company. Financial resources can be evaluated by comparing the total amount of money used for financing to the environment protection costs of the company. The resulting figure can be contrasted with the average industrial values.

In connection with this, mention must be made of *the various types of financial support* which can expand company resources:

- *Allocations* that are non-refundable sources of financial support. They are usually provided in exchange for promising to reduce environmental pollution in the future.
- *Preferential or soft loans* with a below-market rate of interest. The polluting company is entitled to this loan if it takes measures to reduce pollution.
- The third source of financial support can be found in "*renewing green funds*". These funds were established for environmental protection goals and are maintained from expired (soft) loans and occasional donations.

At the moment, there are half a dozen so-called socially-responsible funds available for improving the supply of finance to environmentally-conscious companies. These funds are only available to those companies that successfully go through a thorough assessment. This assessment is called a "sustainability filter".

3. 1. 2. 1. 2. Physical resources

During the analysis of the physical resources of companies, the rising prices of raw materials, their volatility, and even their shortage cannot be neglected. The leading researchers at the McKinsey Global Institute (Beinhocker, Davis and Mendonca [3]) are convinced that resource productivity (that is, the quantity of goods or services that are obtained through the expenditure of unit resource, whether that unit comes from oil, water or other energy sources) will have a central role in the competitiveness of companies. Careful treatment facilitates the growth of resource productivity and puts the concept of eco-efficiency into practice. *The analysing and measuring method of careful treatment* (Nafti and Miller [26]) helps to rationalize the use of raw materials, energy and water, as well as reducing the amount of waste and harmful emissions. This is done by putting forward proposals to solve organizational issues, calculating costs and savings, and analyzing the inputs and outputs of the production process.

Achieving eco-efficiency: according to Jörg's [21] definition, eco-efficiency is attained through the delivery of "competitively priced goods and services that satisfy human needs and bring quality of life while progressively reducing the environmental impacts of goods and resource intensity". The success of the concept of eco-efficiency is underlined by the fact that eco-efficiency goes hand in hand with economic efficiency. This makes it popular among companies, as they can improve their recognition and prestige by implementing environmental protection measures whilst also rationalizing their use of resources and making savings.

3. 1. 2. 1. 3. Human resources

When studying human resources from an environmental aspect, it is useful to know that environmentally-conscious corporate management can only be successful if the senior *management* accepts and shares the idea of environmental consciousness. This is because their commitment is a necessary condition for shaping and putting into practice environmentally-conscious strategies. However, environmentally-conscious corporate activity also means that environmental aspects are taken into consideration by every employee and every organizational unit of the company. Achieving corporate goals is highly dependent on employees. If they do not know about the advantages of new approaches and they are not involved in changes, the implementation of environmentallyconscious strategies may result in failure. Habits, along with ways of thinking, also have to be changed. As these factors influence the whole organization and its culture, successful changes are only possible if the employees of the company are committed to the new environmental strategic programmes. The aim of following environmental guidelines manifests itself on several practical levels. If employees are fully committed to environment protection and have the appropriate professional knowledge for tackling environmental issues, they will be able to act efficiently in accordance with the idea of environmental consciousness.

Apart from human resources, the issue of *working conditions* during everyday operations is also linked to corporate environmental consciousness. A safe working environment – together with the shaping of environmentally-conscious behaviour – are both considerations which must be emphasised.

3. 1. 2. 1. 4. Technology resources

The environmental evaluation of technology can be seen as a component of the study of the internal factors of positioning:

- First, the technologies in question have to be described.
- *Second*, the rate of the used resource (as input) and the final product (as output) has to be determined along with the rate of waste products.
- *Third*, the proper weighting of the individual elements of the process when divided into its stages is also important.

When listing *expenditure indicators*, it is important to decide which elements belong to the assessment process. Because there are no strict rules, practicality is a key condition for listing every factor of technological necessity. In the case of the labour force, the most appropriate method is to look at the number of employees using existing technology. In this way, we can figure out the probable changes related to the introduction of a new technology.

Capital expenditures may pose a problem, as they overlap with material expenditures. Material expenditures have to be taken into account and their rate of output has to be calculated. This is because of environmentally-conscious considerations, including the environmental effects of the resource extraction phase.

Energy expenditures have to be taken into account. This is partly due to the energy needs of the production process, and partly because fuels come from the natural environment.

The quantification of potential environmental effect indicators includes the calculation of the amount of waste released into the environment. When assessing the expenditure and output characteristics of the listed technologies, a weighting method must be applied in order to understand the relative importance of various indicators. The effect of manufacturing a substitution product also has to be evaluated.

Finally, environmental effects related to recycling have to be taken into account as well.

3. 1. 2. 1. 5. Organization

Environmental protection organizations within companies in transitional economies are only in their early stages of development. In addition, it is rare for them to become an organic part of the corporate organization and management system. This is partly because the requirements of environmental protection, as a corporate function, are only met when the companies are forced to fulfil them. It is also because the elimination of environment pollution is not a primary goal of the companies. If the external environment required firms to account for the fate of each and every material and form of energy used, the role and the tasks of environmental protection organizations within the corporate structure would be unambiguously made clear. Until this occurs, only general advice can be given, according to *which the proper role and tasks of environmental protection organizations have to be determined individually; depending on the goals, size and organizational structure of companies*.

If we are to evaluate the appearance of the function of environmental protection within the corporate organization, the "Environmental Organization Development Index" – developed during the research of Pataki and Tóth [28] – seems to be a suitable tool. Index

values may range from 0 to 10; higher values are shown when environmental protection is incorporated more into the corporate organization. The level of incorporation is indicated by several factors. These include the number of environmental protection specialists in the senior management, and the existence of environmental protection boards, independent environmental departments, environmental proposal/performance appraisal systems, and green working groups. The level of incorporation is also determined by the provision of more comprehensive training, the consideration of environmental protection issues in the selection of subcontractors and suppliers, the existence of separate financial statements of environmental costs, and environmentally-conscious behaviour when planning new investments and projects.

3. 1. 2. 1. 6. Culture

As mentioned earlier, the style and implementation of corporate culture are extremely important in terms of positioning and strategy planning. The analysis and evaluation of organizational culture is necessary to avoid the failure which can result from a strategy based on an inappropriate position. From the aspect of environmental performance, the following points are crucially important in relation to sustainability and environmental protection:

- beliefs and convictions embedded in the organization
- accepted common values
- the ways of thinking used in decision-making
- generally accepted behaviour patterns

The ethical attitude of new generations of managers – especially in terms of the future of environmental protection – is equally important. The cynicism hidden behind the question of "Why wouldn't I do it if everyone else does it?" cannot be accepted. This type of ethical attitude may be the source of short-term measures, but managers should not forget to ask how others are affected by the operations of their companies.

Generally speaking, two empirical methods have been developed for the targeted analysis of corporate culture. One employs a *functional approach, and facilitates quantitative evaluation by using questionnaires*. The other applies an *interpretative approach which is based on interviews and observation, and requires qualitative processing*. Their tools are the following: document analysis, observation, questionnaire data collection and interviews. For example, if the EMAS (Eco-Management and Audit Scheme) system is introduced at companies, that can be seen as proof of an environmentally-conscious attitude. It indicates a commitment to environmental protection, in addition to improving environmental performance. Another example is the existence of the ISO 14001 certificate. This is one of the crucial elements of the Employee Satisfaction Index, as it motivates employees to come up with new ideas.

3. 1. 2. 1. 7. Reputation and recognition

A number of points are important in the development of companies' environmental images. The company's customers should be convinced of the environmentally-friendly behaviour of the firm. If this is achieved, a competitive advantage can be gained over their rivals. This process involves setting goals that are important in the eyes of the public. For instance, economizing on raw materials and energy can create the impression of an "environmentally-prudent company", as well as resulting in substantial savings for the firm in a time of rising energy and raw material prices. The aim of environmental analyses and reports is to check whether these goals are achieved.

The success of these reports depends on to what extent the public accepts their credibility. If companies cannot win the public's trust, even the best-written report may prove to be worthless. But how can credibility be increased? One recognized method, chosen by a growing number of companies, is certification by a third party. In order to evaluate external communication, we can use the Environmental Communication Development Index, which was first worked out by Pataki and Tóth [28] in Hungary. The Index produces higher values when companies use the image-improving effect of environmentally-conscious corporate operations in their external communication, such as product advertisements, more intensely. Examples include giving information to customers about the environmentallyfriendly features of the product, as well as advice concerning its disposal in an environmentally responsible way. Environmentally-friendly features can be highlighted on the packaging, as well as in the advertisements for the product. External communication can also include keeping employees informed about environmental matters on a regular basis, issuing environmental documents to the public (for example, annual environmental reports), and organizing public forums on environmental issues related to corporate activities.

3. 1. 2. 2. Companies' own activities

Studying the companies' own activities is important because it helps us to realize that a company is more than a random collection of certain tools, capacities, machinery, people and financial resources. These resources make sense only when they are organized into a system that produces more and more value for the potential consumers. The general efficiency criteria for corporate value-creating processes are well-known: cost, quality, reliability, flexibility and customer service. Today, however, these criteria are not sufficient, as they need be combined with the evaluation of companies' environmental "solutions". In the following part of this paper, we would like to make our contribution to the environment-focused analysis, assessment and planning of companies' operations and processes.

3. 1. 2. 2. 1. Marketing

According to Nagy [27], the development of *environmentally-conscious or green marketing* can be interpreted as a *rational answer to the environmental problems* created by marketing science and traditional marketing. Its starting point is environmental protection. *Its basic aim is to turn environmental advantages into competitive and customer advantages through products and services that are better for the environment, and to ensure the dominance of environmental considerations when using every marketing tool.* How environmentally friendly companies' advertising activities actually are can be assessed by the extent to which the elements of the "marketing mix" – which is the most important marketing tool – meet the demands of "environmental correctness."

Product

Even in the first few steps of the product design process, *manufacturing companies* can pay attention to ecological issues. The composition, production technology and packaging of the product – together with the possibility of recycling – all have a decisive role. Trade companies may make decisions about purchasing their range of products from environmentally-friendly producers, about improving their own image and about making it easier for customers to buy environmentally-friendly products. In the marketing of services, more opportunities for attracting environmentally-conscious consumers can arise.

Price

In general, the production costs of environmentally-friendly products are higher than other products of the same category. For this reason, it is necessary to take the price sensitivity of the targeted consumer group into consideration before introducing a certain product. Some environmentally-conscious consumers are willing to pay a higher price for products proven to be environmentally-friendly. In this case, high initial prices seem reasonable. However, if the aim is a quick market expansion, applying low introductory prices appears the more sensible option. Naturally, the prices applied are necessarily influenced by the development costs of the product. If manufacturing an environmentally-friendly product means substantial additional costs for the company, it can pass some of these costs on to the consumers.

Distribution

The third element of the marketing mix is connected to the selection of *distribution and* sales channels. Environmental considerations can also be applied in this area. Green delivery and distribution - if we put the following principles into practice - is not so complicated:

- minimizing delivery, and delivery packaging
- preferring modern materials and energy saving delivery systems
- choosing the cleanest sales channel (if there is a sufficient choice of distribution alternatives)
- involving consumers in solving the environmental problems caused by delivery
- creating so-called redistribution channels, which ensure used products and packaging materials are returned to their sources.

Communication

The important elements of green communication are the various eco-labels on the packaging, and the equivalents of more traditional tools such as "environmentally-correct" advertising, environmentally-oriented public relations, environmentally-oriented sales promotion and personal sales.

3. 1. 2. 2. 2. Innovation

Innovation is closely connected to the expansion of the preventive approach in environmental protection. In general, the practical application of preventive environmental protection can be linked to the principle of cleaner production. By definition, cleaner production means finding more efficient solutions – in terms of environmental and/or

economic considerations – than those advanced by the so-called "tube-end" approach to environmental protection. Unfortunately, environmentally-friendly technologies have not developed in many areas yet, and those which are available are extremely expensive. These facts force us to make certain compromises and make it necessary to apply solutions which reduce, but do not eliminate, harmful emissions.

Naturally, the expansion of cleaner production and environmental protection innovation, in general, faces opposition. The desired changes can be blocked by several organizations within the company, or may clash with the opposing interests of environmental protection agencies. There may even be a lack of appropriate public support. The environmental-ecological evaluation of technological innovation is not only a question of a scientific or economic rationale, but is also a question of social acceptance. To put it rather simplistically, the choice between technologies depends on the expected rate of real wages and, especially, of capital return. To perform a complex evaluation, we need to be aware of the possibility that so-called "environmental value" or environmental correctness will play a more important role in the selection between technological alternatives in the future (Kindler [24]).

3. 1. 2. 2. 3. Human resource management

Taking the knowledge of the tasks of human resource management as read, here we will only focus on two factors: firstly, the education and training that is essential from the environmental perspective; and, secondly, the *utilisation* of the knowledge of managers and employees in order to achieve the goals of the organization. The ways in which companies create, handle and utilize knowledge capital depend on their knowledge management. Polányi [29] distinguishes the three main elements which comprise knowledge management:

- *Human knowledge capital*: people's knowledge of environmental protection, their experience and skills etc.
- *Organizational knowledge capital:* "this is what remains when employees go home in the evening". These are environmental standards, environmental protection information systems, and environmentally-friendly technologies and products.
- *Social capital*: the knowledge content of the companies' relationships with certain individuals and groups (environmentally-conscious consumer behaviour, environmental lobbying connections, embeddedness into the social environment etc.) There are a lot of areas where companies can use this knowledge capital. They can build it into their green products and services, and they can use this knowledge for increasing the environmental performance of their own value-creating processes. They can also sell it in the framework of environmental specialist contracts.

In order to apply knowledge capital efficiently, there is a need for ensuring a specific medium that makes it possible to synthesize all three elements of knowledge capital within the company. It is also necessary to create a framework of organizational training.

3. 1. 2. 2. 4. Information management

We need to have correct information about our environment, as well as the effects of our activities and products upon it. This is necessary in order to avoid the harmful

consequences of bad environmental decisions. Such decisions are normally based on an inappropriate knowledge of causal correspondence. To ensure our information is correct, Buday-Sántha [5] suggests *the development of measurement techniques, and the setting up of data banks and information systems which facilitate the flow of information.*

The Sustainable Environmental Information System is always an open system which encourages its makers and operators to follow these principles:

- giving information on environmental conditions to every member of the company concerned; by, for example, regularly issuing environmental reports
- giving everyone free access to the environmental information available at the company and other environmental protection organizations

We can evaluate the extent to which these information systems – as internal factors affecting the company's strategic position – have fulfilled their requirements. This can be done by "measuring" how much data is available for decision makers, and then comparing this amount to the minimum quantity of information that is required in order to make the decision in question efficiently.

3. 1. 2. 2. 5. Logistics – material resources and stockpiling

Of all the synthesizing activities of logistics, we will only deal with the ones which are the most important in terms of environmental protection: those that give the greatest opportunities to save resources. These are green purchase and environmentally-conscious waste management.

Green purchase

Making purchases "green" means that – in addition to the consideration of essential requirements such as quality, price, function and security – the purchasing institutions and companies impose environmental demands on the suppliers. In order to prevent many green purchases from becoming failures, the organizations have to set well-defined goals and create an accountability system. Another condition for green purchases is that strategic buyers need to know the labels of economically-friendly products. They have to be aware of the criteria they need to take into account when choosing environmentally-friendly products.

Environmentally-conscious waste management

Environmental considerations connected to waste management may arise in two areas of a company's operation. Firstly, almost every company is affected by the generation – and the transportation costs – of communal waste. Without the application of selective collection, this waste can include paper, plastic and metal. Secondly, we can consider the actual *production – or service-providing – process* itself. Although there are not generally applicable patterns here, as experience shows, companies can achieve substantial savings in this field. Environmental measures can be evaluated by studying investment expenditure, operation costs, savings and time of return.

3. 1. 2. 2. 6. Production and providing services

Environmentally-friendly production and service providing have become basic requirements in market competition. Environmental protection has to cover the whole production activity and reach even further. In order to put environmentally-friendly – or otherwise cleaner – production into practice, the development of operations, processes and systems that have no environmental effects is necessary. We need to ensure that these processes, operations and systems are safe – even if used intensely. We must also make sure that they use materials, energy and natural resources efficiently, and that waste and hazardous materials can be recycled or stored safely. Based on Engel and Tóth's [10] listing, the practical measures which can be employed are the following:

- eco-mapping and using careful treatment
- changes in technology; for example, economizing on materials, energy and water
- internal recycling, reuse of materials
- choosing raw and additional materials carefully, applying environmentally-friendly chemicals and additives
- external recycling; for example, structural or material reuse
- recycling into biogen cycles
- disposal by applying traditional environmental techniques after exhausting the above-mentioned possibilities

The investment need and the time of return of these measures may widely differ and it is also clear that bigger companies may achieve a greater volume of savings. It is obviously easier for them to raise the money needed for investment. However, smaller companies still have the opportunity to consider the environmental effects of their activities.

3. 1. 2. 2. 7. Finances

Finance is a field of activity that embraces the whole operation of companies, as money is the most general means of expressing expenditures and profits. When performing a financial analysis, the subject of our investigation is the whole operation of the company. During the analysis, we map the processes resulting in different short-term and long-term cash flows. However, it is not an easy task to collect usable data for the analysis. The most important producer of environmental information is *environmental accounting*, which can also be regarded as the basis of environmentally-conscious corporate management.

According to Csutora [7], environmental accounting can be defined as an area which involves those activities, methods and systems that record, analyse and report on the environmental protection problems of a given economic system or the economic effects of environmental protection activities. According to this definition, environmental accounting involves two subsystems. One of them deals with the financial effects induced by environmental protection: that is, environmental expenditures and savings. The other is concerned with the environmental effects of the company's economic activities: that is, how the environment changes in response to the company's operations. From the elements of these financial activities and the related information content of the financial reports, we can draw conclusions about the environment-oriented nature of the company's finances. This has a prominent role in determining its strategic position – especially during economic recession.

4. FORMULATING ENVIRONMENTALLY-CONSCIOUS STRATEGIC ALTERNATIVES

In the previous chapter, during the discussion of strategic positioning, we studied the internal and external factors which determine the companies' environmental strategies, along with their capabilities and opportunities. Based on the results of positioning, we can shape a *conscious strategy, or strategic alternatives* which explicitly express the company's basic position in terms of environmental protection. Over the past 10-15 years, the Institute for Economy and the Environment at the University of St. Gallen has conducted research into the competitive aspects of environmental management in various economic sectors. This research has revealed an empirical body of evidence that suggests that sustainability strategies can be classified according to their strategic orientation (market or society) and strategic behaviour (reactive or proactive) (Dyllick et al. [9]; Gminder et al. [17]).

According to strategic *orientation*, a strategy can be classified on the basis of which external player – *market or society* – is in the centre of the company's strategy. Thus, a difference can be made between market-oriented and society-oriented strategies. While the aim of market-oriented strategies is the better satisfaction of market needs, the main goal of society-oriented strategies is meeting social requirements to the greatest possible extent.

Business economics (see Szigeti [31] and Vágási [32]) makes a distinction between two types of organizational behaviour when discussing the possible strategic alternatives. It distinguishes *reactive strategies from proactive strategies*. Reactive strategies are characterized by slow responses to changes in a company's environment. Instead of recognizing challenges, changes are undertaken only when the management is forced to take rearguard action. These strategies only aim to avert immediate dangers, without providing large-scale commitment. Proactive strategies regard the opportunities in environmental protection as a challenge and exploit them to strengthen strategic positions and image improvement. Environmental protection issues are built into the corporate strategy. Therefore, the entire company's behaviour and strategy are deeply influenced by the concept of a responsible corporation.

If we make a connection between orientation and behaviour, we can arrive at the possibilities – and the shapes of strategic alternatives – illustrated in Figure 3. It is important to note that no strategy labelled as "safe" is shown here. This is because "safety" is a general aim that can easily be achieved by all the strategic alternatives. In the following ways, companies may gain advantages by introducing the strategic alternatives presented:

Strategic orientation Strategic behaviour	Society	Market	
Reactive	"Credible" strategy	"Efficient" strategy	

Proactive	"Transformative" strategy	"Innovative" strategy
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Source: Bieker [4]

Figure 3.

The four different types of environmentally-conscious strategies

- "Safe" strategy reducing and managing risks: Sustainability-induced problems and challenges (e.g. climate change, poverty, mobility, bio-technology etc.) are tackled by the political system, market or the public and, hence, have impacts on companies' risk exposure. These risks could affect the financial, managerial or reputational sphere of corporations (e.g. Shell could not get rid off its oil platform in the North Sea; producers of genetically modified organisms (GMOs) are criticised by activists and frequently face a deduction on the stock-market, big chemical companies bear higher liability and credit risks etc.). Managing sustainability, in this respect, may aim at reducing, avoiding or having control of these risks (Hernádi [18]). The objective of this strategy is securing the existing markets and the company's position in the markets.
- "Credible" strategy enhancing and fostering credibility and reputation: Due to the public and political importance of sustainability, the credibility and reputation of a company is a valuable non-tangible asset. This strategy prevents businesses from having conflicts with authorities and other stakeholders, attracts suitable employees, and satisfies customers. Credibility can also provide the necessary capital in crisis situations: for example, when accidents occur or when controversial business projects are launched. Industries such as the chemical, pharmaceutical, military, oil, automotive industries; technologies like nuclear and energy. mobile communications, and chlorine chemistry; and multinationals (just because of their size or global impact) bear a particular high credibility risk. Hence, maintaining a good image in society and politics in the sense of being a "good corporate citizen" is a sound investment. The objective of this strategy is to build up, foster, keep and protect the credibility or "reputational capital". Measures can be either defensive or offensive and can be done through action or communication. Rather defensive measures focus on communicating issues to the relevant stakeholders and are often closer to the above-mentioned type "safe". More offensive measures aim at generating sustainable products and services and are in fact very close to the "differentiation" type. Offensive strategies are recommended in industries with high credibility opportunities like food, textiles, finance, cosmetics, utilities etc. or with technologies like solar or wind power, organic farming, water supply etc.
- "Efficient" strategy enhancing productivity and efficiency: Regarding environmental management, this strategy is well-known and broadly applied as "eco-efficiency". In industries, it seems to be the most prominent sustainabilityrelated strategy; because it has successfully helped to reduce both costs and "the ecological footprint" by achieving better energy, water and material efficiency. On the social side, strategies of this kind may try to improve their "socio-efficiency". This can be done by supporting employees in a way that means both their

productivity at work as well as their degree of job satisfaction (e.g. through flexible conditions of work and payment) can be increased. The objective of the strategy "efficient" is to enhance the eco- or socio-efficiency of the business processes. Measures can be carried out on three different levels: firstly, on the level of operating processes; secondly, on the level of products and the product life cycle (e.g. when a printing-house uses more recycled fibres in the paper); and, thirdly, when companies may implement sustainability management systems inside the organisation.

- "Innovative" strategy Differentiating in the market: environmental and social impacts frequently offer an opportunity of differentiating companies' products in the market place. Sustainable products and services can be found in many markets and sectors (e.g. the food sector, the car industry, fair-trade, management of natural resources in the wood and fishing industries). This strategy contributes to a *unique selling proposition* (USP). The objective of this strategy is to increase sales and margins through developing and selling environmentally and socially friendly product innovations. Possible measures can be found in the attributes of the products (e.g. organic food or textiles can be seen as healthy, high quality products as long lasting, car sharing as easy, green energy as less risky etc.) with sustainable value added products have marketing benefits because the value is perceived by the customer in both the consumption and disposal phase. Although the value in these two stages is quite clear, sustainable value added in production and in the supply chain need to be strongly communicated.
- Transformative" strategy- Developing markets and society: This strategy seems to be much more fundamental than the others, because the transformation of existing – or the creation of new – markets requires institutional changes within human needs, politics or the institutional framework. Such transformations can be found in the field of mobility (e.g. car sharing), energy (by decentralised electricity production) and housing conditions (by designing low-energy houses) etc. In many cases, human needs and consumption patterns may be modified. The objective of this strategy is, consequently, to create or participate in structural changes in the institutional framework of markets and politics. Possible Measures are the participation in existing political committees or associations, and creating or joining sustainabilityorientated industry standards and product labels (e.g. Global Reporting Initiative GRI, SIGMA Management System, Forest or Marine Stewardship Council – FSC for wood, MSC for fish, Fair Trade Labels etc.). Proactive lobbying in order to change existing rules and laws in the competitive field can also be an appropriate measure.

These strategies may be appropriate for a whole company, selected areas of business, sites, certain products or technologies. However, this classification of strategies seems to be idealistic, since in practice these types of strategies may overlap and cannot always be clearly distinguished from each other.

5. IMPLEMENTATION OF ENVIRONMENTALLY-CONSCIOUS STRATEGIES IN VARIOUS CONTEXTS

The third main element of environmentally-conscious strategic management is the implementation of strategies, which generally involves activities such as planning actions, determining the necessary resources, shaping organizations, managing and controlling. In this part of the paper, we will dispense with the detailed presentation of these activities. Instead, we will describe the effects of the particular contexts which influence the introduction of strategies and their performance.

5. 1. Context to small enterprises

Small enterprises usually appear in one, or in a small number of, markets with a narrow range of products or services. As a result of this, their operation has less strategic importance than in the case of bigger organizations. It is highly unlikely that any small enterprise would have a central planning department which carries out complex analyses and market research. Instead, the manager or the owner of the enterprise keeps in touch with the market, and the experience which results from this is decisive. In reality, the values and expectations of the managers – and the owners – have the greatest importance in small enterprises. These represent the values and expectations of the whole company and influence the company's culture decisively. If the company wishes to follow an environmentally-conscious strategy, then it is inevitable that the owner-manager will be committed to environment protection.

Another characteristic of small enterprises is that – unless they specialise in a certain market segment – they are exposed to fierce competition. Generally, companies of this size have to find market opportunities that are in line with their resources and expertise. As the owner and/or the managers are aware of market expectations, it is their task to determine the customer group that is interested in environmentally-friendly products.

Small enterprise strategies are also influenced by the fact that the companies concerned are in private ownership. Because of this, the possibilities for growth and capital intake are limited. If a company wishes to reach these goals, it has to maintain good relationships with those organizations that can help it to achieve its environmental protection targets. For instance, if a small enterprise wants to start producing environmentally-friendly products, it must be supported by a credit bank. At the same time, the production of environmentally-friendly products. In order to cover the additional expenses, environmental protection organizations may make a contribution. In the implementation of the strategies of small enterprises, the main roles are determined by the selection of a suitable, environmentally-conscious target market and securing the financial sources to cover the companies' higher expenses.

5. 2. Multinational and global companies

All organizational, institutional and business entities that pursue their operations in more than one state or country can be regarded as *multinational*. Global companies, on the other hand, divide their resources on a global basis in order to provide the highest quality product

in the best markets at the lowest possible price. The organizational and operational differences between multinational and global companies are illustrated in Figure 4.

1. Product/service	
Multinational	Global
Limited to domestic markets	Standardized for global markets
2. Resource, responsibility and control Multinational	Global
Decentralized to a national organization	Centralized on a global basis
3. Dominant power group and culture Multinational	Global
National leaders, independent culture	Centralized functions, dependent culture
4. Research and development, innovation Multinational	Global
Domestic opportunities,	Centralized R&D
Development of new "local" products	and new product development

Source: Fülöp [15]

Picture 4

Differences between global corporations and multinational organizations

Multinational and global companies are varied in terms of products and markets. This is because they deal with a wide range of products in different business units, in the form of divisions or subsidiaries. As a result of this, the main strategic questions for multinational and global companies are:

- organizational structure and management at a corporation level, and
- the relationship between the parent company and its subsidiaries.

Environmental protection has to appear in the organizational structure at an international level, or rather at the level of senior management. Environmental protection should not appear as an activity which sets back production, but as an important part of the company's operations. Consequently, environmental protection cannot be overshadowed; it must be seen as being in the company's own interest. Environmental aspects especially have to be taken into account at the start of new projects and investments.

The main strategic challenge for parent companies, from the environmental point of view, is the allocation of resources and the coordination of business units with different needs. The coordination of logistics between different business units and countries has an outstanding significance. Green purchase and environmentally-conscious waste management are the most important logistics activities. In the case of green purchase, the company can impose requirements on its suppliers or it can set goals which aim to meet

environmental needs. Environmentally-conscious waste management is directed at the reduction of the environmental burden, as well as recycling hazardous waste and the dangerous materials used in production.

5. 3. Production and service organizations

During the *production process*, the company creates new goods: either by using a part of the available resources, or by carrying out important changes on other resources. *Services* are different from production because – by their very nature – the physical measurement of these products is not possible (Chikán [6]). Those companies that compete by providing services produce intangible goods as an output. As a result of this, competitive advantages are manifested as intangible values for the customers. A manufacturing company, on the other hand, is based around the existence of a tangible product; services are only added to it. Consumers, however, may find the products of different manufacturers very similar to each other. Thus, these companies can gain competitive advantages through the provision of supplementary services or through their brand names.

In the case of environmentally-conscious markets and consumers, environmentally-friendly methods of production and services provide competitive advantages for companies. (Environmentally-friendly methods of production could include low water and energy consumption, the use of environmentally-friendly materials and recyclable packaging materials etc.) The competitive advantage gained by using such methods is the reason why the satisfaction of more environmentally-conscious consumer needs is the focus of production and service company strategies.

5. 4. Strategy in the public sector

The term "public sector" has a lot of interpretations. According to Dinya's [8] definition "the public sector is the aggregation of institutions fulfilling public needs (social and collective wants)." Environmental strategy is as important for the public sector as for business organizations. Many public utility companies provide services to their customers in the same way as their counterparts in the competitive sphere. However, the role of politics is more important in the public sector with regards to strategic management because it provides services that private companies do not or cannot provide. The planning horizon of a state-owned company is determined much more by politics than market conditions, and its capital investments and financial resources are also more limited.

Other public service companies operate almost as monopolies. They are financed through taxes instead of by paying customers. Because of this, their strategic opportunities are restricted. For instance, they cannot specialize in certain services or customers, but are obliged to provide universal services. Strategic priorities are also determined by the person or organization in charge of their finances. Thus, this sector – operating in a typically political environment – is aimed at acquiring crucial resources. As a result of this, companies applying green purchases have advantages. The achievement of eco-efficiency and the need for the best output have become more important. The emphasis has shifted to the environmental cooperation of public institutions, with the hope that their work will bring bigger environmental benefits for society. So, the ability to create and maintain strategic alliances in the field of environmental protection gives an advantage for

companies. In the case of public service companies, behaving responsibly and paying attention to the environment are internal interests whose importance is automatically assumed. As they pursue their activities in the public eye, they are obliged to set a positive example in the field of environmentally-conscious behaviour.

5. 5. Voluntary organizations and the non-profit sector

Voluntary organizations are organizations whose members do not perform their activities primarily for remuneration, and whose work is beneficial for other persons or for society itself (Bartal [2]). In this sector, fundamental values and principles have a decisive role in formulating and implementing environmental strategies. This is especially true when the reason for bringing the organization into existence is the representation of environmental values and not the aim of making profits.

Non-profit organizations are private, non-profit oriented and legally registered organizations that are able to show a sufficient level of volunteerism and self-governance. Their activities are characterized by public benefit and political neutrality.

Financial resources are varied in non-profit organizations – for instance, charity organizations, churches, private schools, foundations etc. – and they are not supplied by the direct beneficiary. Another characteristic of these organizations is that they need to receive the necessary resources – for example in the form of donations – well in advance of providing their services. However, strategic principles and relationships can be observed in the case of voluntary organisations too. The great number of financial resources – that are connected to various environmental protection goals as well as to the expectations of the financing party – lead to the substantial presence of political lobbies, which, in turn, may lead to problems in the application of environmental strategies. For example, financing institutions expect non-profit organizations to centralize their strategic decision-making and responsibility-taking. By doing this, these processes are exposed to external effects instead of being delegated within the organization. In the context of volunteer and non-profit organizations, other important factors can be paying attention to environmental protection, broadening the knowledge of environmental protection, and setting an example of environmentally-conscious behaviour.

6. CASE STUDY – THE ENVIRONMENTALLY-CONSCIOUS STRATEGIC MANAGEMENT OF MIHŐ LTD.

The theoretical, methodological part of this paper discussed a number of examples with the aim of illustrating how companies meet challenges related to environmental protection. By outlining the environmentally-conscious strategic operation of one company, it is hoped that – through the case study presented below – it will be possible for the reader to broaden the connection between theory and practice. However, this cannot reflect the complexity of the tasks which may arise in corporate environmental management. For this reason, we would like to encourage those who are interested to take every opportunity to study the existing problems of environmental management.

The subject of our case study is one the corporations of the North-Hungarian industrial district, MIHŐ Miskolc Heating Ltd. Although environmentally-conscious elements are not highlighted in its management strategy, the operation and the image of the company

emphasise a commitment to environmental protection. MIHŐ Ltd. is a business organization providing public utility services. Its main activity is that of heat production and heating services in the local public administrative area of the city of Miskolc. *In the case study*, we will include the company's major registration data and introduce its partners, which take part in joint environmental protection projects. We will outline the internal and external factors (inputs) necessary for putting these joint projects into practice. Based on these factors and the nature of the projects, it is possible to determine the type of environmental strategy followed by MIHŐ Ltd. as well as its achievements. Quotations taken from the company's strategic documentation represent the company's attitude towards environmental protection.

6.1. General information on the company and its partners

In recent years, the management of MIHŐ Ltd. decided to use alternative energy sources – in addition to the utilisation of natural gas – in the production of thermal energy and electricity. The aim of this measure was to reduce the dependence on energy supply. In accordance with its decision, the company started a joint programme with the local government of Miskolc, which involved harnessing biogas in thermal energy and electricity production. This was followed by the foundation of Miskolci Geotermia cPlc, in cooperation with Pannergy Plc. The aim is that Miskolci Geotermia cPlc – as a thermal energy producer – will supply geothermal energy to MIHŐ Ltd., which will then feed this energy into its own network. This initiative is currently in the phase of exploratory drilling. Finally, MIHŐ Ltd. is planning to build a biomass-fired power plant with a German company. The operation of the biomass-fired power plant will be taken by MIHŐ Ltd. then passed on to the customers of its own network. The elaboration of the details of this project is still underway. The major data of MIHŐ Ltd. and its partner organizations are the following:

Company

Company name: MIHŐ Miskolci Heating Services Ltd. Range of activity: Steam and hot water supply Company size:

- Number of employees: 189
- Number of business units: 1
- Company's yearly turnover: 25925 thousand EUR
- Company's yearly profit after taxation: 179 thousand EUR

Ownership rights: 100% Hungarian public property, local government

Participants in the environmental strategic planning process: owner, managing director, division managers.

1. Partner organization

Organization name: local government of Miskolc Range of activity: local government Organization size:

Number of employees: 108

Number of district local governments: 19

Major data on environmental protection cooperation:

- Year of starting joint environmental initiatives/programmes: 2008
- Initiator of joint environmental initiatives/programmes: MIHŐ Ltd.

2. Partner organization

Organization name: Pannergy Plc. Range of activity: business management Organization size:

- Number of employees: 9
- Number of subsidiaries: 14

Ownership rights: national and foreign organizations and individuals

Major data on cooperation:

- Year of starting joint environmental initiatives/programmes: 2009
- _ Initiator of joint environmental initiatives/programmes: Pannergy Plc.

3. Partner organization

Organization name: SWU Group Range of activity: distribution of electricity production Organization size

- Number of employees: 1000
 - Number of subsidiaries: 5

Ownership rights: international, local government ownership

Major data on cooperation

- Year of starting joint environmental initiatives/programmes: 2009.
- Initiator of joint environmental initiatives/programmes: SWU Energie Ltd

6. 2. Elements of the company's environmentally-conscious strategic management

Without going into great detail, we have summarised below the main elements of the company's environmental management. Our summary includes the internal and external factors -the inputs - of its strategic position, and the characteristics of its strategy along with the results of its implementation. (Picture 5).

The company's strategic position		envi	The company's environmentally- conscious strategy		The results of the implementation of environmental strategy
Internal factors (Company	External factors (Partner		racteristics of egic orientation		 Replacement of biogas with

inputs)	inputs)		alternative
gas pipes c -Installation v of biogas-	Harnessing communal waste as an energy source	 It wants to fulfill customer needs at the highest possible level It wants to provide us with a cleaner environment which is safe and livable 	 energy sources Reduced carbon-dioxide emissions Introducing competitive heating service prices Protection of air cleanliness and the health of
 Setting up, produent extruding wells Doing explorator 		Characteristics of strategic behaviour	the inhabitants – The energy- dependency of
 Providing –U property – 0 Operation – 0 of biomass- – 0 	Jtilization of German quality and environment al protection	 -It exploits the available environmental protection opportunities - It plays a leading role in the utilization of alternative energy sources - Its strategy contained environmentally-conscious elements earlier - It wishes to build an environmentally-conscious company image 	Miskolc is reduced

Picture 5.

Source: Fülöp

The elements of the MIHŐ Ltd.'s environmentally-concious strategic management

From the results, we have concluded that there was a mixture of the environmentallyconscious strategy "credible" and the strategy "efficient". This is because the company has two goals: firstly, it wants to build on and maintain its good reputation; and secondly, it wishes to improve the efficiency of its business processes at the same time. Its strategic orientation is gradually changing; its focal point is shifting from market factors to social aspects. The company is also keen to demonstrate proactive behaviour. In order to achieve this, it should broaden its range of services by innovative developments, and it should play a more active role aimed at changing consumer habits and institutional frameworks. Simultaneously, the company should make it its current mission to implement its vision of a "greener" future. A part of the company's mission statement can be read below.

6. 3. Quotes or other relevant information in relation to the company's environmentallyconscious strategy

The mission statement of MIHŐ Ltd.

"It is our honourable duty to provide secure, energy-saving and efficient heating services of good quality in the town of Miskolc. During our operations, we aim at satisfying our customers' needs at the highest possible level, as well as the continuous development of our services."

The vision of MIHŐ Ltd.

"We aim at maintaining our current position in the field of heating services in Miskolc, in addition to extending the service we provide in Miskolc and in its surrounding settlements. By using our expertise in energy, we wish to play a decisive role in the implementation of the energy policy and energy management of our town. Our goal – as well as aiming at excellence – is to create an attractive, environmentally-friendly heating service which contributes to the committed, high-quality service offered to our customers".

REFERENCES

- [1] Arrow, K.J.: The Economics of Angency. Harvard Business School Press, Boston, 1983.
- [2] Bartal A. M.: Nonprofit elméletek, modellek, trendek. (Nonprofit Theories, Models, and Trends) Századvég, Budapest, 2005.
- [3] Beinhocker, E., Davis, I. and Mendonca, L.: 10 trends, amelyre figyelnünk kell. (10 Trends, to Which We Have to Pay Attention) *Harvard Business Review*, 2009. 11. sz.
- [4] Bieker, T.: Sustainability Management with the Balanced Scorecard. Institute for Economy and the Environment Publication, St. Gallen, 2005.
- [5] Buday-Sántha A.: Környezetgazdálkodás. (Environment Management) Dialog Campus Kiadó, Budapest-Pécs, 2002.
- [6] Chikán A.: Vállalatgazdaságtan. (Business Economics) Aula Kiadó, Budapest, 2003.
- [7] Csutora M.: A vállalati környezetvédelmi költségek számbavétele. (The Calculation of the Cost of Corporate Environment Protection) TTMK Kiskönyvtár, Budapest, 2001.
- [8] Dinya L.: A közszféra szerepe a régió versenyképességének növelésében. In: Farkas B. and Lengyel I. (szerk.): Versenyképesség- regionális versenyképesség. (The Role of the Public Sector in the Improvement of Regional Competitiveness. In: Farkas B. and Lengyel I. (Edited): Competitiveness – Regional Competitiveness) SZTE Gazdaságtudományi Kar Közleményei, JATEPress, Szeged, 2000.

- [9] Dyllick, T., Belz, F. and Schneidewind, U.: Ökologie und Wettbewerbsfähigkeit. Zürich, 1997.
- [10] Engel, H. W. and Tóth G.: Miért és hogyan foglalkozzunk a környezetvédelemmel vállalatunknál? (Why and How Do We Deal with Environment Protection at Companies?) KÖVET-INEM Hungária, Budapest, 2000.
- [11] Fama, E.E.: Agency Problems and the Theory of the Firm. *Journal of Political Economy*, 1980.No.2.
- [12] Fama, E.E. and Jensen, M. C.: Separation of Ownership and Control. *Journal of Law and Economics*, 1983. No.6.
- [13] Jensen, M. C. and Meckling, W. H.: Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 1976. No. 3.
- [14] Freeman, R. E.: Strategic Management. A Stakeholder Approach. Pitman, New-York, 1984.
- [15] Fülöp G.: A globális vállalati stratégiák. (Global Corporate Strategies) Aula Kiadó, Budapest, 2001.
- [16] Fülöp G.: Stratégiai menedzsment. Elmélet és gyakorlat. (Strategic Management Theory and Practice) Perfekt Kiadó, Budapest, 2008.
- [17] Gminder, C.U., Bieker, T., Dyllick, T. and Hockerts, K.: Linking Environmental and Social Sustainability to Business Strategy, St. Gallen-Fontainebleau, 2002.
- [18] Hernádi B.: Környezettudatos vállalati gazdálkodás zöld számvitel. (Environmentally Conscious Business Management – Green Accounting) Diplomamunka, Miskolci Egyetem, 2009.
- [19] Holmstrom, B. and Tirole, J.: The Theory of the Firm. The Handbook of Industrial Organization, Amsterdam, 1989.
- [20] Johnson, G., Scholes, K. and Whittington, R.: Exploring Corporate Strategy. Texts and Cases. Prentice Hall, London, 2006.
- [21] Jörg R.: Pénzek a gazdaság, a társadalom és a környezet szolgálatában. (Money for the Service of the Economy, Society, and the Environment) European Social Investment Forum, 2004.
- [22] Kerekes S. and Szlávik J.: A környezeti menedzsment közgazdasági eszközei. (The Economical Tools of Environment Management) KJK KERSZÖV Jogi és Üzleti Kiadó Kft., Budapest, 2001
- [23] Kerekes S. and Kindler J.: Vállalati környezetmenedzsment. (Corporate Environment Management) Aula Kiadó, Budapest, 1997.
- [24] Kindler J.: Döntéselméleti előfeltevések kritikája. Doktori értekezés, (The Critics of the Hypothesis of the Decision Theory) Magyar Tudományos Akadémia, Budapest, 1989.
- [25] MIHŐ Miskolci Hőszolgáltató Kft. Stratégiai terve 2008-2009 évekre. (The Strategy of the MIHŐ Miskolci Heating Service Ltd. for the Years of 2008 and 2009) Miskolc, 2007.
- [26] Nafti, R. and Miller, J.: Gondos bánásmód. (Careful Treatment) KÖVET-INEM Hungária, Budapest, 2000.
- [27] Nagy S.: Környezettudatos marketing. (Environmentally Conscious Marketing) Ph.D. értekezés, Miskolci Egyetem, 2004.

- [28] Pataki G. and Tóth G.: Vállalati környezettudatosság. (Corporate Environmentally Consciousness) A Környezettudatos Vállalatirányítási Egyesület kiadványa, Budapest, 2000.
- [29] Polányi M.: Személyes tudás. (Personal Knowledge) Atlantisz Kiadó, Budapest, 1994.
- [30] Rokeach M.: The Nature of Human Values. The Free Press, New York, 1973.
- [31] Szigeti S.: A vállalatok társadalmi felelőssége a fenntartható fejlődés és az érintettek nézőpontjából. (Corporate Societal Responsibility from the Aspect of Sustainability and the Stakeholders) Pécsi Tudományegyetem Közgazdaságtudományi Kara Doktori Iskola évkönyve, 2004.
- [32] Vágási M.: Integration of the Sustainability Concept into Strategy and Marketing. *Periodica Poltechnica*, 2004. No. 2.
- [33] Wilson, M.: Corporate Sustainability: What is it and where does it come from? *Ivey Business Journal*, 2003. No. 3 4.

AN EFFICIENT MEANS OF KNOWLEDGE FLOW: TECHNOLOGY TRANSFER

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SUMMARY

Technology transfer is the process of sharing skills, knowledge, technologies, methods of manufacturing, samples of manufacturing and facilities among governments and other institutions. Technology transfer ensures that scientific and technological developments are accessible to a wider range of users who can then further exploit the technology and develop new products, processes, applications, materials and services.

1. THE ROLE OF TECHNOLOGY TRANSFER IN THE ECONOMY

The extent to which a country can join the increasingly intensive process of international technology transfers has a decisive impact on the development of its national economy.

In the past few years, it has been possible to observe two characteristic phenomena in the efforts of the countries that play dominant roles in the transfers aimed at making the flow of knowledge more intensive. One is the result of globalisation and company activities becoming more international, which can be seen in the steady growth of transfer traffic. The other is an effort found in the countries which are taking specific steps to stabilise their transfer balance and ensure it is in the black.¹

An OMFB study (1998), based on an analysis of OECD statistics, highlights some important tendencies in this context:

• Technology supply is much more concentrated than demand. The largest users are the service industries, while the majority of R+D expenditures are concentrated on narrow industrial fields.

• In evaluating technology diffusion, the expenditure on technology purchase is to be taken into account as well as direct R+D expenditures.

• The significance of imported technology has steadily increased in the past one and a half decades. In smaller, moderately developed countries like Hungary, over 50% of technology is imported.

• Global, relatively barrier-free technology diffusion has played a decisive role in the global increase in the efficiency of Information Communication Technology (ICT) sectors.

¹ The international flow of knowledge is surveyed by OECD primarily using the data of the technological balance of payments quantifying the foreign trade in brands, licences, know- how, patents, and intellectual services. Some analyses also study the data of investment capital including technology transfer. (Papanek, 2002)

• Technology diffusion plays an efficient role in strengthening the transfer processes, and their methodological and infrastructural support. This is of particular importance for small countries and for countries conducting intensive international trade.

2. THE CONCEPT OF TECHNOLOGY TRANSFER

The term technology is derived from the Greek language. The word used today is made up by connecting the words 'techne' and 'logos'. The word 'techne' was used to mean manual skills or, in a more general sense, skills and abilities. The word 'logos' refers to knowledge and science. Accordingly, the word made up of the two corresponds to the skills, competence, and aptitude for something in the broad sense of the word, in addition to the knowledge required for it. (Shane, 1982)

In a more general sense, in today's interpretation, technology is a result of the synergic combination of four factors (or knowledge elements) (Figure 1).

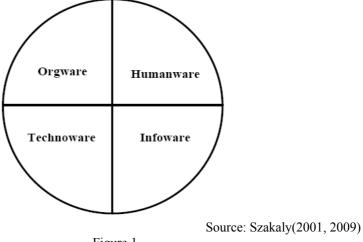


Figure 1 Components of technology

The four knowledge carriers identified above can at the same time be regarded as the objects of technology transfer. In a general sense, the concept of technology is used to mean the elements of knowledge which are needed in order to implement something. This definition can include the product and/or service to be created, the process of implementation (production and distribution) and the related additional knowledge (management, experience, competence). Therefore, technology transfer means the flow of all these technical and knowledge components between the various organisations and persons concerned.

Today technology is defined in a broader sense than specific 'know-how'; it is rather seen as a collection of knowledge (Shane, 1982). This interpretation has the essential feature that it does not narrow the concept down to the level of knowledge concerning specific production processes or manufacturing technology, but treats it as the complex set of knowledge necessary for creating an enterprise, and organising and operating the systems of production and distribution.

If the term technology is used as an attribute of a transfer process, then we can accept the interpretation that it is indeed nothing else but a sum of the technical competences and immaterial knowledge that make people and organisations capable of:

- perceiving new problems
- elaborating new conceptions
- elaborating new solutions
- creating a new division of labour for people and organisations

As a result of the above factors, a new product and/or service is created. Transfer is passing on knowledge to those who do not have it (through the national economy, companies, organisations, and individuals). This new, ideal technology transfer also includes innovation, namely the innovation of a new, adapted system. This obviously satisfies a market demand which originates from the end users, while it also renews several social and economic potentials of the receiving party.

Transfer is always implemented in connection with some direct or indirect economic activity. It results in a special, targeted re-distribution of the outputs of the general development process.

Today its most obvious feature is the effort aimed at imparting systemised knowledge.

Technology transfer and adoption is not simply the imitation of a particular idea (knowledge), but the adaptation of the original so that it can best suit the typical sociological, political, technological, climatic, economic and educational environment of the receiving party (Figure 2).

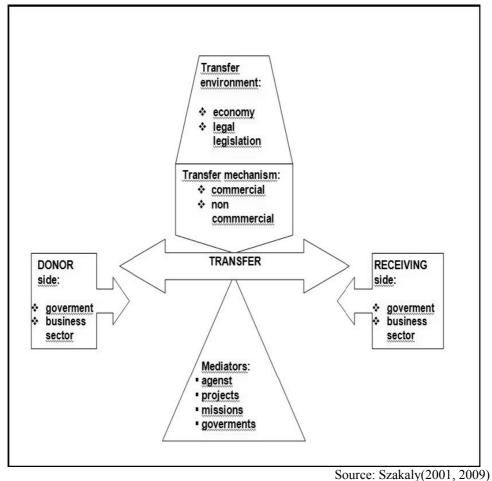


Figure 2 The process of and players in technology transfer

Technology transfer is implemented in various fields of production and services through the imparting and taking on of innovations and development results.

Technology transfer makes it possible that:

- the receiver starts using the R+D results of others fast
- the donor who has taken on the risky investments of R+D, which require large expenditures, is able to share the burdens with others through the rapid economic exploitation of the results

The technology gap and the resulting asymmetry (difference in knowledge) is the starting impulse and driving force of technology transfers. The reason for this is that scientific and technical resources show a highly concentrated distribution in terms of both the world and individual countries. This imbalance activates and keeps the potential players in action who are trying to solve the imbalance. It is technology transfer through which – in the various

moments of the innovation processes – the division of labour is also achieved, both on the scale of individual sectors and at international level.

Concerning its content, technology transfer also includes the passing on and taking on of free knowledge as well as that owned by the proprietor (confidential – restricted). Free, and thus public, information generally ensures access to scientific research results. On the other hand, protected information contains specialist elements of technological knowledge and can only be learned by methods controlled by its owners (patent, licence, etc.). The extent to which knowledge is controlled is an essential consideration for the receiving side, especially as decision makers are frequently faced with tasks that can often hardly be solved. This general problem is referred to in the professional literature as the 'transfer paradox' or 'knowledge controller'.

The essence is that "the technology that we want to obtain is basically the information that would be necessary in order to make reasonable decisions on whether to purchase or reject it". (Ambrosio, 1995)

Decisions concerning transfer carry perceivably high risks, particularly when public information is available to a limited extent. This is frequently the case in the defence sector and in activities based on economic initiatives. It is a well-known fact that innovative companies consciously raise the barriers to entering the market to a high level. Means of doing so include making the information on the new product or service confidential, providing legal protection for it, and embedding it in a way that allows movement only in a complete form (complete know–how.)

3. TRANSFER MODELS

The processes of delivery and reception take place in highly different structures. These depend on the intentions and the interest enforcement methods of – and the extent to which there is cooperation between – the players involved in the transfer, the donors and the recipients. Below, some models showing the relations between the players and demonstrating specialist transfer strategies will be presented (Figure 3 and Table 2). Familiarisation with the models is essential because initial transfers are always established in the frameworks of the simpler models, and after successful cooperation the adoption of more complex forms can begin. The experience gained in the transfers can provide a solid foundation for the conscious development of the embedding potentials of the receiving side, and through that awaken the force of attraction. This may result in the establishment of cooperation according to more complex models. This may provide a sound framework for more intensive interest enforcement by the receiving party, and for the development of the active position. The models to be presented also represent a historical development series, which may serve as an informative framework for the evaluation of transfers in Hungary in the past ten years.

Five models, which describe the behaviour of the players in the process, can be differentiated:

'Contact building model':

This model highlights the role of bridge-forming institutions which ensure that information flows between the sources and their users. These institutions form connections between the demand and supply sides by enabling the potential partners to find each other. Through offering custom-made programmes, the bridge-forming institutions can also help the users discover the mechanisms which are suitable for them.

'Diffusion model':

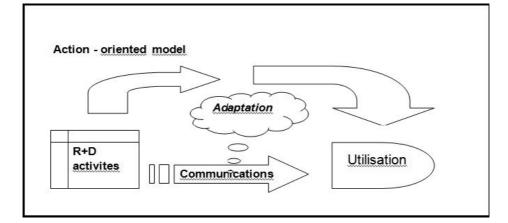
This model concentrates on connecting appropriate technologies and diffusion potentials. It finds the players interested in ensuring an efficient division of labour during the various stages of research, development and adaptation. This model is also able to embrace more complex mechanisms and to make it possible for the receiving side to utilise its diffusion potentials more efficiently. The contact-building model is, first of all, useful for transfers which are occasional or just beginning. This is because it ensures cooperation between a small number of players in a transparent system. However, the diffusion model is also appropriate for mass, fast, spatially widely spread diffusion, where the presence and coordinated cooperation of a great number of players can be ensured on the recipient side.

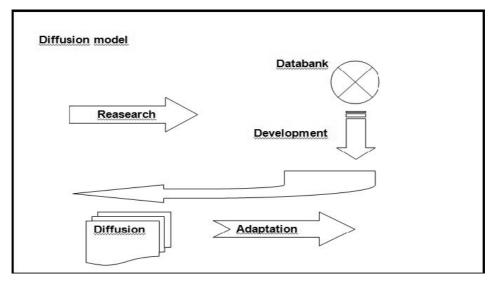
'Problem solving model':

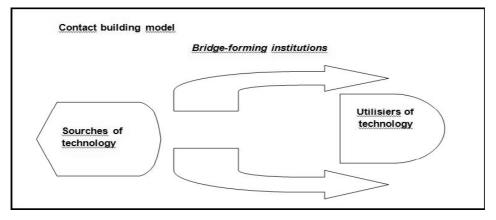
This model starts by accurately clarifying the requirements. It looks at the requirements as technology problems to be solved, and from this starts a problem solving process. In its framework, it arrives at the final solution through selecting the possibilities for adaptation from the range of potential solutions available. This logical system has an important element: it is not satisfied with a simple examination and assessment of the supply, but, in the course of selection, it also assesses the willingness of the donor to adapt. This way of thinking does not simplify transfer through a simple statement of the possible technologies offered, but regards the optimum possible satisfaction of the most fundamental demands as its main objective. In formulating the problem and searching for a solution, it relies on the active participation of the prospective recipient organisation. The model does not just provide simple commercial transactions, it also incorporates supplementary developments in order to ensure the complete satisfaction of the recipients' demands. This latter feature may ensure the development of products and technologies which can meet the specialist demands of the local markets.

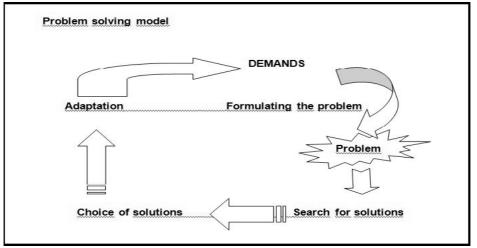
'Action-oriented model':

This model combines the elements of the process on the basis of economically established utility. This thinking starts from the fact that – in the lifecycle of every new product – a decisive moment will arrive which will be crucial for the active marketing of that product. This occurs under competitive conditions. The innovative diffuser enjoys an advantage in this competition if he can cooperate in the early stages of diffusion with companies which are willing to adapt. These companies should be prepared – or forced – to maintain their loyalty because of the contracts they have signed. This adaptation does not mean simply passing over and increasing mass, but it also includes ensuring improvements which match local requirements. It is not by chance that this model is common in the practice of international companies. The model is used primarily when the parent company (donor) has to cooperate with a recipient country and target market with a culture very different from that of the donor's country (e.g. the European projects of Japanese companies, large US companies in African countries). Every company which thinks in terms of a global strategy has applied similar solutions in the early stages of its internationalisation.









Source: Szakaly (2001, 2009)

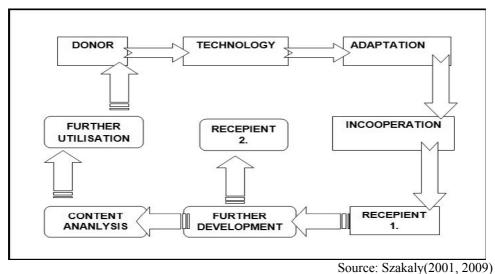
Figure 3 Technology transfers models

_	Comparison of technology transfer models							
	FEATURE	CONTACT BUILDING MODEL	DIFFUSION MODEL	PROBLEM SOLVING MODEL	ACTION ORIENTED MODEL	MODEL BUILT ON KNOWLEDGE EXCHANGE		
1.	Basic idea of the model	Connecting supply and demand	Creating the conditions for rapid diffusion	Eliminating technology problems	Preparing many channels of utilisation	Exploiting the advantages of mutual learning		
2.	Key players	Bridge-forming institutions	Communicators	Requirement-oriented adaptors	Specialist adaptors	Developing recipients		
3.	Crucial process elements	 – finding supply- demand – partner mediation 	 loading a databank surveying diffusion potentials communication 	 exploring requirements formulating problems searching for solution methods setting adaptation directions 	 predicting utilisation directions searching for partners building adaptation bases 	 developing embedding programs building bases for improvement analysing knowledge content 		
4.	Typical transfer mechanisms	 building turnkey systems wedging in technology 	 licence trade embedded technology trade training programs 	 patent transfer know-how transfer technology service purchase 	 joint ventures internal techno partition affiliated companies 	 external techno partition reciprocate and cross licence transfer Joint venture joint R+D programs 		

 Table 1

 Comparison of technology transfer models

(based on Mogavero and Shane, 1982)



The model is based on Knowledge exchange, including feedback. Today it is becoming more and more prevalent (Figure 4).

Figure 4 Model built on knowledge exchange

'Model built on knowledge exchange':

In this model, the donor consciously monitors – in a pre-planned manner – the efforts of the recipient party that are aimed at improvement. The donor will also encourage and assist such efforts. In order to compensate for the work and expenditure this process creates, transfers towards a third party are also supported. In addition, the donor takes on these development results and, after appropriate analysis, builds them into its own new programmes.

In the new transfer cycles, it then becomes possible to disseminate these new advances globally. This model can be clearly identified in transfers within international companies and in projects aimed at the transfer of means and methods of production. In the first case, the interpersonal relations within the companies and the off-site R+D departments are the driving forces of the process. In the second area, it is primarily the customer service organisations that do the necessary information collecting through their monitoring systems. This model is actually an efficient means for implementing external and internal 'techno partition', which is basically a conscious sharing and moving of knowledge, technology and resources between the appropriate transfer players while maintaining mutual benefits.

4. TECHNOLOGY TRANSFER AS A MEANS OF CREATING KNOWLEDGE

When creating technical knowledge, the transfer of knowledge can be performed at different levels. One extreme is when the process is simplified to the physical takeover of a machine, piece of equipment, or device. The other extreme is when people learn how to operate a piece of technology, with the highest level of efficiency, in a process which can

take up to several years. (Von Hippel, 1988; Ray, 1969) In addition, during this process, significant adaptive modifications may be implemented on the original system. The events and outputs of this process also depend on the extent to which the innovation can be regarded as competence destroying or competence enhancing. In such a complex technology transfer programmme, both individual and corporate learning is required. Individual learning begins with collecting experience related to the technology. The understanding of this experience creates the individual knowledge which modifies individual abilities and knowledge. Corporate knowledge is a sum of the individual knowledge of the persons connected with that organisation. Here synergic effects prevail on the one hand, and, on the other, the organisation learns only to the extent that its employees are able to adapt their individual learning to the corporate routine (i.e. the elements which build the corporate culture).

In the transfer process of complex systems the exchange of knowledge takes place at two levels:

- Level one: A knowledge package is put together by the creators of the technology. This package is connected to the forthcoming operation, and it directly assists in the widening of the knowledge of the recipient.
- Level two: A knowledge package is created by the recipient of the technology in the course of use and adaptation. This may have significant creative and innovative elements (reinvention).

The knowledge created by the user also moves in the reverse direction: it may provide important information which can be used to plan the next generation of the technology or to provide concrete solutions.

Four levels of the transfer of technology competences can be differentiated:

- Level 1: copying the activity
- Level 2: complex adaptation of the activity
- Level 3: transfer of the scientific knowledge behind the technology
- Level 4: interactive cooperation between the donor and recipient

The levels denoted here also mark, in general, the development stages in the cooperation of the permanent transfer partners. In addition, they represent the borders of the frameworks. These frameworks can be gradually developed.

The limits and characteristics of knowledge transfer are:

1. Because it includes user experience, technical knowledge can be highly differentiated and immobile. Due to the fact that taking over a technology involves the incorporation of new inventions, this user experience also carries in itself innovative elements.

2. The central task of the potential donors and recipients of advanced technology is to deconstruct the limits of knowledge. This cannot be an isolated activity: instead it presupposes a specialist cooperation network of the various participants.

3. Mediating institutions exist between the donor and the recipients. The tasks of these institutions are diverse:

- mediating know-how from the donor to the recipient
- passing back user knowledge from the recipients to the donor
- providing methodologies for accelerating individual learning processes
- documenting the experience gained in the course of individual learning, and collating this experience in a way which is suitable to pass on to others

• providing methodological support for corporate learning, accelerating that learning and initiating any changes that are required for this purpose

4. The work of mediating institutions is efficient because they incorporate the benefits resulting from an economy of scale. As the recipients only experience the processes of receiving and incorporating knowledge as individual events, they cannot draw general conclusions from this phenomena. The mediator, on the other hand, obtains unique experience and knowledge bases. These can be incorporated into the institution through synthesising the 'individual' phenomena and evaluating the repetitions.

5. KNOWLEDGE CENTRES AND KNOWLEDGE REGIONS

With the exception of the simplest cases, transfer means both imparting and taking on knowledge and experience. Imparting the knowledge accumulated in the course of R+D can only be successful if the previous qualifications of the receiving party make it possible to implement the organised transfer of knowledge.

Under the conditions of global competition, every company is looking for the innovative receiving medium which can support its activities all over the world. Regions, which develop within countries and across borders partly in a self-organising way and partly as a result of conscious development, in turn look for investors that can help to increase the economic potential of a particular area. Looking at it from an industrial policy point of view, a region can be seen as a specialist, active network of economic players. Within this network, the participants take part in a very close and intensive collaboration, which mainly entails supporting each other. The central core of the network is a production company which forms a closed professional culture surrounded by suppliers, institutions providing financial and consulting services, and government and private laboratories engaged in R+D. In operating the network, a central role is played by regional government leaders. These leaders can make the decision to support those learning process which result in the formation of regional networking organisations. Technology transfer and the diffusion of information cannot be successful in international and national frameworks if the local channels, which ensure final distribution and direct the technology and information to their targets, are not created.

What are called Knowledge Creation Fields (KCF) – or Innovative Regions – have been organised in order to ensure the successful completion of these efforts. KCFs have created the development policies, the infrastructure and the networks of institutions necessary to support diffusion, to intensify international technology transfer, and to receive the relevant learning processes. At present, the Knowledge Creation Fields are the province of Baden-Württenberg in Germany, the Centroregion in Portugal, Toscana in Italy, Steiermark in Austria and the port cities in Ireland.

According to international experience, there are ten significant factors which enable the creation of an Innovative Region and its intensive connection to international technology transfers:

- Concentration on the requirements of the global market. When choosing technologies, exports are the crucial factor rather than the meeting of local requirements.
- Creating opportunities to participate in international commerce.
- Efforts at integration through networking with local, national and international partners.

- Intense cooperation, in which companies should focus on strengthening their own competences. Small and medium-sized enterprises have a stronger chance of growing in the framework of project organisations than in isolated activities.
- Systematic strengthening and widening of the knowledge base, and an openness to innovations.
- The formation of a vision which takes long-term perspectives into account. This includes making preparations with foresight.
- Continuous learning both at organisational and at individual levels. Building connections with sources of knowledge.
- Looking for opportunities to participate in knowledge transfer not only as a recipient, but as a donor as well.
- A supportive local innovation network of institutions.
- Generating the establishment of new enterprises.
- Building monitoring systems to predict changes in the environment.

6. NEW TENDENCIES IN CHOOSING TRANSFER OBJECTIVES

When international companies look for transfer partners, there is an increasing tendency for such companies to move towards knowledge centres. The range of comparative advantages has come to include factors connected to knowledge creation and knowledge diffusion. These factors have become important considerations when comparing and selecting recipients (see Table 3).

In the decade to come, global competition will basically concentrate on renewable human capital and the knowledge resulting from it. Knowledge-based industries will be able to create products and services with high added value: a process which will be enforced by competition. These companies will develop their networking systems so that they move towards the knowledge centres, which are today only being formed but will intensively multiply later. The reason for this is that this is the way to obtain and benefit from competitive advantages. Knowledge/Learning Regions will be created where valuable, well-qualified workers (knowledge workers) are concentrated. There should also be an appropriate, flexible local infrastructure available, partly with regards to employment and partly with regards to operating the information and communication infrastructure needed for implementing the organisation's tasks.

Knowledge-intensive regions (centres) will be prepared for the 'just-in-time' movement of information, persons and knowledge. National, local and government organisations, global companies and local enterprises will be organised into networks built on mutual benefits that are open and accessible to everyone. Their joint objective is to create and propagate technologies which carry new, competitive advantages.

6.1. Knowledge centres and regionalisation

From an industrial policy point of view, a region is basically a specialist, active network of economic players where the participants are involved in very close and intensive collaboration, with the main aim of supporting each other. The central core of the network is a production company which forms a closed professional culture surrounded by suppliers,

institutions providing financial and consulting services, and government and private laboratories engaged in R+D.

Knowledge centres are a new type of innovation institution in an economy and society which is becoming both globalised and localised. As compared to the former types of institutions, which were built on the classic linear innovation model, the structure and operation of these new institutions show typical differences.

The problems of knowledge production, knowledge transfer and knowledge utilisation are at the centre of the innovation model. Within that model, the most important issues are as follows:

- opportunities for exploiting knowledge advantages
- dynamics of equalising knowledge
- methods of sharing knowledge
- supporting learning processes

The new tasks for innovation institutions, with regards to the above, are:

- creating and updating the knowledge base
- ensuring intensive and efficient possibilities for using the knowledge base
- ensuring the accessibility of the knowledge base

The main areas in which knowledge can be shared are:

- Sharing between the players in the creation of knowledge (including the problems of comprehension and codification).
- Sharing between the producers and users of knowledge (the problem of transfer).
- Ensuring the multiple use of the knowledge (the learning problem)
- Ensuring the spatial distribution of knowledge (the problem of centre –decentre).
- Ensuring the even distribution of knowledge (the diffusion problem)

Accordingly, the institutions of knowledge distribution are organisations which are built on a high level of information technology, or on their formal and virtual networks. Examples include the following organisations which can develop both from government and private sources:

- service providers offering information technology
- service providers offering network system services
- service providers offering network content services
- service providers operating network search systems
- service providers offering regular information selections
- service providers supporting e-mail and communication groups

Knowledge centres exert their influence on the basic innovation institutions of the surrounding environment, encouraging such institutions to develop in a non-traditional manner.

The structures of regional innovation systems and the networking possibilities of the regional knowledge centres are thus closely interrelated. Knowledge centres play an important role in organising, establishing and operating networking systems which include the world /cooperation networks, strategic alliances, service providing networks, R+D networks, etc.

Networking can be regarded as a new form of development. A crucial period in the establishment of networks is the time when the widening of market competition occurs.

During this period, competition between industries and regions also intensifies. In this situation, medium-sized companies, international companies, and government and private research and development laboratories are all forced to apply cooperative strategies (what is called pre-competitive cooperation). Here government-level cooperation projects – in addition to private initiatives – have resulted in a cohesion effect.

Today the task of ensuring cooperation has even more importance for companies than the stages of R+D, production and marketing. The scope for cooperation is growing wider due to the increased presence of both project-specific and advanced training, which encourage cooperation between an increasingly wider range of professionals.

This tendency also indicates that this practice is becoming more important than both the transfer mechanisms which are built on the simple linear innovation model and the networks which are aimed at inducing direct synergic effects.

Generally speaking, the existence of knowledge centres with various orientations generate favourable effects in the following fields (in general, according to the priorities emphasised):

a) Concentrating intellectual capital:

Intellectual capital concentration is created in space and time. This recreates the information-interest relations between the activities of the innovation process that have the tendency to become separated from each other.

It can be proved that concentrating intellectual capital reduces the uncertainties and risks of R+D. Room is provided for individual initiatives to develop that are often rejected in a different mediums. Partnerships and alliances can be formed between different professional cultures that do not frequently meet.

b) Concentrating relevant information:

By providing the intellectual and infrastructural framework necesary to ensure the open flow of information, connections can be made between the separate participants in the innovation process.

In many cases, the costly, time-consuming and knowledge-intensive tasks of selection can be taken over by specialists, thus offering a fast and secure way to transmit knowledge to 'lay' partners.

c) Concentrating equipment:

Concentrating equipment can create an up-to-date technical, information technology and service infrastructure, which can also be used by those who would normally have to go without it due to a lack of investment funds.

d) Concentrating services:

The range of services may extend from those of a technical character to complex management consulting. Such services can offer a range of opportunities to their customers. A safe professional background can be provided, primarily for new businesses and small enterprises.

e) Providing opportunities for supplying industry activities:

As well as opportunities for R+D, the necessary conditions are ensured for the fast start-up of production.

f) Creating a favourable atmosphere for personal contact building:

The beneficial effects of direct personal contacts can be maintained by improving the relations between the organisations concerned.

g) Increasing economic efficiency:

Major elements of the improvement of economic efficiency are:

- reducing the critical R+D and investment capital requirements
- better utilisation of capacity due to the joint use of equipment
- fast running-in
- financial benefits
- lower specific expenditure requirement of joint services
- h) Stimulating the entrepreneurial spirit:

Favourable conditions, along with any successful examples that can be presented, contribute to bolder entrepreneurial decision making. The benefits that can be offered can be mitigated by the initial barriers which have to be faced.

i) Improving the employment situation:

Wide-reaching demand for labour appears primarily in the final production stages. The quality factor that plays a role in the regional binding of the 'qualified elite' is also very significant.

j) Increasing the attractiveness of the regions:

The secondary networks which arise in the surroundings of innovation institutions can attract enterprises looking for new locations.

6.2. Functions of the KNOWLEDGE CENTRE

In establishing knowledge centres, conscious efforts should be made to develop a varied and easy-to-diversify activity structure and infrastructure, which mix the advantages and service structures of science parks, technology transfer institutions, technopoles, competence /excellence centres, incubator houses and industrial parks.

The KNOWLEDGE CENTRE is

- an explorer of the available local and the accessible global knowledge
- an arranging, frameworking and storing agent of potential knowledge
- a mediator and generator of demand for knowledge
- a leading adaptor and innovator, an active player in venture capital mediation
- a builder of connections between large and SME level economic players,
- an organiser of the innovation network, and a supporter of cluster initiatives as the economic and public administration centres of the region.

The main mission of the knowledge centre:

1. The KNOWLEDGE CENTRE as the cradle of innovation: R+F activities, creating innovations, creating knowledge:

- ensuring the accessibility of innovative technologies
- active transfer partnership

2. The KNOWLEDGE CENTRE as the driving force of diffusion, a basis of sharing knowledge: diffusion, reception and redistribution of knowledge, knowledge flow:

- mediating information,
- mediating partners.

3. The KNOWLEDGE CENTRE as a cluster centre: a collector of specialists, a polarisation centre of expertise:

- new critical resource masses and personnel conditions
- providing technical and technology services

- providing infrastructure
- providing incubation services

4. The KNOWLEDGE CENTRE as a generator and mentor of regional development:

- mixing global and local knowledge
- ensuring knowledge flow in regional dimensions
- maintaining an international network of relations
- 5. The KNOWLEDGE CENTRE as a regional technical service providing centre:

As compared to those of large companies, the innovation activities of SMEs differ in that they are built on using continuous external expert involvement and services in all their stages. Typical areas are:

- technical services/measurements, validation, experiments, leasing laboratory equipment, etc.
- expert services /interpreting, document translation, business administration services, business and legal counselling
- business organisation, counselling/marketing, technology, organising production
- technology services /leasing labour, renting workshop space, rapid prototyping services
- logistics services, R+D services
- technology transfer services /partner search, project writing, licence trade, capital organisation, organising venture companies

	From a mass production region to a knowledge region					
	ASPECTS	MASS PRODUCTION REGION	KNOWLEDGE REGION			
•	Sources of	Sources of comparative	Sources of renewable			
	competitiveness	advantages	advantages:			
		 availability of natural 	 creative-innovative 			
		resources	medium			
		 relatively inexpensive labour 	 continuous development 			
•	Products-services	Mass production:	Knowledge-based production			
		 cost advantages 	and services:			
		 division between R+D and 	 high added value 			
		production	 combination of production 			
		-	and innovation			
•	Production	Centralised plant with a local	Innovation chain built on			
	infrastructure	range of suppliers, and reduced	supplier network			
		task division				
•	Human resources	 low qualifications, low 	 knowledge workers 			
		wages	 life-long learning 			
		 narrow training 	 induced corporate learning 			
		 target-oriented trainings 	projects			
•	Technical	Strong reliance on local	Global communication and IT			
	background	infrastructures	infrastructure			
•	Corporate	 division of authority ensuring 	 mutually beneficial 			
	management system	the dominance of the parent	relations			
		company	 networking organisations 			
		 top-down control 				
·		•				

Table 3From a mass production region to a knowledge region

Source: Szakaly (2001, 2009)

REFERENCES

- HIPPEL, E. A. (1977): Has a customer already developed your next product? Sloan Management Review, Vol. 18. No. 2. pp. 63-74.
- [2] Korean Science and Engineering Foundation (1994): Science and Engineering Research Centre. Daejun City. Korea.
- [3] PAPANEK G. (1999): Az innovatív vállalatok illetve a K+F intézetek, egyetemek és hídképző intézmények együttműködése. (Collaboration of The Innovative Enterprises, R+D Institutes and Background Institutions) GKI Gazdaságkutató Rt.
- [4] OMFB (1998): Technológia, foglalkoztatottság, versenyképesség az OECD országokban. (Technology, Employment, Competitiveness in the OECD Countries) OMFB, Budapest.
- [5] SHANE, R. D.(1982): About Technology Transfer. Dekker E. N. York.
- [6] SZAKÁLY D. (2001): Transfer of Technology Transfer of Knowledge. (In: Business Studies. A Publication of the University of Miskolc.) Vol 1, Number 1. Miskolc. Miskolc University Press. 2001. pp. 179-191.
- [7] SZAKÁLY D.(1999): Technológia transzfer tudás transzfer. (Technology Transfer Knowledge Transfer) Felzárkózás, értékrend változás a vállalati és intézményi gyakorlatban c. konferencia. 1999. május 12-14. Miskolci Egyetem. Miskolc-Lillafüred. 264-279.

INNOVATIVE ORGANIZATIONS AND ORGANIZATIONAL REDUCTION

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SUMMARY

Regarding t he chan ging t endencies of i nnovative o rganizations, i t can be st ated t hat outsourcing activity is the most g eneral method of i ntervention. In this paper, we will review the definitions and forms of outsourcing, mainly by way of presenting a summary of accepted m ethods of c ompetence-analysis. The cost-efficiency of transactions is not detailed here, because it was dealt with in an earlier study.

Outsourcing is also a tool of organization reduction. Therefore, it is important to investigate in det ail t he t opic o f kee ping o rganizational balance, whi le, o f co urse, f ocusing on outsourcing-type interventions.

1. INNOVATIVE ORGANIZATIONS

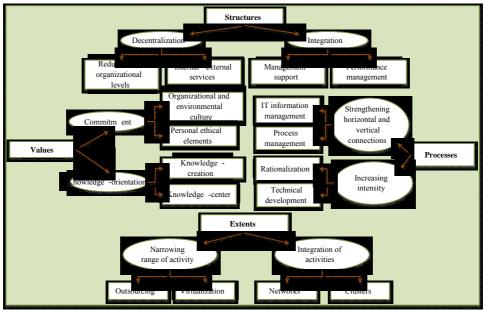
Researchers have been deal ing with the definition and main components of innovative organizations in several publications and studies during the last 10-15 years. Also, the author of this paper has published several sets of research results on this topic. (Szintay, 2007)

Global competition has m ade this topic exciting and relevant. This is because turbulent market, t echnical and other changes have raised a n important question regarding the adaptation ab ilities and initiatives of companies in connection with their competitive environments.

With r egards t o th e abov e considerations, sin ce the 1990's attempts t o d efine what an innovative organization is h ave focused on t he elements of capacity for change, rapid adaptation, and initiatives. In 1994-5, there was a breakthrough, as it was seen as being possible to examine an d describe innov ative organizations on the b asis of four considerations.

It has become clear that the capacities of an economic actor for change can be described by analyzing the changing tendencies of:

- the organizational structure
- the processes of the organization
- the values of the organization
- and the capabilities of the organization



Sources: own editing

Picture 1. Changing dimensions of innovative organizations

Let us briefly examine the content of each consideration:

Changing structures

Two important factors can be identified in the organizations' changes:

- DECENTRALIZATION, which m eans, o n o ne hand, t he re duction of organizational l evels. This has t he aim of t he l egal brea kdown – or o f t he breakdown un der an unchanged leg al fram ework – of larg e, monolithic organizations. This is done in order to ensure a more effective management chain and economic operational parameters. Divisional organizations, lean management, structured m atrixes a nd on-dem and organizations, e tc. are al l parts of decentralization. On the other hand, decentralization also means retaining external and i nternal services on a market base. Shared services and the purchasing of resources as services are part of this too.
- INTEGRATION is a too l for en suring co mmon o bjectives an d m ethods of operation. Integration can include the following management supporting systems: controlling strategic leadership, Balanc ed Scorecard, a nd the harmonization of

merchandizing and production wi th m anagement m ethods i n c ompound organizations.

Changing processes

The value c hain a nd com petence theorem s have up-valued the place and time organizational and t ask-oriented a pproaches of processes. T he HORIZONTAL and VERTICAL integration of phased, functionally separated activities occurs in an intensive way. The end po int is the cu stomer, who has to be "served" in a fo cused and faultless manner.

Of course, IT makes it possible to cross traditional distances and communicational borders, and to accelerate reaction time.

Overall, the considerations of process management have opened new ways and possibilities with regards to B PR, project m anagement, organization and m anagement of work processes, etc.

INCREASING INTENSITY is an intervention resulting in more effective operation and place and time utilization. It uses classical process rationalization, planning rationalization of work proce sses, time-motion analysis, wo rk-place organization, process analysis, I/O analysis, CORAPP procedure, etc.

Logistic management – o r, as it may be m ore correct to say, supply chain management (SCM) – covers the material and IT management, and i ntegrated solutions, of the whole material process.

Changing values

With regards to the future of firms and management, values are one of the main pillars of the knowle dge-based s ociety. This te ndency originates from hum anization, t he aim of protecting and establishing environmental resources, the goal of achieving more human and rational living standards, and also from schools recognizing their own importance.

It can be easily acknowledged that these aims cannot be fulfilled with out the symbiosis of COMMITMENT: i n ot her words, t he t ransformation of t hese values i nto consequent actions and ratios by thoughtful and constructive people.

KNOWLEDGE ORIENTATION is a value which strengthens the importance of innovation today. It is im portant, though, to examine separately knowledge creation (real innovation) and any forms of knowle dge transfer, because diffusion processes can be only treated in this manner.

Changing capabilities

Competence-based firm building invo lves NARROWI NG T HE R ANGE OF THE COMPANY'S AC TIVITIES. It s m ain manifestation i s t he out sourcing of resources. However, in a later ch apter, we will arg ue that o utsourcing is a much m ore complex concept, because of its connections with the issue of networking.

Virtualization is a new project and business operational IT method, which radically rewrites the instrum ental conce pts of com pany and site. Howe ver, once a gain, these a re all consequences of networking.

THE INTEGRATION OF THE R ANGE OF ACTIVITY brings us to the world of networking, namely of network and cluster structures.

Below, research projects on INNOVATIVE OR GANIZATIONS will be reviewed. The organizations will be positioned with regards to their cap abilities for change. (on e programme can i nclude several factors). We also intend to demonstrate how m uch the clients follow changing tendencies.

Of c ourse, there is a strong c onnection between each of the four above-mentioned considerations. One very important consideration is outsourcing: a factor which will have a significant effect on our further investigations. I would like to emphasize some fields based on Picture 1, which all include outsourcing activities:

Structures

- decentralization
- reduction of organizational levels
- internal-external services

Processes

- strengthening horizontal and vertical connections
- process management
- IT management
- Increasing intensity
- Rationalization

Values

- commitment
- excellence
- knowledge orientation
- knowledge transfer

Capabilities

- narrowing activity
- outsourcing
- integration of the range of activity
- networks

On t he b asis of th ese factors, we will d eal with the main theoretical q uestions of f outsourcing below.

2. OUTSOURCING

2.1. Definition and types of outsourcing

Some definitions of outsourcing emphasize that these activities are not critical with regards to the company's operation: they are not b asic activities, they do not h ave st rategic importance and they are not connected to the basic competencies of the company. Outsourcing means the h anding over of responsibility for elements of the company's production processes (which are components of the company's production-and-value chain, but are of lesser importance from the point of view of strategic goals) to external producers. Based on o ther d efinitions, a d istinctive characteristic of ou tsourcing is that the subcontractor has total control over the outsourced activity. The sub-contractor does not simply accomplish some well-defined activity based on the outsourcer's directions, but the method of accomplishment, the resources used, and any development of the activity belong to the competence of the s ub-contractor. This definition emphasizes that the s ub-contractor takes control of some b usiness fields of the client-company as a result of o utsourcing. In this approach, output-orientation is significant: the results of the accomplished activity are more important than the question of "how".

The literatu re which d eals with the ph enomena tries to d ifferentiate b etween "simp le" contracting a nd o utsourcing. Sim ple (o ut)contracting i s pr ocess-oriented, and t he outcontractor does not renounce control. If the sub-contractor follows the plans, technology descriptions, directions and sched ules gi ven by t he gene ral contractor, t his i s not outsourcing. In case of outsourcing, the outsourcer ce des the right of control over the service p roviding p rocess, and t he contract only deals with the expected result. The accomplishment, formation and m anagement of the processes are the responsibility of the service provider. The client does not interfere in the work itself.

This d efinition is ap proved b y Gay and Essing er (2001, p.5). Acco rding to the m, outsourcing is "the tran sference of the responsibility for t he m anagement of service providing to an outsider based on service level agreements". According to Heywood (2001, p.14): "the management of t he functions concerned is given to the service provider. The external entrepreneur, as a specialist in his own field, is usually in the position to ensure higher added value. This cannot be attained by the outsourcer if the task is kept in-house, as it is not among the company's core functions". However, as the service provider decides himself how the service will be provided, and what kind of work processes will be used, nothing can force him to follow the best practices. As a result, there is no guarantee he will attain an improvement in performance as compared to the internal provider. (The same can be seen in Casani et al. (1996) and Sacristan (1999); for terminology see table 1.)

Harrigan (1985)	All of the make or buy decisions within a company about production (services or goods) and the ensuring of raw materials or services.	
Loh and Venkatraman (1994)	Physical and/or human resources related to the company's IT infrastructure, which is provided by an external supplier.	
Quinn and Hilmer (1994)	Buying activities from outside, including the traditionally integrated functions of a company on the condition that it is not part of the core function.	
Ventura (1995)	Temporary barter with independent companies, through which stable partnership can occur.	

Table 1. Terminologies for outsourcing

Lei and Hitt (1999)	Relying on external abilities and skills, the creation of certain sub- functions in production and other value adding activity (frequently capital intensive).		
Rothery and Roberson (1996)	During this process a company delegates in-house activities to an external firm. This includes the delegation of planning, administration and development functions to an independent third party.		
Casani et al. (1996)	Long term relationship, when non-core functions or activities are developed by specialized experts, who can become strategic partners.		
Blumbert (1998)	Contract with a third party about handling certain functions as specified.		
Greaver (1998)	An organization frequently delegates repetitive in-house functions and decision-making to an external supplier.		
Sacristán (1999)	Cooperation agreements between different kinds of companies. During the process, the technical experts of a company give significant assistance to the other firm in the physical and/or human fields, to obtain the given goal.		
Gilley and Rasheed (2000)	Replacing in-house functions by buying them from an external source. Although the company possesses the required management and financial capabilities, it avoids keeping these functions in-house.		
Campos (2001)	A contract is made with a supplier concerning an activity, which was previously carried out within the company. However, the contract can cover new activities too.		
Bailey et al (2002)	The partial or total delegation of an activity and the related services to external management. The desired outcome is fixed.		
Quélin and Duhamel (2003)	During the process, a function previously controlled by the company is delegated to an external supplier through a long term contract. This contract includes the transfer to the buyer.		
McCarthy and Anagnostou (2004)	In addition to buying a product or service from an external source, the agreement is also concerned with the relocation of liability, business functions and the passing on of any appropriate knowledge (implicit and explicit).		
Mol et al. (2005)	The acquisition of a service from a legally independent entity.		

Sources: Espino-Rodriguez and Padrón-Robaina (2006)

Therefore, o utsourcing has basically become an i mportant t ool of c ompetence-based company-building strategy nowadays.

The future d estiny of activities can be classified into two, or further divided into three, categories based on the primary analysis of the competencies of the value-creation process:

- insourcing: the activity, as a core-competence, is kept within the company

- outsourcing: outsourcing of the so-far internal activity, which is retained only as a service
- co-sourcing: (outsourcing through a general contractor) a higher level solution of outsourcing, which means the organizing of networks and suppliers' clusters

Accordingly, out sourcing i s an act ion d uring whi ch a com pany consi gns any o f its activities, eith er th e wh ole activity or so me o f its p arts (ex cept for ownership an d management aspects) to an external entrepreneur, thereby liquidating or cutting back such capacities. Con sidering the e aim o f ou tsourcing, the following driving factors can be identified:

- homogenization of the value chain
- increasing efficiency based on transactional costs
- maximum utilization of internal resources
- compensating for the absence of important competencies
- following fashion trends
- resource-concentration
- concentrating on competencies, etc.

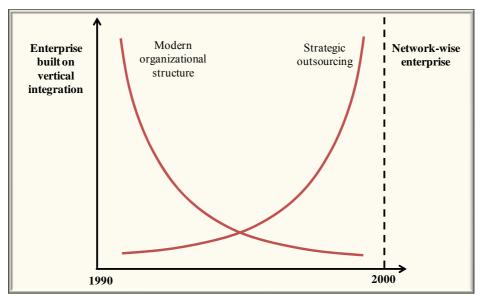
Besides these, today t he process of networking can be viewed as a more acceptable consequence of outsourcing, because:

- it assumes a business partnership in the longer term
- it builds on mutually advantageous economic relationships
- it is based on profe ssional, confidential principles, a nd t he accepted norms of cultural and business behaviour

This tendency can be measured by reviewing the development activities of companies.

Company-building st rategies based on vertical i ntegration had d ominated t he growth strategy of c ompany groups for 100-120 y ears. Their essence was the maximization of added value, and t he greatest possible extension of t he p rocessing, su pplying a nd technology phases in order to meet their own interests (e.g. Ford company group).

An evaluation of competencies – and the developmental company-building strategies which focus on core-competencies – can only concentrate on the introduction of activities which affect m arket com petition, and t he building o f net works and cl usters usi ng st rategic outsourcing (co-sourcing). (Picture 2.) (Allen and Chandrashekar, 2004)





Picture 2.

The development of companies has shifted from vertical integration toward network-wise company building

As outlined ab ove, outsourcing can mean the outsourcing of basic processes to external consultants, software-houses, and ot her service centers. However, new key definitions of outsourcing have begun to appear in the field.

Onshoring: Onshore (o r, according to some d efinitions, do mestic) o utsourcing m eans outsourcing with in n ational b orders. The term 'o nshoring' is u sed when the outsourced activity is placed under the control of a domestic service provider. In this case, a domestic company asks anothe r domestic company to accomplish an activity. In this case,

outsourcing is less co st-saving (although the sa vings can still be considerable), but rather the advantage here derives from the fact that the service provider can contribute to the differentiating ability of the company. (Kumar et al. 2007)

Offshoring: For a m ore pre cise definition, we can use the term 'offs hore outsourcing.' Offshore outsourcing ta kes place in a foreign c ountry, ve ry often one which is a considerable distance away. The aim behind offshore (or overseas) outsourcing is us ually cost-reduction. D uring o ffshore outsourcing, t he outsourcer t akes advantage of t he differences in wages between the countries concerned. (Kumar and Aquino 2007, Harrison and McMillan 2006)

Until the middle of the 90's, offshore outsourcing was connected to production activities. However, with the intensive outsourcing of IT tasks to India undertaken by many American companies, the focus has been shifted toward business processes (or back office activities). Examples of this include the offshoring of call centers, be ook-keeping services, clinical research, etc. In the case of production activities, a frequent targ et country for offshore outsourcing is China. (However, based on the characteristics of the relocated activities, we can talk rather about g lobal p rocurement th an outsourcing.) In con trast, with regards supporting activities, many companies outsource to India.

Nearshoring: Nearshoring outsourcing means outsourcing to nearby foreign countries. The expression 'n earshore' do es not h ave a un iform meaning in the related literatu re and practice. In some cases, it is not use d in a geographical sense. 'Nearness' can include situations in which the outsourcer and the service provider carry out their activities in the same time zone, or in which they have a common working language. Political, economic and cultural 'nearness' can be important; as well as, in some cases, the historical 'nearness' supplied by a common past. If we examine the definition in its geographical interpretation, in the case of the United Sta tes nearshore locations can include Cana da, Mexico, Latin-American and the Caribbea n re gions. From the viewpoi nt of European c ompanies, nearshore locations can be found in Eastern Europe; for Japa n, a nearshore location is China.

The evo lution of su ch definitions does not end here. In the literatu re d ealing with outsourcing, we can find further phrases in connection with the different characteristics of the phenomenon. For example, the expression "bestshoring" refers to the outsourcer's effort to choose those places and service providers where the best combination of available skills and prices can be obtained. The expression "multisourcing" refers to the outsourcing trend when certain outsourcers make contract with more service providers for the sam e task on account of the security of the outs ourced s ervice providing and the te ndering of service providers (there can also be further motives, for example, the geographic characteristics of the activity). The expression "rural sourcing", which was conceived only recently, refers to outsourcing from those urban regions which have high wages and sometimes struggle due to a sho rtage of professionals. Here certain tasks – w hich can be acc omplished over long distances – ar e out sourced t o ru ral re gions. S uch t asks coul d, f or example, i nclude programming jobs, system supervision, etc.

2.2 The decision making background of outsourcing

Considerable changes can be detected concerning outsourcing motives and approaches to selection. At fi rst, c oncentration occurred on the basis of i nternal com petencies, and categorizing on the basis of "what our strengths are". The concentration of a com pany's own resources could include:

- those activities which have to be continued, and which have always been part of the company's image
- those task s in which the company's staff are well-sk illed and which they enj oy carrying out
- those factors that have to be favored in order to ensure the company's efficiency
- all those factors that have to be kept under control, and which contain the potential for boosting innovation and competitiveness

Later, however, companies tended to concentrate more on external market factors, in order to estab lish networking competitiveness. It is ev ident that it is n ot en ough to analyz e internal st rengths, but also value judgments of the market and potential cu stomers are necessary. Concentrating on external competencies could include:

- instead of a function-oriented concentration of effort, a competence-orientated concentration on the customer or client has become more important

- business resources – and most of the value of competencies – depend on not only their p erformance potential, but talso on the values ack nowledged b y t he customer/client and t he utility of the functions and roles that con tribute to the satisfaction of their needs

The real systematizati on of outsourcing o bjectives can be given based on internal and external competencies. (Picture 3) (Allen and Chandrashekar, 2004)

External judgment of competencies (customer/client) large	Selective re-arrangement of internal resources, co-sourcing • Networking, outsourcing; • Development, learning, insourcing	Utilization of own resources INSOURCING	
small	Give up the situation OUTSOURCING	Revaluation •Networking, outsourcing; • networking, insourcing	
	small Internal judgr	large nent of competencies	-

Source: Allen and Chandrashekar, 2004

Picture 3.

Judgement of in-and-outsourcing based on the internal and external judgement of competencies

All of t hese were ex amined in detail by In singa (2000), m ainly from the aspect of competitiveness. The ev aluating table d eveloped by h im (Picture 4.) makes categories based on the comparison of a company's own skills as measured against the competitors' and the potentially gainable competitive advantage.

When considering competitive ad vantage, three types of activities can be identified. Key activities are those whose contributions to the competitiveness of the company are crucial. "Industrious" activities are those activities of which it can not be stated yet whether they will bring advantages in the future in terms of competitiveness. "Further" activities do not and probably will not contribute to competitiveness (for example, administrative activities, such as accounting, and "commodity" type services provided by several suppliers such as cleaning, security, and maintenance.)

The other dimension of the matrix shows the competitiveness of production activities as compared with those of competitors. This dimension includes the comparison of the cost-efficiency of internal production with the parameters of the produced out put based on reliable benchmarking.

Absolutely	, 1. Get capability	2. Build Strength	3. Do In-House
Probable Potential for an Activity to Yield Competitive	4.a Partner 4 b Collaborate	5.a Partner 5.b Collaborate 5.c Share Risk	3.Do In-House
Advantage Not likely	7. Buy	8.a Develop second source (external) 8.b Buy	9.a Make it a profit center 9.b Consider selling/buying
Non	e 10. Buy	11. Exit/Buy	12. Consider selling/buying
	Weak Internal capability of th	Moderate he enterprise to perform an a with competitors	Strong ctivity in comparison
			Source: Insinga 20

Picture 4 The Insinga-Matrix

The Insinga-Matrix gives detailed suggestions for the outsourcing strategies of enterprises. If t he company j udges its activity as sufficient for competiveness, but, regarding its accomplishment, does not possesses strong competencies (cell1), then it has to attempt to build internal cap ability by moving to cell2 or 3 of the Matrix. To achieve this, the company might have to buy itself into another company, acquiring the required level of basic abilities needed for competitiveness.

If an activity has a good chance of becoming a resource for competitiveness in the future, then it has to be kept under the control of the enterprise until its competencies are strong enough for accomplishment (6.a.). If no t, then the c ompany has t o search for potential partners with the required abilities (4.a, 5.a). If the company is anticipating that the activity will be one of the sources of future competitiveness, then the door has to be left open for total internalization.

If an activity represents only one possible resource of competitiveness in the future and the enterprise has a weak position with regards to internal production, then collaboration with others can be suggested. The aim of collaboration is to strengthen the position of the enterprise, and, at the same time, to decrease the risk arising from the activity concerned. (4.b, 5.b)

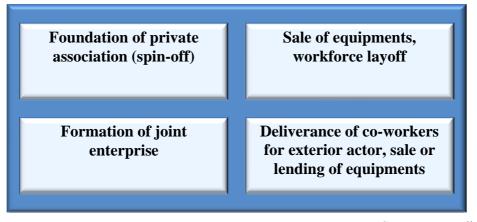
The future role of an activity may be uncertain. However, as long as an enterprise is strong at performing its in -house functions, it is practical to involve others in order to share the

investment and expenditure of the development process. This also means that the company realizes that it is n ot necessary to own the function exclusively. Sharing the risk opens the door for stak eholders t o b e involved in the activity u p to the required level, while the company can still save its resources or concentrate on other activities which are in a higher region in the Matrix (5.c, 6.b).

Those activities which will not become sources of competitive advantage – and in which the company has a weak position with regards to the performance of its functions – are likely to be disposed of as soon as possible. In this way, the further wasting of corporate resources can be avoided. If a resource still has the possibility of becoming a competitive advantage, but the capability of in-house production is not better than average, the company must act like an intelligent costumer and cut down its dependency on this internal producer. The same happens when the company has a strong position with regards to performing its in-house functions, but the activity is not likely to become a core competence which can be offered as a serv ice for other companies. If this is true, add itional in come will not b e generated. In this case, extra capital should not be invested in this field; the maximum aim is maintenance. These kinds of situations led to the "spin-off" type of outsourcing.

In all of the other cases, the best solution is to pull out. There are some cases when a strong inside competence can be sold to an exterior enterprise. However, if this is not possible, this activity – which consumes resources – should cease as soon as possible.

The facilities of outsourcing are listed in Picture 5.



Sources: own editing

Picture 5 Legal facilities of outsourcing

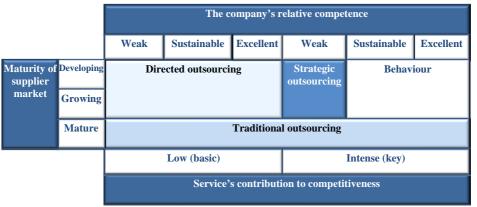
Establishing a sp in-off or sp in-out company is reasonable if there is an area inside the company which is separated enough from the other functions to be seceded. An important benefit of this solution is that there is no close relation between the lender and the borrower organizations; for example, the threat of salary-tension is lower. Insourcing is also common between t hese com panies, because usually there is a le gal re gulation which requires outsourcing, but as so on as this legal regulation comes to an end outsourcing is no longer necessary.

Considerations of c ompetence and a dvantage are important factors of the Insignia-Matrix. In ad dition to the ese considerations, the new factor of contractor market maturity was introduced to the Matrix by Cullen and Willock. The contractor market is considered to be developing if there are only a few companies which can provide a certain service. In this case, outsourcing has a high risk. In growing markets, there are more suppliers. The best case is a mature market, where we can choose between numerous competing services.

If the m arket is mature and, due to its h istory, the company is prim arily v ertically integrated, trad itional outsourcing can be a g ood so lution, esp ecially if the service significantly assists corpor ate com petitiveness. T his basically differs from the consequences of the other models, which suggest internalizing the competitive functions.

As long as t he s upplier market is not mature enough, we need controlled f orms of outsourcing. E ither m ore suppliers can be hired at the same time or the radius of t he outsourcing can be narrowed (only for particular components). In addition, joint businesses can be est ablished, o r i f a com pany has a hi gh l evel of c ompetence concerning the extension of a given activity, that activity can be conducted in-house.

Controlled o utsourcing becomes st rategic out sourcing i ft he company's rel ative competences are weak, but significantly contribute to the firm's competitiveness. This type of outsourcing can bring benefits if the firm has powerful control over the supplier, and if there is a good level of m otivation. The elements which determine the success of strat egic outsourcing are the existence of common goals and win-win type agreements, and the share of earnings available. Relations of th is type are often closer to strategic alliances than the traditional outsourcing of serv ices for an agreed fee. (see also the theory of competitive advantage from inter-enterprise relations).



Source: Cullen and Willock 2003

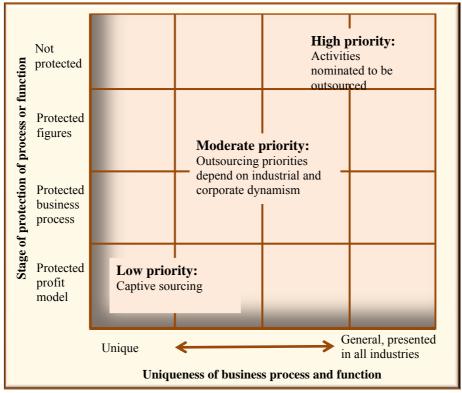
Picture 6

Outsourcing strategies based on contractor market maturity

According to Go ttfredson, Pu ryear and Philip s (2 005), the reason why outsourcing has increased in importance is the realization that no wadays the important question is no t whether a company possesses the app ropriate ab ilities, but whether it is capable of

controlling – and establishing in suitable places – the majority of those abilities. Today the question is not whether to outsource an activity; it is rather where a company should obtain certain elements of its value chain. Companies have to determine which functions they have sufficient i nfluence over. T hey al so ha ve t o deci de which o nes are best su pported by differential abilit ies and which ones are not. C ompanies must try t o re place direct possession with cap ability so urcing. In this way, t hey can estab lish a strong strateg ic position, and have lower levels of costs, a lean organization and higher quality.

The Measurement Model, suggested by Gottfredson, Puryear and Philips, consists of three steps. Fi rstly, t he busi ness model and t he processes are evaluated with regards to uniqueness a nd protection. The protection di mension shows how m uch of t he given procedure t he com pany ow ns, while t he fact or of uniqueness s hows how frequently processes are used. In the upper right corner of the matrix, we find those processes and functions which are not unique (meaning they are widely used throughout the sector) and which are not protected from the company's point of view. These functions are the most likely to be outsourced. In the lower left corner of the matrix, we can find those functions and processes which are unique and protected. As the company's profit production model is based on them, they have to be insourced.



Source: Gottfredson, Puryear and Philips 2005

Picture 7

Parallel measurement of the protection and uniqueness of processes and functions

In the middle of this matrix, we find the question of whether to outsource or insource. The answer to this depends on the dynamism of the industry and the com pany. As we can find both pros and cons, detailed corporate research is needed. During this research, we must consider standards, regulations and alternative products. We have to forecast what will happen with regards to these capabilities in the future.

3. Outsourcing and the balance of organizations

Changes in organizations can be seen as responses to the challenges of market competition. These changes can be studied as possible new solutions, with regards to corporate structure and ways of functioning.

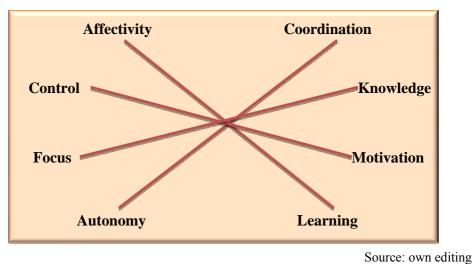
This article summarizes those organizational changes (in a very simple way regarding the complexity of the topic). Although these changes occurred prior to globalization, they have turned out to be general phenomena of it.

There is no doubt that the growth in a company's size (without going in details about the interpretation of size) brings a notable paradox:

- The factors of econom y of s cale, presence in markets, favorable pricing, the high specialization of technology, and, of course, capital and its power of innovation all secure – or appear to secure – the position of the company as a dominant economic actor.
- In contrast, the medium-sized or small enterprise category shows the capability to be prepared, to react immediately to the demands of the market, and, occasionally, to have the ability to demonstrate more innovative behaviour.

Before the direct appearance of the effects of globalisation, organization planners were engaged with the problem of corporate size. They tried to integrate the benefits of both small and large en terprises. In this way, they hoped to discover how to make small businesses look bigger in the market. They also hoped to suggest ways in which larger businesses could possess the same flexibility as small ones.

All of these intended changes must be implemented while keeping the organizational balance. (Picture 8.)



Picture 8 Contrasts of organizational balance

Let u s lo ok at these forces which have radically in tensified the previously mentioned intentions and have caused extremely significant changes.

3.1. Competition and recession: the origins of outsourcing

Companies usually don't follow the changes in transactional costs, but react to the pressure of trading and market competition evoked by these changes. When Miles and Snow first observed the appearance of network organizations, they felt this was the result of, firstly, the accelerating changes in product and processing technologies, and, secondly, changes in international competition. They saw these as much more significant factors than changes in IT costs. Rosa beth Moss Kanter also dealt with this in her 1989 book: "When giants learn to dance". Ka nter observe d that large bus inesses face d accelerating changes in their circumstances, in addition to changes in technology and in the international regulations which permitted young and flexible firms to join the race. So, if large companies wanted to cope with these upheavals they had to learn how to dance: in other words, to become more flexible and to be able to make a lot from a little. Regarding as critical their value adding sources, a lo t o f th ese com panies d ecided to purchase th eir m arginal activities from contracted partners. By doing this, they were following the successful model used in fast changing an d fashion-based industries and t rying t o build a net work structure. Ka nter declared Benetton Fashion Company and Lewis Galoob Toys as pioneers of the network, but she also mentioned companies such as Nike or Reebok.

By the end of the 80's and the beginning of the 90's, the difficult situation generated by growing competition was agg ravated by recession and all forms of cost cutting methods were used d aily. Companies had to jud ge their productivity and costs more seriously than ever before. In addition to these new circumstances, growing at tention was paid to the reviewing of corporate effectiveness. This meant simple steps such as cutbacks and delays,

as well as more comprehensive changes such as the foundation of internal markets or the introduction of n ew business processes. In addition to the see moves, outsourcing remained one of t he m ost i mportant cost-cutting m ethods. In the past, departments could have strategic purposes such as b eing sources of development and flexibility potential, or they could e xist f or historic or s entimental reasons. Nowadays it is im possible f or financial causes to protect the profit and the marginal costs of capital. The same has happened in the case of central costs. Before the recession, no-one asked about the maintenance costs of a function or whether it was cheaper to purchase it through outsourcing. From the beginning of t he recession, t his q uestion bec ame i nevitable. T he advantages of o utsourcing also became clear during this period because firms like Dell and Sun Microsystems proved that in th is way t hey could su rvive m ore easily in an e nvironment of sharp c ost-based competition.

3.2 Leadership trends and outsourcing as an ideology

In a way, outsourcing can be regarded as a logical answer to the changes that have occurred in communication technology. These changes have affected the balanc es of the costs and profits w hich had e volved bet ween m arkets a nd hierarchies. F rom anot her an gle, outsourcing is the logical answ er to the challen ges resulting from the radical increase in product life-cy cle, the change in international competition, and the strong pressure which has come into being as a result of the global economic crisis. A third factor has also helped the sp read of outsourcing. This force, however, is m uch more related to lead ershipment trends and political ideas than to economic logic or competitive considerations.

The Market I deology is often linked to the privatization of state-owned companies. The introduction of internal markets and the outsourcing of the services of governmental units and a gencies have al so pl ayed al so an i mportant part in this i deology. The theories underpinning such trends support innovation in a constantly changing business environment and favour simple, market led networks over branching systems of hierarchies.

Robert R eich m ade his point in his book, 'The Work of Nations' which was a bout the spread of giant pr oduction f irms in n ewly industrialized countr ies. Thes e Am erican companies switched from a quantity-based ideology to knowledge- intensive production. In the new competitive circumstances, success is based on intellectual resources and on the speed of deployment. Thus, administration, supply services, production and m aintenance have all become redundant processes which slow down the functioning of the company and reduce its flexib ility. According to Reich, the development of outsourcing and network organizations (or entrepreneur networks) was not just desirable, but also necessary in order for Western companies to survive and function well.

In his b ook 'The Age of Unreason', C harles Ha ndy s tates t hat o utsourcing i s nei ther desirable nor necessary -i t i s sim ply a fact . The reas ons he gi ves f or t he g rowth of outsourcing a re sim ilar to those pre viously stated: accelerating changes, growi ng competition combined with the pressure of recession, devel oping IT, and the de velopment towards knowledge-intense companies. The result is the existence of so-called clo ver companies: where one leaf represents the company, the second stands for a flexible external workforce, and the third leaf is for the services and functions which are available for customers. Handy's main aim was to show how people can react to obviously threatening

and inconvenient changes positively and in a constructive way. This is worth trying for, and is preferable to a situation in which the company simply has to react.

3.3 Flexibility and size

The need for flexibility is o ne of the most common arguments for cancelling secondary functions. Due t o t he fast chan ges which occ ur i n t oday's c ompetitive environment, companies look for options which are able to provide the possibility of quick changes for them. In order to do this, they are likely to use those companies with which they have contracted relations. A sm all company's orient ation can be altered more easily than the large one's. It is much easier to change the range of services, the means of expansion, or the assignment itself in the case of a contracted service, than in the case of an in-house service. With regards to the former, it is enough to change the purchase demands; while in the case of the latter, the company must consider its ties to its workforce, the presence of trade unions, and the resistance of the management.

These are strong reasons, but we must consider the other side of the equation too. Losing parts of the company might cau se the loss of flexibility with regards to the company's general awa reness of events and the comprehensiveness of its or ganization. The more attention the company fo cuses on the main function, the less awareness it g ives to the background events. Changes in circum stances can affect a business sooner than a nother unit. The informal aspects of a m ore comprehensively organized company are joined together as parts of its system , and any changes in awa reness take place via the syste m created.

If a change is threatening, a strong culture can choose to avoid it. This can happen in both comprehensively-organized and m ain-function-focused com panies. A c omprehensive company, how ever, th anks to its w ider borders and m ore effective informa 1 communication, can react more sensitively than a main-function-focused one.

A related question is that of size. Like all cost cutting strategies, the main function-focused one is based on the idea that a lean, well-defined organization is much more desirable than a bro ad and 1 ess well-st ructured one. This is all tru e - un til so mething go es wrong or something u nexpected happens. The looseness of the company can absorb a ny ne gative effects and its collective knowledge can supply solutions to the problems which arise. As soon as this collective knowledge breaks apart, the company becomes vulnerable.

3.4 Motivation and learning: the advantages of community

Another set of problems can arise from shifts in relations: for example, when employees are turned into conductors or advisors, or when their job is considered as not being focused on the company's main function. These c hanges might seem like signs of kindness from the managing director's point of view, but the employees could feel threatened. They could interpret such messages to mean that they are not part of the staff a nymore, or at least not part of that branch of the company which really counts. This feeling can, therefore, generate resistance. In a certain way, it could be argued that such an eventuality could motivate them because outside the com pany's boundaries they can find free dom and their own way of self-expression. However, it is more likely that the opposite would happen.

One of the victims of out sourcing is motivation. There is no particular reason why people do not find as m uch motivation outside the company as inside, since many workers are motivated by working in small groups and by having a bigger authority. But we must admit that the k ind of motivation that working inside the company gives will not be found so easily outside it. One of the main effects of a strong corporate culture is trust. A company which is supportive both in the material and emotional fields, and which gives a feeling of community, motivates its workers to serve the firm's aims well. As a function is liquidated, the remaining company becomes a potential buyer or, in the worst case, it is regarded as a body wh ich is n ot tru stworthy. Ho w m uch is e mployee tru st, go odwill and co rporate motivation worth if we com pare it with the sk epticism and inner motivations of the supplier? It is a hard question to answer, but it is not a question which is negligible.

Security is closely related to motivation and it also an issue that has two sides to it. On one hand, the security of traditional employment can cau sel aziness and inefficiency when compared to the ene rgy and efficie ncy of contractors. But as all parents are a ware. insecurity is no t always m otivating. In security leads to c arelessness and m istakes. More critically, it can be a barrier to asking questions, experimentation and learning. A child asks questions, makes experiments and learns if his teacher is trus tworthy and provides security both in social and psy chological t erms. L eaders are i neapable of reacting to change themselves, unless, as Edgar Schein points out, they feel secure. Cutting back on everything except the company's main functions, turning employment relations into mere contracts, and dismantling all of the traditional safety nets all result in the growth of fear. This means potential for learn ing. At the same time, learn ing must emphasize the there is less importance of understanding the strategies of those companies which are close to taking the decision about whether to "make or buy" knowledge-intense services. In almost all c ases, the decision is reached due to the presence of a n important external factor. Am bitious partners can e neourage the a ccumulation of kno wledge and can assist with revealing the potential of a new product.

REFERENCES

- AGERFALK, P.J. F ITZGERALD B. (2 008): O utsourcing to an Un known Workforce: Exploring Opensourcing as a Global Sourci ng Strategy. MIS Quarte rly Vol. 32 No. 2, June 2008, pp. 385-409.
- [2] ALLEN, S. CHANGRASKERAR, A. (2004): Outsourcing services. The contract is just the beginning, Business Horizont 43.k. 2.sz. 2004. March-April. p. 25-34.
- [3] BARNEY, J. B. (1997): Gaining and sustaining competitive advantage. Ad dison-Wesley Pub. Co., 1977
- [4] CULLEN, S. WILLCOCKS, L. (2003): Intelligent IT Outsourcing: Eight Building Blocks to Success. Butterworth-Heinemann, Oxford, 2003
- [5] CANEZ L. PLATTS K. PROBERT D. (2001): Make or Buy: A Practical Guide to Industrial Sourcing Decisions. Institute for Manufacturing
- [6] Espino-Rodriguez, T. F. Padr ón-Robaina, V. (2006): A review of o utsourcing from t he res ource-based vi ew of t he firm. I nternational Jo urnal of M anagement Reviews, Volume 8, Issue 1 pp. 49-70.
- [7] FARRELL, D. (2006): Smarter offshoring. Harvard Business Review, 84(6), 84-92

- [8] FEENSTRA, R. C. GOR DON H. H. (1996): "Foreign Investment, Outsourcing and Relative Wages," in R.C. Feenstra, G. M. Grossman and D.A. Irwin, eds., The Political Eco nomy of Trad e Policy: Papers in Honour of Jag dish B hagwati, MIT Press, pp. 89-127.
- [9] FORBATH, T. BROOKS, P. (2 007): Outsourcing's Next W ave. Fin ancial Executive, April 2007, pp 21-24.
- [10] Gay, L. C. Essinger, J. (2001): Inside outsourcing. Nicholas Brealey Publishing, London, 2001
- [11] GREAVER, (1999): Strategic Outsourcing: A Structured Approach to Outsourcing Decisions and Initiatives. Amacom New York, 1998.
- [12] GOTTFREDSON, M. PURYEAR, R. STEPHEN, P.: Strategic Sourcing From Periphery to the Core. Harvard Business Review 83, No. 2 (February 2005). 132-139
- [13] HARRISON, A. E. MCMILLAN, M.S. (2006): Dispelling Some Myths Ab out Offshoring. Academy of Management Perspectives. Vol. 20. Number 4/2008 pp. 6-22.
- [14] INSINGA, R. C. (2000): L inking outsourcing to business st rategy. Academy of Management Executive, Nov 2000, Vol. 14 Issue 4, p58
- [15] KUMAR, S. EICKHOFF, J. H. (2005): Outsourcing: When and how should it be done? Information Knowledge Systems Management, Vol. 5 (2005/2006) 245-259
- [16] KUMAR, S. AQUINO, E. C. ANDERSON, E. (2007): Application of a process methodology and a st rategic deci sion m odel f or b usiness process outsourcing. Information Knowledge Systems Management, Vol. 6 Issue 4 (2007) 323-342
- [17] SZINTAY I. (2007): In novációmenedzsment. Kutatás és Gyakorla t Innovatív szervezetek kötet (Innovat ion m anagement. Researc h and Practice Innovative Organizations' Volume) ME ImKKK Miskolc, 2007. p. 7-17; p. 41-54.
- [18] WILLIAMSON, O. E. (1979): Transaction Co st Econ omics: Th e G overnance of Contractual R elations, Jo urnal of Law an d Econ omics, Vol. 22. No. 2., 233-261. (Magyarul m egjelent: Korm ányzás, Közpénzügyek, Sza bályozás, II. é vf. (2007 2. szám p. 235-255.)
- [19] WILLIAMSON, O. E. (1 985): Williamson, Oliv er E. (198 5) The Econ omic Institutions of Capitalism. New York, Free Press.

INSTITUTES OF GLOBALISATION AND ENVIRONMENTAL GLOBALISATION¹

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INTRODUCTION

The term globalisation is sometimes used to refer specifically to economic globalisation: that is, the integration of national economies into the international economy through trade, foreign direct investment, capital flows, migration, and the spread of technology. The issue of the relationship between globalisation and the environment has arisen mainly as a result of increased economic integration, but globalization has also meant an important conceptual change in the way we think about the environment. Today environmental problems – such as the protection of the oceans and the atmosphere from pollution – seem to be not just of national interest, but of international concern. [4] The environment is now considered to be the "common heritage of mankind", and environmental problems are increasingly the subject of international efforts. This is because of their cross-border effects and the impossibility that just one or a few nations can solve these problems on their own. The recent globalisation of international markets has managed to sustain the economic growth of the countries that have actively participated in this process. This paper summarises the institutional system of globalisation and gives a review of the environmental consequences of globalisation.

1. GLOBALISATION IN A NUTSHELL

Globalisation has sparked one of the most highly-charged debates of the past decade. It has been the subject of countless books and the cause of major demonstrations in Europe and North America². Globalisation is the inter-dependence of nations on one another's goods – a process which results in a global economy. One may argue that such a phenomenon has been occuring since civilization began, due to the activity we know as commerce. However, such a view is more mistaken than correct. The first phase of globalisation is to integrate economically most of the populations of the world. The second phase is the formation of global governance. Today, the United Nations is the first step of this second phase. With regards to the third phase of globalisation, the internet can serve as an obvious example of this. However, globalisation is usually recognized as being driven by a combination of economic, technological, sociocultural, political, and biological factors. The term can also refer to the transnational circulation of ideas, languages, or

¹ This paper is supported by OTKA K76870 research "Globalizáció és intézményi változások, Magyaroszág világgazdasági illeszkedési stratégiái"

² World Bank Annual Report, 2002.

popular culture through acculturation. The globalisation that has taken place in the last two decades – which can be seen as economic and political – has also incorporated cultural and technical phenomena. We can say that the euroatlantic area is politically dominant, and we can also observe the spread of the western consumer mass culture and its hegemony. Regarding recent times, of course, the internet must be mentioned as an example of such processes.

Recent globalisation has managed to sustain the economic growth of the countries that have actively participated in this process. The available empirical evidence suggests, however, that it has been accompanied by a worldwide increase in environmental degradation and economic inequality. Therefore, there is a growing concern that these features of the globalisation process may jeopardise its social and environmental sustainability. [2] Globalisation can have both positive and negative effects on the environment. It can exacerbate environmental problems as well as provide new means of dealing with them. [3]

Capital moves through the world in two ways: on the one hand, direct capital investment in the form of multinational companies; on the other hand, as money on the intertwining international money and capital markets. The capital is totally free. The fact that its motion is facilitated by international institutions, such as the World Bank and World Trade Organisation, is an important feature of globalisation.

Research indicates that the functions of economic globalisation and its institutional system will be thoroughly transformed in the forthcoming years: a change which will be strongly influenced by ecological problems. It is certain that our world will be even more complicated, with even more regulations, treaties and organisations. However, many researchers suggest that the regulation of globalisation has to be aimed at, at least partly, relocalizing economic processes: in other words, somehow slowing down globalisation tendencies. Agreements between nations and supranational institutions regulate the globalisation process. Globalisation entails a constant increase, which has a substantial impact on the political system. One of the most fundamental consequences of globalization is that – for a long time – states (national states) have not been the only wielders of power in the system of international contacts. Thus, states do not provide definite answers to global problems any longer. The non-state actors such as multinational companies, banks and worldwide civil organisations have gradually become increasingly influencial. This has resulted in power relations – and political relations – being redrawn. [14]

The impact of globalisation on the system of international politics has led and will lead to the development of a new order – or chaos – involving new actors. The same five factors characterize today's politics as characterized the period before the First World War: imperialist expansion, competition between great powers, an unstable system of international relations, rogue states and the presence of revolutionary terrorist groups opposed to capitalism. It is necessary that mankind should create political institutions that control the many-branched worldwide processes which exist nowadays and these institutions should also enjoy the people's support. An example of such an institution is the European Union.

Globalisation does not sell rotten meat in the megastores. Globalisation does not steal small investors' money, nor is it the reason for child pornography. Globalisation rather creates opportunity and freedom of movement for large and small actors alike, so that they can make new discoveries. Communication technologies facilitate the activities of small actors in the same way as those of big ones. The cheapness of the solutions the internet provides and the ease of access to it may work especially well for those small actors.

Globalisation is basically functional and system-based. The system more or less suits organisations and actors (the capital market, the commodity market, the information media) that function globally. However, politics as a system is not functional. Its agreements are based on values and traditions. The politician has to find a political margin between the processes of globalisation. If he succeeds then the political systems will recover their dignity.³

Stiglitz's⁴ book "Another World is Possible" provides us with a new vision, in which he criticises globalisation's lack of democracy. His view is that successful development requires infrastructure, social and political stability, and full employment. Stiglitz argues that the largest institutions of globalisation, in contradiction to their functions, have actually held back development rather than allowing countries to develop through the employment of a variety of diverse methods. [11] [12]

2. CHANGES IN THE WORLD SYSTEM AND THE METHODS OF PLANETARY ORGANISATION

It seems that globalisation, in addition to spreading modernisation, has become such a strong force that any attempts to abandon it appear impossible. The victory of globalisation has apparently determined the method by which the planet's affairs shall be organised. This victory – based upon transformability – is not at all unambiguous, and it is not necessary to accept it as inevitable that the world's affairs should be determined by globalisation of this kind. [11]

From a philosophical point of view, it could be said that globalisation cannot cope with many of the facts of existence: globalisation could result in the devastation of the individual, gender roles, and modernisation itself. Globalisation – just like modernisation – can be regarded as an evolutionary dead-end. The nature of planetary organisation depends on the ability of the groups affected by globalisation to cooperate.

³ http://hu.shvoong.com/books/1863093-globaliz%C3%A1ci%C3%B3-hat%C3%A1sa-politikairendszerre/

⁴ Stiglitz, former Chief Economist at the World Bank and Senior Economics Advisor to Bill Clinton, has the distinction of having published more journal articles than any other economist in the last thirty year.

3. THE INSTITUTIONAL SYSTEM OF GLOBALISATION

The leaders and owners of transnational companies are the main beneficiaries of economic globalisation. In order to establish the appropriate environmental frameworks, they rely on different international institutions (such as the World Bank, IMF, OECD, WTO, EU), the media, opinion-forming think tanks, advertising and marketing firms, and lobbying organizations. The figure below demonstrates that – in the institutional system of economic globalisation – financial globalisation is one of the most vigorous segments. As economic globalisation is getting stronger, it is becoming more dominant. However, besides this, the global governance of international human rights, education, nutrition, and resource management is also commencing.

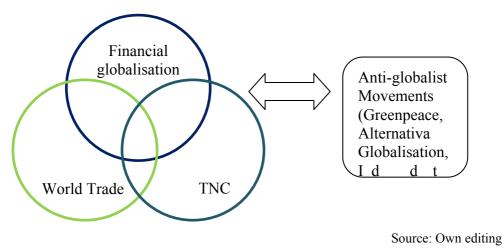


Figure 1 Institutes of Globalisation and Anti-globalisation

Actors in the process of economic globalisation perform their activities among the institutional frameworks listed below. Perhaps the most significant of these are the financial institutions that are simply referred to as the World Bank. However, it should be pointed out that there are other institutions besides the World Bank, and that the World Bank includes many institutions within it. [11]

Institutes of globalisation

- 1) International financial institutions
 - a) The World Bank
 - i) IBRD International Bank for Reconstruction and Development, foundation year: 1945
 - ii) Ida International Development Association, foundation year: 1960.

- iii) IFC International Finance Corporation, foundation year: 1965.
- iv) MIGA Multilateral Investment Guarantee Association, foundation year: 1985.
- v) IMF International Monetary Fund
- b) Export Credit Agencies
- c) EBRD European Bank for Reconstruction and Development
- d) EIB European Investment Bank
- 2. The WTO, regional trade organisations, and trade agreements
 - G8 Group of Eight (France, the United States, the United Kingdom, Russia, Germany, Japan, Italy, and Canada)
 - OECD Organisation for Economic Cooperation and Development, started in 1961
 - GATT- General Agreement on Tariffs and Trade
 - WTO World Trade Organization
 - EU European Union
 - NAFTA North American Free Trade Agreement-
- 3. Trans- national corporations
 - 51 TNCs from the richest 100 countries
 - World organisation of TNCs
 - o ICC International Chamber of Commerce
 - o ERT European Round Table of Industrialists
 - WBCSD World Business Council for Sustainable Development
 - Media

4. Institutes of environmental globalisation

- UNEP
- World Watch Institute
- World Resource Institute
- WBCSD
- SETAC
- 5. Anti-globalisation movements
 - Greenpeace
 - Friends of the Earth
 - Ralph Nader's Public Citizens

4. ACTORS AND INSTITUTES OF ENVIRONMENTAL GLOBALISATION

The treatment of the global problems which occur as a consequence of economic globalisation (acid rain, the pollution of waterways, wastes, etc.) was strengthened by the formation of the International Association for Environmental Protection. The link between

the environment and economic development may be more complex than we think. In fact, in many ways, protecting the environment and promoting economic growth are complementary goals. [2] Poverty in developing countries is a leading cause of environmental degradation.

Our world of rapid social, institutional, and environmental change is desperately in need of new insights, strategic orientations, policy prescriptions, and the plain hard work of action. Such action could include negotiation, mediation, and ensuring the implementation of intentional changes.

In the paper "Globalisation and Environmental Governance: Is Another World Possible?" five prominent social scientists share their thoughtful and, at times, provocative insights. While varying in their perspectives, all contributors believe that another world is possible: one where humans can reverse, ameliorate, and perhaps even stop the destructive impacts of current patterns, systems, and cycles of production, consumption, and distribution. [10]

Economic globalisation might be expected to have a positive effect on economic efficiency because the increased competition created by it is likely:

- to help allocate efficiency, and
- reduce X-inefficiency.

This ought to reduce the input of materials per unit of output and lower wastage, thereby reducing pollution emissions in relation to output. In effect, this means a shift downward in the global environmental Kuznet curve as a result of globalisation. [13]

In the last decades, a lot of public international and private non-governmental organisations – such as the United Nations Environmental Programme, Greenpeace, and the Worldwatch Institute – have been seeking solutions to environmental problems. A multitude of treaties have been concluded to harmonize governmental policy on environmental protection. Some environmentalists have even proposed the creation of a "world environmental organisation" to coordinate international environmental policies.

At the same time, it can be seen that environmental questions are also raised within the aforementioned institutional system of globalisation, since independent environmental protection strategies are at the disposal of the World Bank, OECD and WTO. However, although the G8's sense of environmental responsibility seems to be increasing with regards to climate change, spectacular results do not follow their discussions. Although sustainable development is mentioned in the preamble to the agreement for the WTO, it should be pointed out that this is not binding. In any case, neither GATT nor the WTO has approved trade restrictions which limit trade on the basis of adverse environmental effects, even when these have a severe effect on the country which wishes to impose sanctions. [5]

The *World Bank Group* (WBG) is embarking on the preparation of a new Environment Strategy, expected to be completed and approved by December 2010. The new Strategy will articulate a set of principles and propose an approach for achieving the environmental sustainability of the WBG's portfolio. Basically, the strategy development process is being carried out in two phases as follows:

Phase 1 Global Dialogue: October 1st 2009 - June 15th 2010

Analytical Work: August 2009 - June 2010

Phase 2 Global Consultations on the Full Draft Strategy from September through October, 2010,

The World Bank Group has held 64 face-to-face consultations on the Environment Strategy Concept draft with a broad range of stakeholders from around the world.

"It recognizes that the term "Environmental Sustainability" has different meanings to different stakeholders, depending on various factors, such as planning time horizons (e.g. the year's business cycle, an administration's duration, a life-span); and the existence of binding constraints (e.g. the ability to reach political consensus on the reforms needed, institutional capacity, and the fixed resources available to meet development priorities). Furthermore, developing country stakeholders might think of sustainability from the viewpoint of affordability, particularly when explicit trade-offs are inevitable as, for example, when win-win opportunities have been exhausted." [18]

The *players in environmental globalisation* work for a better, more liveable and healthier World. They are in cooperation with each other, and, through their programme, they try to reach their goals.

UNEP

The UN took part in an environment protection programme in the early seventies. Its mandate was to coordinate the development of environmental policy consensus by keeping the global environment under review and bringing emerging issues to the attention of governments and the international community so that action could be taken. It had an additional role in forming an acceptable economic policy from an environmental viewpoint especially in the developing countries.

UNEP created guidelines and contracts in connection with cases such as the international trade of in harmful chemicals, cross-border air pollution and the pollution of international waterways. UNEP and the World Organisation of Meteorology together created an intergovernmental commission for climate change (the Intergovernmental Panel on Climate Change, IPCC) in 1988. UNEP is one of the programme coordinators of the Global Environment Facility (GEF). UNEP is engaged in a lot of activities and its responsibilities include (www.unep.org):

- Promoting international cooperation with regards to the environment and recommending appropriate policies.
- Catalysing action to address major environmental threats.
- Monitoring the status of the global environment, and gathering and disseminating environmental information.
- Facilitating the coordination of United Nations activities on matters concerned with the environment, and ensuring, through cooperation, liaison and participation, that their activities take environmental considerations into account.
- Helping to develop international environmental law.
- Providing expert advice on the development and use of environmental concepts and instruments.
- Developing regional programmes for the environment.

The major results of UNEP activities should include:

- International arrangements to enhance environmental protection and give policy advice to governments, multilateral organisations and others in order to strengthen environmental protection and incorporate environmental considerations into the sustainable development process.
- Periodic assessments and scientifically sound forecasts to support decision making and international consensus on the main environmental threats and the responses to them.
- More effective coordination of environmental matters within the United Nations system.
- Greater public awareness and capacity for environmental management and effective national and international responses to environmental threats.

The United Nations Environment Programme (UNEP) collaborates with a wide range of partners throughout the UN system and beyond to provide information on the state of the planet's natural resources and their contribution to sustainable development.

Worldwatch Institute

The Worldwatch Institute is an independent research organisation recognized by opinion leaders around the world for its accessible, fact-based analysis of critical global issues. Its mission is to generate and promote insights and ideas that empower decision makers to build an ecologically sustainable society that meets human needs. Worldwatch has catalyzed effective environmental decision making since 1974. Each year, it has published its State of the World reports - in 20 languages - analysing crucial issues: Consumer Society (2004), Redefining Global Security (2005), China and India, Urban Future, Innovation, etc. In State of the World 2010, sixty renowned researchers and practitioners describe how we can harness the world's leading institutions - education, the media, business, governments, traditions, and social movements - to reorient cultures toward sustainability. Its programmes are connected to the issues of energy and climate, food and agriculture, and the green economy. Beyond these three priorities, the Institute monitors human health, population, water resources, biodiversity, governance, and environmental security. The Institute's current State of the World report 'Transforming Cultures' focuses on how we can shift today's consumer cultures to cultures of sustainability.

World Resource Institute

WRI is an environmental think tank that goes beyond research to find practical ways to protect the earth and improve people's lives. Today's environmental challenges are complex and global in nature. They call for visionary and ambitious action grounded in sound science and objective analysis. This kind of action has distinguished WRI for over 25 years. WRI works with business partners, governments and civil society to confront today's most urgent environmental challenges. It has over 50 active projects focusing on issues such as global climate change, sustainable markets, ecosystem protection, and environmentally responsible governance.

Some of WRI's programmes:

- The Carbon Capture and Storage (CCS) project works with policymakers and the private sector to develop solutions to the policy, regulatory, investment, environmental and social challenges associated with CCS implementation and deployment. The potential deployment of carbon dioxide capture and storage (CCS) technologies is attracting the growing interest of policy makers around the world. The CSS is the focus of hundreds of publications [1], [9], and [16].
- The Climate Accountability & Information Project focuses on providing the accountability and information needed to address climate change from the top down and the bottom up. As a result of this project, more than 100 countries have made high-level political commitments to reduce their greenhouse gas emissions, and to finance mitigation and adaptation efforts in other countries.
- The Corporate Ecosystem Services Review (ESR) is a structured methodology for corporate managers to proactively develop strategies for managing the business risks and opportunities arising from their company's dependence and impact on ecosystems. Human demand on aspects of the ecosystem continues to increase. This causes, for example, growing water scarcity, the collapse of fisheries, deforestation, soil loss, and CO₂ accumulation in the atmosphere. All this indicates that human demand may well have started to outpace the regenerative capacity of the biosphere. The human appropriation of resources from the ecosystem in relation to the amount of bio-productive land and sea area could be measured in terms of an ecological footprint. [17]
- *ENVEST:* This project aims to provide environmental intelligence for tomorrow's markets. This is done in order to ensure that the financial implications of environmental opportunities and risk are properly understood by financial institutions, investors and issuers and are appropriately reflected in the world's capital markets.
- The International Financial Flows and Environment Project (IFFE) works to improve the environmental and social decision making and performance of public and private International Financial Institutions (IFIs) by holding them accountable to their investors, to donor countries and to the communities that are impacted by their investments.
- The World Resources Report (WRR) provides policymakers around the world such as governments, civil society, and business with analysis of and insight into major environmental and development issues. The World Resources Report 2008, 'Roots of Resilience: Growing the Wealth of the Poor' continues the focus on poverty and the environment. The reality of global poverty is that it is rural and persistent: three-quarters of the 2.6 billion people living on less than \$2 per day almost 2 billion live in rural areas. That number has remained virtually unchanged for 20 years.

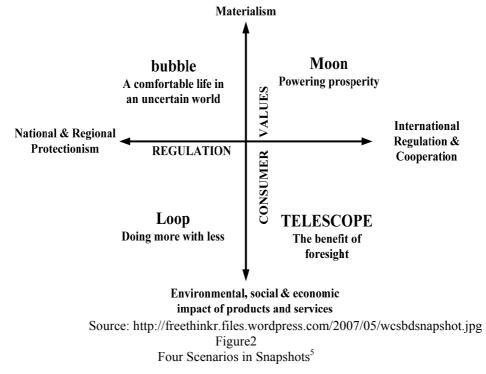
WBCSD

The World Business Council for Sustainable Development (WBCSD) is a CEO-led, global association of some 200 companies which deals exclusively with business and sustainable development. Their mission is to provide business leadership as a catalyst for

change toward sustainable development, and to support the business license to operate, innovate and grow in a world increasingly shaped by sustainable development issues. The Council's objectives are to:

- Be a *leading business advocate* on sustainable development
- *Participate in policy development* to create the right framework conditions for business to make an effective contribution to sustainable human progress
- Develop and promote the business case for sustainable development
- *Demonstrate the business contribution* to sustainable development solutions and share cutting-edge practices among members
- Contribute to a *sustainable future* for developing nations and nations in transition The last publication is based on the workshops held in 2008, which were organised

by the WBCSD and UNEP FI. These workshops provided a platform for institutional investors and companies to discuss how to facilitate the integration of ESG (environmental, social and governance) factors into key processes of the capital markets. A series of workshops were held in Europe, North America, Asia and Africa for WBCSD and UNEP FI member companies, institutions, partners and stakeholders. They aimed to collectively address process and communication barriers to assessing the ESG and sustainability aspects of company performance evaluation and to chart a course for change [15].



⁵ The slides from the link to the right under the Social Responsibility link "WBCSD Scenario Planning."

The World Business Council for Sustainable Development (WBCSD) believes that the business leaders of tomorrow will need *new skills and competencies* to cope with increasingly urgent social and environmental challenges.

The four scenarios (Bubble, Moon, Loop and Telescope) use both materialistic and ethically-conscious consumers and a fragmented or complementary international regulatory framework as a starting point from which to build different possible futures.

SETAC

SETAC is an organisation that works to find solutions to environmental problems through scientific research. SETAC is a political, 'front-line fighter' of a free trade organisation – The Toxic Environmental Chemistry Company – which is involved in environmental risk analysis. Although SETAC operates all over the world, its branches in Europe and North America are maybe the strongest.

SETAC's long-term aims include the strengthening of the multidisciplinary character of the scientific research, and the establishment of summer camps to train young people. SETAC is also interested in the more general training of the young; the sustainability of brands' activities in environmental, social, technical and political terms; and the continuous development of methodology that can be used in analyses. Another SETAC objective is to maintain close cooperation with UNEP programmes. (UNEP/SETAC LCA Initiative program.).

5. ANTI-GLOBALISATION AND ANTI-FREE TRADE NGO'S

The leading anti-globalisation organisation is Ralph Nader's Public Citizen (http://www.publiccitizen.org), based in the US. Public Citizen serves as the people's voice in the nation's capital. Since the foundation of Public Citizen in 1971, it has delved into an array of areas. The organisation has five policy departments: the Congress Watch Division, the Energy Programme, the Global Trade Watch Division, the Health Research Group and the Litigation Group. In addition to Public Citizen, several anti-globalisation green movements have appeared. *Anti-globalisation* is an umbrella term. It can be applied to a diverse range of protest groups, all of which have the common element of opposition to *globalisation*. Many anti-globalisation activists generally call for forms of global integration that provide better democratic representation, and encourage the advancement of human rights, fair trade and sustainable development. Therefore, it can be said that the term "anti-globalisation" is misleading.

The environmentalist groups, such as Greenpeace (www.greenpeace.org), Friends of the Earth (www.foe.org), and The Sierra Club (www.sierraclub.org) argue that the globalisation harms the environment. Greenpeace is an international organisation that prioritises global environmental campaigns. Based in Amsterdam, in the Netherlands, Greenpeace has 2.8 million supporters worldwide and national – as well as regional – offices in 41 countries.

Friends of the Earth Europe (FoEE), an environmental NGO, have expressed "severe concerns" about the European Commission's Raw Materials Initiative, saying it "will have a detrimental effect on the environment and developing countries. *Their network of*

grassroots groups in 77 countries defend the environment and champion a healthier and just world. FoEE are progressive environmental advocates who pull no punches and sometimes speak uncomfortable truths to those in power. It is an approach that for four decades has yielded victories which have protected our planet and its people. Their current campaigns focus on clean energy and solutions to global warming; protecting people from toxic and new, potentially harmful technologies; and promoting smarter, low-pollution transportation alternatives". FoEE have pointed out "fundamental contradictions" in the EU's proposed strategy which, on the one hand, reiterates the need for increased resource efficiency and the recycling of raw materials; and on the other, spells out "aggressive plans to grab other countries' resources". The environmentalists have said they are "particularly concerned that the proposals challenge other countries' rights to restrict trade on environmental grounds and their ability to process raw materials themselves". According to Friends of the Earth Europe, "the proposals aimed at improving the EU's 'security of supply' of raw materials succumb to the selfish interests of Europe's industries and are at odds with the long-term sustainability of the natural resources sector".⁶ Michael Warhurst, senior researcher of FoEE, has deplored the fact that Europe "has no targets" for reducing resource use, while "new policies are not assessed for their potential to increase our resource efficiency". In a joint report with the Sustainable Europe Research Institute, FoEE is calling on the EU to measure its resource use and adopt new policies, such as higher recycling targets, to increase resource efficiency. FoEE suggest that Europe should measure its use of materials in particular, but also its land and water use and greenhouse gas emissions, taking into account the impact of Europe's consumption on the rest of the world in terms of imported resources.

Environmental think-tanks came into existence as independent research institutes, which attempt to find solutions to global environmental problems.

The Peterson Institute for International Economics is a private, nonprofit, nonpartisan research institution devoted to the study of international economics. It is one of the very few economics think tanks that are widely regarded as "non-partisan" by the press and "neutral" by the US Congress. Its research staff are cited by the quality media more than those of any other such institution. In 2008, in the first comprehensive survey of over 5,000 similar institutions, it was selected as the 'Top Think Tank in the World'. (ic policy. http://www.iie.com/institute/aboutiie.cfm)

The Wuppertal Institute on Globalisation's project explored the strained relationship between the rising transnational economy and goals of public policy, such as sustainability and equity. Their studies have succeeded in identifying options for shaping globalisation according to these goals. As it happens, debates on globalisation often fail to pay sufficient attention to the environmental causes and effects of globalisation. The Institute's research on "sustainable governance" identifies approaches to international policy that may be able to counteract the deficiencies accompanying globalisation in the areas of democracy and the environment. First of all, the research addresses how globalisation restructures the political arena by transferring the responsibility for public tasks and goods (such as sustainability, economy of care, civil rights and human rights) from public into "private"

⁶ Friends of the Earth Europe: EU raw materials initiative: industry interests undermine sustainable resource use (5 Nov. 2008) *www.euractiv.com/.../raw-materials-heading-global-resource-crunch*

hands, and how this phenomenon can be dealt with politically. http://www.wupperinst.org/globalisation/html/gov.html

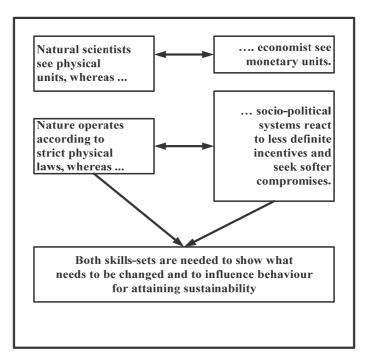
Globalisation and Sustainable Development – t he Institute has produced more than a dozen books and numerous articles, policy documents, and discussion papers. GDAE researchers selected and summarized hundreds of articles for this project. This has uniquely positioned the Institute to comprehend both the limitations of the mainstream economic paradigm, and also the wide range of creative efforts that have been and are being made to extend our economic understanding.

http://www.ase.tufts.edu/gdae/about_us/gdae_overview.html

The Nautilus Institute has evolved into a thriving public policy think-tank and community resource. Along the way, it has addressed critical security and sustainability issues such as the United States' nuclear policy in Korea and the effect of the U.S.-China relationship on environmental insecurity. The Institute has not only built a reputation for innovative research into and the analysis of critical global problems, but it also translates ideas into practical solutions, often with a significant impact. The key to reducing global insecurity is, in short, to make the world peaceful, equitable, and sustainable. This can be achieved by the creation of a global civil society committed to joint problem-solving. The Nautilus Community is a global network built around this strategy, serving thousands of people in over fifty countries.

www.nautilus.org/papers/enviro.html

The Factor 10 Institute (Austria) is an environmental think-tank. [7] It is a non-profit association in the field of applied environmental research. The Institute promotes the sustainable development of the environment, the economy and society.



Source: Factor 10 Institute

Figure 3 The conceptualised relations between the environment and business based on the work of the Factor 10 Institute

6. CONCLUSION

Recently two paradigms have appeared in the relationship between globalisation and the environment. One of them is the paradigm of partnership and cooperation. This is represented by the United Nation's series of world conferences, which attempted to discuss and resolve - in a consensus-seeking framework - global problems relating to the environment, women, social development, habitat, and food. The other one is the freemarket paradigm which is represented by the Bretton Woods Institution and by the WTO. In addition, the emergence of a civil society can monitor and help shape the globalisation process, and can arouse hope for the promotion of sustainable development. All of this is accelerating changes in the institutions of globalisation and encouraging them to move towards efficient solutions to environmental problems. "There is strong corporate responsibility and the number of sustainability reports is also increasing, as is the emergence of environmental institutes. The logic of a Global Environmental Mechanism is straightforward: a globalising world requires thoughtful and modern ways to manage interdependence. The world community would benefit from the presence of an authoritative environmental voice in the international arena, a recognised forum for national officials and other stakeholders to work cooperatively to address global-scale issues, and a legitimate mechanism to ensure that efforts to promote economic progress and environmental goals are mutually reinforcing." [3]

REFERENCES

- [1] van ALPHEN, K., M. P. HEKKERT, W.C. TURKENBURG: Accelerating the deployment of carbon capture and storage technologies by strengthening the innovation system International Journal of Greenhouse Gas Control, Volume 4, Issue 2, March 2010, Pages 396-409
- BORGHESI, S, A. VERCELLI Sustainable globalisation Ecological Economics Volume 44, Issue 1, February 2003, Pages 77-89
- [3] ESTY D. C and M. H. IVANOVA: Globalization and Environmental Protection: a Global Governance Perspective Yale Center for Environmental Law and Policy Yale University New Haven, CT
 - http://www.tilburguniversity.nl/globus/activities/conference/papers/ivanova.pdf
- [4] FIDRICH R.: Globalizáció és környezet (Globalization and Environment). Globalizáció füzetek 1. MTVSZ, 2002
- [5] HALLE, M.: Seattle and Sustainable Development International Institute for Sustainable Development, 2000. Winnipeg. http://www.wcit.org/Halle Seattle andsd.htm

- [6] Oltra, R C., Sala, R. Solà, M. Di Masso, G. Rowe: Lay perceptions of carbon capture and storage technology International Journal of Greenhouse Gas Control, Volume 4, Issue 4, July 2010, Pages 698-706
- [7] LORENZ M.H., T.F. RUDDY: From the Natural Sciences to Economics A glimpse of what is to come at the World Resources Forum (WRF) 16th September 2009, Davos
- [8] PODOBNIK, B. :"Resistance to Globalization: Cycles and Evolutions in the Globalization Protest Movement" Paper presented at the annual meeting of the American Sociological Association, Hilton San Francisco & Renaissance Parc 55 Hotel, San Francisco, CA,, Aug 14 2005
- [9] RAI, V., D. G. VICTOR, M. C. THURBER: Carbon capture and storage at scale: Lessons from the growth of analogous energy technologies Energy Policy, Volume 38, Issue 8, August 2010, Pages 4089-4098
- [10] SONNENFELD, D. A.: Globalisation and environmental governance: Is another world possible? Global Environmental Change Volume 18, Issue 3, August 2008, Pages 341-342
- [11] STIGLITZ: A globalizáció és visszásságai (Globalization and Its Discontents) Napvilág Kiadó, 2003
- [12] SZABÓ M.: Civil társadalom és emberi jogok a *globalizáció* kihívásai (Civil Society and Human Rights the Challanges of Globalization)
- [13] TISDELL, C.(2001): Globalisation and sustainability: environmental Kuznets curve and the WTO Ecological Economics, 39 183-196
- [14] VARGA S., Z.: Globalizáció: fenntartható fejlődés vagy Malevil. (Globalization and Sustainable Development or Malevil) Magyar Nemzet, 2003. November 29.
- [15] WBCSD: Translating environmental social and governance factors into sustainable business value, 2010,

http://www.wbcsd.org/DocRoot/LJQWshKWnR84DNoH97iL/TranslatingESG.pdf

- [16] WILSON, E.J., A.B. KLASS, S. BERGAN: Assessing a Liability Regime for Carbon Capture and Storage_Energy Procedia, Volume 1, Issue 1, February 2009, Pages 4575-4582
- [17] WACKERNAGEL, M: Methodological advancements in footprint analysis. Ecological Economics Volume 68, Issue 7, 15 May 2009, Pages 1925-1927
- [18] World Bank: Environmental Strategy 2010. Analytical Paper on Environmental Mainstreaming and Environmental Sustainability Raising the Bar Towards Sustainability Concept Note. www.worldbank.org

THE SELF-EVALUATION MODEL OF ORGANIZATIONAL BEHAVIOR

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SUMMARY

In a turbulent age, the key to permanent organizational/institutional success can increasingly be measured by the ability to recognize new challenges in time and to react to them in a quick and flexible way. As a consequence of this, the changes in our environment are forcing organizations to reconsider and change their strategies and structures in a short space of time. Nevertheless, very often the management does not make use of reliable tools or methodological knowledge. Such knowledge could be of use when considering how to implement complicated organizational change, structured and frequent mapping, and the logical restructuring of the organization – especially the restructuring of areas which are in a critical situation. Unfortunately, however, decisions are very often made based on intuition and personal viewpoints. A critical element in the successful accomplishment of organizational change is the effectiveness of the analyzing phase. This paper, therefore, focuses on a methodology which supports the effective implementation of this activity.

1. "EFFECTIVE" ORGANIZATIONAL ANALYSIS

Which are the most important characteristics of the analyzing process? Such a process should begin with the precise demarcation of the object or situation to be examined. Then the parameters of the situation-and-operation analysis can be established. The actual structure of all organizations – as a result of either conscious or spontaneous organizing interventions – basically determine their mode of operation, its efficiency and – at the same time - its limits. The recognition of this fact is a precondition for finding successful solutions. Any error factors can be revealed as a result of implementing the effective organizational solutions appropriate for the given area. Depending on their types, such solutions could be used as organizational reserves. Accordingly, situation analysis concentrates on the contrast between the actual situation and the "ideal" position. In addition to this, the operations of all sub-systems contain several perceivable segmental or persistent errors. At first glance, such recognizable so-called operational errors include the frequent problems caused by the people, in their everyday work, not following the directions, rules, and working methods which have been determined by the way a particular system operates. These operational errors could be categorized as losses. Such errors can be recognized via a comparison of the official 'planned' method of operation and the way the operation works in reality. By evaluating the appropriateness and the efficiency of the objective-task-tool procedure, operational analysis can provide information on the effectiveness of regulations and changes in motivational systems. Operational analysis can also lead to the elimination of temporary problems and other limitations. At the same time,

we can examine whether the objectives of the system designers have failed because of segmental or structural factors. After decisions have been made concerning the aims and objectives of the organizational analysis, the appropriate methods can then be selected. The criteria used to choose such methods can include, for example, the size of the task, whether a formal system of evaluation is in place, the aims of the organizational analysis, the method which has been formulated to analyze parameters, the means of evaluation to be employed, the conditions in which the analysis will be implemented, the accessories to be used, the contents of the system of evaluation and so on.

Considering the factors mentioned above, the following statements can be made with regards to the methodology of operational analysis:

- The methods used should meet the demands made on them in different ways.
- The users can be offered different approaches. This enables any necessary adjustments to be made to the decisions, increasing the effectiveness of the decision-making process. In addition, any decisions taken can be aligned with the users' interests, as well as the users' roles, mentalities and patterns of communication.
- With regards to all methods, one must consider how effective they are in a given situation.

2. THE SELF-EVALUATION MODEL OF ORGANIZATIONAL BEHAVIOUR

Below, I will deal with organizational self-evaluation as a method of organizational analysis. I will especially focus on the Self-Evaluation Model of Organizational Behaviour, analyzing it in detail. I will discuss this model in its wider context, in addition to presenting a smaller, more specific version of the model that I have devised myself. I intend to examine how both these versions of the model can become part of a process of organizational change.

Self-evaluation basically includes a complex, system-based approach and the periodical examination of organizational activities and results. This makes it possible for the organization to recognize its strengths and those areas which could be improved. During organizational self-evaluation, a comparison takes place between the organization as it is and a model of an ideal organization. This is like "looking into a mirror", although it should be stated that there is not "only one good solution" to the organization's problems. Therefore, organizational self-evaluation offers a well-structured approach - which gives an overall picture – for the manager using it. Placing organizational behavior in the spotlight is a consequence of the fact that a considerable part of an organization's success depends on the actions of its members. The best organizational structure and the most professional strategy cannot by themselves lead to success. The organization's staff are also needed for its accomplishment. It is evident that motivation, effort, decisions, cooperation ability and the notions held by the employees are the most important components of organizational performance. Therefore, it is useful to perform a detailed analysis of the behavior of organizations and the factors that influence it. In my opinion, the self-evaluation model of organizational behavior is appropriate for doing this.

The Self-Evaluation Model of Organizational Behavior can be seen as a smaller, more focused version of the more developed EFQM model. The relevant fields from the perspective of organizational behavior – and interpretations of them – are listed below: (Table 1.)

Table 1
Fields of self-evaluation according to the Model of Organizational Behavior

ENABLERS	RESULTS
LEADERSHIP: The model evaluates the behavior and activities of all managers and management groups without giving names. It investigates how the persons in management positions support, inspire and help to reach the organization's goals. Internal and external communication is responsible for the transmission of values, and for the presentation of expectations and orientations. The answers found during the investigation can be used to judge specific solutions and the standard of operations. The connections between the organization's strategy, structure and culture, and its day-to-day existence; and the relationship between the company's formal structures and its more informal culture are important areas with regards to the judgment of managerial activity. A more 'hands-on' kind of leadership – and the systems of evaluation and motivation related to it – are important pillars of quality, excellence and corporate culture. These also need to be taken into consideration.	EMPLOYEES' SATISFACTION: The model investigates what kind of results the organization has attained with regards to the satisfaction and motivation of its employees. Performance evaluations and methods of remuneration provide information about the employees' satisfaction in an indirect way. Other indirect indicators are whether there is career planning or if professional development is encouraged. A high staff turnover is evidence of the absence of satisfaction.
HUMAN RESOURCE MANAGEMENT: The model investigates how the organizations of the examined company/institution utilize the skills, knowledge and competencies of its personnel (or human resources). By using questions, the model can review how the organization manages, develops and utilizes its employees' knowledge and skills on individual, group and organizational levels. The model also looks into how such activities are organized to support the fulfillment of short and long-term objectives. The model aims to show how the identification and development of the employees' skills and competencies occur, in	CUSTOMER SATISFACTION: The model investigates how the organization identifies, segments and measures its different groups of external customers. It evaluates those indicators and results which mark the level of customer satisfaction and loyalty. By doing this, the model seeks to determine the true level of customer satisfaction.

addition to identifying the means of dialogue between the organization and its employees. The examination of certain elements of performance management is also important.	
HUMAN STRATEGY AND PARTNERSHIPS: The model investigates what kind of human strategy the organization accomplishes, and how the organization's resources are managed in order to promote efficiency and effectiveness. The model asks what kind of actions ensure that the organization uses and develops its key partnerships in order to utilize the organization's knowledge to the highest possible level.	SOCIAL RESPONSIBILITY: The model examines the organization's activities which have an influence on its community, general society and the wider environment. This all depends on the size and type of the organization.

The considerations outlined above can be used to evaluate the level of operational efficiency with regards to the human factors within the organization. All similar self-evaluation systems use two different methods for the quantitative research:

- tests (internal and external public opinion research materials)
- textual self-evaluation (teams comprising professionally competent persons from the organization.)

The normative character of the model derives from the evaluation scale and its extension. According to this model, the maximum values of the fields of organizational behavior are as seen in Picture 1.



Picture 1. Self-Evaluation Model of Organizational Behavior

The procedures by which the six fields are evaluated are not uniform. The evaluation of the fields of Leadership, Human Resource Management, Human Strategy and Partnerships, and Employee Satisfaction are based on the same logic. This involves, on one hand, public opinion research in the form of tests. (These tests are based on an internal, representative sample of the organization's employees.) On the other hand, textual self-evaluation is carried out by an internal professional team.

With regards to the results for Customer Satisfaction and Social Responsibility, we can only rely on the data of external public opinion surveys. The basis of these surveys is a test containing fixed topics and questions.

The main evaluation subgroups for the 6 fields can be structured in the following way, as presented in Tables 2 and 3.

 Table 2

 Subgroups of Enablers in the Self-Evaluation Model of Organizational Behavior

ENABLERS		
LEADERSHIP	HUMAN RESOURCE MANAGEMENT	HUMAN STRATEGY AND PARTNERSHIPS

 The management's scale of values The identification and validation of the organization's mission and values internal communication Role modeling Conflict management Participation Organizational structure 	 Competence requirements Performance requirements Motivation Performance evaluation Personal development Career planning Organizational culture Measuring intellectual capital 	 The relations between strategy and human strategy Personal development The process of human strategy development Knowledge of strategy Supporting achievement Monitoring and correcting strategy National professional partnerships and development International professional partnerships and development Labor market partnerships Influencing sectors
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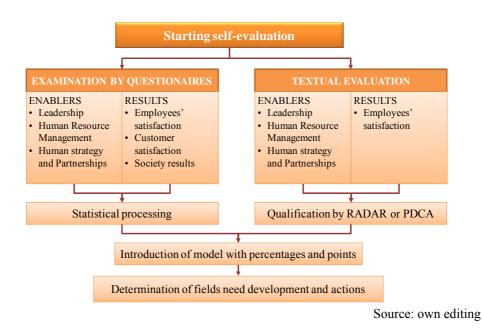
Table 3 Subgroups of Results in the Self-Evaluation Model of Organizational Behavior

		RESULTS			
EMPLOYEE'S SATISFACTION	CUSTOMER SATISFACTION	SOCIAL RESPONSIBILITY			
 Participation Internal communication Satisfaction with the work Feeling appreciated Loyalty to the organization Interest claiming Receiving support 	 Judgment of products and services Image of the organization Behavior of the organization's employees Customer service activities External 	 Environmental awareness Relationships with social organizations Opinions of civil organizations Judgments of the underprivileged Supporting, and cooperating with, 			

Source: own editing

The criteria of textual self-evaluation, in the case of the first four fields, can be met by further detailing and grouping the above mentioned phenomena in the way described in the EFQM model.

The process of self-evaluation is presented in Picture 2.



Picture 2 Process of organizational self-evaluation

As seen in the flow diagram, a separate phase of implementation is necessary for the evaluation of the information gained and its transformation into evaluating points. In order to carry out the evaluation, the tests use a 5-grade scale. If the total number of points given by the respondents is divided by the maximum number of points, the percentage we get is already appropriate for calculating the point value. This represents the exact ratio from the maximum number of points on the field test. In order to carry out the entire procedure mentioned above, first a decision has to be made concerning the ratio of test and textual points, for which I propose the ratio of 66/34. For the quantification of the textual evaluation, I suggest the RADAR or PDCA cycle. In the former cycle, the evaluation of the Enablers and Results elements are different; in the latter, there is no relevant difference with regards to these elements.

3. THE EVALUATION METHODOLOGY OF THE SELF-EVALUATION MODEL OF ORGANIZATIONAL BEHAVIOR

The methodological criteria-system of evaluation – based on the Self-Evaluation Model of Organizational Behavior – can be divided into a primary and a secondary part. Both of them are based on the test results, as well as on the textual evaluation. The primary evaluation contains the overall values of the whole model, as well as the enablers and results elements. In addition, it also analyses the extremities within each of the elements. The secondary part investigates groups within the elements, and the interrelations within and between the elements. The primary evaluation covers the following fields:

Criteria of evaluation

- Total number of points
- RADAR %
- Incidence rate with regards to the maximum and minimum number of points available
- The range of analysis in connection with the opinions of customers and the wider society
- The highest and lowest average scores, with regards to the Enablers and the Employees' Satisfaction.

In case of all the criteria – with the exception of the RADAR % – the resources used were based upon the data from the completed tests. During the first stage of processing, the total number of points can be determined through analyzing the tests filled in by the employees. The areas of Leadership, Human Resource Management, Human Strategy and Partnerships, and Employees' Satisfaction made up 66% of the total number of points available in the element concerned. Customer Satisfaction and Social Responsibility – with regards to the appropriate element – made up 100% of the total available points (it should be emphasized that there is not any textual evaluation in these cases.)

The textual evaluation is based on the RADAR technique, according to which firmly validated methods and approaches have to be planned and established. Through these the desired objectives can be reached, and then the methods used can be systematically examined in detail. The methods applied have to be analyzed and evaluated through the analysis of the results obtained, and the results have to be weighed up with regard to organizational performance and the satisfaction of the expectations of the interested parties

Following this, as a result of the RADAR evaluation – which will have been prepared by the managerial teams – the number of points obtained in the textual evaluation can be revealed. According to the RADAR logic, all organizations need to:

- have a precise idea of the results they wish to achieve
- plan and establish the methods to be applied
- ensure the methods are systematically applied
- evaluate and refine the methods
- establish and develop their objectives, and finally implement them

During the analysis, the professional team carrying out the evaluation takes into consideration whether the organization have clearly defined aims and objectives, and whether these meet the needs of the interested parties. They also consider the integration of – and the support provided by – the organizational strategy, as well as considering the expected results. The practical side of the evaluation examines the putting of the organization's methods into practice. The evaluation and refinement is related to the measurement and interpretation of the method. The effectiveness and efficiency of the approach and its application also have to be examined, as well as the learning process of the organization, the analysis and use of actions and information, and the developments accomplished. All of this is concisely stated in the RADAR acronym (Results, Approach, Deployment, Assessment, and Refinement). Following the above mentioned logic, 33% of points can be gained for all the elements of Enablers, and 33% of points for Employees' Satisfaction.

With regards to all the elements examined by the tests, the incidence rate of maximum (5) or minimum (0 or 1) points can be quantified. By doing this, any extremes which emerge during the evaluation can be investigated.

In the case of the results for Customer Satisfaction and Social Responsibility, it is practical to make a range analysis. This can provide information about the location of the points gained within the margin 0 to 5. If we also perform a deviation calculation, we can get a picture of the homogeneity of opinions.

Regarding the 4 elements evaluated by employees (3 for Enablers and one for Employees' satisfaction), the highest and lowest average points are examined in order to eliminate extremes. The lowest average points are normally used to determine the potential fields for improvement. Secondary processing covers the evaluation of the following fields:

Evaluation criteria

- evaluation of the elements by statistical groups (expressed in %)
- evaluation of the consistency of assessment among the elements that differ from the averages of the textual and test evaluation
- verification of consistent opinions (by using questions to check the validity of previous responses)
- evaluation of elements by using the ratio of the number of points available and the number of points gained (expressed in %)
- analysis of the links between the Enabler elements and the Results
- range analysis and average-point calculations for the main groups (training, communication, cooperation, management systems, culture)
- correlation analysis of the elements through the evaluation criteria

During the % evaluation of the elements by the statistical groups it can be investigated whether there is a relevant difference in opinions between managers and employees, or men and women. If necessary, a clausal analysis may follow.

The evaluation of the consistency of assessment among the elements which are different from the average of the textual and test evaluation is appropriate to reveal the relevant difference of opinions in the dual evaluation. The evaluation can also reveal "convergence" between the two types of evaluation. It is advisable for all companies to analyze the consistency of opinions by using questions which aim to check the reliability of previous responses.

The next step is the evaluation of the elements' characteristics based on tests. Here, groups can be formed within each element in order to perform an evaluation which is even more differentiated. This evaluation could enable the identification of clearly defined cross-sections within elements. It could also help to highlight those fields which could be improved. Below are some examples:

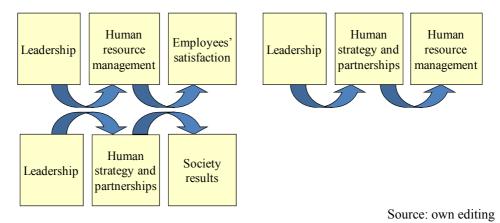
- strategic approach
- participation
- managerial role modeling
- team-work

Table 4 contains information about characteristics in relation to the elements discussed above.

E N A B L E R S	 LEADERSHIP strategic approach, role modeling of management, participation, team- work orientation, professional competence 	HUMAN STRATEGY AND PARTNERSHIPS - strategic approach, - feedback on the strategy, - participation, - integrated management, - partnerships	HUMAN RESOURCE MANAGEMENT – determination of requirements, – personal advancement, – supportive conditions, – evaluation, – development
R E S U L T S	EMPLOYEES' SATISFACTION – management, leadership, – motivation, – participation and team-work, – culture, – supportive conditions.	CUSTOMER SATISFACTION - customer loyalty, - customer registration system, - comparison analysis, - analysis of customer groups, - routine methods, - external communication.	SOCIAL RESPONSIBILITY – protection of direct and wider environment, – supporting the community, – the firm's reputation.

Table 4 Introduction of characteristics according to the elements

Besides the isolated examination of the elements, it is advisable to analyze the links between the enabler and result elements. These can show the weaknesses and imbalances of each element. A multilateral approach could also be useful to point out the areas that need to be considered here.



Picture 3 Strong connections (links) in the model

REFERENCES

- [1] Bakacsi Gy.: Szervezeti magatartás és vezetés (Organization behavior and *leadership*) KJK 1996.
- [2] A munkatársak irányítása és elégedettsége a szervezeti önértékelésen keresztül. (*Management and satisfaction of employees through organizational self-evaluation*) In: Harvard Businessmanager, 2005. 11. sz.
- [3] A Research Project Performance Measurement of a Crisis Region in Hungary by Adapting a Method of Organization Evaluation. Társsz.: Szintay I., Hogya O. "Sixteenth Annual Conference of POMS, Chicago, II." April 29 May 2, 2005. 12 p. [CD]
- [4] Organisational Self-Evaluation as a Possible Tool of Organisational Analysis.
 "Sixteenth Annual Conference of POMS, Chicago, Il, April 29 May 2, 2005." 14
 p. [CD
- [5] Az értékalapú szervezetfejlesztés egy új megközelítése. (A new approach of valuebased organization development) In: GVV Gazdálkodás Verseny Vezetés, [2. évf.] 2010. 1. sz. 13-21. p. ISSN 2061-3539
- [6] A felsőoktatás belső és külső minőségirányítási rendszerének sajátosságai. Az intézményfejlesztési és a minőségfejlesztési terv kapcsolata. (*Characteristics of internal and external quality management systems in higher education. The relations between plans of institution development and quality improvement*) Társsz.: Szintay I. In: Magyar Minőség, 2007. 6. sz. 21-28. p.

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